



# The Black Country Geological Society

Editorial:      ENTENTE CORDIALE:

Our society has many friendly links with other geological societies and universities, who run geological courses and holidays for the public. Brief details of these are usually published on the last page of our newsletter. One of the most productive of these links, in terms both of interest and friendship, is with Bristol University.

At the last meeting of our society in November, about seventy people welcomed the return visit of Dr. Reg Bradshaw from Bristol University, and an account will be published in a future issue. The weekend before this, Dr. Bradshaw took a party of about forty to Paris for a geological visit, and Douglas and Ivy Warren, your editor Sheila, and treasurer Anne Sutcliffe feasted their eyes upon some quite incredible beauty. Yes, we do mean minerals and their brilliant colours, as well as the Notre Dame and Seine alongside the hotel. And the English made commendable linguistic efforts which were much appreciated.

"Oh, monsieur, c'est MAGNIFIQUE! (aside) What's French for "out of this world?" But the expressions on our faces needed no translating at the Ecole des Mines and the Sorbonne, about which Anne wrote previously. The Giant Crystal collection was another natural wonder, with Brazilian crystals the size of ourselves. Finally, when one of us had a minor accident, the extreme kindness of all passers-by, police, and the nearby cafe staff, gave the entente cordiale an even deeper meaning.

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Forthcoming Meetings:

Monday 8th December: "New Zealand geology and scenery." Talk by Sheila Pitts, based on a five week tour. This involved sharing a two week holiday with North Island friends who produced as much geology as they could think of, then touring in South Island which is very different, for two weeks. The last week was with the friends again in Rotorua, and by then they were all fascinated with their own geology.

Monday 19th January: "Tales of the River Bank." Talk by Dr. Lawlor, about the many aspects of erosion and deposition.

*Chairman*  
A. Cutler B.Sc., M.CAM.,  
Dip.M., M.Inst.M.

*Vice Chairman*  
P. G. Oliver B.Sc., Ph.D.,  
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*Hon. Treasurer*  
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*Hon. Secretary*  
P. D. Shilston M.A., C.Eng.,  
F.I.E.E., M.I. Mech.E.

*Field Secretary*  
N.G. Bradley

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Indoor Meetings are held at the Saracen's Head, Stone St., Dudley: 7.30 p.m. for 8.00 p.m. start. Field Meetings commence from outside the Saracen's Head unless otherwise stated. Those who would like lifts for field meetings, please contact Graham Worton (Dudley 213207).

The Society does not provide personal accident cover for members or visitors on field trips. You are strongly advised to take out your own personal insurance to the level which you feel appropriate. Schools and other bodies arrange own insurance as a matter of course.

8th December)  
19th January) see front sheet.

Monday 19th February: "Green Rock in the Black Country." Talk by Colin Knipe, of Johnson, Poole & Bloomer, about large igneous intrusions in and below the Coal Measures, as proved in his own firm's investigations.

Monday 16th March: AGM and buffet.

Sunday 19th April: Field trip to the Jurassic exposures of Hook Norton. Leader Mr. B. Boneham of the Geologists' Association, Midland Group.

Monday 11th May: Informal meeting on aspects of conservation. It is expected that there will be 20 minute talks by members of other organisations about their work, such as nature trails.

June: Weekend field trip (still to be arranged).

July: "Evolution of Fossils and the fossil Record." Talk by Dr. Derek Gobbett.

September: Talk by Professor Westbrook, Birmingham University.

October: Field trip.

November: "Geology & Philately." Talk by Dr. R. Bradshaw of Bristol University.

December: (to be arranged).

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Weekend field trip to Llangollen:  
28th-29th June, 1986. Leader Dr. Derek Gobbett, Birmingham University.

On a bright sunny morning in June, about twenty amateur geologists, including a good contingent of B.C.G.S. members, met at the first site. This was a road cutting showing a section in Silurian sediments of basin facies on the south side of the Berwyn anticline, and excellent three dimensional graptolites were found. We next visited an exposure of Caradocian slates, interbedded with

volcanic ashes, a complex structure with faulting and mineralisation, before having a pub lunch in Llangynog.

We explored the spoil heaps of Pen-y-Parc mine, which once exploited the mineralisation previously mentioned. Here good examples of galena, sphalerite, calcite and chalcopyrite were found. Travelling on over country lanes to Pandy, we inspected a good section through the Pandy ash in Pandy quarry on the way to our hotel in Llangollen. For those not too exhausted, an evening visit was arranged to the ruins of Castel Dinas Bran, with fine views of the Dee Valley and Eglwseg escarpment. On Sunday morning we drove east of Llangollen to a quarry of well bedded fine grained chert, probably a silicified mudstone, in the lower part of the Cafn-y-Fedw sandstone. Below this horizon were coarse sandstones with quartz pebbles from the escarpment overlooking the Vale of Llangollen.

We then drove down the Panoramic Walk to an exposure of sandy limestone showing large-scale cross-bedding, and then on to Trevor Rocks, where an almost complete cross section through the Carboniferous Limestone was exposed in old quarries and some good fossils were found. Lunch followed at the Britannia Inn on the A452, and then we continued on to the Horseshoe Pass and the Clogau quarry. This quarry used to specialise in large slabs of slate for billiard tables. The bedding and cleavage of the Upper Silurian siltstones and slates are almost parallel. Some bedding planes are covered with flattened and distorted Orthoceras, and good examples were found. We then proceeded to World's End, where we saw Llandovery mudstones in the stream below the limestone crags, and followed a footpath through a small valley along a fault. Finally we walked down a forest track to investigate fossiliferous calcareous mudstone of the Ashgillian Cym-y-Bran beds. This was another highly successful and interesting field trip held in perfect weather, and our sincere thanks go to Derek Gobbett for leading it.

Chris Jowitt:

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P.S. And my thanks to you, Chris, for nobly doing a second write-up after the post failed to deliver the first.

Several people have since told me what a pleasant and interesting trip this was, and Derek Gobbatt will be visiting us again next year - Sheila.

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Field Meeting to Charnwood Forest,  
7th September, 1986:

Dr. T. Pharoah, who led this meeting is a member of the Deep Geology Research Group of the British Geological Survey. Charnwood Forest is of particular interest to them as it is an area where "deep geology" comes to the surface. Charnwood's Precambrian rocks, formed over 600 million years ago, were covered by Keuper Marl in Permo-Triassic times; the marl covering is now being eroded and the original landscape of rugged Precambrian is once more exposed at the surface. It is likely that Precambrian strata underlie, at a deep level, large areas of the Midlands, so that we can see "deep geology" at first hand.

The structure of the Precambrian strata is an anticline plunging in a SE direction, and Dr. Pharoah started at the eastern entrance to Bradgate Park (GR 542114) close to the anticlinal axis. Here there were exposures of Bradgate Tuffs - Precambrian volcanoclastic sediments - which showed a cleavage oblique to the anticline, perhaps indicating a later direction of pressure.

Among many other interesting features in Bradgate Park, Dr. Pharoah pointed out the exposures of Markfieldite, a pink and green mottled diorite, near Bradgate House, and also the spectacular Sliding Stone Slump Breccia near the War Memorial.

The next site was a quarry at The Brand (GR 536135) which was made to obtain roofing slates of the Swithland Greywacke formation. The useful slates formed a fairly narrow band, at a high angle of dip, towards the NE edge of the

Anticline.

After a stop at Beacon Hill (GR 510 148) to see the Beacon Hill Tuff formation - fine grained, silicified, ash deposits - we finished up at Morley Quarry (GR 476179). This is on the axis of the anticline, where the oldest Precambrian strata (the Blackbrook formation) are exposed, and for this reason it was selected by the British Geological Survey for their Geothermal Research Borehole. Dr. Pharoah explained that the object was not to tap geothermal power at Charnwood, but to obtain general data about old Precambrian strata for use in other geothermal projects - again, "deep geology" at the surface.

This excellent field meeting was complemented by brilliant sunny weather, and we are most grateful to Dr. Pharoah for leading it.

Paul Shilston:

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Courses for the Public:

1. University of Bristol,  
Dept. of Extramural Studies,  
Wills Memorial Building,  
Queens Rd., Bristol BS8 2HR.  
0272 303030.
  - a) Karst Processes - 20/21st  
March. Wills Memorial  
Building. £8.00.  
B86 D038 SJ.
  - b) Geology of Bridport area -  
5/8th March. Bridport.  
£15.00. W86 H013 SJR.
  - c) Geological Miscellany II -  
20/22nd March. Dr. R. Bradshaw  
at Urchfont Manor, Devizes,  
Wilts. £51.00. W86 H013 SJR.
  - d) Welsh Borderland - 5/7th  
June. £20.00 Precambrian and  
Silurian. D86 H004 SJ.
  - f) Volcanoes of Southern Italy -  
Ten day field excursion at  
Easter. C86 J002 SJR. Details  
on request.  
Vesuvius, Pompeii, Pozzuoli,  
Bay of Naples, Stromboli,  
Etna, Vulcano.
  - g) Eastern Canada - 17th Sept./5th  
October. Traverse Montreal to  
Gander, Newfoundland. Quebec  
Precambrian Shield, structure  
of Canadian Appalachians, early  
Atlantic rift phenomena in Bay  
of Fundy. By air, then Greyhound  
coach in Canada. Details on re-  
quest.
2. University of Durham, Dept. of  
Adult Education, 32 Old Elvet,  
Durham, DH1 3JB.
  - a) Geology and Botany of Tenerife -  
March.
  - b) Geology of Loch Assynt - May
  - c) Geology of South Germany - Sept.
  - d) Geology and Flora of Grand Canaria.
  - e) Geology and Botany of Crete,  
April, 1988.

Field Secretary:

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