



The
Black
Country
Geological
Society

NEWSLETTER NO. 143 OCTOBER 2000

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. Phone (01384) 458070. 7:30 p.m. for 8 o'clock start.

EXHIBITION "The Rocks of Walsall" 3rd OCTOBER - 18th NOVEMBER 2000 in the access Gallery above Walsall Central Library in Lichfield Street, Walsall. In conjunction with the above, Alf Cole will be giving a talk entitled 'Walsall's Journey through Time' on Thursday 26th October at 7pm. Free admission and no booking necessary. The venue: Walsall Museum, Central Library, Lichfield Street, Walsall.

FRIDAY 13th OCTOBER- SUNDAY 15th OCTOBER 2000 - History of Geology Group of the Geologists' Association. The Dudley Gathering: A Celebratory Event to Discuss and Relive Dudley's Role in the History of Geology.

Friday 13th October: 18.30-21.30 Informal gathering in Dudley Museum to view the Geology gallery and items from the Dudley collection.

Saturday 14th October: 10.00 am - 4.00 pm. A series of talks at Dudley Muscum by Alan Cutler, Paul Smith, Hugh Torrens, Graham Worton and Colin Knipe. This will be followed at 17.00 by an excursion by narrow boat into the caverns beneath Castle Hill. Pre-booking is essential.

Sunday 15th October: Field visit to Wrens Nest.

Although this is not a BCGS event members are invited to attend if they wish, **but must use the Booking Form which accompanied the August newsletter.**

MONDAY 23rd OCTOBER 2000 "Volcano: Subaerial and Submarine Volcanic Phenomena" Dr P Floyd, Department of Earth Sciences, Keele University. This lecture will concentrate on subaerial and submarine volcanic constructs produced by basaltic volcanism, as representative of the most common lava type. The global tectonic environment and the origin of basaltic volcanism will be briefly outlined to illustrate the differences between lava generation at spreading ridges (shallow mantle melting) and within lithospheric plates (deep plume-related melting). Examples from the Mid-Atlantic Ridge and recent research from the western Pacific Ocean will be used to illustrate the submarine environment, and the Hawaiian Isles for the subaerial environment. Also a look at basaltic volcanism on our closest planetary neighbours (Venus and Mars) as well as on the Jovian satellite Io.

Please note the cancellation on SUNDAY 5th NOVEMBER 2000, Black Country Society 'Local and Family Fair' in Dudley Town Hall.

MONDAY 27th NOVEMBER 2000 "A Comparison of the mass extinction events at the end of the Cretaceous Permian and Triassic periods" Professor A Hallam, University of Birmingham School of Earth Sciences. Professor Hallam will review the literature and his personal fieldwork to compare these three mass extinctions. The most frequent association of marine mass extinction is with transgression and the spread of anoxic waters into epicontinental seas. Some have been attributed to the effects of regression and to bolide impact. Professor Hallam's lecture will also cover the probable ultimate tectonic and volcanic changes that caused the sea level changes and the continental and atmospheric changes which may be associated with them.

MONDAY 4th DECEMBER 2000 Mini-lectures and Specimens. A chance for members to bring along a few transparencies and/or specimens and talk about them. Please inform Gordon Hensman at meetings or fill in the booking form and send it to the editor if you are willing to make a contribution on this evening. Graham Worton will give a short presentation on the things that we can all do to help with the identification and conservation of the local geological exposures in the areas that we live. Examples will be given (including actual specimens from sites and examples of the very simple paperwork required that anyone can do).

MONDAY 29th JANUARY 2001 "Little Geophysics - looking at the top 100 metres" Dr I A Hill, Department of Geology, University of Leicester. The lecture is concerned with the common ground of engineering, archaeological, environmental and geological geophysics in the depth range 0.5 to 50 metres.

WEDNESDAY 21st FEBRUARY 2001 Rockwatch Roadshow 10- 4pm at Walsall Town Hall, Lichfield Street. To be held in the February half term, this would appear to be an important venture. Take the children or grandchildren back to the Jurassic with a range of activities: model dinosaur claws, Velociraptor skull, fossil identification, construction of a Jurassic forest and much more.

MONDAY 26th FEBRUARY 2001 "Quaternary Topics" Dr D. H. Keen, Department of Geography, Coventry University.

MONDAY 26th MARCH 2001 "Bringing Dinosaurs to Life" John Martin, Managing Curator, Leicester City Museum

MONDAY 23rd APRIL 2001 "A Walk across the Mid Atlantic Ridge: A geological Guide to Iceland" P F Regan, Division of Earth Sciences, University of Derby.

MONDAY 21st MAY 2001 "The Geology of Eastern Europe" Dr Jan Zalasiewicz, Department of Geology, University of Leicester.

EDITORIAL

On my recent visit to America I was able to visit some important mines. After enjoying the historical delights of Deadwood (shades of Calamity Jane and wild Bill Hickock) I visited the famous Homestake gold mine where production is being increased to compensate for the losses incurred by the falling price of gold. The mine is kept open to prevent its destruction by flooding and in the hope of long term recovery of gold prices.

We crossed the Powder River basin of Wyoming and were overwhelmed by the size of America's energy production and resources. Here, the Roland Coal from the Wyoming seam has sufficient reserves to supply all of America's needs for 200 years. At Eagle Butte Mine lies a seam of sub-bituminous coal 110 feet thick. The mine produces 12-15 million tons of coal annually. Shovels remove the thin overburden and the coal, free of rocks and dirt, is crushed and loaded on to trucks. The sulphur (or should it be sulfur?) content is low, the Btu value is 8,300 and the trains, pulled by 3-5 locomotives, are 1.2 miles long, made up of more than 100 cars, and take the coal to power plants across the continent. Because of excess production, coal prices have been falling and although some mines have closed, many have been increasing production in order to stay profitable. Wyoming also has gas and oil in abundance and in the still, dry summer air a pall of pollution is extending over the state.

Further south I visited the Glen Canyon dam producing nice clean, pollution free hydroelectricity and controlling the flow of the mighty Colorado. The Glen Canyon Dam holds back Lake Powell. (As geologists you can imagine the consequences of the loss of sediment and flood water for the Lower Colorado.) But the dam and its lake have also

generated a tourist trade attracting 2.5 million visitors annually, so that a coal burning power station has had to be built to supply its needs. Power station and tourist traffic pollute the fragile desert environment. Energy burning and forest fires create a pollution haze which, at times, the camera lens is unable to penetrate. The wastefulness of the Americans was a constant source of comment by us careful Brits!

On returning home a contrasting economic climate dominates the news. OPEC is acting with reformed strength and has been cutting production, oil prices are escalating and Europeans are demanding their right to cheaper energy and a high standard of living. For a few days we use our cars with care, get out our bicycles, discover our legs, and realise our total dependence on oil.

CONSERVATION COLUMN

RIGS UPDATE

The annual UKRIGS conference was held in Penrith, Cumbria this year. Four members of the society attended various talks, workshops and field trips which aimed to give examples of good practice in the fields of recording, assessing and designating sites, building relationships with planners and landowners, opportunities for geological conservation in the towns and cities, writing (and readability of) interpretive literature etc. Having now attended all three of the UKRIGS conferences held so far I sensed that despite the slow and difficult start, UKRIGS is now rapidly becoming a more cohesive national organisation that has closer and stronger working links between the RIGS groups across the country. Congratulations for this focus and direction are in no small part owed to those who initiated the annual conference programmes and the more frequent regional meetings, that provided the essential forum for discussion and ideas. Alan Cutler stood again to serve on the UKRIGS executive committee, and was duly re-elected at the AGM on the Saturday of the conference- Congratulations Alan!

NEWS IN BRIEF

Catherine Eales has sent me the whole of the East Midlands Geological Society programme which is available by electronic mail. I wonder how long it will be before we have such a system. I think it is the way that we shall have to go. Is there anyone interested in helping us to set up and provide such a service?

I'm including a list of geological websites:

http://www.emgs.org.uk/	East Midlands Geological Society
http://www.geologist.demon.co.uk/index1.htm	The Geologists' Association
http://earth.leeds.ac.uk/ygs/ygswelc.htm	The Yorkshire Geological Society
http://pangaea.esci.keele.ac.uk/nsgga/	The N Staffs GGA site
http://www.bgs.ac.uk/	The BGS Site
http://www.fortunecity.com/greefield/ecolodge/25/geosoc.htm	The Hull Geological Society
http://www.cumberland-geol-soc.org.uk	The Cumberland geological Society

I haven't the skill, time or patience to test all of these and apologise if I have typed any errors.

Editor
K. M. Ashcroft

Hon. Secretary
Dr Sarah Worton,