THE BLACK COUNTRY GEOLOGICAL SOCIETY

NEWSLETTER NO. 8 - MAY 1977

The Annual General Meeting

The A.G.M. was held on Thursday 10th March, 1977, and was attended by 11 members and 3 junior members. The attendance represented less than ⅓ of the total membership.

The main item of the evening was the annual report read by the Chairman, Mr Alan Cutler. He reviewed the membership situation which showed a drop for 1976 in actual numbers and in attendance at meetings. Several functions were well attended but some embarrassment had been felt when only a small number of members attended a lecture given by a distinguished speaker.

Informal meetings have been introduced and are a success with those members who attend. These meetings have become a regular feature of the 1977 programme.

The Society has been actively engaged in two projects; at Pouk Hill and Mucklow Hill. Various members have spent many Sunday mornings at Pouk Hill and have amassed a large collection of rocks, fossils and photographs which are now awaiting final documentation.

During the year contact has been maintained with the Nature Conservancy regarding Wrens Nest, but in view of the delicate and protracted negotiations, Society help was not enlisted. The new sections have now been cut, so replacing the original type sections.

The Society is recommending to members that they should wear safety helmets when visiting quarries, following the new regulations in the Health and Safety At Work Act. Consequently the Society is in the process of obtaining helmets for resale to members.

During the year the Society bought a petrological microscope with slides and this is available to members on loan.

In September the Society mounted a stand at the Black Country Museum Open Days and much interest was shown by the general public and other organisations.

The Chairman announced that the Society hoped to introduce a long term photographic project to record exposures visited by the Society.

During the meeting the present officers of the committee were re-elected and due thanks was recorded to Peter Parkes and Doug Bedson who have retired as committee members. The two new members of the committee are Graham Hickman and John Colledge. - DJW

Black Country Museum Open Days

The Friends of the Black Country Museum once again organised two very successful open days at the Tipton Road Site, Dudley, on Saturday and Sunday 4th and 5th September, 1976. The museum site was open on both days from 11 a.m. - 6 p.m. and attracted a great many visitors from far and wide. The museum is of course still in a formative stage but the many permanent exhibits already on the site provide a wealth of interest to Industrial Archaeologists and anyone who is simply interested in the Black Country.

In addition to the museum exhibits other organisations including the Black Country Society, the "Friends" Mining Group and of course the BCGS mounted display stands in the large marquee.

There were two principal reasons for our participation; firstly the overall publicity benefit and secondly to provide a geological exhibit which otherwise would not have been present because this subject area is not covered by the Black Country Museum.

The BCGS stand had three basic features. The largest and central exhibit described Black Country geology in pictorial form together with a selection of representative fossils and rocks. The two other exhibits concentrated on Society work (Pouk Hill) and Society details, events, etc.

A considerable amount of interest and comment was generated and we hope that several new members will have been attracted. If nothing else the Society has been firmly planted on the map and must be regarded as an integral part of the Black Country scene. - AC

London Trip

Society members and friends travelled by coach to London via the M1, after an unscheduled sight seeing tour the party arrived at South Kensington where small groups set off to their predetermined starting points for their tours of the museums.

The main places of interest were the Natural History Museum, the Geological Museum and the Science Museum.

The Natural History collection is housed in a magnificent building adorned inside and out with effigies of present day and extinct animals.

From the geological point the main centres of interest in the Natural History Museum were the Dept of Palaeontology and the Dept of Mineralogy. The museum's displays of fossils include spectacular specimens of dinosaurs, land mammals, giant fish, marine and flying reptiles and also the more familiar corals and brachiopods.

The Natural History Museum is also the home of the national collection of minerals, rock specimens and meteorites. The museum houses a collection of over 200,000 minerals representing 1700 mineral species. The display of meteorites includes the Cranbourne Iron Meteorite weighing 3.5 tonnes and was found in 1854 near Melbourne.

After what amounted to a lightning tour of the Natural History exhibits, some of the party then visited the Geological Museum which is the headquarters of the Institute of Geological Sciences. The museum exhibits include the National collection of gemstones, displays of British Geology and the economic geology of the world. Also on show is a remarkable exhibition of basic earth science called The Story of the Earth. This exhibition contains some very fascinating real and animated films which included the position of the Earth within the solar system, the origins of the elements, the oceans and the solar system. There was also film on the first million years of the Earth's formation. Continental drift was explained quite extensively as were many other aspects of Earth Science. The spectacular films showing volcanic eruptions and lava flows attracted a great amount of interest as they vividly show geological processes in action today.

With so many things to see in such a short time the journey home provided time for reflection on the exhibits that had to be passed over or needed more time to study them and for this reason it is to be hoped that the Society will repeat this most enjoyable trip some time in the future. - PP

Social Evening - November 18th

As numbers continued to rise during the week of the social there was concern in the domestic backwaters about the sufficiency of food - however there was ample to satiate all extremes of appetite.

Thirty three people braved a cold foggy evening for the "delights" in store at The Old Mill - which proved to be a very good venue for an informal social evening. The room provided a pleasant atmosphere in which to socialise and the nearby location of liquid refreshment was an added advantage.

The raffle with its donated prizes brought in a much needed supplement to the funds, as did the profits from the sale of the last few tickets. - MO

Correction

Family Membership is £4.50 and not £4.00 as stated in the previous newsletter.

Residential Field Course

The University of Leicester's Department of Adult Education is running a very interesting course: - 'Sedgwick's Snowdonia - Its Geology and Scenery'. 7 - 14 August 1977. The course is based on the Snowdonia National Park Study Centre at Maentwrog. Cost £46. For further details contact Pete Oliver or write direct to Director of Adult Education, Vaughan College, St Nicholas Circle, Leicester.

Programme of Events

May 12th Informal Meeting - Dudley Library 7.45 p.m. A discussion about the geology of the Ludlow area; in preparation for the forthcoming field trip.

May 15th Morning visit to Pouk Hill; Some final recording. Meet at entrance to tip at 10.30 a.m.

May 22nd Field Trip - 'The Ludlow Anticline' Leader W J Norton FGS. Meet Dudley Library 9.30 a.m. Bring a packed lunch.

June 9th Informal Meeting - Dudley Library 7.45 p.m.

June 18th Saturday field trip. 'The Castleton Area'. Meet Dudley Library 9.00 a.m. Return by 8.00 p.m. Details below.

June 30th Evening trip - Mucklow Hill. An assessment of the work involved. Meet half way up the hill (at entrance to D & E stockyard and warehouse) 7.00 p.m.

July 7th Informal Meeting - Dudley Library. 7.45 p.m.
July 14th - Cotwall end Valley.
July 17th Field Trip 'Aust Cliff and Hock Cliff'. Leader A Mathieson of Bristol Museum. Coach. Please book well in advance. Prices similar to Castleton trip. Leave Dudley Library 9.00 a.m. Return by 8.00 p.m.

August 4th Informal meeting - Dudley Library 7.45 p.m.

August 14th Field trip to the Cotswolds (possibly with members of Cheltenham Colleges Geological Society).

September 4th Field trip to Birch Coppice Opencast site. Morning only.

September 22nd Lecture by T Pettigrew formerly of The British Antarctic Survey, now with Sunderland Museum. "An Expedition to South Georgia with the British Antarctic Survey".

October 6th Informal Meeting - Dudley Library.

October ~~9th or~~ Saturday 15th ~~Possible~~ visit to Birmingham University Geology Department Museum. (Note change of dates)

November 18th Social Evening.

December 8th Members Evening - Dudley Library. 'Travels in Iceland' Sheila Pitts.

Castleton Trip - June 18th

Please book your coach places immediately. Members £1.50. Children £1.00. Non - Members £2.00. Leaders:- P Whitehead and D Bedson. Bring a packed lunch.

Note also there is another coach trip on July 17th. It is essential that the Hon Sec has bookings well in advance for all coach trips. Please let him know now. Tel.Sedgley 5814.

Lecture: Colin Knipe B.Sc. F.G.S.

The Faults and Folds of the South Staffs Coalfield - Thursday 17th February 1977

The South Staffs coalfield is crossed by a large number of faults and has been affected by some folding, but most of these features are underground and go undetected by the average Blackcountryman.

In 1842 The Dudley and Midland Geological Society produced the first geological maps of the area and this work was incorporated in the first published maps of the area. At that time the work must have been much easier than it is today because much more of the area was accessible and not covered by the present day housing and industry. At that time there were also many mines in operation which allowed access to the underground features. Todays geologists have a much harder task and have to rely on the records kept by the early miners.

The early geologists viewed the Eastern and Western Boundary faults as ancient coastlines and clifflines with the sandstones filling the spaces at a later date. It was not until a later date that it was realised that the faults had dropped the carboniferous rocks by as much as 3,000 feet on the western side.

Folding and faulting have affected the life of the 'Black Country' in various ways. Where mining has taken place right up to the fault eventual collapse of the ground has caused houses to list at various angles (e.g. Old houses in Pedmore Road, Brierley Hill). Folding has brought coal seams to the surface, which made mining easy, and has also brought the Silurian rocks to the surface giving limestone for use in the iron and steel industry. It was discovered that the many faults divided the coalfield into pounds from which water could be pumped out on a co-operative basis rather than erratically by the various mine companies who would have been operating in the area. The surface drainage was improved so that water did not end up in a neighbouring mine.

Underlying the area from the Russells Hall fault to north of the Bentley Faults is a dolerite sill which comes to the surface at various places including Pouk Hill at Walsall and the Rowley Hills in the southern part of the area. Detailed work has shown that the faults and intrusion occurred at about the same time, the beginning of the Permian period 265m years $\pm$ 50m years. The sill follows the bottom coal in many places and appears to be stepped up and down the faults.

The overall pattern of folds and faults in the coalfield can be looked as follows:-

1) Two Major faults - Eastern and Western Boundary faults.

2) Minor faults running east west across the coal field.

3) Folding has taken place with a north-south axis.

4) The Russells Hall fault is a special case, since it is thought that this fault may have started out as a fold. (The direction of throw changes halfway along the fault)

The two major faults are very deep seated and go down into the underlying Silurian rocks. Northeastward movement along the western fault and southwestward movement along the eastern fault would produce faults at an angle of 45° across the coalfield. Folds would develop at right angles to the minor faults leaving the mainfold lines north-south.

In various areas the folds and faults have produced some complicated structures which are still being sorted today.

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