



Newsletter Issue 12: December 2001

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What's New?

Pauline Moves On When the Group began work in 1996 with the support of UCW it was with great fortune that at the same time Pauline was undertaking research and looking for part time employment. She was interested in the post of Data Manger that had become available as a result of the award from the Heritage Lottery Fund and she was available to begin work straight away. Those early beginnings in the windowless store room (the embryonic Geological Records Centre) proved Pauline's metal for she gradually built the dataset (albeit initially on GD2) and with the development of Cheryl Jones's Access database it has now reached 1500 sites.

But it is important to point out that Pauline put considerable effort into other matters associated with the development of a professional Earth science conservation and recording unit. She was responsible for much of the organisation of the first two UKRIGS conferences and for the collation of the two resulting Proceedings publications. Indeed there was and still is a wonderful flair for presenting information whether as scientific or general posters, survey reports or seminars. This approach has proved to be one of the success stories of the Group with the quality of our work being recognised by many private and public organisations both nationally and locally. Pauline also acted as secretary to the Panel of Assessors and the Executive Committee and was responsible for producing the informative and widely circulated newsletter and maintaining the website.

Amid all this multifunctional activity Pauline has been carrying out some important research on fluvial sites and their position in the RIGS designation process. This has proved to be a major catalyst for us as she gradually brought to our attention the vast wealth of river features in the two counties and how they might be used for educational purposes as well as research. She has highlighted even more the problems associated with the designation of geomorphological sites and she has set the scene for agreement regarding a regional approach to this issue within the Western Association of RIGS Groups.

Now Pauline has chosen to make her career in the academic world. She has been appointed as a lecturer in physical geography at the College of St Mark and St John in Plymouth and she starts there in January. All of us in the Group will miss her. We wish her every success for the future and trust that she will continue her interests in geoconservation.

Local Heritage Initiative Project

Educational Centre for Geology and Landscape

As reported in the last newsletter, over 400 schoolchildren attended Rockwatch Roadshows earlier in the year. We presented each school with a teaching set of rocks and fossils and supporting information. Accounts of the events were in the local press and on radio. The events were very successful with requests from schools to repeat the programme on a regular basis.

The Type Collection display units are now in place at Hereford and Worcester Museums. These will provide storage for the type collection for the two counties and they will also have display facilities associated with them for use by the general public. Collecting programmes for specimens are underway following a procedure drawn up by Rosemary Roden and Les Morris. The Group has adopted a stratigraphical approach with examples of Formation and Member being collected. Fieldwork has been undertaken in the areas of Upper Old Red Sandstone and Carboniferous Limestone Series in southern Herefordshire, in the areas of Precambrian and Silurian in the Malvern and Abberley Hills and in the areas of Permian and Triassic around Kidderminster. Volunteers have been involved in all these surveys.

The printing of the trail guides for Goodrich Castle and the Lickey Hills is being funded by the Local Heritage Initiative. The drafts of these are well advanced with considerable site research having taken place. It is likely that the Goodrich trail will be completed before the end of the year with the Lickey Hills trail to be printed early in 2002.

Biodiversity Links

The Group participated in drawing up the Herefordshire Biodiversity action Plan by sitting as a partner on the 'Quarries and Pits' committee. The targets for the Group to carry out are associated with linking RIGS to biodiversity, in particular trails and quarrying activities. A recent award from English Nature will enable this to be carried out over the next two years. Rollo Gillespie, our Biodiversity Co-ordinator, is currently working on producing biodiversity 'inserts' for the trails, focussing on the wildlife character of the sites.

Rollo Gillespie writes:

The Foot and Mouth epidemic caused major delays during the summer but eventually enough information was accumulated for the Wigmore Trail insert. Each insert is in black and white, double sided with a single fold. The Wigmore trail insert has a few drawings, some photos and a 'tree spotter's guide'. Limited space has resulted in a very selective approach to subject matter, but the insert is finished and awaiting the printing of 500 copies. The next inserts will be for the Goodrich Castle Trail followed by the Symonds Yat Trail. It is possible to vary the inserts slightly in different seasons, so the Goodrich castle one is currently fungi and a tree spotter, and later on some small ferns and plants that grow in the castle walls can be put in. The Yat trail will have more tree spotting and include buzzards, the obvious peregrine falcons and possibly deer.

Fluvial Sites Project

Pauline Couper writes: The aim of the fluvial sites project is to identify sites suitable for RIGS designation which relate to the fluvial geomorphology (river systems) of Herefordshire and Worcestershire, and with the funding from the British Geomorphological Research Group this was extended to include 'other' geomorphology as well. After 12 months, the project has resulted in the collation of a wealth of information and the discovery of potential RIGS, but also in the

identification and clarification of a number of issues relating to RIGS and geomorphology which clearly require further consideration among UK RIGS Groups.

The general approach of the project has been to consider the influence of geology and glacial history on the present-day river systems, and the processes currently operating within them. Sites which have been instrumental in understanding the development of the fluvial geomorphology, or which demonstrate past or present-day processes, can then be considered for RIGS designation. Taking this approach, the inclusion of 'other' geomorphology becomes a logical step as the influence of glacial history is so evident, particularly in Herefordshire.

In practical terms, the work has involved a combination of literature surveys and field visits. The Rivers Severn, Wye and each of the main tributaries within the two counties (e.g. the River Lugg, River Arrow, River Teme) are being visited in turn, following each river and its valley from its entry into Herefordshire or Worcestershire down to its confluence with another river, or to where it leaves the counties. In this way, a general overview of the rivers is obtained and specific sites can be considered within the context of the river and drainage basin. A report is being produced which also adopts this format, describing each river in turn, thus providing a reference source for future RIGS work and identification of the areas which would benefit from further investigation.

Herefordshire and Worcestershire have a very varied geomorphology. As well as present-day fluvial processes and forms, the counties show evidence of past river channel changes (for example, on the floodplain of the River Teme) and of glaciations (e.g. dry valleys which once carried major rivers or meltwater, glacial depositional forms such as moraines, and relic glacial lakes). Deposits resulting from past processes and climate changes are also present, such as at the wind-blown sands at Hartlebury Common. The project will thus result in a number of sites being considered by the Panel of Assessors for RIGS designation in the near future.

RIGS Groups across the UK have found greater difficulties associated with designating geomorphological RIGS than geological RIGS, and there appear to be two main problems; the scale of features and the delineation of boundaries. The Fluvial Sites Project has perhaps led to some clarification of these problems.

Many geomorphological features are large-scale, perhaps covering several square miles, and this presents the question of whether or not whole features at this scale should be designated as Regionally Important Sites. It may be worth considering, under these circumstances, what is the aim of such a designation – what are we trying to protect? In the case of some large landscape components (for example, Wigmore Glacial Lake, or the Wye Gorge), there is very little that would actually harm them geomorphologically, and this raises the question of whether or not they require designation (protection) at all. The Group has, in some places, designated 'viewpoint RIGS' – the feature(s) of interest might be huge, cover many landowners, and not really be 'at risk', but there's one place where you can see that geomorphology very clearly, and this is important, for education at least. This is just one approach though, and would probably not suit every case. Another approach to consider is that of 'education' rather than 'designation'; perhaps, in some cases, it would be sufficient to make local councils aware that a particular landscape-type is present in part of the county, and why it is of interest, rather than actually designating the whole area. This may be relevant, for example, for a drumlin field.

Finding a suitable delineation of the boundary of a RIGS may be partly dependant on the criteria for which the site is designated. For example, although land use boundaries (i.e. hedges, fences) generally have no geomorphological significance, if a site were designated for its educational value alone, they might be appropriate as RIGS boundaries. District and County Councils need to be able to delineate a site in order to define clearly any potential threats to the site and restrictions (if

appropriate) to be imposed. But if a site were queried at a public enquiry, boundaries which were not based on sound geomorphological understanding of the features of interest could easily be ridiculed. Perhaps, then, RIGS Groups need advice from a range of appropriate 'external' bodies, such as the councils, as to how this problem should be tackled.

Whilst some of these issues have been introduced in past UK RIGS Conferences, they have yet to be solved. Clearly, identification of all possible approaches, and the potential pitfalls associated with each, requires a good deal of discussion between a number of parties involved. With this in mind, the Western Association of RIGS Groups intends to begin discussions in our part of the country with a seminar early in 2002. We hope that this will then prompt further deliberations across the UK, and help to redress the bias within RIGS towards geological sites.

If you have any comments regarding the designation of geomorphological sites, please contact the Group.

Trails Update

Ruth Thornhill writes:

Wigmore glacial lake trail has been well received. It is now available from Tourist Information Centres, bookshops, Hereford Map Centre, locally, and direct from the Geological Records Centre priced £1.95.

The Wigmore guide recently won a national award. The LASMO Geological Challenge Award for 2001 was presented to H&W RIGS Group in Edinburgh on 25th September 2001, following the 2001 British Geological Survey Distinguished Lecture. Dr John Payne received the award on behalf of the Group. The lecture was entitled 'Life and the Earth' and was given by Aubrey Manning. Amongst other themes, his principal one was the need for the science community to heed the 'heretics' in its midst. He cited as examples the initial scorn attached to the theory of continental drift and to the discovery of organisms in exotic habitats (deep, hot rocks; oil reservoirs; concentrated brine).

The LASMO award has three components:

- The inscription on the trophy of the Group's title. The trophy is kept for the coming year at BGS Edinburgh.
- Two inscribed glass blocks, for the Group to keep.
- A cheque for £250.

The award was given to us on three main counts:

- The guide deals with geomorphology. This was seen as an unusual yet very desirable topic for public awareness.
- The volunteer input into the project.
- The very attractive design coupled with the low price.

Two more trail guides will be available by the end of 2001: *Goodrich Castle Building Stones Trail* which covers the geology and landscape of the castle and surrounding environment, and *Symonds Yat Trail* which interprets the geology and landscape as seen from Yat Rock viewpoint and at various locations in the local area.

More trails will be available early next year. We hope to publish a building stones trail for Worcester Cathedral and a geology and landscape trail for the Severn Valley Railway (view from the window). If anyone would like to volunteer their services to test the trails before they go to print, please contact me on 01905 855184, or r.thornhill.ac.uk. We will send you a free copy of the

published guide in return for your efforts.

New Projects & Associated Matters

The Heritage Lottery Fund award that the Group received back in 1997 has been the mainstay of our work enabling us to set up a computer based archive and set in motion the infrastructure to record and conserve Earth science sites. There have been many spin offs resulting from the grant and we are indeed grateful to HLF for the support. That project comes to an end in December this year but we have not been idle in looking to the future with new projects and potential funding.

There is a major problem in securing funding for core activities in the geoconservation movement in general and with RIGS groups in particular. As designating RIGS and all the survey and assessment work that goes with this is regarded as part of the local authority planning process, the position of most funders is that it is a statutory obligation and therefore should be funded by central or local government. We all know that no such funds are forthcoming. Consequently for us to survive we must concentrate on those activities that are likely to be supported such as public awareness and education programmes and heritage conservation.

Thus we intend to build on the successes that Ruth has had with geological and landscape trails. Our new application to HLF is for an Earth heritage education and awareness programme throughout the two counties working with parish councils and linking in biodiversity and archaeology. We also have applications in to DEFRA and New Opportunities Fund for 'Earth Discovery Zones'; a town based project looking at the geology of the built environment and the natural landscapes within the towns. Eleven urban areas have been identified and there have been indications of support from local authorities.

We have been asked by English Nature to set up a programme of SSSI surveys and enhancement. This essential work enables us to develop further the important professional link with EN and receive a steady income as a result. Without this commitment from English Nature the Group would be unable to cover the basic costs of its operation such as rent, printing, computers, travelling expenses etc. We hope that the strong support that EN gives to the RIGS movement can be used to produce some core funding from central government.

Rock and Fossil Events

The very successful Rockwatch Roadshows earlier in the year set up the enthusiasm amongst our volunteers to provide an ongoing programme for first and primary schools. However, Rockwatch are unable to provide continuing support without charging the Group. We have decided that the best way forward is to create a similar event using our own ideas, and the Group has recently received a grant from Awards For All (Lottery funding) to fund the purchase of materials and pay volunteer expenses.

On 2nd September the Group attended the Duckworth Trust's 'Chapter Meadows Open Day', and in keeping with the interactive spirit of the event we produced a 'Geology In Your House' activity - thus using the open day as a test run for one of the activities planned for the future rock and fossil events. The purpose of the activity is to link geology with its use around the home; thus specimens of chrome, zinc and copper ores are matched with plumbing materials, clay is matched with bricks, kaolinite with kitchen tiles, and titanium dioxide with white paint and plastic such as light switches. The drawback to the activity is that we have a 'builders junk yard' in the Geological Records Centre, but this, combined with the other activities we have planned, will help children to recognise and engage with the geology around them.

Enquiries from schools about the next event continue to be received at the GRC so we hope to start the new series of events as soon as possible.

AGM

The Annual General Meeting of the Group will be at University College Worcester on Thursday 7th February at 6.30 for 7pm, in the Hereford Room of the Conference Centre. Sherry and light refreshments will be available. Membership fees (£1) will be due at the meeting. Nominations for a maximum of five positions on the Executive Committee should reach the Geological Records Centre at least 14 days before the AGM. The current Executive Committee, consisting of Les Morris (Chairman), Moira Jenkins, Cheryl Jones, John Medley, and Peter Thomson, is willing to stand for re-election for another year.

As required under article 18 of the Constitution, advance notice is hereby given that the following resolutions to alter the constitution have been received:

- Article 1 be changed to read; "The name of the Association is Herefordshire and Worcestershire Earth Heritage Trust ('the Group')." Proposed by Rollo Gillespie and seconded by Pauline Couper.
- Article 3(f) be changed to read; "to inform educational establishments of the work of the Group and to promote the educational use of Earth science sites." Proposed by Cheryl Jones and seconded by Peter Thomson.
- Article 3(h) to be changed to read; "to promote awareness and understanding of geodiversity, and an interest in Earth science conservation amongst the general public." Proposed by Moira Jenkins and seconded by Cheryl Jones.
- Article 14(a) to be changed to read; "There shall be an Annual General Meeting of the Group which shall be held in the month of February in each year or as soon as practicable thereafter." Proposed by John Medley and seconded by John Payne.

In the next issue

- Rock and Fossil Events
- Director's Annual Report
- RIGS - latest news
- Earth Discovery Zones
- Western Association Progress