



NEWSLETTER NO 87 JUNE 1991

Lecture meetings are held at the Saracens Head, Stone Street, Dudley 7.30pm for 8 o'clock start.

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.

The
Black
Country
Geological
Society

The BLACK COUNTRY GEOLOGICAL SOCIETY records with regret the untimely death of Dr. BEVERLY HALSTEAD, who died on May 1st.

Beverley was President of the Geologists' Association, and a great champion of popular geology. Only last November he was guest speaker at our Society's dinner to celebrate our 15th anniversary, and gave us a memorable evening.

We print in this newsletter the obituary which appeared in a national newspaper.

FUTURE PROGRAMME:

N.B: Extra field meeting arranged for 30th June- details on page 2.

MONDAY 3RD JUNE

Lecture: "Earthquakes" by Dr. I.G. Stimpson, Keele University.

It is some years since the Society had a lecture on a geophysics subject, so we are glad to welcome Dr. Stimpson to update us on recent developments. His lecture will cover the subject of earthquakes in general and will review current developments.

Dr. Stimpson is an Earthquake Seismologist in the Geology Department at Keele University. He gained a PhD for his research on earthquakes and his particular interest is in studying the origin of deep earthquakes, visiting Turkey, Chile and Brazil in the course of his work.

FRIDAY 14TH - SUNDAY 16TH JUNE

Weekend field meeting to North Devon coast. Based at Barnstaple.
Leader: Michael Bamlett, Birbeck College, University of London.

- Chairman
A. Cutler B.Sc., M.CAM.,
Dip.M., M.Inst.M.
- Vice Chairman
J.E. Gollidge M.A.
- Hon. Treasurer
Mrs J. Shilston
- Hon. Secretary
P.D. Shilston M.A., C.Eng.,
F.I.E.E., M.I. Mech.E.

The field meeting will examine coastal rocks and scenery between Westward Ho! and Baggy Point.

Cost .20 (not including accommodation) for Friday evening to Sunday. An additional whole day Friday with the leader for a surcharge of .5.

MONDAY 24TH JUNE

Evening field meeting - "The building stones of Birmingham".

Leader: Paul Shilston.

Meet: 7.00pm at the Hall of Memory, Broad Street, Birmingham.

A guided walk in the city centre, looking at the various types of building stones used in some of the important public and commercial buildings including recent buildings and the new Convention Centre.

SUNDAY 30TH JUNE

Field meeting to North Staffordshire. Leader: John Armitage

The field meeting to this area that was held on 14th April, unfortunately was not able to visit the British Coal opencast site at Biddulph, due to some misunderstanding by British Coal.

John Armitage has arranged to run the trip again, with a group of his own students, and Society members are very welcome to attend.

The full day is to meet at Mow Cop Folly at 10.45am. The Folly is a mock-ruined castle, on a hill about 2 miles north-east of Kidsgrove, grid ref: 858573. Lunch will be at Mow Cop Inn, then the party will visit the Biddulph opencast at 1.45 or 2.00pm.

If anyone wants to miss out Mow Cop, and just wishes to visit the opencast, they should turn up there at 1.45pm and join the party. The opencast is off Brown Lees Road, near Biddulph, grid ref: 878560. Anyone wanting more details of the route to the opencast can contact Paul Shilston (021 459 3603). If you have a hard hat, please bring it.

SUNDAY 22ND SEPTEMBER

Field meeting to Cross Hands Quarry and Sharps Hill Quarry, near Chipping Norton, Oxfordshire.

Leader: John Crossling, Keeper of Geology, Warwickshire Museum.

Meet 11.00am at Cross Hands Quarry next to Cross Hand pub (grid ref: 269290). The quarry is on the A44 road, about 4 miles west of Chipping Norton.

Cross Hands quarry is in the Middle Jurassic and shows the Clypeus Grit and Hook Norton limestone. Bivalve molluscs and brachiopods are the most common fossils. No hammering, but collecting is possible from loose or fallen material.

Sharps Hill quarry is in the Great Oolite of the Middle Jurassic. It is a classic site, being the type locality of the Sharps Hill beds.

Hard hats are required - bring your own if you have one, otherwise the Society's stock of hats will be available.

MONDAY 14TH OCTOBER

Lecture: The mass extinctions controversy
by Professor A. Hallam of Birmingham University.

Professor Hallam is an authority on the subject of mass extinction and will outline the present controversy between the different points of view.

Mass extinction events have always interested geologists. Why did dinosaurs die out at the end of the Cretaceous? What is the explanation for the other well-documented mass extinctions in the late Devonian, at the end of the Permian, at the end of the Triassic, and so on? Various theories have been put forward, but none have been completely accepted.

Professor Hallam is Lapworth Professor with The School of Earth Sciences, Birmingham University. His main research interests are in mass extinctions, sea-level changes and evolution.

SUNDAY 27TH OCTOBER

Field meeting to Black Country Sites.
Leaders: Dr John Powell and his team from the British Geological Survey.

The itinerary will probably include Upper Coal Measures strata, Keele Beds and Enville Beds around Baggeridge, and possibly in Birmingham.

MONDAY 2ND DECEMBER

Lecture: Geology in South Africa by Malcolm Callow.

WEDNESDAY/THURSDAY 4-5TH DECEMBER

Geological Curators Group AGM and Conference in Dudley.

MONDAY 13TH JANUARY 1992

Lecture: W.J. Harrison (1845-1908). Birmingham geologist and photographer. A historical lecture illustrated by Harrison's own photographs.

Lecturer: Peter James, local studies Archivist, Birmingham Central Library.

FRIDAY 17TH JANUARY - 150TH ANNIVERSARY

This date marks the 150th Anniversary of the Dudley and Midland Geological Society. The BCGS will be marking this event during 1992 - watch this space.

MONDAY 24TH FEBRUARY

Annual General Meeting followed by a talk "Mount St. Helens - ten years on" by Paul Shilston.

MONDAY 23RD MARCH

Lecture: "Geology and the nuclear industry" by Nigel Monckton, UK Nirex Ltd.

EDITORIAL
CONSERVATION

Geological conservation has always been a part of this Society's activities. This involves identifying important new geological sites, conserving existing ones, and ringing alarm bells when sites are threatened by infilling or development.

There are so many pressures on land use, it is important to make sure that all interests are considered. We have found that sites are more likely to be preserved if they have importance on several counts - wildlife, amenity, education as well as geology.

As part of this, last month a party of BCGS members, with Dudley Canal Trust members, cleaned up the important site on the canalside at Brewin's Bridge, Netherton. The snag is that it is on the wrong side of the canal bank - the side without a towpath, so the conservation activity was conducted from a canal bridge. Fortunately no one fell in and the exposure is once again revealed in its full glory.

The NEWS RELEASE included with this newsletter describes the operation.

B.C.G.S. NEWS

1. LAUNCH OF THE STRATEGY TO SAVE GEOLOGICAL SITES

A nationwide initiative to identify and improve protection of geological sites was launched on 5th December by the Nature Conservancy Council with the publication of "EARTH SCIENCE IN GREAT BRITAIN - A STRATEGY". The central theme of this document is the RIGS (regionally important geological sites) scheme, and the establishment of locally based RIGS groups.

The BCGS was one of the first organisations to pioneer the way for local geological site conservation, and its experience has helped shape the new nationwide initiative. In fact, the BCGS is cited as one of the seven known groups which have a selected portfolio of sites, recognised by local planning authorities.

The NCC traditionally has only been concerned with sites of National/International importance. This endorsement of the importance of LOCAL/REGIONAL sites marks a significant step forward in earth science conservation, which has lagged behind its biological ("wildlife") counterpart for so long.

In addition to detailing the importance of earth sciences both in practical and academic terms, THE STRATEGY deals with the practical aspects of protecting and improving sites, and of increasing public awareness.

The BCGS still has many opportunities for conservation work, some not finished and some not even started. Further investigation and data gathering is needed in WOLVERHAMPTON, WALSALL, SOLIHULL and adjacent areas. Expanded data records are needed for the Dudley Museum recording centre, and management plans for existing sites will be needed in the future.

One of the key aspects of local conservation is informal monitoring of sites in one's own area and this is something in which ALL MEMBERS CAN BE INVOLVED. Taking part in local site monitoring would help save geological sites and keep the BCGS in the forefront of Earth Science Conservation.

IF ANY MORE MEMBERS ARE INTERESTED IN HELPING WITH LOCAL SITE MONITORING would they contact Alan Cutler or the Secretary.

ALAN CUTLER

2. REPORT OF ANNUAL GENERAL MEETING

The annual general meeting of the Society was held on Monday 25th February 1991 in the Saracens Head, Dudley.

The Treasurer, Judith Shilston, presented her report for 1990, and was able to report that the Society's finances were in good shape. The income from subscriptions had increased due to the larger membership, while we continue to receive useful help from local firms in printing the newsletter.

The Chairman, Alan Cutler, in his annual report said that Society membership was at its highest ever, and that a successful programme of lectures and field meetings had been held. The Chairman's report was circulated with the April newsletter.

The election of Society officers and committee resulted in no change, so that they are constituted as follows:

| | | | |
|--------------------|---------------|----------------|-----------------|
| Chairman: | Alan Cutler | Vice-chairman: | John Golledge |
| Secretary: | Paul Shilston | Treasurer: | Judith Shilston |
| Committee members: | | Steven Hughes | Janet Meakin |
| | | Peter Smith | Graham Worton |

Hon. Auditor: Geoff Hubbard BSc, ACMA.

We are grateful for the work of the Hon. Auditor, Geoff Hubbard, who is not a member but gives up his time to audit the Society's accounts.

3. JOINT FIELD TRIP WITH SHROPSHIRE GEOLOGICAL SOCIETY TO NORTH STAFFORDSHIRE ON SUNDAY 14TH APRIL

Everyone met at the Newchapel Natural Sciences Centre for a 10.00am start on a bright, sunny morning, with the fine weather staying with us for the rest of the day. There was a good turn out and John Armitage gave a conducted tour of the centre, ably assisted by Michael Pace the curator. The centre was in an unusual location down an alley between some houses at the back of a garage compound, and to everyone's amazement contained the following: an observatory plus telescope, a planetarium, with equipment to pick up and show the information from weather satellites. Models and pictures demonstrated how satellites are put into orbit, and there were various fossils with the ubiquitous dinosaur samples. Special telescopes enabled us to view sunspots on paper. There was a pond with a wide variety of fauna and flora.

The path was made up of flagstones, some of which contained fossilised tree roots.

The centre had been started with the observatory by a group of enthusiasts, and the rest of the site was built on an old tip. About 1000 trees planted on it are now becoming well established and make a very pleasant setting for the building.

We moved on in a large convoy to the car park at Mow Cop. This is the highest point in the area and it is made more dramatic as the ground drops rapidly away from the Folly on the summit in a series of outcrops of rock.

John indicated the main geological features, which were the Millstone Grit faulted anticline forming the high point of Mow Cop and to the north the Triassic deposits forming the flat Cheshire Plain. The Millstone Grit was bounded by two faults, one of which, the Red Rock, is still active and responsible for some of the minor earthquakes in the area.

Chatsworth Grit is the most prominent in the area and contains 85% quartzite grains, small quantities of ilmenite, zircon, mineralisation of barytes and fossilised plant bark. We found specimens of the barytes mineralisation which had formed along the bedding planes and small faults, and some fossilised plant bark. There was also cross bedding which could be seen on an exposed face of the Grit.

The whole area had been worked for millstones in the past and it was not easy to distinguish which were natural outcrops and which had been quarried.

We then moved on to a nearby brick pit which was in the Lower Coal Measures and we were able to find the thin coal seam and seat earth which existed above the fire clay. Above the coal seam is the horizon marker for the Lower Coal Measures known as G3 or Gastriophorous Listeri Marine Band, of which, unfortunately, we could find no trace.

After a very pleasant morning we had lunch at the Mow Cop public house and then went off to the Brown Lees opencast coal site to look at the Lower and Middle Coal Measures. This unfortunately was not to be as John Armitage had been let down by the person who was to escort us around the workings. John could not apologise enough for this mishap, but the morning's geology and the weather had been thoroughly enjoyed.

PETER SMITH

4. DUDLEY ENVIRONMENT WEEK 11-19TH MAY

May 11-19th was National Environment Week, and in conjunction with this, Dudley Borough ran a programme of events with an environment theme. As part of this, the BCGS ran two guided geological walks for the public - Paul Shilston took a party around the Wrens' Nest on 12th May and Alan Cutler did the same at Saltwells Local Nature Reserve on 19th May.

5. EDITOR FOUND

We are happy to report that one of our long standing members, Kate Ashcroft, has offered to take over the newsletter editor's post. Kate has been a very supportive member of the BCGS for many years and is well fitted to keep members informed of the Society's activities. She will start with the August edition.

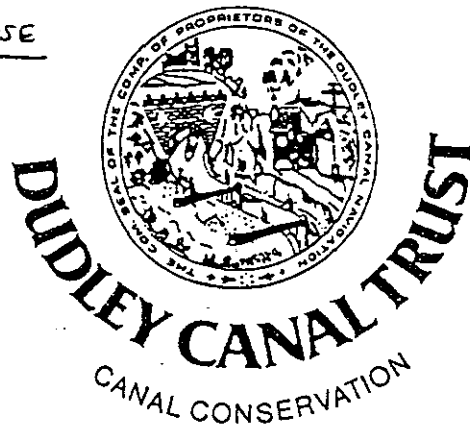
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OUR PRESS RELEASE

The
Black
Country
Geological
Society



UNIT 44, HIGH STREET, TIPTON,
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NEWS RELEASE

On Saturday 13th April volunteers from the Black Country Geological Society and the Dudley Canal Trust will join forces to clean up a section of the Dudley Canal and the adjacent geological exposures.

The working party will take place at Brewin's Bridge, sometimes called High Bridge, Netherton near Dudley.

The original line of the canal when constructed in 1796 followed the tortuous contours around the south side of Netherton Hill. In 1836 the canal was shortened by 200 yards by the construction of a 75 yard tunnel through a spur of the hill. This became known as Brewin's Tunnel after Thomas Brewin the canal company engineer at that time. As part of a series of improvements carried out to the canal in 1858 the tunnel was opened out into a deep cutting for the first time exposing the strata of Netherton Hill.

Brewin's cutting as it is now known, is often visited by students of geology. Here they examine the evidence that tells the story of Netherton Hill as part of the floor of a shallow tropical sea (some 400 million years ago) which slowly silted up to become land on which the lush swamp forests which gave us the coal seams grew (some 300 million years ago). Of particular interest is a pulse of molten rock (magma) whose "frozen" remains are preserved in the western end of the cutting. This was captured as it cooled while cutting its way up through the older rocks of the ancient seabeds and forests.

Over the years this important teaching resource has been sadly neglected, it has become very overgrown and has accumulated a large amount of unsightly rubbish.

The aim of the working party is to cut back the undergrowth and remove visually intrusive rubbish so that the strata can be readily seen and understood from the canal towpath. The Canal Trust will be providing boats for access and removal of the rubbish and volunteers from both organisations will be present throughout the day.

On Sunday 14th April the Canal Trust will continue with a clean up of the canal and towpath between Parkhead Junction and Netherton Tunnel, a distance of 3 miles. On this occasion two boats will be used following a working party held during January along the same length. In January more rubbish was collected than could be carried away on one boat.

For further information contact:

Vic Smallshire (Chairman Dudley Canal Trust)
Home: 0384 69798 Office: 0384 74022

Graham Worton (Black Country Geological Society)