



NEWSLETTER No. 35 - OCTOBER 1982.

The Black Country Geological Society

Editorial.

In almost every newsletter I have the pleasant task of welcoming new members. Those of us who have been members for some years often wonder if we do enough to make new members feel at home, in a society which is so definitely run by its own members. At the beginning of meetings we have tasks to sort out with other members, or like me we may be embarrassed by a dreadful memory for names. The spirits are very willing, but time is so very often short.

Those of you who have made even modest contributions to running the society, such as helping with the organised walks, know how enjoyable this is. Could I encourage (not push) you all to have a go at something? Tell Alan Cutler what you might be interested in doing. I would like a paragraph or two on what you did during the summer. Some of you have been on other geology trips, and some even to other continents! Let us hear a little about it. It will help you to feel part of what really is a friendly society.

Next Meeting.

October 4th. Informal meeting.

October 10th. Joint meeting with Shropshire Geological Society to sites of interest in Shropshire. See details and map within.

Meetings are held in the Allied Centre, Green Man Entry, Tower Street, Dudley, behind the Malt Shovel pub. Indoor meetings will commence at 8pm. with coffee and biscuits from 7.15pm. Field meetings will commence from outside the Allied Centre unless otherwise arranged. Those who would like lifts, please contact Anne Harrison.

Non-members welcome.

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

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

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

Field Secretary
Anne Harrison B.Sc., M.B.,
Ch. B., F.F.A.R.C.S.

Programme.

October 4th. Informal meeting.

October 10th. Joint field trip with Shropshire Geological Society. Meet at Forest Glen, SJ 639093 next to the Wrekin. See map page.

To study the exposures in the Ercall quarry complex - Uriconian, Wrekin quartzite, rhyolite, intrusions and faults. A mapping project is at present being completed by the Shropshire society of this area. Pub lunch at 12.30. At the Huntsman, Little Wenlock. Please bring a packed lunch. 1.30pm. A study of the Onny Valley section near Craven Arms, mainly Ordovician. 4pm.approx. - finish.

November. Coming shortly.

December 6th. "Glacial deposits". Lecture by Mr. Edward Francis of Keele University.

January 10th. 1983. "From the Petrified Forest to Death Valley and Yosemite". A lecture about the geology and scenery of south west U.S.A. by Mr. W.G. Hardie, senior lecturer at Birmingham University. Slides taken on the Geologists' Association 1981 excursion.

Evening field trip to Kinver.

June 21st.

Kinver Edge is an escarpment formed of rocks from the Bunter Series; the oldest rocks from the Triassic Period. The escarpment consists of a thick layer of Lower Mottled Sandstone overlain by a thin layer of Bunter Pebble Beds. The Lower Mottled Sandstone is bright red in colour with occasional streaks of yellow, and consists of fine grained sandstone with local marly bands. The sandstone contains well rounded, wind polished quartz grains. There are also

small amounts of mica and feldspar. The Lower Mottled Sandstone is thought to have been deposited as dune sand. The orientation of the dips and cross-stratification suggests that the prevailing winds blew from the east.

The field trip began in the car park at Mill Lane where the Lower Mottled Sandstone is exposed. The red colour of the rock is unmistakable, and with some effort we convinced ourselves that we could see yellow streaks. However, cross-stratification was visible there only with the eye of faith. From Mill Lane we walked towards Kinver Church. At the side of the road is an exposure of Bunter Pebble Beds. These beds are dull reddish-purple in colour and consist at this point of pebbles which are about 1 inch in diameter. The commonest pebbles are quartzite and quartz, and are characteristic of pebbles deposited by the "Budleighensis" river.

We then visited the cave dwellings of Holy Austin Rock, which were carved in the soft easily workable Lower Mottled Sandstone, and were inhabited until the early 1950's. An average cave dwelling at Holy Austin rock was quite sophisticated and consisted of at least two rooms. Additional features included small niches carved out of the rock to serve as cupboards, windows, doorways and chimney stacks. By the nineteenth century brick walls had been added to enlarge and improve the dwellings. The inhabitants were obviously proud of their homes and carefully cultivated small gardens, in spite of the difficulties imposed by lack of space and only poor quality, thin top soil. It was the custom to whitewash or plaster the inner walls but this has now disappeared. On some of the ceilings it is possible to see the cross-stratification of the

sand dunes.

We were particularly fortunate when we visited Holy Austin Rock, since members of the Youth Opportunities Programme have been clearing the site this summer. Removal of surface debris and undergrowth has revealed cast-iron grates, quarry tiled floors and even gas pipes. The rock dwellings of Kinver were obviously not just glorified caves.

By now the light was failing fast and a rainy day was turning into a misty night. We walked on to Kinver Edge itself. There was no time to see where the Bunter Pebble Beds join the Lower Mottled Sandstone, but we did get glimpses of the scree formed by erosion of the Bunter Pebble Beds. Kinver has been a favourite spot for day trippers ever since 1901 when the Kinver Light Railway was opened. The Bunter Pebble Beds are only a few feet thick and the constant tramp of tourists' feet together with natural erosion may soon destroy the pebble beds to such an extent that the Lower Mottled Sandstone will be exposed to the elements. Rapid weathering of the sandstone could drastically alter the appearance of the Edge within a relatively short time.

I have always believed that geology and industrial archaeology go hand in hand. Alan Cutler and Mr. D.M. Bills proved the point when they jointly led this trip. The information provided by each individual was fascinating but the evening really came to life when they discussed various problems together. As an example of this discussion; why were the inhabitants able to live in such comfort in

rock dwellings? Surely the rooms would have been damp. The answer is of course that the Bunter Pebble Beds are relatively impermeable to water. Thus they protect not only against erosion but also against damp houses.

Our thanks go to both leaders for a superb evening.

Anne Harrison.

Twenty fifth anniversary of Wrens Nest National Nature Reserve.

Wrens Nest was declared Britain's first geological National Nature Reserve at the end of 1956 in recognition of its international importance to Silurian stratigraphy and palaeontology. Mons Hill was incorporated into the reserve in 1957 and the events attracted widespread publicity.

In the autumn of 1967 two geological trails were formally opened by the Mayor of Dudley, and Professor Shotton addressed the gathering on the importance of the geological features. A comprehensive trail guide was published at this time, establishing another "first", and is now something of a collector's item.

Instability of the underground workings subsequently led to the two trails becoming unsafe in places, and these were replaced by a new trail described in the current trail guide. A geological handbook was published in 1978 which also describes the new sections replacing the original type sections of Butler. The safety of the underground workings has led to considerable problems in the management of the reserve. Dudley M.B.C. the actual landowners are anxious to make the site safe in view of the local housing, but many of the remedies suggested are at variance with the geological needs, and therefore certain aspects of the reserve have been

allowed to decline.

It was hoped that a special exhibition or event could be organised to mark the occasion, but sadly the Nature Conservancy Council's resources are so depleted that at present the idea has had to be abandoned.

Alan Cutler.

Major blunder at Wrens Nest.

In March this year maintenance work was commenced at Wrens Nest by Dudley M.B.C. on behalf of the Nature Conservancy Council. A BCGS member noticed that crushed limestone was being used to rebuild steps on the eastern side of the hill and alerted the committee. Subsequent inspection coupled with the ominous presence of tractor treadmarks from the road led to the conclusion that our worst fears were justified, in that imported material was being used. NCC was quickly informed that Wenlock limestone from Farley quarry, Much Wenlock, was being imported!

This was the worst material that could be used, since it is indistinguishable from Dudley limestone. NCC have warned that all geologists applying for permits to work on fossil faunas will have to be notified that scree collections are no longer valid for research.

We hasten to add that this is no excuse for hammering the rock exposures, and that scree material will still be more than adequate for schools and general purpose collecting.

NCC officers expressed their thanks for our prompt observation and action.

Alan Cutler.

Welcome to New Members.

Jim Workman of Sedgley.
Sally Furnell of Dudley.

Enquiry at Charmouth - conclusion.

The inspector's report concluded that there was insufficient evidence that fossil collectors had a material effect on erosion. Licensing as proposed by the council was likely to be unenforceable, and unlikely to reduce the numbers of people scaling cliffs. The order was not confirmed.

Black Country Geological Society Christmas Cards.

The 1982 Christmas card depicts Crosswell's open works in the Thick Coal at Dudley in 1894. It is complementary to last year's card as the original was drawn on the occasion of the visit of the British Association for the Advancement of Science. The illustration is reproduced in its original black and white form on top quality board, size 8" x 5".

The price for a dozen including envelopes is £2.50. Single cards are 25pence each. We still have some of the 1981 cards available at the same price. These depict the British Association visit to

the Dudley caverns.

The cards will be available from mid-November and will be on sale at the Social and the December meeting. They may also be obtained by post from Alan Cutler. See form.

Evening Field Trip to
Saltwells - June 7th.

Doulton's Claypit has often been included in the society's field trips, but they have never embraced Saltwells wood. So a pleasant woodland stroll with the promise of some "new" exposures not normally visited seemed particularly attractive for an evening walk. In fact much of the route is that used for the walks for the public.

We started at Doulton's Claypit, looking first at the lowest beds visible in the Lower Coal Measures near the spring in the western side of the pit. They look deceptively like rocks of Downtonian age but are classified as Coal Measures because of the presence of coal streaks. Some calcite veining was also evident, probably associated with an east-west fault traversing the pit.

We carried on to the bottom of the pit, crossing the stream and walking to the eastern end of the claypit. Surprisingly most of the party had never been to this part of the claypit, but we had a fine view of the Thick Coal rock which overlies the Thick Coal, now obscured below the present floor of the quarry. Unfortunately, we could not see the dip of the intervening measures (on the eastern flank of the anticline) because of the leaf cover. It is really worth a visit in the winter.

There was much evidence here too of work to improve the pool and associated wetlands, carried out by the conservation volunteers.

We left the claypit and walked along Saltwells field, and into the woods where Black Brook has cut a small valley. Near where the brook emerges from its culvert Red Downtonian Marls are exposed. This is near the southern limit of their exposure and close to the axis of the Netherton Anticline, and was most interesting as no-one had been here before.

We walked further into the woods along the route of an old mineral railway until we neared the western boundary. Here the "Typsyford Brook" has cut a small ravine before joining Black Brook in the middle of the woods. In the ravine are the only known westerly dipping beds in the Netherton Anticline. Sadly leaf cover and gradually sinking sun meant that we had to descend to stream level to see them, but there were a few disbelievers even then.

We turned northwards along the edge of the woods to a point adjacent to the new enterprise zone. In this part of the woods there are a great many circular depressions. They are remains of old workings, some for coal and others for clay. Before the industrial revolution iron stone was also dug from beneath the Thick Coal which outcrops here.

Moving out of the woods on to the enterprise estate we were indeed fortunate to see the Thick Coal actually exposed at the surface. This nowadays rare event was only possible because of the building works taking place, emphasising the need to monitor temporary exposures of this kind as and when they arise.

We walked on via the woods to Highbridge Road crossing Black

Brook once again to reach the familiar tramway section adjacent to the reservoir. Here Upper Ludlow Shales are seen, the oldest exposed rocks of the anticline. By now the light was beginning to fade, so we returned to pass Doulton's Claypit on the way back to the car park at Saltwells Inn.

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Committee dates:- Nov. 8th
Nov. 22nd.

Evening Courses 1982-3.

- 1) Petrography. An introduction to rocks under the microscope. Dr. R.A. Ixer, at Birmingham University, Geology Dept. 20 meetings, Wed. 7.30pm. beginning Oct. 6th £14.
- 2) Introduction to Geomorphology. Mary Cochrane. 20 meetings, Tues. 7.30pm. Beginning Jan. 25th. At Museum and Art Gallery, St. James Rd. Dudley, £14.

Other Courses and Holidays.

- 1) Geology of Shetlands. July 2-9th 1983. About £100. excluding travel to Shetlands. Deposit £15 to G.A. Metcalfe, 42, Aberdour Rd. Dunfermline, Fife KY11 4(E).
- 2) Bristol University. Extramural Dept. 32, Tyndall's Park Rd. Bristol BS8 1HR.
 - a) Forest of Dean. Oct. 9-10th. £7.80. Based Coleford. G82 F06 SJ.
 - b) Purbeck. Oct. 29-31st. £9.10 D82 G01 SJ.
 - c) Mendip. Oct. 17. £4. Based Stratton on Fosse. S82 D06 SJ.
 - d) Mendips. Nov. 13th. £4. Based Burrington. A82 D05 SJ.

Geo-Supplies.

16D Station Rd. Chapelton,
Sheffield S30 4XH. Telephone
0742-461093.

A most interesting catalogue has been received, of books, instruments and maps, far too detailed to summarise usefully. Members may read it or send for their own.

Malvern Geological Teaching Trail.

Five localities have been cleaned and will form the basis of a guide to be produced shortly. Work has been carried out on:-
Gullet Quarry, SO 761381.
Gullet Wood Quarry, SO 760380.
Hollybush Quarry, SO760371.
Hollybush Road Cutting, SO756368.
Whiteleaved Oak Quarry, SO762358.

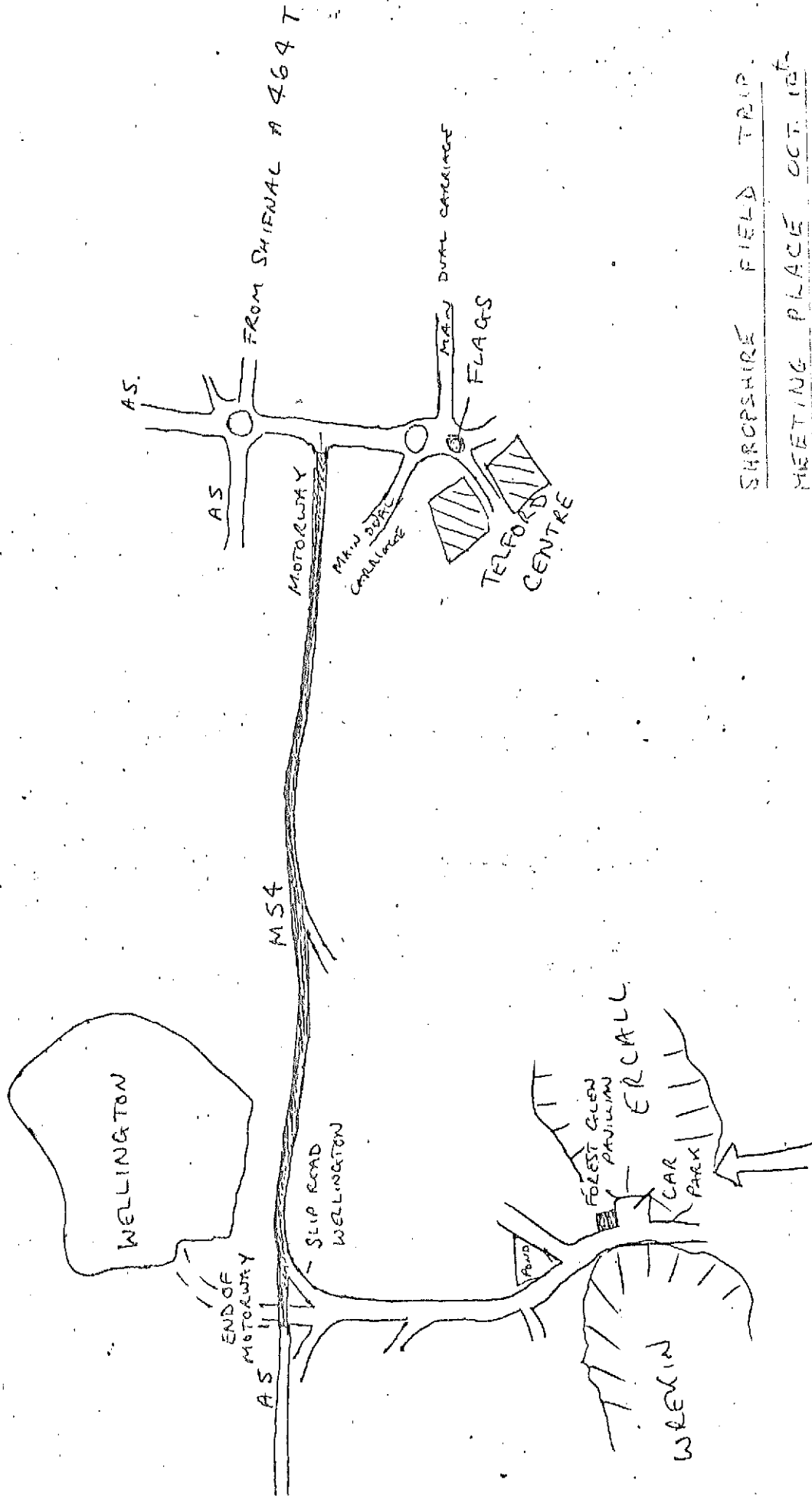
City Museum and Art Gallery,
Stoke on Trent.

Open Mon. - Sat. 10.30 - 17.00 and until 20.00 on Weds.
This museum won the Museum of the Year award for 1982, and was newly opened in June 1981. It is the largest museum to be built in the provinces in recent years. It has a geology and natural history section, art including glass, silver and ceramics. Entrance is free, and it has a cafe and bar.

South Kensington Lectures in Geology.

Geological Museum. Flett lecture theatre. Free.
Morning and afternoon sessions.
1) Nov. 20th 11am.-4.30pm.
Fossil Environments.
2) Jan. 15th. Volcanism.
3) Mar. 5th. Deep Geology of Britain.

In the summer of 1983 the Natural History Museum will stage an exhibition to mark the centenary of the eruption of Krakatoa.



SHROPSHIRE FIELD TRIP.
 MEETING PLACE OCT. 10th
 SUNDAY 10.30 AM
 FOREST GLEN CAR PARK

BLACK COUNTRY GEOLOGICAL SOCIETY

1982 CHRISTMAS CARDS.

The 1982 Christmas Card depicts a contemporary print of the Dudley Gathering - the visit of the British Association for the Advancement of Science, to Cresswell's Open Works in the Thick Coal at Dudley in 1894.

The illustration is reproduced in its original black and white form on top quality board, size 8" x 6".

The price for a dozen including envelopes is £2.50.

Single cards may be purchased at 25p. each. Discounts available for quantities of 50 or more; details on request.

We still have some of the 1981 cards available which depict the British Association visit to Dudley Caverns. Prices as for the 1982 cards.

The cards will be available from mid-November and will be on sale at the Social and the December meeting. Alternatively, they may be obtained by post from:

Alan Cutler,
21, Primrose Hill,
WORDSLEY,
Stourbridge,
West Midlands.

Telephone : Brierley Hill 77865.

Please add 50p. towards postage.

B.C.G.S.Christmas Cards.

Order Form.

Please send me.....1982 Christmas Cards.

.....1981 Christmas Cards.

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ADDRESS :

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Cheque enclosed for £.....including 50p. postage.