



**Circular 377
August 2008**

Registered Charity No: 503617

President: John Travis

www.emgs.org.uk

FIELD MEETING & INDOOR LECTURES PROGRAMME - AUTUMN 2008

FIELD MEETING

Saturday 18th & Sunday 19th October - Weekend trip to the Gower

Leader: Ian Sutton

Meeting place on Saturday morning at 10.30 a.m.

Bracelet Bay Car park near Mumbles Head.

Grid ref. Landranger Sheet 159 SS627872.

BGS one inch sheets 246 (Worms Head) and 247 (Swansea) cover the area to be visited

The Gower Peninsula has excellent exposures of Carboniferous and some Devonian strata. These rocks have been strongly deformed by faulting and folding during the Variscan orogeny and have given rise to spectacular coastal sections which we will be able to visit during the weekend. Additionally many of the Lower Carboniferous rocks are highly fossiliferous and exhibit a range of carbonate lithologies. These should provoke considerable interest during our visit to this South Wales area and they are enhanced by some superb coastal scenery. Although we have good examples of Lower Carboniferous strata on our doorstep in the East Midlands those of the Gower occur in a quite different tectonic setting and show a more complete sequence compared with the Derbyshire Lower Carboniferous.

PLEASE COMPLETE THE ATTACHED BOOKING FORM FOR THE FIELD TRIPS AND RETURN TO IAN SUTTON.

Where a member has to cancel a booking it is requested that they contact Ian Sutton (0115 923 2360 or 07795 211761) as early as possible.

Insurance and Safety

Members are reminded that the Society has only public liability insurance and that personal accident insurance is a matter for individual members to arrange as they consider necessary. Up to date hard hats are obligatory for all field excursions involving quarries or cliff faces and strongly recommended for all trips. High visibility clothing is sometimes required in working quarries. High visibility tabards can be obtained from GA Enterprises, 126 Fleetside, W. Molesey, Surrey KT8 2NQ at £4.70 incl. pp. Members without suitable hard hats may be refused access to certain sites! Hard hats can be obtained from many Builders' Merchants, Wickes, B&Q Warehouse etc. for about £4.

Any non-members attending field excursions will have to pay a temporary membership fee of £2.00 and all participants are reminded that they must comply with any instructions from excursion leaders or, for example, quarry managers or their employees on Health & Safety issues.

INDOOR LECTURE PROGRAMME

Saturday, 25th October 2008 - 6.30 pm

Geology of the Languedoc Wine Country, Southern France

Speaker: Roger Suthren

(to be followed by wine tasting - please bring your own wine glass)

Saturday, 15th November 2008 - 6.30 pm

The Rotunda Museum - its role in the birth of Geology on the Dinosaur Coast and its Redevelopment

Speaker: Will Watts

Saturday, 13th December 2008 - 6.00 pm

Salt Terrains of Iran

Speaker: Tony Waltham

Followed by our Annual Cheese and Wine Evening.

LECTURE VENUE

Indoor meetings will take place in lecture theatre B3 of the Biology building at the University of Nottingham. If you require to use the lift to B3, please speak to the security attendant who will assist you. B3 is equipped with induction loop hearing assistance. If you are attending meetings or joining a coach at the University of Nottingham, enter from the South Entrance on University Boulevard. Cars should be parked in the car park on the bend in the road just beyond the security point after Science Road. The entrance to the Biology building is at the right hand side of the rear of this car park.

Saturday, 25th October 2008 - 6.30 pm

Geology of the Languedoc Wine Country, Southern France

The Languedoc-Roussillon region of southern France displays a spectacular range of geological and landscape features. We follow the theme of geology, soil, and vine growing in the world's largest vineyard. In the south, the eastern Pyrenees reveal the internal structure of two mountain belts. The younger range formed about 50 million years ago, as the Iberian continent collided with southern Europe, producing large folds and faults. These structures form the backbone of the present landscape, with high ridges crowned by mediaeval villages and castles.

North of the Pyrenees, the Languedoc Basin filled during Cretaceous and early Tertiary times with fossiliferous deposits, representing reefs, coasts, river channels and floodplains (with abundant dinosaur remains), soils and carbonate-rich lakes.

Further north, the Montagne Noire, over 1200 m high, is part of the Variscan mountain belt, formed some 300 million years ago. Highlights include deep gorges eroded through granites and gneisses; cave systems and quarries in Devonian 'marbles' used in the buildings of Versailles and Washington, DC, and ancient deep ocean deposits.

Northeast of the Montagne Noire, large expanses of more or less horizontal Jurassic limestones form the barren plateaux of Les Causses, grazed by sheep whose milk is the basis for Roquefort cheese. The

'icing on the cake' of younger rocks includes Tertiary gypsum deposits mined for plaster, volcanoes less than a million years old, and huge volumes of sediment eroded from the Pyrenees and deposited to form the plains and terraces of the Roussillon basin, roamed by early humans.

Saturday, 15th November 2008 - 6.30 pm

The Rotunda Museum - its Role in the birth of Geology on the Dinosaur Coast and its Redevelopment

The Rotunda Museum

Its role in the birth of Geology on the Dinosaur Coast and its redevelopment

'The Rotunda Museum is unique. It is perhaps the only museum whose design, original displays and even the stone of which it is built combined to express the logic of William Smith's ideas and the, then, brand new science of geology' (Professor Simon Knell, University of Leicester).

The Rotunda Museum in Scarborough first opened in 1829 and over 175 years later it is the subject of a £4million redevelopment scheme that was completed in May 2008. This talk will explain the rationale for the redisplay of the Rotunda Museum. How, in the context of the aspirations and diverse interests of the Scarborough Philosophical Society and its Museum we present Smith's ideas. The return of the Museum to the cutting edge of science through the 'Shell Geology Now' gallery and the provision of a gateway to the wider geological heritage of the Yorkshire Coast through the Gateway to the Dinosaur Coast.

In 1827 a meeting was held in Scarborough to discuss the possible formation of a philosophical society and the building of a museum. Attendees at this meeting included Thomas Hinderwell a local natural historian and holder of large, varied and important collections from the area. Also present was William Smith, the 'father of English Geology' recently employed by Lord Derwent at the nearby Hackness estate as land steward. Two years later in August 1829 the dream of a Scarborough based philosophical society with its own museum was realised with the opening of the Rotunda Museum, built to designs suggested by William Smith who also acted as foreman of works. The museum housed the collections of Hinderwell and other local collectors and covered a huge range of subjects from geology and natural history, through ethnography to social history, a truly cross subject display. Although the museum originally featured geology in pride of place this soon changed as other subjects became more prominent, including natural history and archaeology. These changes in interest coupled with the expansion of the museum through the addition of the two wings in the 1850's saw the geology redisplayed in one of the lower galleries, no longer using Smith's concept of sloping shelves holding objects to mirror their natural 'stratigraphic' position in the field.

The museum closed in 2006 to allow the £4.4 million redevelopment programme to begin. This has seen the complete restoration of the building, the addition of new space at basement level and the complete redesign and installation of the exhibitions to provide three contrasting but linked galleries. The Gateway to the Dinosaur Coast and Shell Geology now occupy the two wings whilst the original Rotunda Gallery on the first floor has been restored to its former purpose and glory.

The finished museum is a unique experience for the visitor that builds on (in this author's opinion) the three key elements for a successful museum, real people; the visitors and staff, real objects; over 1000 of them will be displayed, and real places; an awe inspiring 175 year old museum located yards from the stunning Dinosaur Coast.

Will Watts, Head of Learning Partnerships, Scarborough Museums Trust

Saturday 13th December 2008

Salt Terrains of Iran

The southern Zagros Mountains of Iran are unique in having over a hundred salt domes that survive at outcrop in the desert environment. Each dome is a diapiric structure, a few kilometres in diameter, of Cambrian salt squeezed up from depths of some kilometres. Some have developed spectacular salt glaciers, also a few kilometres long, where the salt extrusion rate exceeds its weathering rate and so flows down off its anticlinal mountain at a few metres per year. Exposed salt domes develop dramatic karst landscapes with large sinkholes in both the bare salt and the cover of dissolutional residuum. Stream caves that drain through some of the salt hills provide excellent exposures of the internal structure of the diapirs, and also contain magnificent displays of salt stalactites. The lecture presents experiences and observations gathered on a visit to just a few of the salt domes near Bandar Abbas early in 2008.

Society Publications

- (1) **Leicester Building Stones Guide** (new);
 - (2) **East Midlands Field Guide**;
 - (3) **Sandstone Caves of Nottingham** (new full colour edition) .
- Copies available by contacting the Secretary or at Indoor Meetings.

We are looking for volunteers please in the Leicester area to help in distributing the Leicester Building Stones Guide. If you can help, please contact the Secretary (details below).

EMGS Website

A plea for past EMGS Field Trip Photographs please for a gallery on the website. Pictures can be e-mailed to website@emgs.org.uk or sent to the Secretary.

New Members

Mr Dave Sahman, Southwell, Notts.

Marketing the Society's Publications

We are still in need of a volunteer to promote the marketing of the Society's publications such as the East Midlands Field Guide, Leicester Building Stones Guide and the Sandstone Caves of Nottingham books. If you have any expertise in this field, or even if you haven't but would like to volunteer to help, please contact the secretary or any other member of Council.

The National Stone Centre

Are looking for volunteers for guiding and other activities on the site at Wirksworth. If you can help, please contact Ian Thomas on 01629 824833 or ian@nationalstonecentre.org.uk

BA FESTIVAL OF SCIENCE, LIVERPOOL - 7TH TO 11TH SEPTEMBER
Geology Section Events

Exploring the Geology of the Wirral

Sunday, 7th September 10.00 am - 4.00 pm

Geoscience at the Frontiers of Global Oil & Gas Exploration

Monday, 8th September 1.30 pm - 3.30 pm

The Dynamic Earth

Tuesday, 9th September 9.15 am - 1.15 pm

Rock around Liverpool

Tuesday, 9th September 2.00 pm - 5.00 pm

Isotopes: Silent Witness to History

Wednesday, 10th September 9.15 am - 1.15 pm

How Britain became an island: catastrophic megafloods in the English Channel

Thursday, 11th September 9.30 am - 10.30 am

For further information, please contact the British Association for the Advancement of Science.

e-mail addresses

To minimise postal costs and photocopying charges which amount to approximately £4.00 each year for every member who still receives their Circular by post, we would very much like to send you your Circular by e-mail. If you have not already done so, please send your e-mail address to the Circular Editor, sue.miles@freethcartwright.co.uk.

Please can you also confirm your name and address when sending your e-mail so we can correlate these details with our membership listing.

The next Circular will be published in October 2008.

The next Council Meeting will be held on 10th September 2008.

Secretary: Mrs Janet Slatter, 100 Main Street, Long Whatton, Loughborough, Leicestershire LE12 5DG
e-mail: j.slatter@zoom.co.uk tel. no. 01509 843297

Treasurer: Mr Colin Bagshaw, 150 Scalpcliffe Road, Burton-on-Trent, Staffordshire DE15 9AD, e-mail:
Cb68@tutor.open.ac.uk , tel. no. 01283 564520

EAST MIDLANDS GEOLOGICAL SOCIETY

BOOKING FORM - WEEKEND FIELD EXCURSION TO THE GOWER PENINSULA

SATURDAY 18TH AND SUNDAY 19TH OCTOBER 2008

Please book me/us for the excursion:

Name(s):

Address:

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Tel:

e-mail address:

I/we do/do not have a car available.
I/we would be prepared to offer transport.

I/We would like to purchase High Visibility Tabards at a price of £3.00 each – PLEASE ENCLOSE A CHEQUE for the appropriate amount made payable to “East Midlands Geological Society”

Please send completed booking forms to the Field Secretary,
Ian Sutton, at 30 Alford Road, West Bridgford, Nottingham NG2 6GJ
Tel. No: 0115 923 2360 e-mail – ian.sutton@idsgeo.demon.co.uk
