



NEWSLETTER NO. 107 OCTOBER 1994

The Black Country Geological Society

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.

Leaders provide their services on a purely voluntary basis and may not be professionally qualified in this capacity.

The Society does not provide hard hats for use of members or visitors at field meetings. It is your responsibility to provide your own hard hat and other safety equipment (such as safety boots and goggles/glasses) and to use it when you feel it is necessary or when a site owner makes it a condition of entry.

Hammering is seldom necessary. It is the responsibility of the hammerer to ensure that other people are at a safe distance before doing so.

FUTURE PROGRAMME

Lecture meetings are held in the Banquet Room (Dudley Suite) at the Ward Arms Hotel, Birmingham Road, Dudley. Phone: (0384) 458070. 7.30 p.m. for 8 o'clock start.

MONDAY 24TH OCTOBER. Lecture: The Geology of the Isle of Man. By Dr. Trevor Ford (Leicester University).

The geology of the Isle of Man will be an unknown subject to many members, so we can look forward with particular interest to Dr. Trevor Ford's lecture. The structure of the island has some similarity to that of the Lake District, while its main mass is of Manx slates of Cambrian age and similar to the Skiddaw slates on the mainland. In addition there are horizons of Carboniferous limestone resting unconformably on the slates and considerable evidence of igneous activity.

DR. TREVOR FORD has a very wide range of geological interests and has given several lectures to the Society most recently on the Grand Canyon and on Blue John Fluorspar. With his extensive knowledge of the island he has recently completed a geological guide to the Isle of Man published by the Geologists Association.

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MONDAY 14TH NOVEMBER. Lecture: "Geology - without a rock hammer?" By Kathie Bowden (National Remote Sensing Centre, Farnborough).

The National Remote Sensing Centre at Farnborough uses Landsat Thematic Mapper satellite imaging for a wide

variety of applications, in particular for environmental studies of vegetation cover and land use. For geological studies the large land areas that can be surveyed by satellite have enabled scientists to look at landforms on a much broader scale, not possible with ground-based surveys.

This lecture will describe the techniques of geological exploration using satellite data giving a new dimension to the traditional geological mapping.

KATHIE BOWDEN is an Applications Consultant with the NRSC at Farnborough.

SATURDAY 19TH NOVEMBER 10.00 a.m. to 5.00 p.m. Dayschool "The Midlands through geological time".

Lecturers: Dr. Alan Thomas and Dr. Paul Smith. At Lapworth Museum, School of Earth Sciences, Birmingham University, Edgbaston.

This is the first of three linked Saturday dayschools. "The Midlands through geological time" run by the School of Earth Sciences, Birmingham University; the others are on 25th February and 13th May 1995.

Details and booking: School of Continuing Studies, University of Birmingham, Edgbaston, Birmingham B15 2TT Tel: (021) 414 5606/7/8.

MONDAY 28TH NOVEMBER. Lecture: Pleistocene geology of the loess plateau of China. By Dr. David Keen (Coventry University).

Dr. David Keen writes: "The loess windblown silt deposit of north-central China is the most extensive and uniform body of terrestrial sediment on Earth. It is up to 350m thick and has been continuously deposited for at least the last 2.5 million years. Its stratigraphy and its included soils and fossils have potentially the most complete record of the climatic changes of the Quaternary anywhere on land.

Our Chinese work arose out of a three-week visit to the loess plateau in September 1992. In the lecture I will give a brief résumé of the work done by Chinese and foreign workers to unravel this climatic sequence and will also show some of the work done by the combined University of London/Coventry/Liverpool team since 1990."

DR. DAVID KEEN is Reader in Palaeontology at Coventry University with special interests in Quaternary geology and Palaeontology, in particular Quaternary Mollusca. He is also Proceedings Editor for the Geologists Association.

MONDAY 16TH JANUARY 1995. Lecture: Tales of teeth and tails - the origin of fish". By Dr. Paul Smith (Birmingham University).

MONDAY 20TH FEBRUARY. AGM followed by a talk "Geology of Iceland" by Alf Cole (Society Member).

MONDAY 6TH MARCH. Lecture on mineral exploration by Clyde Leys (RTZ Mining & Exploration Ltd)

EDITORIAL

I planned my summer vacation with no thought of geology but it is not so easy to escape. I travelled to Italy, to Venice, and appreciated the danger of rising sea-levels and the optimism and human folly of placing high buildings on low-lying silt and mud. I went to Elba and visited a splendid mineral museum. Finally, I walked part of the coastal section of the Cleveland Way where the scenery was so dependent on geology and where the consequences of marine erosion were all too apparent, not least in the reduction of the smartest hotel in Scarborough to a very tidy and carefully grassed over landslip.

The Rock and Fossil Fair illustrated many aspects of the subject: buildings, civil engineering, education, academe, conservation and commerce. It was a joy to meet so many enthusiastic people, notably small children and delightful teenagers. Interest in our society was considerable and we look forward to welcoming new members recruited from our stand.

REPORTS

Geologists' Association Meeting to the Chester Area, 23/24 July 1994

About 30 people - ranging from novices to the knowledgeable - assembled to enjoy the geological delights of Chester and its environs.

Chester itself owes its origins to its geology, being on a hill of red sandstone and flanked by a navigable river, an ideal site for Roman and earlier settlement. On Friday evening Jim Spencer, of Manchester Geological Association, led us on an excellent guided tour of Chester. At Minerva's quarry we examined a colourful outcrop of the Pebble Beds where flat-bedded silty sandstone has cross-bedded red sandstone above and below. Jim pointed out the lower sandstone shows slumped beds, scarce pebbles and an infilled channel, the flat-bedded unit is finer grained and was eroded during deposition of the upper unit and now dips east at about 10° , Haematite has been leached from it producing biscuit coloured bands. The upper limit shows abundant slumped bedding with more pebbles, and at the eastern end pebble lag deposits can be seen in an easterly-migrating channel. We went on to trace Chester's Roman past and saw how different architectural styles had superseded one another.

On Saturday we set off to explore the Dinantian of the Clwyd Hills under the leadership of Drs Wilson and Waters from BGS. I particularly enjoyed Craig Quarry, a huge working quarry in the Cefn Mawr Limestone, with its lower facies of dark, fine grained, fossiliferous limestones with interbedded shales and upper facies of pale, coarser grained limestone.

The limestones at the top of each cycle display evidence of subaerial exposure including fossil rootlets, karstic features and clay soils. Cycle correlations with other quarry sections further north suggest that the lowest cycles exposed here lie not within the Brigantian Stage but within the preceeding Asbian Stage. I could have happily spent the entire day in the coral bed at the top of the quarry sifting through the colonial and solitary corals, brachiopods and crinoids.

At Loggerheads Country Park students and experienced alike found the examples of early and late Asbian hard to tell apart, immediately after a pub lunch, and some turned their attention to enjoying the tranquility of dappled sunlight on a lazy stream instead.

For the evening Jim had planned another delightful walk - this time on the walls - to examine their geology and historical development.

Altogether an excellent weekend with something for everyone whatever their level of experience.

MARION JENKINS

Rock and Fossil Fair, 24/25th September 1994

1. An appreciation

I am a laywoman with limited knowledge of geology: my horizons are limited so I plead your indulgence.

I spent Sunday at the Fair from opening to closing time and it was not five minutes too long. Every stand had its fascination, every stand demanded my attention. I made many circular tours. It was overwhelming. There was so much on offer. The stands were run by people who, once approached, were so friendly and helpful that my questions were keys to the floodgates of knowledge. I was in my modest geological element. The presence of so many keen young people (and their supportive parents) impressed me greatly: their needs and interests had been so carefully catered for. There was a plethora of books, minerals and fossils. I had a wonderful day.

JEAN SCOTT RITSON

2. Colin Reid reports that 2,500 people paid to attend Dudley Rock and Fossil Fair. Numbers were down compared with the last Fair partly because fewer people visited the museum than in 1992 when 'Dinosaur Mania' was at its height. The Fair received considerable sponsorship from local industry; contributors who would like greater involvement in future. Visitors were asked to comment on the Fair on their entry coupons for the Eurotunnel competition and favourable comments were far in excess of criticism. Some reported that the Fair was too crowded. (Do we restrict entry of build a bigger Town Hall?)

Colin wishes to see more interactive exhibits and in future will hold excursions in the afternoon only so that people can look round the Fair in the morning and learn of the excursions on offer. He would like to be open on Friday to attract school parties.

Dudley Fair is not a commercial Fair but a unique shop window on the exciting world of Geology.

It is typical of Colin that, only two days after the 1994 show, when I enquired about the Fair he talked more about plans and changes for the 1996 event. Watch this space!

3. Thank You

I would like to offer my thanks to the 28 Society members who volunteered their services for the Dudley Rock and Fossil Fair.

I managed to do this directly with some people but others had gone "off duty" whilst I was looking the other way! There is no doubt that because of financial constraints it would have been very difficult, maybe impossible, to run the Fair without volunteer help. The willingness of so many Society members to assist made things much easier and relatively hassle free for me. So - thank you all.

JUDITH SHILSTON

COURSES

1. University of Birmingham

Details and booking: University of Birmingham,
School of Continuing Studies, Edgbaston,
Birmingham B15 2TT
Tel: (021) 414 5606/7/8

Evening classes

- (a) Fossils: a key to past worlds. Mondays, 10 meetings from 19 September 1994. Lecturer: John Armitage. At Codsall High School.
- (b) Fossils: the world of the vertebrates. Mondays, 10 meetings from 16 January 1995. Lecturer: John Armitage. At Codsall High School.
- (c) The geology, structure and landscape of Britain. Tuesdays, 20 meetings from 20 September 1994. Lecturer: John Armitage. At Wolverhampton College of Adult Education.
- (d) Introduction to rocks, minerals and fossils. Thursdays 10 meetings from 29 September 1994. Lecturer: Susan Beale. At School of Earth Sciences, Birmingham University, Edgbaston.

Daytime classes

Introduction to plate tectonics and stratigraphy. Thursdays 10.30am - 12.30pm. 10 meetings from 12 January 1995. Lecturer: Peter Toghil. At Winterbourne, Edgbaston.

Dayschools

The Midlands through geological time. 3 linked dayschools on Saturdays 19 November 1994, 25 February and 13 May 1995. Lecturers: Alan Thomas and Paul Smith. At Lapworth Museum, School of Earth Sciences, Birmingham University, Edgbaston.

2. University of Bristol

Details and booking: University of Bristol,
Dept of Continuing Education,
8-10 Berkeley Square, Clifton,
Bristol BS8 1HH.
Tel: 0272 287172

- (a) Field geology in Gloucestershire - Lydney and Westbury-on-Severn areas. Two linked dayschools on Saturdays 5th and 19th November 1994, 9am-4pm. Fee £26-70.

- (b) The Cleeve Hill area - a circular geological walk, Dayschool on Saturday 3 June 1995, 10am-4pm. Meet at Prestbury. Fee £11-50.
- (c) The ice age in the Cotswolds and Severn Vale, Dayschool on Saturday 8th April 1995, 10am-5pm. At Tewkesbury. Fee £13-50.
- (d) The south Malverns and adjacent areas - a circular geological walk, Dayschool on Saturday 6th May 1995 10am-4pm. Meet at Hollybush.
- (e) The geology of the Isle of Wight. Residential course 21-23rd April 1995.
- (f) Granite and slate in north Cornwall. Weekend course 5-7th May 1995.
- (g) Geology of the Isle of Mull. Residential course in June 1995.
- (h) Geology of Guernsey. Residential course 15-19th May 1995.
- (i) Geology of Cyprus. Residential course in September 1995.

3. Part-time BSc degree course

This part-time course for BSc in Environmental Science or Geography is offered by Walsall College of Arts and Technology and Sutton College in conjunction with Coventry University. It is specially designed for people who are busy in the day but can attend in the evening.

Further details from: Gerard Hawley,
 Walsall College of Arts & Technology,
 St. Paul's Street, Walsall WS1 1XN
 Tel: (0922) 720824 ext. 300

(This course can be joined in September or February).

NEWS IN BRIEF

'Earth Heritage Conservation' is a new book co-published by the Geological Society and the Open University, written for voluntary and professional conservationists with little or no knowledge of geology or amateur and professional geologists unfamiliar with the needs of Earth Heritage Conservation. The work involves the protection and management of landforms and natural and artificial rock exposures. Price £15 obtained from Geological Society Publishing House Tel 0225 445046.

RIGS News

Warwickshire Geological Conservation have nominated two new RIGS to be administered by Staffordshire.

1. Dosthill Granite Quarry (SP 211998) is valuable as a research site and has Namurian Millstone Grit resting on mudstone of Cambrian Stockington Shale Formation. A large intrusion of Lamprophyre is present in the face.
2. Averill Brick Works (SP 221996) is an active pit in the Etruria and Halesowen Sandstone Formation.

SSSI News

Gospel End Road Cutting, South of Wolverhampton, has been notified by English Nature as an SSSI (SO 904936). The sequence in the Etruria formation represents fluvial channel deposits with pebbly lags laid down during the transition to desert conditions in the late Carboniferous/early Permian.

'Dinosaurs of Jurassic Park'

I thought the dinosaurs were extinct but they are making a comeback at Bristol Industrial Museum. This exhibition includes the story of the making of the film, a walk through Jurassic Park jungle with life size model dinosaurs and the scientific facts behind the fiction. The exhibition is open 7 days a week. 0272 223571.

Dudley Canal Trust wishes to recruit new members. 021 520 5321.

Welcome to B.C.G.S. New Members

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