



The Black Country Geological Society

NEWSLETTER No. 50 - Half Century - April, 1985:

Editorial:

This fiftieth edition of the newsletter differs from the usual in having news from founder members who have been far away but who have remained members. There are no accounts of events because we do not have space for both. All you workers who so kindly write things up will be back in publication next time.

Back in 1978 I had a phone call from Peter Oliver asking me to take over the newsletter from him, with some suitably complementary remark. What began as two or three pages every three months, became larger and every two months. This was partly because people helped, and partly because I find it difficult to shorten other people's hard work.

Since it is regrettably rare to have volunteers (please take the hint!) the newsletter is organised behind the scenes by requests, and by showers of post forwarded on by the Secretaries. It is then summarised and assembled over two days on my lounge floor, before being typed roughly by me and neatly by Hilary. Then it is photocopied up to a pile of about a thousand pages by various members as the others are exhausted! Then there's all that licking ...

Next Meetings:

Sunday April 21st: Field trip to Church Stretton. Leader Andrew Jenkinson. Meet 11 a.m. in Easthope Road car park, Church Stretton. It is intended to visit sites at Long Mynd, Caer Caradoc, Hope Bowdler, Soudley and Acton Scott. There will be strenuous walking.

Monday May 13th: Informal meeting at the Saracen's Head, with a talk by Neil Howard on the Himalayas.

Sunday May 19th: Field trip to North Staffs. Leader Don Staward. Meet 10.30 a.m. at the Market Place, Leek. Sites at The Roaches, Ecton and Waterhouses will be seen.

Meetings are held at The Saracen's Head, Stone Street, Dudley. Indoor meetings commence at 8 p.m. Those who would like lifts for field meetings, please contact Nigel Bradley.

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

Vice Chairman
P. G. Oliver B.Sc., Ph.D.,
F.G.S.

Hon. Treasurer
M. J. Woods B.Sc., M.Sc.,
M.I.Geol., F.G.S.

Hon. Secretary
P. D. Shilston M.A., C.Eng.,
F.I.E.E., M.I. Mech.E.

Field Secretary
N.G. Bradley

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 should arrange their own insurance as a matter of course.

Programme 1985:

June 2nd, Sunday: Northants field trip. Leader John Hudson. Meet 10.30 a.m. at the Kings Arms, Weldon (2 miles east of Corby). This is at the junction of the old A43 and A427.

HARD HATS ARE ESSENTIAL:

June 17th, Monday: Evening field trip to Wrens Nest, Dudley. Leader Paul Shilston.

June 28th, Friday: Conversazione at Dudley Museum to mark the tenth anniversary of the BCGS.

July 2nd, Tuesday: Briefing for the weekend field trip to the Lake District. At 7.30 p.m. at the Dome Laboratory, University of Birmingham.

July 5th-7th, Weekend: Field trip to the Lake District. Leader Dr. Frank Moseley. The Coniston and Ullswater areas will be visited. Youth hostel accommodation will be arranged. Total approximate cost £20. (Alternative hotel accommodation available on request). Bookings with £11.00 deposit to Nigel Bradley. To be sure of a place, please book by 30th April.

July 15th, Monday: Evening field trip to Ketley Quarry, Kingswinford. Leader Alan Cutler.

September 16th, Monday: "Geology of the Midlands", talk by Professor Donald Hawkes at the Saracen's Head.

September 19th-21st, Thurs.-Sat: Sixth Meeting of the Geological Societies of the British Isles, at Birmingham University. Details to be announced.

October 6th, Sunday: Joint field trip with Shropshire Geological Society to Cotwall End, Dudley. Leader Alan Cutler.

November 11th, Monday: "Geology and Soils", talk by Dr. Margaret Oliver at The Saracen's Head.

November 17th, Sunday: Field trip to the Lickey Hills. Leader Dr. R. Hamblin.

December 6th, Friday: AGM of the Geological Curators' Group at Dudley Town Hall, hosted by the BCGS.

December 9th, Monday: "The Eye of Faith in Geology", talk by Dr. R. Bradshaw of Bristol University, at The Saracen's Head.

Letters to the Editor:

46 Rhos Hendre,
Waun Fawr,
Aberystwyth,
Dyfed SY23 3PU.

Dear Sheila,
Congratulations BCGS on your Tenth Anniversary! Is it really ten years since the happy days of the first field trip and the inaugural lecture with Professor Shotton at Dudley Museum? The sun always shone in those days, didn't it - except when we went to open-cast coal mines or when distinguished visiting lecturers came and we found ourselves locked out of the Museum and had to dash round in the snow looking for alternative meeting places.

From reading the recent newsheets, it seems that the Society has grown from strength to strength, and has matured considerably since those first chaotic days.

~~I seem to remember that the geology~~ was always rounded off with a pint at the Saracen's Head and a liberal sprinkling of biology! Are the old traditions still adhered to? When I first moved to Borth I fully expected hordes of BCGS members to descend on me demanding guided tours of the local outcrops. When they didn't materialise I devoted my time to entertaining the children of caravanners on wet days or taking primary school children on rock spotting trips. These were often very productive as the tide brings in fossil echinoids and other foreigners

from the south of England, South Wales and Ireland. In the cliffs at Borth and Clarach there are fine examples of slumping features especially cone-in-cone structures. I sent samples of these to Birmingham University to have slides made, and we were surprised to find that they were solid quartz. In fact one professor was so intrigued by this that he went off to South Africa with one of my samples in his pocket.

One of the best known features of Borth is its bog. This bog is the largest and most undisturbed coastal bog in Britain and one of the finest in the world. It forms an important part of the Difi National Nature Reserve. A bog is generally defined as ombrotrophic (feeding on rain) sphagnum-dominated wetland generally less than pH 5. Its formation is essentially due to the lack of oxygen and an acidic environment which slows down the degradation processes. The build-up of dead plant material produces a peat accumulation. The tidal patterns of the Irish Sea have led to deposition of a pebble spit forming northwards across the mouth of the Dovey estuary. Salt marshes developed along the southern edge, which eventually became a reed bed. As the climate became drier it changed into a wet woodland or carr. Then about ten thousand years ago at the end of the Ice Age, the ice retreated and the level of the sea rose, drowning the woodland and raising the water table. Reed beds again covered the area and a bog formed. This sequence of events can be seen in section through the peat together with an uninterrupted vegetation record of the last 7,000 year. On the beach are the remains of the fossilised forest which was drowned when the sea level rose. The tree stumps are remarkably well preserved despite the continual onslaught of the sea. The sand dunes have all the features of a miniature desert including the occasional mirage.

The numerous rivers of the area provide all the textbook features from source to estuary and the River Rheidol provides one of the best

examples of river-capture in the British Isles.

The Rheidol valley was once a prosperous silver, lead and zinc mining area and the spoil heaps still yield a varied assortment of ores and their associated minerals. The rocks of the river bank near Parson's Bridge contain graptolites including Rastrites and Monograptus cyphus. I have recently found similar graptolites in a small private quarry near Borth. I can find no previous record of any other fossils being found in situ near Borth though there are numerous small quarries in the area. All the old houses are built from local rock and most of the farms have a small quarry from which the farm house was built. I am slowly visiting as many of these as I can and I hope eventually to build up a better picture of these small but not insignificant links.

Yours sincerely,

Eileen Bakewell -

founder member, now exiled in Aberystwyth.

PS. Thank you for a most interesting letter, Eileen. Since your days long ago as our first treasurer, you will have noticed that history has repeated itself, and we now meet at the Saracen's Head again! - Sheila.

49 Middlefield Lane,
Hagley,
Stourbridge.

Dear Sheila,

As a founder member of the BCGS I would like to congratulate the Chairman, past and present secretaries, speakers, field trip leaders and members of the past ten years for establishing this Society firmly. In the early days there was considerable concern as to whether the Society was a viable proposition and it is due to the hard work, foresight and resolution of several that it has been. During these ten years the Society has grown and established itself well in academic circles.

Unfortunately I have been unable to

attend the Society regularly over the past five years, but I have good intentions for the future. While I was doing my doctorate I had very little spare time and I wanted to spend as much as possible of it with my family. It was quite difficult to integrate a full family life with the intense and rigorous demands of research, and I was only able to do it by minimising other interests. The research that I did involved several months of field work in the Wyre Forest. This was followed by exhaustive analysis of the data by computer using a variety of techniques to determine the spatial pattern of soil variation in the Wyre Forest. The final task of writing the thesis took nine months and required the most concentrated effort.

At present I am preparing some of the work for publication. Two papers have been submitted to journals, two more are in preparation and a further two to three have yet to be started. I intend to write a short summary for the newsletter in the near future. With my very best wishes for the future success of the Society,

Yours sincerely,
Margaret A. Oliver.

PS. Thank you very much, Margaret. We've missed you, but we all knew you were up to something very worthwhile, and we've been delighted to see you back again. Sheila.

We've had further good wishes from Graham Hickman in Cairo, who always seems to manage to keep in touch with home. He started his eastern high-life with a month at the Nile Hilton Hotel, and has continued it in a seventh floor roof top flat, with a view right across the Nile valley. His only worries seem to be whether the water and the lift will continue to reach the top floor!

He is having new experiences in geology, in scuba-diving off coral

reefs, and in learning Arabic - Sheila.

From the Papers:

19.2.85
Record bore THE TIMES.



Soviet space "firsts" often make headlines. Much less is known about the "deepest borehole in the world". (Rus-

sians, like Americans, enthusiastically go for superlatives). It is being sunk in the north-west of the Soviet Union and is approaching the 12 kilometres mark, "only" three kilometres from its ultimate depth. That, however, will not be reached before the end of the decade.

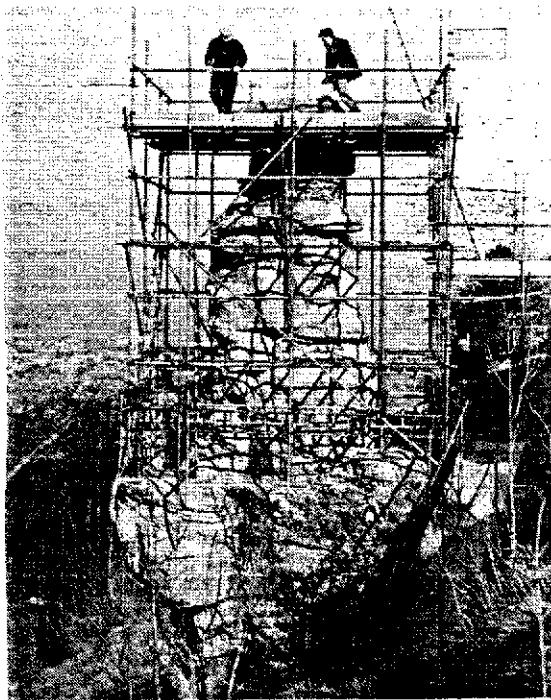
The Kola Peninsula drill, designed to bring samples of the earth's interior to the surface, is housed in a pyramid-shaped tower, 64 metres high. It is crammed with electronic equipment and television cameras, which monitor the progress of the heat-resistant, reduction gear turbo drill.

Soviet scientists say many concepts about the earth's structure will have to be revised. Initially they calculated that the temperature at a depth of 15km would be about 150 degrees centigrade. They have now found that it is above 200 degrees at 11km, rising by 2.5 degrees every 100 metres, and although geo-physicists predicted that basalt would be present at a depth of seven kilometres, none was found as far down as 11km. They are also excited by their discovery of petrified micro-organisms.

From the Papers (continued)

'SORE THUMB' CHELTENHAM NEWS. GETS A 29.3.85 MANICURE

One of Cheltenham's most famous landmarks, the Devil's Chimney at Leckhampton, is undergoing emergency repairs to save it from collapse.



The natural stone monument which sticks out like a sore thumb from the Cotswold escarpment overlooking Cheltenham has suffered from various land shifts over the years, and some adventurous youngsters have, in recent years scaled the chimney at great risk.

The work, which it is hoped will be finished by Easter, involves drilling into the main face and inserting big steel bolts into the rock, in order to prevent any further movement.

Erosion has increased over the years with wind and rain being the principal factors as well as subsidence in the area, but it is hoped that emergency operation now in progress will conserve this local enigma for many years.

Dudley Limestone Workings: Progress Report Five:

At long last I am able to report a start on the trial infilling of a part of the workings below the Dudley Sports Centre, the main contractor for which is R.M.Douglas. Work commenced on site during February, and with the earlier works of exploratory drilling and the construction of a new access shaft, design and supervision fees, the total value of the scheme exceeds £1.5 millions. The local authority will receive 100% Derelict Land Grant

from the Dept. of the Environment. This trial infilling of pillar and stall workings by the injection of a "rockpaste" mixture of graded colliery waste materials with a consistency similar to that of concrete, which is to be pumped into the workings through over-ground pipelines and down boreholes. The trial is expected to provide important information about the general suitability of this technique to workings within the Black Country area where infilling is considered to be the appropriate remedy.

As the trial proceeds, a range of scientific observations and studies

will be carried out by the local authority and its consultants Ove Arup and Partners, and by the Building Research Establishment and the British Geological Survey, using a wide range of sophisticated monitoring equipment.

Again with 100% Derelict Land Grant, Dudley is embarking on a comprehensive desk top study into the problems associated with the Seven Sisters Caves on Wrens Nest Hill. These studies will cover not only the technical problems and potential solutions but the wider issues of land use, tourism and recreation, and the scientific and educational value of the geological outcrops in the area.

Reports on the drill hole investigations into abandoned workings near the Black Country Museum, Guest Hospital, Castle Mill and The Broadway areas will be published over the next two or three months.

During this month it is expected that the local authority will hear what level of Derelict Land Grant will be made available by the Department of the Environment for 1985-6, to fund continuation of the investigation and treatment works in the Borough.

Alan J. R. Evans:

Welcome to new Member:
Mrs. Diane Houghton - Harborne.

Committee Date - Wednesday 24th April, Park Inn, Sedgley.

Exhibition of Dinosaur Remains:
Wednesbury Art Gallery, Holyhead Road, Wednesbury. From late June to early August. The collection is on tour and has been assembled from several sources, including the Isle of Wight Museum.

Shropshire Observed: Sunday July 14th

Shropshire Geological Society,
Sunday July 14th. 10 a.m. at Alington Hall, Shrewsbury School. Illustrated talks, guided walks, details from Les Dolamore, 3 Woodlands Park, Shrewsbury.

Geology of Non-metallics:

New book for economic geologists and mining engineers, bringing together much previously scattered information. £34.60. Metal Bulletin PLC, Metal House, Park Terrace, Worcester Park, Surrey, KT4 7HY.

Tertiary Research:

Quarterly journal US Dollar 17.00. E. J. Brill Publishers, PO Box 9000 2300 PA Leiden, The Netherlands.

Earth Science booklist from Allen and Unwin received. Includes books on economic and petroleum geology, petrology, oceanography, palaeontology, Quaternary studies and soils. PO Box 18, Park Lane, Hemel Hempstead, Herts. HP2 4TE.

Industrial Minerals. Monthly journal £67.00 per year. From Metal Bulletin Journals, Park House, Park Terrace, Worcester Park, Surrey KT4 7HY.

Courses for the Public:

1. Losehill Hall, Castleton, Derbyshire S30 2WB. July 20-27th. Minerals, rocks and fossils. £125.00 and VAT. Also activity holidays for all - similar prices.
2. University of Birmingham. June 8-9th. Geology of the Llangollen area. At Bridge Hotel, Llangollen. £11 tuition £15 hotel. Tuition fee to Miss E. Bartlett, Mason Croft, Church Street, Stratford-upon-Avon, CV37 6HP. Tel: 66961.

Geology of Llandrindod-Builth Wells area. June 15-16th. Tuition £11. List of Hotels. Fee to Miss E. Bartlett above.

3. Geology of the Grampian Region:

3-10th August, 1985. Cost £55 non-residential or £140 residential. Details from Dept. of Adult Education, University of Aberdeen, Aberdeen AB9 2UB.

John Easter,
27 Fairlawn Drive,
Kingswinford,
West Midlands DY6 9PE.
Tel: 27-4916.

4. Geology and Scenery. 7-14th August, 1985. Cost £113 residential. Details from Kindrogan Field Centre, Enochdhu, Blairgowrie, Perthshire PH10 7PG.
5. Geology of Assynt. 31 July-7Aug. Cost £24 non-residential, or approximately £160 residential. Details from Mr. P. Harrison, "Tigh Aittionn", Leckmelm, Lochbroom-by-Garve, Ross-shire IV23 2RW.
6. Ardnamurchan. May 25-June 1. £170. From Dr. R. Senior, Dept of Adult Education, University of Durham, 32 Old Elvet, Durham, DH1 3JB.
7. Dumfries and Galloway. May 25-June 1. £130. From Mrs. L. Crombie, School of Extension Studies, University of Liverpool, PO Box 147, Liverpool L69 3BX.

Field Secretary:

Nigel Bradley,
11 Leicester Close,
Warley,
West Midlands, B76 5NJ.
Tel: 021 429 8833.

Hon. Secretary:

Paul Shilston,
16 St. Nicolas Gardens,
Kings Norton,
Birmingham B38 8TW.
Tel: 021 459 3603.

Editor:

Sheila Pitts,
17 The Pear Orchard,
Northway Farm,
Tewkesbury,
Glos. GL20 8RG.