

The Black Country Geological Society

NEWSLETTER No. 65 - October, 1987:

Forthcoming Mestings:

Shropshire Geological Society to the Malvern Hills, an attractive area which we have not visited for some years. This is the last field trip before the winter, so don't miss it!

Meet at 10 o'clock at the North Malvern Clock Tower on 84232 (Grid ref. 76994705). There is a large car park just before the tower. Bring a packed lunch. Our leader will be Dr. David Bullard. The Malvern Hills have a distinguished history in

Sunday: 11th October: Joint field trip with

geological research, especially in Victorian times. As an important area for field geology, the Nature Conservancy Council has been interested in making a guide book for the area. Work started in 1980 and has expanded to become a major contribution on the geology of the hills. The book is due to be published in September, 1988. In writing this guide, Dr. Bullard is continuing his interest, which started as a research project on the Malvernian in the early 1970's. Structurally, the hills present a very complex history and the new exposures (1987) along the western edge of the hill region have extended our understanding. It is to these key exposures that the day will be oriented, working from N. Malvern southward to finish at Raggilstone Hill.

(Saturday: 24th October:)

Dear Mr. Gollege,

Here is a write up on the forthcoming Open Day for geology at Dudley Museum on the 24th October from 10.30 a.m. to 4.30 p.m. There will be several childrens' activities including films and videos on dinoseurs and the formation of fossils, as well as fossil cest-making, a "hands-on" stand on fossils and minerals and a gallery quiz.

For mineral lovers there will be three stands, on lapidary, gemmology and minerals, as well as specimens for sale or exchange. Specialists stands will include the Association of Teachers of Geology, Dudley Cave Rescue Team and, of course, the BCGS. Also stands by Johnson, Poole & Bloomer; West Midlands Gem and Mineral Society: British Micromount Society. There will be several new displays in the Geology Gallery and and all BCGS members will be invited to inspect the new storage facilities for the permanent collection.

All welcome. Please come along and give your support.

Colin Reid.

Monday: 16th November: Indoor meeting at the Saracen's Head, Stone Street, Dudley. 7.30. p.m.

Chairman Alan Cutler BSc M.CAM DipM MInstM

Hon.Treasurer Anne Harrison BSc MB ChB FFARCS

Hon.Secretary Paul Shilston MA CEng FIEE MIMechE

Field Secretary John Easter BSc for 8.00 p.m. Another talk from a regular visitor, Dr. Reg Bradshaw, of Bristol University, whose lecture is entitled "Geology and Philately."
You will not be the only one wondering what connection there could be between rocks and stamps! Which is a good reason to come and hear this entertaining speaker.

Monday: 7th December: Indoor meeting at the Saracen's Head. A suitably cold subject "Greenland", for the talk by Dr. Andrew Chambers of Aston University. This will cover in particular the roots of ancient volcances, which not only reveals much about the origins of the area, but also the unusual metal ores there.

Editor's Note:

This newsletter marks the beginning of a new era - for the first time in nine years it has not been edited by Sheila Pitts. My first task must be to thank her for producing the newsletter for so many years, with complete reliability.

The newsletter is a vital means of communication in our Society, but it is no easy task for the editor to keep up with all the bits of news coming in and yet publishing it in a readable and useful form. It is easy to get a confusing feeling of deja wu at times. This issue of the newsletter is being taken care of by your Vice-Chairman, but the next - and we hope many more issues - will be edited by Andrew Rigby. Andrew is a teacher in Stourbridge and has been a keen member for many years. We wish him well as our new editor. As for Sheila, she will be able to come to meetings and actually enjoy them! Many aspects of life are changing slowly but surely, and amateur geology is no exception. Many of our members still enjoy the traditional activities of societies such as ours, observing and collecting and listening to learned lecturers. Such societies in the 19th century produced many great geologists and their writings and also the great collections of fossils and minerals which are displayed, or lie rotting, in the nation's museums today. There is nowadays another develop-

ment - people are increasingly interested in the dynamics of natural history, how it all works and how all the parts of the environment affect one another. This has led to awareness of the need for conservation and environmental management, as can be clearly seen in the recent increase in the number of societies and campaigns concerned with such interests, Your committee have deliberated often on how or if we should meet this change in public awareness. Some things are clear, e.g. there are not too many people who want the traditional geological society in the West Midlands; e.g. geology is not well integrated into West Midlends natural history interests. Some members belong to other societies, We would be pleased to hear from you, because we need to keep in touch with progress in other areas of natural history. Such things have edges that are more blurred than they used to be, as can also be seen from courses and classes being offered this Autumn and Winter - a and ist follows later in this newsletter

John Gollege:

Programme for 1988:

Monday: 4th January: Saracen's Head, Stone Street, Dudley. 7.30 p.m. for 8.00 p.m. Dr. Coopeof Aston University will be talking about the mammoth remains found last year in Shropshire.

Monday: 8th February: Saracen's Head, Stone Street, Dudley. 7.30 p.m. for 8.00 p.m. Paul Shilston, the BCGS Secretary, will give an illustrated talk on Canyons in Utah and Arizona, based on his recent geological holiday tour through Western U.S.A.

Saturday: 12th March: Society visit to the Chinese Dinosaur Exhibition at the National Museum of Wales. Whilst we are there, the A.G.M. will be held. A coach will be arranged, so reserve this date and bring along your family and friends. This is a world-class exhibition, which has greatly impressed those who have seen it. For the non-geologists, there are plenty of attractions in central Cardiff: excellent shopping centre; the restored Norman/Roman Fort; Docks; as well as the other departments of the museum. Booking details in next newsletter.

Sunday: 17th April: Field trip to the Abberley Hills in Worcestershire, led by Dr. Peter Oliver, former vicechairman B.C.G.S.

Sunday: 8th May: Field trip to attend the Open-Day of the British Geological Survey, based at Keyworth, Nr. Nottinghem. BGS was formed in 1835 to record UK geological knowledge, to provide an advisory service, and to conduct projects (e.g. the present geothermal energy project). Mapping is one of the basic activities; other interests to be displayed on the Open Day include:water resources; deep drilling; construction surveys for dams, tunnels, motorways etc.; disposal sités: metal and mineral resources; offshore work: oil and gas; type collections of fossils and minerals: saismology. coach will be arranged to Keyworth: it should be interesting to both members and their friends. This is a once a year change - don't miss it!

Further details of next year's mestings will appear in the next newsletter. Those attending BCGS field trips should note that the Society does not provide personal insurance cover. You should arrange any insurance you feel to be necessary.

Birmingham University Extra-Mural Dept. classes.

P.O. Box 363, Birmingham Bl5 2TT.

176 DINOSAURS: THEIR LIVES AND TIMES AUTHUR CRUICKSHANK BSc PhD; DAVE NORMAN BSc, PhD; JOHN MARTIN BSc Fee: £7 (£3.50) Saturday Nov 7 10.00-4.30 Faculty of Arts, University B15 Dinosaurs are a diverse and exciting group of extinct reptiles, whose life styles are becoming increasingly well understood. Three experts will present up-to-date information on all aspects of dinosaur lives and the factors which may have led to their extinction.

136 GEOLOGY AND SCENERY OF THE BRITISH ISLES SPG# C.H.S. SANDS BSc PhD Fee: £26 (£13) 20 meetings (incl 3 full day trips) 7.30 Oct 1 Dept of Geological Sciences, University B15 The course will provide a background knowledge of the geological history of Britain against which the present structure and scenery can be appreciated.

86 GREEN CORRIDORS: A FIELD COURSE

PETER SHIRLEY

SBO/6 Fee: £14 (£7)

8 meetings 7.30 May 24 Winterbourne

"Green Corridors" are of great importance to the vitality of wild life in the Midlands. This field course will introduce the idea of Green Corridors and includes visits to some of the most important corridors in the region.

172 GREEN CORRIDORS IN URBAN AREAS

SBO/5

PETER SHIRLEY AND OTHERS Fee: TBA Saturday Feb 20 10.00-5.00 Faculty of Arts, University B15 The problems of conserving the wildlife value of linear sites, such as river valleys and canals in urban area, and of realising their wildlife and recreational potential. Of interest to natural historians and conservationists, and officers of local authorities, statutory and voluntary bodies.

THE NATURAL HISTORY OF DUDLEY BOROUGH Fee: £12 (£6) 6 meetings (including field visits) Thursdays 7.00 from May 12 1988 at Saltwell Development Centre, Bowling Green Road, Netherton

DAVID OAKLEY BSc

Dudley Borough possesses what must be the richest diversity of wildlife habitats to be found in any urban area in the country. These habitats will be explored.

GEOLOGY, LANDSCAPE AND MAN

Fee: £19 (£10)

12 meetings (including field visits) Tuesdays 7.30 from Oct 6 at the United Reformed Church, Gracechurch Centre, Sutton. CHRIS SANDS BSc PhD

An outline of the geological factors which have moulded the scenery of Britain and a consideration of how these factors have also influenced man.

GEOLOGY AND SCENERY IN THE MARCHES

Based at Preston Montford Tutor: DAVID CRONSHAW BA PhD

22-29 July 1988

A short course centred in the spectacular South Shropshire hill country, providing the opportunity to investigate at first-hand the relationships between the striking surface landforms and scenery and the unique underlying geology.

Fee: £145.00 to include full-board accommodation in twinbedded room, tuition.

ROCKS, MINERALS AND MINES

Based at Preston Montford Tutor: DAVID PANNETT BA 10-12 June 1988

An opportunity to explore a part of the country in which mining and mineral extraction have played an important part in its history and landscape development and to collect and study in the hand many of the minerals involved.

Fee: £58.00 to include full-board accommodation in twinbedded room, tuition.

WOLVERHAMPTON

At the College of Adult Education, Old Hall Street.

FOSSILS: A PANORAMA OF PAST LIFE (09H15) Tutor: John Armitage

A fully illustrated course presenting a broad panorama of past life as demonstrated by the fossil record; how they have been preserved and what they tell us about past life and past environments.

10 meetings, THURSDAYS, 7.30 p.m., starting September 24th In Room 12. Fee: See 'Notes' at front of programme.

SHREWSBURY

All courses (except Place Names of Shropshire) will be held at The Galeway Education and Arts Centre, Chester Street, Shrewsbury, SY1

Fee: £26 (£13)

GEOLOGY IN SHROPSHIRE

20 meetings Mondays 7.30 p.m. from 28 September. PETER TOGHILL, PhD

The great variety of Shropshire's geology will be explained in detail. Initially, aspects of the county's geological history will be used to understand the general principles of geology. The beginner will therefore not be out of place.

"UNDERSTANDING THE BRITISH LANDSCAPE

Fee: £18 (£9) 12 meetings Wednesdays 7.30 p.m. from 23 September. DAVID PANNETT, BA Our familiar British landscape of hills, valleys, lowlands and coastline is

the product of changing climates and sea levels acting upon a varied collection of rocks. The characteristic features can be seen both in Shropshire and in many lavourite holiday areas and will be explained with the help of photographs, maps and diagrams.

University of London DEPARTMENT OF **EXTRA-MURAL STUDIES**

Extra-Mural Centre, 32 Tavistock Square, London WC1 (01-636 8000 extension 3854)

Dartmoor And Torbay

765X05 Thursday to Sunday, 19 to 22 May. Fee: £25.00 + accom. Michael Bamlett, BA, MPhil, MIGeol & D Laming. CENTRAL REGISTRATION

Mesozoic Rocks And Coasts

765X04 Thursday to Sunday, 23 to 26 June. Fee: £25.00 + accom. Michael Bamlett, BA, MPhil, MIGeol. Gower Peninsula CENTRAL REGISTRATION

The Western Weald

765X03 Friday to Sunday, 2 to 4 October. Fee: £20.00 Michael Bamlett, BA, MPhil, MIGeol & Beryl Oxtoby-Evans, Haslemere CENTRAL REGISTRATION

iceland

765X09 Summer 1988. Fee: TBA CENTRAL REGISTRATION

Skye - Volcanics And Structures 765X06 Wednesday 6 to 13 April. Fee: £40.00 + accom. Michael Bamlett BA, MPhil, MIGeol & Dr Bonita Thomson CENTRAL REGISTRATION

The Limestone Regions Of Southern France 765X08 3 to 12 June. Fee: £50.00 + trave, & accom. S Van Rose CENTRAL REGISTRATION

B.C.G.S. News:

Cotwall End Walley Nature Centre, Sedgley:

BCGS and the management of the centre have been co-operating for some time, the aim being to use some of the geological exposures in the valley to set up a geological trail. This is thought to be important by BCGS because it will help to heighten public awareness of

geology and its place in the environment. Despite frequent negotiations, it is proving difficult to get everyone concerned in the right place at the same time. Our man on the spot is Graham Worton, and hopefully he will be able to get things moving again soon, in which case he will want volunteers to help the British Trust for Conservation Wolunteers who will be doing the path making etc.

Pensnett Wildlife Group:

BCGS had a display stand at this Group's exhibition in Brierley Hill in July, which should help to get us known better in that area. John Easter manned the stand for us.

Past Newsletters:

Surplus copies of past BCGS newsletters have been collected together:-

Nos.1-6, covering the years 1975/6 Nos.7-14 Nos.15-24 1979/80.

These are available at meetings at 20p each or 50p for all three.

From the Papers:

GEOLOGY TODAY September-October 1987/151

On a recent field trip organized by the Black Country Geological Society, amateur geologist Hilary Giltrap discovered a small shiny black object in a sedimentary face that, at first sight, looked fairly uninteresting. However, Leicester Museum has since identified the object and a few similar pieces collected at the same time as bone fragments from the dorsal vertebrae of a large land-dwelling or flying reptile. No further fragments were found on a return visit to the site; but it turns out that fragments discovered at the same site some time ago, and now in Oxford Museum, nave been positively identified as having belonged to a stegosaur. It's possible, therefore, that all the fragments were part of the same animal; and the new finds are being sent to Oxford for comparison. As we have remarked in these columns before, geology is still one of the few fortunate sciences in which amateurs can make interesting and important discoveries.

Report on "Palaeoecology of the Dudley Limestone" a talk on 6th July, 1987 by Dr. D. Gobbett:

Dr. Derek Gobbett gave a most lucid account of the Wenlock Limestone. These middle Silurian rocks were laid down in a tropical or subtropical sea south of the equator.

Beginning with maps, sections and photographs of the Wrens Nest and adjacent areas, Dr. Gobbett systematically described the environment of the time. The fine grain of the rocks indicates a quiet environment or one which was sufficiently deep i.e. 10-20 metres, to lack surface wave action. There is little sand or silt. Most of the fossils were buried in their life positions though the Upper Limestone has more broken fragments indicating rougher conditions. In places ripple marks can be seen and compaction cracks.

By using photographs of specimens from Birmingham University Museum Dr. Gobbett built up a vivid and detailed picture of life in the sea. Reef mounds formed by tabulate corals show periodic growth. Perhaps growth was impeded by a seasonal influx of mud. These reefs provided a haven for many other creatures. Many of the photographs showed interaction between creatures i.e. coral growth having begun on a brachiopod shall eventually overwhelming the latter. Conversely brachippods encrusted the bryozoans and corals and thus obtained food from currents generated by the reef formers. The stromatoporoids required clearer conditions and have solitary corals growing on them. The growth of an efficient sediment trapping bryozoan overwhelmed a snail, despite the snail's attempt to crawl from beneath it.

The trilobites are often nearly complete. Calymene was a bottom-living, flexible, heavily armour plated mud ingestor. A likely predator of the trilobites was nautilws. Dalmanites may have dug its tail in the mud but its head and large eyes must have been free of the mud.

The spiny trilobites and swimming organisms have less massive skeletons and are probably under-represented in the rocks. Snails

and nautilus, with aragonite shells will be less readily preserved. Dr. Gobbett's photographs provided some fascinating insights into life in a shallow Silurian sea.

Kate Ashcroft:

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