

NEWSLETTER_NO._82__AUGUST_1990

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.

FORTHCOMING MEETINGS:

SUNDAY 23RD SEPTEMBER

Field meeting to Dovedale, Derbyshire. Leader: Dr. Paul Bridges of Derbyshire College of Higher Education.

Meet at 10.15am at the car park in Thorpe village (grid ref: 1557 5050).

The field meeting will be in a linear walk ending at the car park in Milldale (grid ref: 136548) so cars should be left there. The plan is for passengers to alight at Thorpe, then drivers to take their cars to Milldale and leave them there. The car park at Milldale is at Sunny Bank, 400 yards from Milldale on the road to Hopedale.

Cars should be at Milldale by 9.50am, and we will ferry drivers back to Thorpe for the start.

The itinerary will involve approx. 7km walking and some hill climbing - walking boots are recommended. The meeting will start at Thorpe, ascend Thorpe Cloud, then to Stepping Stones, along Dovedale and finish at Milldale. It will study in particular clusters of carbonate mud-mounds of Lower Carboniferous age, formed in deep water off the developing Derbyshire Platform, and now exposed in Dovedale.

MONDAY 15TH OCTOBER

Lecture : "Silurian RED beds - a geologist's view of the USSR"

- by : Dr. David Siviter
 - of Leicester University.

The lecture will be 70% geology and 30% travelogue of various parts of the USSR including Moscow and Leningrad. The Silurian geology in the lecture is chiefly in Estonia and in the Ukraine, and will show some connections with the Silurian on our own home ground at Dudley.

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

Dr. Siviter has been to the USSR several times and will be there again this summer. He has visited many regions including the Baltic States, Siberia and Soviet Central Asia.

SUNDAY_28TH OCTOBER

Field meeting to Black Country sites. Leaders : The British Geological Survey team:-Dr. J.H. Powell (team leader) Dr. B.W. Glover . Dr. C.N. Waters

Meet: 10.00am at the entrance to Ibstock Brick Company quarry, Tansey Green (grid ref: 900902). It is about three miles west of Dudley town centre on the B4175 (Stallings Lane).

Wellington boots are advised and hard hats must be worn - bring your own if you have one, otherwise the Society's stock of hats will be available.

Itinerary

The field meeting will study late Carboniferous sedimentation in the western part of the south Staffs coalfield.

In the morning it will examine new exposures in the topmost Productive Coal Measures and the lower part of the Etruria Formation, including volcaniclastic deposits, in the Tansey Green area. Changes in the sedimentary regime from paralic Coal Measures through to red-bed palaeosols of the Etruria Formation will be demonstrated in brick-pits in the area. Recently discovered volcaniclastic deposits, with well preserved plant stems and associated dykes of tuff and alkaline basalt, illustrate the onset of Variscan deformation in Etruria Formation times.

In the afternoon the party will visit exposures of the Enville Formation, near Gospel End, which exhibit a variety of fluvial bedforms and sedimentary structures; the petrography, provenance and palaeogeography of late Carboniferous strata will be outlined.

MONDAY 19TH NOVEMBER

Lecture : "The Hornsleasow dinosaur excavation and sieving project" by : Roger Vaughan of Bath Museum.

Hornsleasow quarry (also known to geologists as Snowshill quarry) is near Broadway in Gloucestershire. It is a working quarry and in 1987 an amateur geologist noticed several huge dinosaur bones which had been exposed by the quarrying. He alerted the staff at Gloucester City Museum and a major site investigation was carried out, excavating the large bones and sieving the clay for smaller items.

Roger Vaughan played a major part in this enterprise, which recovered much fossil material - vertebrae, limb and girdle bones of a large sauropod dinosaur as well as many teeth and bones of smaller dinosaurs, lizards, crocodiles and small mammals.

FRIDAY 30TH NOVEMBER

15th Anniversary Dinner, with speaker. At the University Centre, Birmingham University.

The dinner will be an informal social function, for members and friends, in the Hampton Room at the University Centre.

The BCGS is pleased that Dr. Beverly Halstead has agreed to come and give a light hearted address at the dinner. He is a well known geological personality, a great champion of our popular geology, and is President of the Geologists Association.

A BOOKING FORM FOR THE DINNER IS WITH THIS NEWSLETTER.

MONDAY 14TH JANUARY 1991

Lecture : "Britain underground". Caves, caving and geology by : John Smith, Dudley Caves Rescue Team.

MONDAY 25TH FEBRUARY

AGM followed by "Geology in paradise" a talk on the Hawaiian Islands by Paul Shilston.

MARCH : Lecture - (to be arranged).

SUNDAY 15TH APRIL

Field meeting to North Staffordshire. Leader Mr. John Armitage.

EDITORIAL

This year, the fifteenth in the Society's history, is to be celebrated on the 30th November with an evening dinner at the University Centre, Birmingham University. The guest speaker is Dr. Beverley Halstead, President of the Geologists Association. This event presents a chance for members to meet at a social function, perhaps renew old acquaintances and to share in the celebration of 15 years of the B.C.G.S. The details of menu, booking forms and dates and times are given at the end of this newsletter - an event not to be missed.

To add to the conversations at the dinner a look at our fine autumnal programme is strongly recommended. It contains field meetings and lectures on subjects of local, regional, national and international interest.

WEEKEND FIELD MEETING - NORTH NORFOLK. 11-13th May.

Leaders: Michael Bamlett (Birkbeck College), Peter White (Polytechnic of Morth London)

The geology of this area of Worfolk - cretaceous and quaternary - is of a different type from that the Society normally meets in its field trips, so we looked forward to a really worthwhile weekend, and we were not disappointed. As well as the interest of the strata present, the widespread evidence of glacial effects, and their interpretation, gave the meeting an added dimension.

The chalk in Morfolk has an easterly dip, and Hunstanton is on its westernmost outcrop. Here the chalk shows as a surprisingly bold cliff (locality 1) underlain by a bed of red chalk (the "red rock"), with the Carstone at the base. The contrasting colours of these beds - white chalk above, red and brown strata below - make these cliffs spectacular even to the layman.



The Carstone in this area is a gritty brown sandstone, in some places coarse crossbedded, indicating estuarine or shallow-water conditions. The red chalk, above, is a red ferruginous limestone, derived in part from laterite washed out from neighbouring land areas; its formation indicates stable shallow-sea conditions for a long time. The white chalk, at the top, is of marine origin.

Locality 2, the Blakeney esker (GR.032423), was quite different. An esker is a glacial feature, formed from melt water, running in a tunnel under the ice; the tunnel becomes filled with sand and gravel, and when the ice has melted it leaves a gravel ridge behind. The Blakeney esker is a long low hill of sand and coarse gravel, winding for several miles, and was formed on the edge of a decaying ice sheet.

We moved next to the coast at Weybourne Hope (locality 3) where, because of the easterly dip, the top of the chalk reaches sea-level, and is overlain by the Crag deposits, with glacial gravels and till at the top. Crag is a general term for shelly sands, gravels and sands, accumulated in relatively recent (Pliocene/ Pleistocene) times from material originating in various directions, swept up from the bottom of the sea, often by ice.

Locality 4 (GR.249411) was at Overstrand, also on the coast. Here the top of the chalk should have been well below sea-level, with the Crag above it, but the cliffs showed blocks of chalk which had been sheared off by ice moving inshore, when the sea-level was lower. These blocks, with the Crag sequence on top, had been moved bodily by ice, and thrust up to form the present-day cliffs.

The final locality (5) at the cliffs at East Runton, showed similar features, and in addition there was a wide selection of pebbles and blocks on the beach which had been brought in by glacial action. Pebbles of prophyritic andesite, granites, peridotite, and gneiss, had probably come from Norway, and could have made the journey in several stages. At nearby West Runton, the Cromer Forest Bed was well displayed; this is a Pleistocene inter-glacial deposit, laid down in deltaic conditions, dark-coloured peaty and sandy beds containing much plant remains.

Altogether the weekend was a great success, visiting an area new to our members.

- 1. Many hands make light work
 - (a) Typing the newsletter.

Many thanks to Sue Fairclough who responded to the appeal in the last newsletter for someone to do this job.

(b). Indoor meetings - layout of room.

It would be of help to Paul and Judith if someone could take on this task. The requirement is for a volunteer who could regularly arrive at about 7.00pm (most speakers arrive early as they want to sort themselves out before the audience appears) and look after:-

- * arranging the tables and chairs.
- * adjusting windows, curtains, ventilating fans and lights as necessary.
- * a modest amount of tidying up at the end.

This would help committee members who usually have a number of other jobs to deal with at the meeting.

If anyone can help, would they contact Paul or Judith Shilston.

2. Wrens Nest Geological Handbook and Guide

This excellent new handbook was written by Society members Alan Cutler, Dr. Peter Oliver and Colin Reid, and is published by the Nature Conservancy Council and Dudley Leisure Services.

We have a stock of these books available for \$.1.00 at meetings or \$.1.25 by post from Paul Shilston.

3. University of London

Details and booking:

Centre for Extra-Mural Studies, 26 Russell Square, London WC1B 4DQ. telephone 071 636 8000 ext. 3854.

- (a) weekend field meetings, geology of the coast from Devon to Dorset.
 Part 1 : 8-10 March 1991. Based at Exeter. \$.30.
 Part 2 : 12-14 April 1991. Based at Weymouth. \$.30.
- (b) Lipari/Sicily volcano trip. 20-27 October 1990.£.490.
- (c) Western Ireland, April 1991.
- (d) Western USA, May 1991.
- (e) Tenerife, 19-26 October 1991.

4. University of Birmingham

Details and booking:

School of Continuing Studies, Edgbaston, Birmingham B15 2TT.

- (a) Short break. Geology of the Church Stretton area, Peter Toghill, BSc., PhD. 19-21 April 1991 at Longmynd Hotel. \$.108.
- (b) Evening course. An introduction to the geology of the Malverns, John Havell, BSc. Tuesdays, 20 meetings,
 7.30pm from 2nd October at Lyttleton Church Buildings, 6 Church Street, Malvern. \$.33.

5. Dinosaurs Alive Exhibition

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This exhibition (see press cuttings) is now at the National Museum of Wales, Cardiff, closing on September 30th.

Secretary

Paul Shilston 16 St. Nicolas Gardens Kings Norton Birmingham B38 8TW

Newsletter editor

Andrew Rigby Witley House Oldswinford Hospital School Stourbridge DY8 1QX

Tel: 021 459 3603

Tel: 0384 390916