



THE BLACK COUNTRY GEOLOGICAL SOCIETY

CHAIRMAN
VICE CHAIRMAN
HON. SECRETARY
HON. TREASURER

A. CUTLER, B.Sc.
P. G. OLIVER, B.Sc., Ph.D., F.G.S.
D. J. WRAIGHT
Mrs. E. BAKEWELL

NEWSLETTER NO. 2 - NOVEMBER 1975

Editorial

Since July 3rd 1975 The Society has gone from strength to strength with the result that members of the Committee are just about finding sufficient time to go to work. This highlights the original intention of encouraging as much member participation in activities as possible.

Doug Bedson has taken on the role of Librarian as literature flows in, and out of the Society. This can be discussed, perhaps, at the Christmas meeting, but in the meantime anyone wishing to assist Doug would be most welcome.

In the same way Alan Cutler has agreed to co-ordinate the visits to, and recording of temporary sites. This type of work will increase as time goes by and participation by members is extremely useful. If anyone would like to help in the co-ordination exercise please contact Alan.

In fact, if there are members who would like to arrange a field trip, give a lecture or suggest a lecturer, discuss the future programme or help with meetings or functions in any way, please do not hesitate to contact Dave Wraight.

The Society hopes to produce a journal early next year; suggestions for, and contributions to this would be much appreciated.

Inaugural Lecture

Professor Shotton spoke on 'The Ice Age in the Midlands' at Dudley Museum on 25th September 1975. This well attended and excellent lecture marked the formal beginning of The Black Country Geological Society.

Only the final third of the complex Pleistocene period is displayed in Britain. The deposits and flora and fauna indicate cycles of cold and warmer episodes; an excellent example exists at Quinton. Boreholes here, revealed two boulder clays with interglacial channel deposits between them.

Professor Shotton indicated the significance of beetles in palaeoclimatology but also stressed that invertebrate shells, tree pollen and vertebrate bones give an idea of climate. The Number 2 Terrace of the River Avon was deposited in a cold spell as the gravels contain remains of mammoth and woolly rhinoceros.

Ice wedge polygons caused a distinct pattern in the resulting soils which in turn influence the rates of growth of vegetation. Patterns in the latter can readily be observed from the air.

In discussion at the end Professor Shotton described the role of Carbon 14 in Pleistocene chronology. Dating back 50,000 years can be undertaken but samples must not be contaminated otherwise considerable errors can creep in.

Meeting 20th November

Due to unforeseen circumstances Dr. Toghill is unable to give his lecture on conservation. He has promised to address The Society in the near future.

There will still be a meeting however: Members' Night; three or four short talks, with slides and fairly informal. Dudley Museum, St. James Road, 7.30 p.m., Thursday November 20th.

Tea and biscuits at 7.00 p.m.

FIELD MEETING - SUNDAY AUGUST 31ST

INTRODUCTION TO BLACK COUNTRY GEOLOGY PART II

UPPER COAL MEASURES - TRIASSIC

Leaders: Mr. A. Cutler and Dr. P. Oliver
The second of this two part field course

continued the story of Black Country geological history from the Middle Coal Measures times seen at Saltwells on the first meeting. After assembling as usual at Dudley Museum the party travelled to the first site of the day adjacent to Duports Ltd, at Tividale, where an old marl hole showing good exposures of the Etruria Marl is situated.

Mr. Cutler described the Etruria Marl, the lowest member of the Upper Coal Measures group, and the conditions believed to be pervading at the time of deposition. Several members found fossil plants although they were generally of a fragmentary nature.

The party then moved off towards Rowley to visit the Basalt quarry at Allsops Hill. Dr. Oliver described this location and members were able to see fine examples of columnar jointing, spheroidal weathering and a raft of Etruria Marl in which group the Basalt is intrusive.

After lunch the party travelled to Halesowen where Mr. Cutler described the exposure of Halesowen beds in the road-works/subway adjacent to the Grammar School. This was a good example of a typical temporary exposure at which members were able to inspect several of the lithological variations in the group. Some fossils mainly pithcasts were found but a single specimen of an unidentified bivalve (lamellibranchs) was also discovered.

The last locality of the day was the old quarries at Queslett Road, Great Barr, where the fine section of Bunter Pebble Beds was described by Dr. Oliver. The 'jump' from the Halesowen beds to the Triassic period represented a great period of time but provided an appropriate ending to the field meeting as the Triassic is the youngest of the solid formations which can be seen in the Black Country, contrasting with the oldest, the Cambrian, seen at Rubery on the first meeting.

Pouk Hill Quarry

Dave Wraight has written up the events of the field meeting, September 14th 1975.

Grid Ref. 993 994 Sheet 139 (Birmingham)

Leader: Dr. P. G. Oliver

This quarry is approached from the Bentley Quarry Works at the bend in Bentley Lane, Walsall. The quarry was originally excavated for roadstone but now provides excellent exposures of the features of a dolerite sill.

The southern part of the quarry is overgrown and is used for biological field work. The track leads northwards to the main quarry.

The eastern part of the quarry shows the typical features of dolerite including jointing and spheroidal weathering. The rocks at the top of the section are much finer grained than the lower ones. Polygonal jointing can also be seen but this is better displayed in the northern face of the quarry where there are a few short columns.

A ramp leads to the upper level and to the west of this are some very good examples of spheroidal weathering. This upper level represents the top of the sill and the junction with the overlying shales is clearly exposed. Coal Measure shales show signs of baking and veining at various places around the quarry.

There is evidence of ironstone working the top level and also at this level can be found lepidodendron, non-marine lamellibranchs and fish fragments. (Identified by Professor F. W. Shotton).

The quarry is of great value displaying igneous metamorphic and sedimentary rocks, examples of fish and plant life, thermal metamorphism and weathering features. Every effort must be made to preserve the site. Perhaps members in Walsall could have a word with their local Councillors.

Book Review

Terry Bond takes on the role of 'Book Critic' with the following review:

"Geology Explained in the Forest of D... and the Wye Valley", by W. Dreghorn, published by David & Charles, 1968, £2.75 does what you would expect; it describes and explains clearly to the amateur geologist the structure of the area. Then by means of a series of 10 chapters each dealing with a specific area, the Author takes the reader on field study tours.

The text is detailed well enough for enthusiasts without being too technical, a glossary of terms is provided, to assist newer geologists. A particularly attractive feature of the book is the many pictorial sketches of the locations taken from convenient vantage points in the area. This enables the reader more easily to understand the text and receive an excellent grounding in geomorphology at the same time.

Used in conjunction with the O.S. map and a comfortable pair of walking shoes readers will find themselves attracted time and time again to this varied, compact part of the country.

Booklist

Doug Bedson has suggested some further reading:-

ELEMENT OF PALAEOLOGY R.M. Black £4.25
FIELD GUIDE TO ROCKS AND MINERALS F.M. Pough £1.75
OUTLINE OF HISTORICAL GEOLOGY A.K. Wells £2.20
ANCIENT ENVIRONMENTS Laporte £1.25
READING GEOLOGICAL MAPS Bradshaw & Jarman

Forthcoming Events

Wednesday December 10th; Wine, Cheese and Rocks. The Society's first Christmas 'get together'. An informal evening when members can display their collections. St. Mary's Church Hall, High Street, Kingswinford. 8.00-10.30 p.m. Tickets £1.50.

January 22nd. Basil Poole of Johnson Poole and Bloomer will talk on 'The Thick Coal'. We are indeed honoured that such a respected mining engineer has agreed to lecture to The Society. Dudley Museum. 7.45 p.m. Tea and biscuits 7.15 p.m.

February 19th. 'The Documentation of Geological Sites' by various speakers. The role of The Society in recording and conservation both locally and nationally. Dudley Museum. 7.45 p.m. Tea and biscuits 7.15 p.m.

March 14th. Field Trip - Telford (Coal Measures) and Ironbridge (Industrial Archaeology). Meet at Dudley Museum 9.30 a.m. If there is sufficient support transport will be by coach. Bring a packed lunch.

April 29th. Annual General Meeting. The first of many we hope. A session of slides will follow.

Who and Where

Alan Cutler (Chairman) 21 Primrose Hill, Wordsley, Stourbridge. Telephone No. Brierley Hill 77865.

Dave Wraight (Hon. Secretary) ~~1107~~ Parkfield Road, Wolverhampton. Telephone No. Bilston 46717.

Eileen Bakewell (Hon. Treasurer) 38 Coldstream Drive, Wordsley. Telephone No. Kingswinford 79589.

Doug Bedson (Librarian). 114 Tudor Street, Birmingham B18 4DQ. Telephone No. 021-455-0186.

Other Committee members: Pete Oliver, Margaret Oliver and Terry Bond.

Please telephone before 10 p.m.

Field Meeting - Sunday 19th October The Forest of Dean

Leader: Dr. P. G. Oliver

A packed coach arrived at Kerne Bridge on a bright and sunny day to observe the Brownstones (Lower Old Red Sandstone) at first hand. A continuation of the succession was seen at Symonds Yat Rock where the Quartz Conglomerate of the Upper O.R.S. could be seen on Huntsam Hill and the Lower Dolomite of the Carboniferous Limestone Series outcropped. At this locality the influence of the Pleistocene glaciation in the geomorphological evolution of the area was explained.

In the afternoon an interesting exposure on the south eastern edge of the geological basin was visited. Here the Trenchard Gropf of the Coal Measures rests unconformably on the Carboniferous Limestone.

At Bixhead Slade the Pennant Sandstone was seen and a few specimens of haematite were collected. Iron ore was a significant mineral in The Forest of Dean and was mined mainly from the Crease Limestone particularly on the western limb of the syncline. Mining was more difficult in the east where the dip was steep.

Halesowen Beds, A458 Roadworks, Halesowen

As a result of co-operation between the County Councils of West Midlands and Hereford & Worcester, and The Society, it seems likely that this exposure will now be permanent.

A scheme of landscaping, making use of bedding planes, joints and variations in lithology, was suggested to the County Councils. The latter have been asked that members of The Society are present in the near future to advise the contractors during operations.

Site Documentation

Dr. Oliver and Doug Bedson have recently returned from Sheffield University where they represented The Society at a conference called by the Geological Curators' Group to discuss the standardisation of geological site documentation and site preservation. An 8 x 5 record card designed by Information Retrieval Group of the Museums Association (IRGMA) was adopted by the conference. These cards listed such things as the name of the locality, its map reference, description, dates visited, condition, accessibility and the location of the complete site record.

The cards would be completed by field geologists from all parts of the U.K. and sent to the various City and University museums taking part in the scheme; they in their turn would up-date their own records and then send the cards to IRGMA at Oxford where they would be collated on computer tape. A printout of the tape listing all geological sites in the U.K. by age, location and type would then be returned to the museums concerned.

Unfortunately for the scheme, more than half of the U.K. is not covered; some areas have no geological museums, some no field geologists and many neither. The Midlands are not represented at all and the Curators' Group have suggested that The Black Country Geological Society should be responsible for this area. The Committee have agreed to supply information from within the limits of the Black Country if the Curator's Group will allow B.C.G.S. members access to the computer printout. Very shortly, all units taking part in the scheme (including the B.C.G.S.) will receive ten information cards from IRGMA. These are to be completed and returned to Oxford where they will be used to set up the computer and a trial printout will be run off.

So much time was spent on documentation that the conservation part of the conference was limited to a talk by Dr. Black of Nature Conservancy on what had already been done. 150 sites have been designated "sites of scientific importance" (S.S.I.) by the Institute of Geological Sciences and preservation orders against them have been approved by the Government. The only one in the Society's area is Wrens Nest. Other sites will only be approved at Government level if it can be

shown that they are unique and preferably are of international importance. However, local authorities can designate sites in their own areas but they will be responsible for the purchase and maintenance costs for such a designation. It would appear that approach to local authorities is the only practical course the Society can take when persuading society at large the desirability of preserving the few precious sites we have.

The design of several geological site records will be shown and discussed at a meeting of The Black Country Geological Society early in the new year and it is hoped that one of these will be adopted by the Society as its standard. In the meantime, if any member would like to the Curators' Group card or would like further information on their scheme, ~~will~~ they please ring Doug Bedson, Telephone No. 021-455-0186 (after 7. p.m. please).

Editor: Peter Oliver,
26 Belvedere Close,
Kidderminster.
DY10 3AT