

Herefordshire & Worcestershire

Building Stones Survey of Herefordshire & Worcestershire – YOUR HELP IS NEEDED!

THE TRUST HAS NOW BEGUN this English Heritage funded pilot study. This is primarily a desk-based exercise, which aims to find out all the information (or lack of!) that is currently known about building stones and important sources of stone within the two counties. The long-term aim will be to identify the sources of important building stones, and to ensure that these sites are protected within the planning system.

This will not only help safeguard sites from development, but cut down the carbon footprint of buying a similar, yet inferior, stone from halfway across the world, when it is possible to get the original stone from your own backyard. It would also ensure that important historic buildings and areas retain their sense of character and vernacular style. It wouldn't be the same if you had a Cotswold village made out of Old Red Sandstone!

This is where you, the reader, come in; if you have any information, however large or small, we want to hear from you. To enable us to give English Heritage the best results, we need to find every piece of information that is out there. So, if anyone is a secret building stones expert, knows someone who is, or who can give us a bit of info on what their village/local church was made out of, then please get in touch. This is where the members and readers of this newsletter can really help the Trust lead the way in another truly new and exciting venture, and once again show that geoconservation isn't just about the rocks.

We're not alone in this. The English Heritage funding for the project has been secured through a contract with The Geology Trusts. Our fellow GT members in Gloucestershire, Oxfordshire, Shropshire and Warwickshire are also underway with this survey, and Bedfordshire and Wiltshire will follow suit when the

Right: Hadley Quarry, near Ombersley, where Bromsgrove Sandstone was extracted in part for restoring Worcester Cathedral in the 1800s.



pilot study is completed next February. So if your knowledge extends beyond the borders of Herefordshire and Worcestershire, then those other counties will be equally keen to hear from you.

If you have information about Herefordshire or Worcestershire building stones contact Tom Richards at the Worcester office, email thomas.richards@worc.ac.uk.

For other GT counties get in touch with Andrew Jenkinson, the GT's project manager for this work, email andrew@scenesetters.co.uk.



Ledbury Parish Church – an essay in local sandstones and limestone.

NEWS FROM WORCESTERSHIRE

UNFORTUNATELY WE HAVE FOUND nothing as exciting in Worcestershire as the Herefordshire Lagerstätte, which is a site of exceptional fossil preservation – i.e. where soft bodied parts are found, whereas normally, fossils are only made up of hard parts (shells and so forth). But don't stop reading yet!

NEW RIGS

As a result of the geodiversity audits, there are some further 50 candidate Regionally Important Geological Sites (RIGS) in the county which will go to our designation panel over the next couple of months. As this shows, just because the Trust is branching out in its work, this doesn't mean that the designation process has stopped – indeed as more work is done, more sites are found that warrant RIGS designation.

BIODIVERSITY

The Worcestershire Biodiversity Partnership has now launched its revised Biodiversity Action Plan (BAP) for the county. This document sets out the important habitats and species that are in need of conservation and active management in the county, based on the

objectives and targets of the national BAP. The Trust is a member of the partnership and as such, supports the action plan and will do all it can to assist in meeting the actions and targets set out. For more information visit www.worcestershire.gov.uk/biodiversity

WORCESTERSHIRE'S OLDEST ARTEFACT

Worcestershire County Archaeologists have recently made a fascinating discovery – potentially the oldest hominid artefact in the county. Found at a location just outside Pershore, the stone tool appears to have been rolled around in water. This finding led to a discussion over a possible origin and age of the river terrace deposits above which the tool was found. Further investigation found that the site of the find is located



The oldest stone tool in the county? Photo courtesy of Worcestershire Historic Environment and Archaeology Service.

on the Pershore River Terrace (or 5th Avon Terrace). The deposits underlying this terrace have a minimum age of 230,000 years, thus defining the youngest age at which this tool could have been dropped or placed into the river.

This demonstrates the importance of geological knowledge in relation to archaeological finds, especially those found within sand and gravel deposits. It also highlights what could have been achieved if the Shotton Project had continued its successful enterprise – which aimed to bring together geologists, archaeologists and the quarrying industry in supporting each other's work; an initiative which the Trust strongly supports and will continue actively working towards.

NEWS FROM HEREFORDSHIRE

Working With Wye Valley AONB

WYE VALLEY AREA OF OUTSTANDING NATURAL BEAUTY (AONB) has been successful in an application to the Heritage Lottery Fund and has obtained money for a three year project entitled 'Overlooking the Wye'.

This project has four themes – Hidden Industry; Viewpoints; River Connections; Hillforts – each with Outreach and Interpretation. The Trust have been asked to run a Rock and Fossil Roadshow

each year. On 13th and 14th September, we organised a Roadshow at Goodrich Castle as part of the Open Heritage Weekend organised by English Heritage, who gave free entry to the public. The

activities were set up within the castle walls. The weather was kind with the first sunny day for weeks. Thanks are expressed to all of the volunteers who worked so hard to make this a great success. There was a good attendance of children who enjoyed making casts of fossils, collages of Silurian Seascapes and doing the Dinosaur Detective Trail. As you can see in the picture below there are fine rock exposures to be seen at Goodrich Castle which are described in the Goodrich Castle trail guide.



Medieval entertainment as part of the Open Heritage weekend at Goodrich Castle.



Rock and Fossil Roadshow at Goodrich Castle.



CHAMPIONS PROJECT — OFF TO A FANTASTIC START!

SINCE STARTING IN APRIL, THE CHAMPIONS PROJECT has received great amounts of enthusiasm and support, not only from the local communities within the counties, but also from other organisations such as Natural England, and even other County Geology groups.

The project itself is progressing very quickly, with local landowners signing up to be involved and even suggesting potential events to be run at the sites. We are very grateful to these landowners, as without them the project would not be possible. It is good to see that people outside of the geological community appreciate the importance of conservation of these precious sites.

All Regionally Important Geological Sites (RIGS) in the two counties were assessed for their suitability for this project. Twenty sites have been selected and they were chosen according to the following criteria:

- ◆ Active community
- ◆ Interesting geology
- ◆ Good accessibility
- ◆ Safe

Sites that met these criteria were short listed, and then from that list (of nearly forty!) we were able to pick the best sites to use for the project.

We are now at the stage of actively looking for people in the local communities around these sites to become Champions. If anyone is interested in being involved with the project or would just like to know more about sites in their local area please contact the Champions Project Manager, Eve Miles on 09105 542014, or e-mail e.miles@worc.ac.uk.

Below: Permian dune bedded sandstone at Blackstone Rock, near Bewdley: one of the shortlisted sites.



CHAMPIONS PROJECT

Worcestershire

CHAMPIONS IN WORCESTERSHIRE is progressing very well, with the original shortlist of 23 Regionally Important Geological Sites (RIGS) finally narrowed down to ten.

The short listed sites cover a wide area across the county as well as a variety of geological periods: from the Precambrian of the Malvern Hills and the Ordovician Quartzites of the Lickey Hills, to the Carboniferous Coal Measures and fossil rich Silurian Limestones in the North-West.

Ideas for events and site development are already being suggested by some private landowners as well as some of the larger group landowners such as the Malvern Hills Conservators. There are three sites short listed for Worcestershire on Conservators' land, the main one

being Tank Quarry at the northern end of the Malverns.

Tank quarry has an extensive quarrying history dating back to the 1870s, and was originally considered an eyesore on the hills. Following the end of the quarrying in 1970, it is now a Site of Special Scientific Interest (SSSI) as well as a RIGS. The geology at Tank Quarry is just as fascinating as the rest of the Malvern Hills, with the Precambrian diorites and granites of the aptly named Malverns Complex extensively sheared and intruded by microdiorite dykes. The vegetation has had a chance to grow back, with a wide range of flora and fauna, with peregrine falcons nesting in the site.

The range of geology, biology and even archaeology at this site has made it an ideal choice for the Champions Project as we try to show local communities how these three environmental subjects interact with one another – you don't get vegetation without soils, and you don't get soils without rocks!

As we move towards the end of this year we hope to get landowners signing up to the project, with site clearance beginning early next year.



Precambrian igneous rocks in Tank quarry on the side of the Malvern Hills.

CHAMPIONS PROJECT

Herefordshire



The potential for great exposure of Silurian rocks is here at Linton Quarry.

THE HEREFORDSHIRE PART OF THE CHAMPIONS PROJECT is progressing well with ten sites provisionally chosen. They range from Precambrian volcanics in the Malvern Hills to a Carboniferous Limestone Pavement in the Wye Valley. They are all Regionally Important Geological Sites (RIGS) and each is unique and important to the geological history of the county.

One of the selected sites is Linton Quarry which is a limestone quarry comprising the Gorsley Limestone, Ludlow Shales and the Downton Castle Sandstone Formations.

This site is a great example of how wildlife and geology interact

with each other; since the quarry has been abandoned lime-loving plants have colonized it. As a result of poor drainage, marsh species thrive in the boggy centre of the quarry.

A pond has formed in the south-eastern corner of the site which

contains newts in addition to other pond loving creatures. The quarry needs a lot of work to make it accessible to the public and one of the first goals for the Champion will be removing vegetation from parts of the rock face to re-expose the geology.

We are currently talking with the landowners and negotiating an agreement allowing us to use their site for the Champions Project. We are also starting to write the management plan for the site so that the Champion will have the information he needs to ensure effective conservation of the site.

OLIVERS MOUND PROJECT

THIS LOCAL HISTORY PROJECT aimed to link archaeological and geological expertise in the excavation of Olivers Mound; an old hill fort found in Shrawley Woods, Worcestershire.

This has been a lovely project to undertake and has had good community value. A small educational leaflet was produced in a digital form. Field work in the woods has produced two excellent potential RIGS.

The highlight was the guided walk. Thirty members of the public attended this enjoyable walk. Although there are many old sites in the woods, few of them are suitable and most have difficult access. The guided walk comprised visiting Olivers Mound and the 35,000 year old Holt Heath Member (deposits of the 3rd terrace of the River Severn) found there, then on to the end of the lake to see some dolerite, and then a walk to the northern end of the woods where a propitious tree fall ten days before had given a good view of the 350,000 year old Spring Hill Member (deposits of the 6th river terrace). All walk attendees managed the access to the North Quarry, showing the Bromsgrove Sandstone Formation. Lake deposits and desiccation features were also inspected. The walk took in a block of oolitic limestone in the riverside track, and also some good channelling in a gully. The final site was the south end of the woods where similar lake deposits occur, but are complicated by evaporitic deposits.

Rollo Gillespie attended all the dig days on the mound which proved useful to the project. The uncovering of masonry revealed the local sandstone. There was not very much imported stone with the exception of the tile spread of Trench 2, identified as Devonian St Maughans Formation, and narrowed down further to either Cusop Hill, or the Monnow valley between Longtown and Craswall. In Trench 1 a small block of tufa was found and retained; this probably came from Shelsley Walsh. A small gastropod was found in the samples and identified by the expert in the county archaeological unit as 'Nesovitrea hammonis'. Trench 2 reached a natural gravel horizon above a silty palaeosol, which consisted of fluvial material and small coarsening up patches of well sorted, clean, water washed stones. The virtual absence of gravels in Trench 1 defines the limited extent of the Holt Heath Member here on the mound.



Above: Part of the castle foundations excavated at the north west corner of the mound.

A blow by blow daily account of the dig can be found here: http://gilraenarchaeology.blog.co.uk/2007/11/08/olivers_mound_update~3265938

A pdf version of the final report will make its way on to the Earth Heritage Trust website in due course. There will be a further dig season in 2009.

RIGS condition monitoring is here!

IN THE LAST ISSUE, we informed you that the Trust was in the process of producing the nation's first condition monitoring form for RIGS.

Driven initially by the Malvern Hills AONB, and supported by Natural England, UKRIGS and the Geology Trusts, a final template has now been agreed. The form will be put through a series of thorough tests during the next twelve months, to assess its strengths and weaknesses, with the aim of reviewing it after this period. If any RIGS/geology/geoconservation groups wish to have a copy of the form, then please contact us at eht@worc.ac.uk

Though not perfect, the form and the accompanying guidance notes are quite an achievement and show that once again, through close partnership working, the Trust is leading the way in geoconservation in the UK.

National Association of AONBs – A walk on the Malvern Hills

FROM THE
CHAIR...

IN EARLY JULY the National Association of AONBs (Areas of Outstanding Natural Beauty) held its annual meeting, based in Shropshire. Members from the forty-one English AONBs attended. (These AONBs cover 15% of England.)

John Payne and Moira Jenkins

As a part of the meeting, the Malvern Hills AONB hosted a walk on the Malverns and invited colleagues from other local organisations to participate too. Thus, representatives from the Malvern Hills Conservators and the Trust (John Payne and Moira Jenkins) joined the walk for a part of the route. Both organisations are members of the Joint Advisory Committee (JAC) of the local AONB.

Thirty-five conference delegates were welcomed at Bromesberrow Place by the owner, Dr Greenall, and walked to the Wyche Cutting, taking in several of the peaks. Along the way, various features and elements of the AONB's work were explained and discussed.

The list is interesting as an illustration of the range of the organisation's activities and interests: the history of Malvern Chase, ley lines, cattle grids, the SSSI, stewardship agreements, polytunnels, the Hills Hopper (bus service), multiple land ownership and landowner's meetings, issues over the local commons, the high brown fritillary butterfly, Eastnor Castle events

including the Land Rover trails and mountain bikes, archaeology, Malvern water and recreation management.

Also included, of course, was the geology of the area and this was described to the walkers by John and Moira. At the Gullet Quarry, John spoke about the work of the Trust and in particular the developing strong links with the Malvern Hills AONB via the JAC membership and the funding of some Trust work by the AONB (Malvern Hills [2] trail guide and the development of a RIGS Condition Assessment Methodology).

He also described the links with the Geopark and then explained the geology of the Gullet Quarry. After everyone had enjoyed an excellent picnic lunch on Broad Down, Moira explained more about the local geology and especially the legacy of the Ice Age shown in the Malvern Gravels and the consequent poor soils of Castlemorton Common. These talks led to some useful subsequent discussions, particularly with the (rather few) geologists amongst the walkers.

MEMBERS OF THE TRUST, especially new ones, may not be aware that, in addition to the continuously expanding database of geological sites, there also exists a comprehensive database of the literature relating to the geology of the two counties.

This is available for consultation by members. In particular it allows searches for the literature which mentions a particular site and it delivers lists of the references, maps, sections and pictures for the site. Both published works and unpublished (so far as they are accessible to us) are included. In most cases the nearest location of a hard copy which may be consulted is indicated (usually a library) but most items will be obtainable via inter-library loans. Both the University of Worcester library and the Woolhope Club library possess substantial runs of both the Journal of the Geological Society (and its predecessor, the quarterly journal, QJGS) and the Proceedings of the Geologists' Association as well as the invaluable Transactions of the Woolhope Club. Currently the Herefordshire and Worcestershire Earth Sciences Bibliography lists 3205 individual articles and documents, 173 books and other compilations, 1241 maps, 528 section diagrams, 496 pictures and about 13700 site references. A corresponding bibliography has also been developed for Gloucestershire. Members are invited to contact the author for more information.

John Payne



David Armitage of MHAONB describes the history and the pillow lavas of Clutter's Cave.

Take a walk through time... the story of the Geopark Way

THE TIME IS DRAWING NEAR to pull on your walking boots, don your waterproofs and sun hats (you can never tell!), and hit the Geopark Way trail.



Two years in the making, the Geopark Way long distance walking trail was conceived from the aspiration to highlight geology, landscape and associated heritage within the Abberley and Malvern Hills Geopark (AMHG) and to make these accessible to all.

As mentioned in previous articles it hasn't always been straight forward! Floods, landslips, dead ends and brambles galore have, at times, lain in the path of the progress. Yet, with the assistance of local community groups and organisations, this unique trail route has now been realised.

Linking geological sites of interest, the Geopark Way winds its way for 108 miles alongside rivers, through forests, along

ridge-tops and across valley floors, whilst the associated 136 page guidebook interprets the sites and vistas seen along the route. Together with the geological interpretation, the guide draws attention to examples of how geology has played a significant part in influencing the wildlife, archaeology, social and industrial history of the area.

The trail guide conveniently splits the Geopark Way trail into eighteen comfortable day walks; each with its own detailed map.

A slim supplementary booklet details useful information on public transport routes, tourist amenities and attractions, further geological walks and countryside sites along the Geopark Way.

THE GEOPARK WAY TRAIL and guide will be launched in early 2009.

You will be able to order your copy of the trail guide direct from the Trust (although the price is yet to be fixed, there will be a discount for members). Details of the Geopark Way launch and guided walks along the trail will be posted on the Trust's website when particulars are confirmed.

On Sunday 30th November 2008 there will be a guided walk on the Geopark Way starting at Severn Valley Country Park visitor centre in Alveley, Shropshire. The walk will start at 10am and take in a section of the Geopark Way as well as a

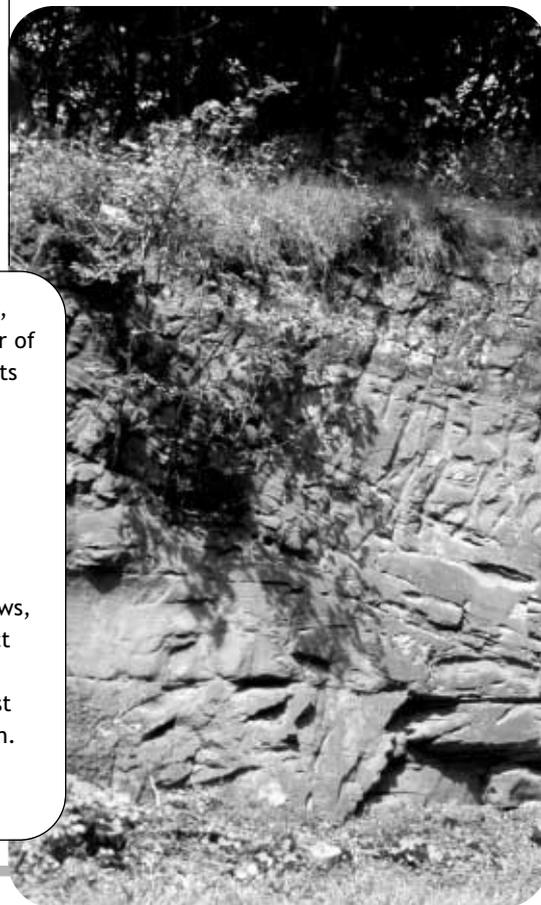
beautiful riverside and woodland walk, with the opportunity to see all manner of different wildlife. There will be experts on hand to talk about the history, geology of the landscape and wildlife. The total route will be approximately five miles and should finish at around 2pm, when the cafe will be open for refreshments.

The walk will be led by Edward Andrews, Countryside Officer, Bridgnorth District Council and Andrew Jenkinson of the Shropshire Geological Society. The cost will be £2.50 adults and £1.50 children. For more details please contact the Countryside Team on 01746 781192.

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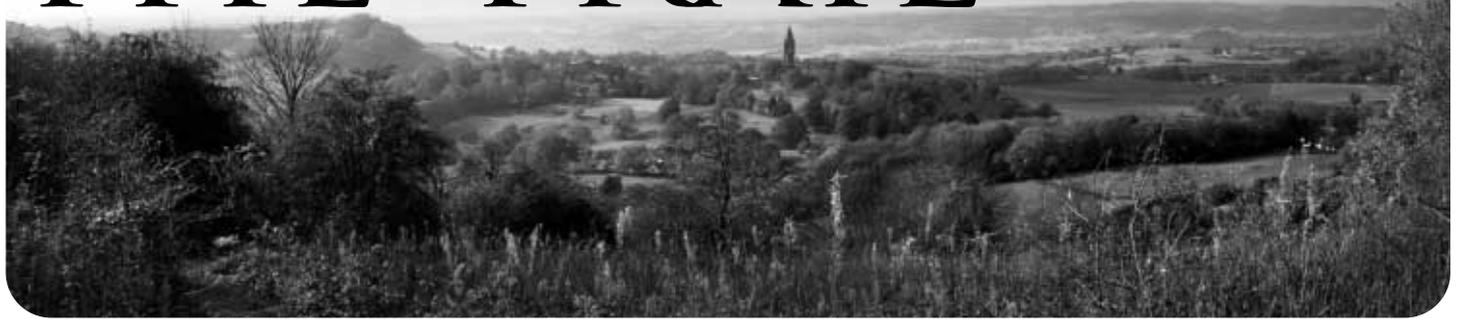
STARTING IN THE TOWN OF BRIDGNORTH, Shropshire, the Geopark Way explores the Permian sandstone cliffs that separate Bridgnorth into a High and a Low Town, both lying on the banks of, and overlooking, the River Severn.

Travelling south from Bridgnorth, the trail passes through the Wyre Forest Coalfield. Along with exposures of Carboniferous cyclothem lithologies the trail encounters evidence of the social and industrial impact that the availability of natural resources had on local communities. There is much to be seen highlighting the mining history of the area.



Permian sandstone road cutting, showing cross bedding at Quatford, Shropshire.

THE TRAIL



Breath-taking views from the Abberley Hills looking west towards Abberley Clock Tower and Silurian, Devonian and Carboniferous landscapes.

Leaving the coalfield the trail passes over a succession of Permo-Triassic sedimentary rocks and visits the Quaternary wind blown sands that cover the lower terrace of Hartlebury Common. This local nature reserve is celebrated not only for its geology, but as a lowland heath and as a common with a social history spanning at least 2000 years.

Next the trail veers westwards and crosses over the East Malvern Fault where the topography becomes more dramatic as the Silurian limestones and shales of the Abberley Hills come into view. Rock exposures, fossils, bentonites (volcanic ash), quarries and abandoned lime kilns collectively tell a compelling story of this series of rocks.

Continuing south and travelling further back in time to the Pre-cambrian, the route encounters the Malvern Hills; an area still not geologically fully understood, or at least with theories of chronology still fuelling debate amongst geologists. The Geopark Way visits several sites on the hills to capture the essence of their geological history, peppering the science with tales of folklore and the Victorian

Water Cure phenomenon that placed Malvern on the map.

Leaving the Malvern Hills the horizon changes as the Cotswold Hills come into full view. Into Gloucestershire the trail passes over the inlier of May Hill with its distinctive crown of Jubilee (Queen Victoria) trees, before entering into Huntley Quarry Geological Reserve to explore the fault and fold structures clearly seen on the quarry face.

The final leg of the trail leads you over the relatively flat plains of late Triassic and early Jurassic sediments, visiting sites to unveil the River Severn's formational history before arriving at its final destination of Gloucester

Cathedral. This wonderful building of oolitic limestone marks a fitting end to a traverse across 700 million years of Earth history.

The rocks along the Geopark Way tell amazing stories of continental collision, of tropical seas, hot deserts, equatorial swamps and coastal lagoons and of vast ice sheets and polar deserts. But just as interesting are the building stones of churches, bridges, town halls, cottages and even a cathedral. These stories can be followed in the guidebook delivering a totally new perspective on long distance walking.

The Geopark Way trail and guidebook project is supported by Advantage West Midlands.



Exploring the structural geology of Huntley Quarry Geological Reserve, Gloucestershire.

PHOTOGRAPHY ALONG THE GEOPARK WAY

John Stocks reports.

WHEN THE TRUST suggested that I should provide additional landscape photographs to fill some important gaps in the record, I was faced with the opportunity to discover some completely new countryside. This was a very surprising and inspiring experience, in a walk of over 100 miles.

The photographic requirements are yet another challenge. The familiar country calendar shows convincing proof that every day of the year is full of bright colours, blue skies and the perfect landscape. But this year, in late spring, there were many grey skies, not too much sunshine and endless rain. A new polarising filter intended to highlight towering cumulus clouds struggled to penetrate distant hazy horizons.

At this time the benefit of patience and careful reconnaissance were surprisingly repaid by the occasional brightening of the sky, and a photograph. Yet over the following weeks spring did at last arrive with a great burst of fresh new greenery

and spring flowers. Suddenly dull views were transformed, bluebells carpeted woodlands, barren fields became lush meadows and photography was fun again.

So which of these landscapes made a deep impression? Well, four in particular:

1. The northern section of the route starts at Bridgnorth and here dramatic scenery is dominated by the sandstone crags along the river Severn; as seen from the castle walk looking north.

2. Not too many miles south of Bridgnorth is the National Trust property of Dudmaston Hall. In a shallow river valley there are three small lakes lost in

conifer and beech woodland. The prettiest of these lakes is Brim Pool.

3. In Herefordshire, the route runs a few miles distant from the Malvern Hills. Oyster Hill is a small but prominent hill with views of the Malvern Hills to the east, and further to the west are the Welsh borders. In the many small limestone ridges bluebells flourished.

4. From the summit of Oyster Hill, the deep blue skies and the beginnings of the first cumulus towers were finally seen. What a reward.

So, this short exercise taught me that the sun shines if you are lucky and that choosing a new landscape offers very different views of this wonderful country in the Geopark.

When exploring this favourite corner of the border counties visitors will discover an endless combination of landscape with the changing seasons.



PHOTO COMPETITION

AS WE ARE THE *Herefordshire and Worcestershire* Earth Heritage Trust, we have decided for this photo competition to put in one photo from each county. Hopefully this will give more people a chance of getting it right! The first two replies which correctly identify the site and/or the geology in each county photo will be offered two free trail guides of their choice from our selection of 27. The first person to get both right will also receive a Trust mug.

We won't tell you which photo is in which county!



Last Photo Competition Results



THE PHOTO which we asked you to identify in the last Trust newsletter, showed Cregennen Lakes near Dolgellau in North Wales. There were only two correct answers. Dr Denis Bates won the first prize. He wrote, "I see Cregennen Lakes, and Pared-y-Cefn-Hir is illustrated." He also described the geology. "Volcanic breccia on the

ridge, and granophyre on the dip slope."

Second prize went to Jane Install and Linda Darby from Martley C.E. Primary School, who correctly identified Cregennen Lake and said that it was overlooked by Cader Idris. This is true but Cader Idris is not visible in the photo.

Congratulations to both winners.

MEMBERSHIP

A PART FROM MY MAIN ROLE as Trainee Champions Manager for Herefordshire I have also been given the task to develop membership of the Trust. The Trust already has 50 valuable and dedicated members but I would like to see that number increase over the next year.

I am reviewing what the Trust offers its current members, and plan to come up with new ideas for activities, in order to provide a more varied selection of events. I am hoping this will encourage new members to join us.

Our last members' event: the Trust's AGM, which was followed by a guided tour around Worcester Cathedral, was supported by twenty people and all who attended commented on how interesting and fun it was.

I hope we can do more of these types of events in the future. I would like to take this

opportunity to thank those of our members who have volunteered for us at various events in both counties. Your help is invaluable and we would not be able to go to these events and publicise the Trust without you.

If anyone has any ideas for new events the Trust could run or in which we could participate, or if you would like to visit a particular site, then please get in touch and I will try my best to organise something.

My contact details are email: j.donaldson@worc.ac.uk or tel: 01905 542014.

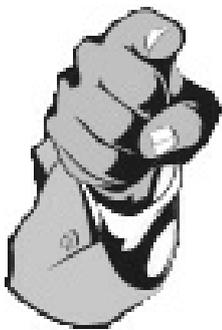
Dates for your diary

20th October – Lapworth Lecture at the University of Birmingham.

Dr Iain Stewart who has done many of the big recent geologically related TV Series on the BBC: *Un-natural Hazards: the cultural geology of risk*. Please contact Jon Clatworthy at the University of Birmingham for more details on lapworth@bham.ac.uk

15th November – Hereford Christmas Charities Market, Hereford High Town.

30th November – Severn Valley Country Park Guided Walk (see page 8). Guided walk around the Severn Valley Country Park by Andrew Jenkinson. Please contact Andrew Jenkinson for more details on andrew@scenesetters.co.uk



We need you!

WE ARE LOOKING FOR PEOPLE to help with a number of aspects of the projects and general running of the Trust.

◆ **Champions Project:** We are looking for ecologists to do small surveys at each of the Champions sites. If there are any ecologists out there who would like to help, please contact the Champions Project Manager, Eve Miles on 01905 542014 or email e.miles@worc.ac.uk.

◆ **Building Stones:** We are looking for any information regarding the building stones used in the two

counties. If anyone knows anything about their local building stone, e.g. what their local church is made from, please contact the Worcestershire Geodiversity Manager, Tom Richards on 01905 855184 or email thomas.richards@worc.ac.uk.

◆ **Librarian:** We are looking for an individual or individuals to help organise our expanding resource library, including cataloguing

books and maps, archiving photographs and CDs, and assisting with resource requests from members. If anyone is interested in helping us with any of these tasks, then please contact the trust on 01905 855184 or email eht@worc.ac.uk.

We're also still on the look out for general volunteers, please see the back of the enclosed membership form for opportunities. As always we would like to thank all our volunteers, your assistance ensures the Trust continues its good work.

GEOLOGY TRUSTS REPORT

THE GEOLOGY TRUSTS continue to be a proactive organisation – championing the cause of geoconservation; contributing intellectually, practically and financially to national initiatives; supporting its member groups through the sharing of ideas and securing funding for multi-county projects.

Within the last year alone The Geology Trusts has:

- ◆ Managed a national project, carried out in partnership with staff from UKRIGS and Natural England. The project presented a national workshop on sources of funding for geoconservation; paid out money to fifteen counties for the writing of 28 new site management plans across England and encouraged county groups all over the country to work together to set up regional geodiversity partnerships for their mutual support and to influence local government policy. To date, four new regional partnerships have been formed. The Geology Trusts is grateful to the Aggregates Levy Sustainability Fund and Natural England for funding the project and to the many people who contributed to its delivery.
- ◆ Contributed, in partnership with many other organisations, to the development of a new UK Geodiversity Action Plan (UKGAP), to be launched next year. The UKGAP should provide a framework for action to raise awareness of the

importance of geodiversity and enhance its role across the UK.

- ◆ Developed a new methodology and standard form to be used by groups nationwide for monitoring Regionally Important Geological/Geomorphological Sites (RIGS). This work was carried out by H&W staff member, Tom Richards, and supported financially by The Geology Trusts, UKRIGS, Natural England and Malvern Hills AONB.
- ◆ Written a paper outlining the funding needs and difficulties of geoconservation groups and making practical suggestions of how grant giving bodies could adapt their practices to help. The paper was circulated to the major funding organisations.
- ◆ Attended and contributed regularly to the Earth Science Education Forum held at the Houses of Parliament, to help maintain the profile of geology within education.
- ◆ Negotiated a contract with English Heritage, whereby all Geology Trust counties will compile a database of their

building stones, source quarries and the vernacular and/or famous buildings in which each stone is used. This will enable English Heritage to maintain the buildings in its care, using original materials. An illustrated guide to the building stones of each county will also be written, contributing to a future English Heritage publication.

- ◆ Started to consider a means of assessing the condition of every Regionally Important Geological/Geomorphological Site (RIGS) within member counties and developing management plans for each.

The innovative approach of The Geology Trusts is driven by its member counties. Together, they have a wealth of experience and expertise that they are willing to share and enquiries are always welcome.

For more information about The Geology Trusts and contact details for the member counties, please see www.earthheritagetrust.org/blog/Partnerships/TheGeologyTrusts



EHT AGM Report

ON A LOVELY SUNNY, early summer's day, with the business of the AGM complete, members of the Trust were rewarded with a rare treat at Worcester Cathedral.

We were privileged to have Chris Guy, the Cathedral Archaeologist, to give us an informative conducted tour of the roof space above the transepts. We were also given a tour of the Stonemason's Yard by Darren Steele. Darren explained the technicalities and intricacies involved in working with stone and

demonstrated one of the techniques used in carving. In particular he showed us the plan that had been drawn up from a fragment of stone and an old photograph for replacement pinnacles for the walls of the cloisters – all lovingly done in the traditional way, eschewing computer aided design. We

were able to see a completed pinnacle awaiting installation. The full restoration will take several years. Lunchtime provided an opportunity to take a closer look at the architecture and building stones of the cloisters as well

as the well-stocked herb garden with its traditional rosebush. Many thanks to Chris and Darren for a most memorable day and to the ladies from the refectory for providing morning coffee, lunch and afternoon tea.



DATA ACCESS & MANAGEMENT IN THE GEOLOGICAL RECORDS CENTRE

THE TRUST ESTABLISHED the Geological Records Centre (GRC) in 1996 as a repository for information collected and collated by employees and volunteers. Access to the GRC data is controlled by the Trust's Data Access Policy (DAP).

The purpose of the policy is to ensure that our data providers and users know and understand the terms and conditions that govern the collection and dissemination of GRC data. A detailed DAP is available from the Data Manager, a summary is included below:

Data Access & Use

1. The GRC archive contains site surveys, photographs, maps, and references to an extensive database of literature and research.
2. When data or images are received, they undergo various quality control processes to ensure accuracy before the data is entered onto the database and archived.
3. Anybody requesting data from the GRC must complete an Information Request Form, available from the Trust's website and submit it to the Data Manager. Persons who wish to visit the GRC must make an appointment with the Data Manager.
4. The Trust is committed to ensuring free and fair access to the data held in the GRC. No fee will be charged for the data itself. However, a charge may be applied to cover staff time for processing data requests.
5. The Trust reserves the right to restrict access to all or part of some data resources.
6. Personal data about individuals who have supplied or requested information or are landowners is managed according to the Data Protection Act (1998). This information will not be provided to persons requesting information from the GRC archives.

Data Management

All data about the geology and landscape of Herefordshire and Worcestershire is collected or collated by employees and volunteers working for the Trust. Site reports are recorded on the Geology Locality Record Form (GLR). It is left to the discretion of the fieldworker as to which version of the form is

used for a site report. Copies of the form are available from the Data Manager.

All GLRs are forwarded to the Data Manager, who will check each one for quality and completeness of information. Any incomplete or wrongly completed forms will be returned to the fieldworker to be amended and resubmitted. When GLR forms have been checked, the information is added to the sites database and each form is filed in both digital and hard copy formats.

The sites database and other digital resources are backed up on a weekly basis.

For more information about data access and management, contact the Data Manager, Adam Stinton on 01905 542014 or a.stinton@worc.ac.uk.

Natural England & Geology Trusts Project: a National RIGS Database

NATURAL ENGLAND HAS GIVEN the Geology Trusts the task to supply information which will be fed into a national Regionally Important Geological Sites (RIGS) database. This data will supplement that already supplied to Natural England by Local Authorities.

Ultimately members of the public will be able to access the information via the Natural England website; data relating to Sites of Special Scientific Interest (SSSI) are already available. It is anticipated that the Geology Trusts will be using data from 400 of their 960 sites. The first stage of the project will be starting immediately, with the collation of initial data covering the following areas:

1. RIGS boundary information.
2. The completion of a spreadsheet giving basic information about each site – access, basic geology,

reason for RIGS designation and site condition and contact details for the local geoconservation group.

3. Condition monitoring of 100 sites. This will involve fieldwork and will use the form devised here at the Trust by Tom Richards (see article on page 6).

There may be follow on work next year; filling gaps in the data, quality checking of data and mapping site boundaries, if they are not currently known. The Trust will play a key role in this exciting new project, which will have national implications for geological conservation work.



Trust Website Updates

Adam Stinton

SINCE REJOINING THE TRUST in September 2007, I have been responsible for maintaining and updating the content of the Trust's website.

Initially a number of behind-the-scenes changes were made to improve the visitor's ability to navigate through the site. Several new sections have been added to the website. A section specifically for information about Regionally Important Geological Sites (RIGS) in the two counties and background information has been created. In addition, detailed information on the geology and landscape of the two counties is available in the *Our Earth Heritage* section.

Several new articles are in preparation for the *Local Landscapes* section. Changes to the site design to include better navigation and an improved colour scheme are in the process of being developed. A new feature that will allow visitors to buy our Explore and Discovery guides directly from the website is being investigated. Hopefully, these will be added to the site in the not too distant future.

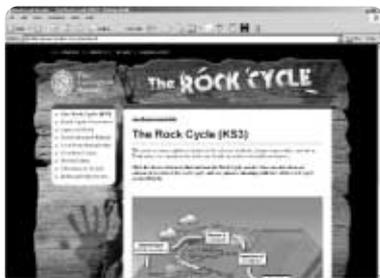
If anyone has any comments about the website content, or is interested in contributing short articles to the *Local Landscapes* section, please let me know (a.stinton@worc.ac.uk).

USEFUL WEBSITES

NUMEROUS WEBSITES provide a valuable resource for those of us involved in geodiversity protection and education. Here are just a few.

Adam Stinton

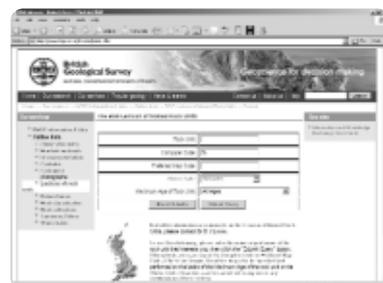
The Rock Cycle (Geological Society of London):
www.geolsoc.org.uk/rockcycle



This recently developed website is aimed at UK science students at Key Stage 3. It focuses on the rock cycle and covers core topics such as the three main rock types, weather, erosion, transportation and deposition processes. Perhaps the most interesting part of the site is the *Rocks around Britain* section which describes numerous localities in the UK where examples of the different rock types or processes can be seen. You will be glad to know, I'm sure, that our area is represented by Symonds Yat in the evidence of geological processes in action section.

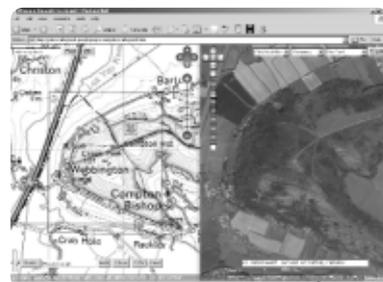
The BGS Lexicon of rock units:
www.bgs.ac.uk/lexicon/home.cfm

This free resource provided by the BGS, is a valuable resource for anyone who is studying the geology of Herefordshire and Worcestershire (and the UK for that matter), and is confused by the variety of new and old names. Entering a rock unit



name into the search box will give you some detailed information on aspects such as type sections, on which BGS maps the unit can be found and any previous or new names. As all of us who were involved in the recent GAP work will testify, this site is incredibly useful.

Where's the path?
<http://wheresthepath.googlepages.com/wheresthepath.htm>



This is a very interesting website. It displays side-by-side the Ordnance Survey map data, Google Earth satellite and aerial images. You can search by place name or just browse through the maps by dragging with your mouse. Perhaps the best feature of the site is that you can determine precise 10-figure grid references for any point in view – just perfect for use when working in the field!

WELCOME

WE ARE PLEASED TO ANNOUNCE that Katie Boath has joined the team and will be working one day a week as Finance Manager. Katie joined at the beginning of April and has quickly got to grips with the complexities of the Trust's finances.

Woolhope N.F.C. – Geology Section Programme – Autumn 2008

Indoor meetings are held at the Woolhope Room, Hereford Library, Broad Street commencing at 6pm unless otherwise stated.

Friday 17th October. Oil in N. Africa due to Ordovician glaciation. Talk given by Bill Fitches.

Friday 14th November. Iceland: where the geological processes happen in real time. Talk given by Chris Darmon.

Friday 12th December: Members' Evening.

Non-members are welcome but will be charged a small fee for temporary membership for each event attended.

Further information for all events unless otherwise stated from: Sue Hay on (01432) 357138, or email: svh.gabbros@btinternet.com.

FRITH WOOD PROJECT

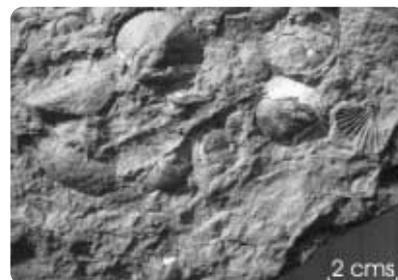
THE TRUST HAS TAKEN PART in a project, funded by Malvern Hills AONB, which explored Frith Wood just north of Ledbury.

A booklet has been printed describing the geology and landscape, archaeology, natural history and woodland management of Frith Wood. There are two interpretation panels in the wood to give visitors information.

Copies of the booklet can be obtained free from the Tourist Information Centre and Heritage Centre in Ledbury. If you want a copy please hurry as numbers are

limited! The project was launched in June by Ledbury's Mayor, Keith Francis, with a guided walk and tea and cakes at the Market Hall.

The long narrow ridge of Frith Wood follows the line of an anticline folding Lower Ludlow, Aymestry Limestone and Upper Ludlow rocks. The picture above right shows a fossil rich horizon in siltstones in Godwin's Rise, Frith Wood.



Brachiopod and bivalve fossils found in the Silurian siltstones by the trackside in Godwin's Rise, Frith Wood.



View to the East from Frith Wood.

PERSONNEL AND CONTACT INFORMATION

All can be contacted by telephone on 01905 855184 and 542014 or by email on eht@worc.ac.uk (unless indicated otherwise).

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