



NEWSLETTER NO. 117

JUNE 1996

The Black Country Geological Society

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 accident insurance to the level you feel appropriate. Schools and other bodies should arrange their own insurance as a matter of course.

Leaders provide their services on a purely voluntary basis and may not be professionally qualified in this capacity.

The Society does not provide hard hats for use of members or visitors at field meetings. It is your responsibility to provide your own hard hat and other safety equipment (such as safety boots and goggles/glasses) and to use it when you feel it is necessary or when a site owner makes it a condition of entry.

Hammering is seldom necessary. It is the responsibility of the hammerer to ensure that other people are at a safe distance before doing so.

FUTURE PROGRAMME

Lecture meetings are held in the Banquet Room (Dudley Suite) at the Ward Arms Hotel, Birmingham Road, Dudley. Phone: (01384) 458070. 7.30 p.m. for 8 o'clock start.

MONDAY 17th JUNE. Evening field meeting to Saltwells Nature Reserve. Leader: Alan Cutler (Society Chairman).

Meet at 7.00 p.m. at the Reserve car park near Saltwells Inn, Brierley Hill (grid ref: 935869). This is about 3/4 of a mile east of the Merry Hill Shopping Centre.

The Saltwells area has a lot of geological interest. Doulton's Claypit, once worked by Doulton's of earthenware fame, shows a sequence of Carboniferous strata including sandstones, mudstones, ganister and several coal seams. The canal cutting at Brewins Bridge shows exposures of Red Downtonian mudstones and sandstones, and Temeside Shales strata (Silurian) as well as a basalt intrusion. Finally in Saltwells Wood there are the traces of many small mines which once worked the Dudley Thick Coal.

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F.I.E.E., M.I. Mech.E.

MONDAY 1st JULY. Evening field meeting to Kinver. Leader: Alan Cutler (Society Chairman).

Meet at 7.00 p.m. in the car park at Mill Lane, Kinver (grid ref: 849832). This is near the junction of Mill Lane and Kinver High Street. Mill Lane is on the route from the Stewponney pub to Kinver.

This trip has a dual purpose. Firstly to see the Triassic sandstone at Kinver and on Kinver Edge. Secondly to see the famous Kinver Rock Houses; these were developed in the sandstone which is soft and easily worked. Some of the Rock Houses were lived in for 300 years until 1955, and now one of them is again inhabited.

SUNDAY 14th JULY. Field meeting to The Roaches, north Staffordshire. Leader: Don Steward (Stoke-on-Trent Museum).

Meet at 10.15 a.m. in the car park of the MERMAID INN (grid ref: 037605). This is about 4 miles northeast of Leek on the Morridge road. *Members of the Manchester Geological Association will be joining us for this field meeting.*

The Roaches area can be considered as the beginning of Highland Britain which runs from there northwards via the Pennines into Scotland. The area is in the Upper Carboniferous (millstone grit) series and has many exposures of these sandstones, so giving rise to their name "Roaches" (or 'rocks'). Ludchurch itself is a spectacular deep chasm with a narrow entrance, and is reputed to have been the site of secret religious services and other goings-on. As a contrast the afternoon will take us into Carboniferous Limestone country, and the visit to Brown End Quarry will show its general structure as well as the highly fossiliferous limestone strata.

ITINERARY: Meet at the Mermaid Inn, amalgamate into as few cars as possible and proceed to Roach End (996645) to park in the limited space available there. Walk over typical Moorland terrain for just over 1km to Lud's Church (987657) and inspect this historical landscape chasm feature. Return to Roach End and drive back to the Mermaid. Lunchtime refreshments there, then all cars to be driven south via Morridge to Brown End Quarry, Waterhouses (092502) on the A523 Ashbourne-Leek road, either parking at the quarry entrance or in the old station car park. A tour of the quarry will be given and then finish between 4pm and 5pm.

DON STEWARD is Senior Assistant Keeper of Natural History at Stoke-on-Trent Museum. He is a good friend of the BCGS and has been a member for many years.

HARD HATS ARE REQUIRED FOR THIS FIELD MEETING.

Members must provide their own.

SATURDAY 7th - FRIDAY 13th SEPTEMBER.

British Association - Annual Festival of Science

The British Association for the Advancement of Science runs an annual science festival, at a different venue each year. This year 1996 it will be held in Birmingham based at the University, and will include many lectures, field trips, conferences and other events on a wide range of scientific interests.

The PRELIMINARY PROGRAMME leaflet is available now, and the FESTIVAL HANDBOOK giving more detailed information will be available shortly. They are obtainable from the BA office:

23 Saville Row
London W1X 1AB
phone: 0171 973 3500

BCGS members will be helping with some of the field events including:

Monday 9th September. Afternoon field meeting to the Lickey Hills.

Tuesday 10th September. Afternoon and evening event organised by Dudley Museum, including visits to Wren's Nest and Dudley Museum, dinner in Dudley Castle grounds, canal trip to the Singing Cavern with re-enactment of Sir Roderick Murchison's visit on the occasion of a previous British Association Festival, held in Birmingham in 1839.

Thursday 12th September. Afternoon field meeting to Saltwells Local Nature Reserve.

The Society will also have a stand at the Geological Fair on the Monday and Tuesday in the Lapworth Geological Museum at the University.

Dr. ERIC ROBINSON of the Geologists Association will be leading guided geological walks during the week. These will be free of charge, open to anyone, and will include:

Wednesday, Thursday and Friday mornings: 'Geology in the heart of Birmingham' looking at the city's building stones.

Wednesday and Thursday afternoons: 'Geology of gravestones' at Lodge Hill Cemetery, Selly Oak.

SUNDAY 29th SEPTEMBER. Field meeting to Alderley Edge, Cheshire, for Triassic strata and an underground visit to one of the copper mines. Leader: Tony Browne (Manchester Geological Association).

MONDAY 7th OCTOBER. Lecture: Underground limestone mining in Shropshire by Dr. Ivor Brown (Consultant).

MONDAY 21st OCTOBER. Lecture: Conserving marine reptiles at Whitby Museum by Kate Andrew (Ludlow Museum).

MONDAY 25th NOVEMBER. Lecture: Ancient miners, modern collections by Dr. R. Ixer (Birmingham University).

MONDAY 20th JANUARY 1997. Lecture: Environmental Geology - examples from Finland and the U.K. by Dr. Roger Dackombe (Wolverhampton University).

MONDAY 17th FEBRUARY. Annual General Meeting. Followed by two short lectures by Society members who have visited the locations recently:
Easter Island by Sheila Pitts
Geology of Gibraltar by Paul Shilston.

MONDAY 17th MARCH. Lecture: Mineral exploration in Europe by Dr. Christopher Morrissey (RTZ Mining & Exploration Ltd.)

MONDAY 14th APRIL. Lecture: Evolution and extinction of Trilobites by Dr. Bob Owens (National Museum of Wales).

SUNDAY 18th MAY. Field meeting to Shropshire. Leader: Dr. Paul Smith (Birmingham University).

Reports

Field Visit to Wirksworth, Derbyshire on 19th May 1996. Leader - Kate Ashcroft.

The party assembling at the National Stone Centre, the rocks studied were from the very top of the Derbyshire Limestone Sequence, the Upper Brigantian Stage of the Carboniferous. Steeplehouse Quarry shows rocks formed in lagoonal conditions of well oxygenated shallow seas. At the base are coarse bioclastics with abundant crinoid remains, broken brachiopods and storm graded shell banks. Above are fine grained deposits with much chert and good examples of *Giganto Productus*. The finer grain represents quieter water.

Coalhills Quarry East shows the limestones below those in Steeplechase Quarry. Also lagoonal these show coarse bioclastics alternating with dark muddy limestones. The quarry has particularly fine ball and pillow structures.

The Coalhouse Reef Quarry is fenced off but parts can be closely examined. The mound like reef is unbedded but the limestone mud bioherm encloses many fossils in living position: brachiopods, bivalves, bryozoa and gastropods. Small cavities may mark the site of former seaweeds and dolomitisation has taken place. Bitumen is common in the cavities. Wave action broke large pieces from the reef and these created spectacular screes falling towards the lagoon as back reef and away into deeper water as fore reefs. The surface of the back reef in particular is covered in 'giant' sized crinoids and gigantic productids. Pick marks can be seen on the remaining side of an old lead mine.

Shaws quarry shows further reefs superimposed on one another and showing uneven erosion at their top. From these reefs, eroded material descended, not only off the reef, but also down the palaeoslope into deeper water where limestones exposed are dark and muddy and very massive being laid down in deep, undisturbed waters.

Everywhere, in veins and pipes, there was evidence of mineralisation. Much galena was found and some spectacular rosettes of barite.

A visit was made to the Gulph, a graben where the overlying shales are preserved in an area downfaulted between the Ratnor and Gulph Faults.

From Black Rocks where the trip finished the views were spectacular. The remains of lead working associated with the Gang Vein could be clearly seen. Two huge modern quarries are visible and the effects of rock and faulting on the landscape are very plain. The grit, shale and limestone all have their distinctive features and the influence of geology on landscape and on man in his utilisation of the resources are boldly seen.

Thanks go to Ian Thomas and his staff for their help in preparing this trip.

K.M. Ashcroft

Editorial

The future of the British Geological Survey is under threat from a review to be undertaken by its parent body, the National Environmental Research Council. There are believed to be four options for the survey: abolition, privatisation, contractorisation and rationalisation and as the status quo is not an option there are bound to be cutbacks among its 770 staff which includes 550 scientists. All of us have benefited from the work of the B.G.S. through their lectures, field trips, memorable open days but above all from their geological and Earth Science publications. Society needs impartial and widely disseminated scientific information of the earth so that the wise political and planning decisions can be made. We are rightly proud of the work of B.G.S. over the last 160 years. May we hope that for short term financial gains we don't lose a service of inestimable value.

Users of B.G.S.s services should express their views to Dr. David Lynn, NERC, Polaris House, North Star Avenue, Swindon, SN2 1EU.

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