



**Circular 394
January 2012**

Registered Charity No: 503617

President: Tim Colman

www.emgs.org.uk

**WINTER/SPRING 2012
LECTURE PROGRAMME**

Saturday, 14th January 2012 - 6.00 pm

The Devensian Glaciation of North-East England

Speaker: Tony Cooper, British Geological Survey

**Saturday, 11th February 2012 - 6.00 pm
(To be followed by the Society's Annual Dinner)**

Foundation Lecture: Australia's Mineral Wealth

Speaker: Tim Colman

Saturday, 10th March 2012 - 6.00 pm

Annual General Meeting, followed by:

New Zealand's Earthquakes

Speaker: Ian Sutton

Saturday, 21st April 2012 - 6.00 pm

Members' Evening

Gerry Shaw will be looking after this meeting in 2012. The format will be as in previous years - namely three short talks by members on a topic they have an interest/expertise in or the geology of a recent holiday trip. Members are encouraged to participate and should contact Gerry at gerry_shaw92@hotmail.com or telephone 0115 939 4037.

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.

INDOOR LECTURES

Saturday, 14th January 2012 - 6.00 pm

The Devensian Glaciation of North-East England

Detailed geological surveying in the Vale of York, north-east England has utilised GIS, to bring together digital map data, digital terrain models, and field mapping. The use of extensive borehole databases (about 8000 boreholes) and borehole modelling has allowed the understanding to be taken into 3 dimensions. The uncovering of this 3D model permits time slices to be constructed for the Devensian glaciation showing how it advanced and waned extending the modelling into 4D. As the ice advanced, a large pro-glacial lake was impounded by ice in the North Sea. Thick laminated clays with marginal sands and gravels formed in this lake. These were overridden by the advancing ice, which extended south to form the Escrick and then York moraines. The Vale of York ice blocked the river's courses around its margins and formed numerous overflow channels that, with the drainage from the ice-sheet, fed the lake in front of the moraines. As the ice front retreated more glacial lakes with laminated clay deposits formed to the north of the moraines. Eventually the eastward drainage to the North Sea was re-established and the present topography developed.

Saturday, 11th February 2012 - 6.00 pm

Australia's Mineral Wealth

Australia has a long mining history with names such as the Eureka Stockade, Broken Hill, the Golden Mile and the Poseidon boom. Today there are still world-class operating mines and major deposits in waiting as Australia is a major source of iron, manganese, lead, zinc, gold, silver, nickel, copper, uranium and titanium. The Western Australian Pilbara iron ore country and the South Australian Olympic Dam copper-uranium-gold province are the new frontiers. The talk will describe aspects of Australia's past mining history and current operations as well as the excitement of claim pegging during an exploration boom.

Saturday, 10th March 2012 - 6.00 pm

New Zealand's Earthquakes

New Zealand's early settlers first experienced a major earthquake with the magnitude of 7.5 in the 1848 Marlborough Earthquake. This caused much devastation in the developing settlement of Wellington. Soon after this, in 1855, the 8.2 magnitude Wairapa Earthquake with an epicentre in Palliser Bay just to the south-east of Wellington also caused much destruction in the capital. Since then over 20 earthquakes of greater than 7 magnitude have occurred. Each year many thousands of minor tremors occur in New Zealand.

The plate tectonic setting of New Zealand will help to explain the reasons for the abundant tectonic activity and many of the major historic earthquakes will be reviewed, including the 2010 Christchurch Earthquake and its aftershocks.

In September 2010 a 7.3 magnitude shallow focus earthquake shook Christchurch causing considerable damage. From then and throughout 2011 a vast number of aftershocks have occurred, none more destructive and with a major loss of life than the 22nd February 2011 event. This had a magnitude of 6.3 but the severity of this earthquake on Christchurch can be explained by the epicentre on the outskirts of the city and at a very shallow focal depth.

NEW SUBSCRIPTION RATES FOR 2012

Please remember to pay your subscription on or before 1st February to our Treasurer Colin Bagshaw at the appropriate new rate, as follows:

Ordinary member - £18.00

Joint member - £22.00

and please remember to contact your bank to adjust the payment amount if you pay by standing order.

Other Events

Nottingham Geotours - Programme for 2012

Cretaceous and glacial geology of North Norfolk

23rd - 26th April 2012

Geological tour of the North West USA

5th - 25th June 2012

Geology of Angus and Fife

23rd - 28th September 2012

Further information from Ian Sutton on 0115 923 2360 or ian.sutton035@btinternet.com

New Members

Mrs Valerie Page, Spondon, Derby

Mrs Heather Wheatley, Woodborough, Nottingham.

Information for Other Societies

We hold information of lectures and field meetings for other local societies such as the NSSGA, Black Country Geological Society and Leicester Lit & Phil Society. If you would like details of any of these, please contact the Secretary.

Donation to Notts. And Lincs. Air Ambulance

Geoff Warrington has asked us to mention that the money he received from the sale of surplus geological publications at one of our recent meetings resulted in him being able to make a donation to The Air Ambulance Service of £114.00 – thanks to all of you who contributed.

Society Publications

- (1) **Leicester Building Stones Guide;**
- (2) **East Midlands Field Guide;**
- (3) **Sandstone Caves of Nottingham** (new full colour edition)

Copies available by contacting the Secretary or at Indoor Meetings.

EMGS Website

The publications page on the Society website (www.emgs.org.uk) has been tidied up and updated. It now includes links to two archives:

One is the archive of the early Mercian Geologists where scanned copies of complete issues are being diligently prepared thanks to the hard work of David Bate. This is still being added to (with successive volumes) and will eventually reach volume 12 for 1991.

The other is the archive of papers and reports in the more recent issues. These will go onto the webpage two years after they appear in the paper issues of the Mercian. Currently only the 2009 material is online, but files will be extracted and posted, working backwards as far as 1992, and

this takes time. Files for 2010 onwards are already prepared and will go online on their second birthday.

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

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 February 2012.

The next Council Meeting will be held on 28th February 2012.

Secretary: Mrs Janet Slatter, 100 Main Street, Long Whatton, Loughborough, Leicestershire LE12 5DG e-mail: janet.slatter@btinternet.com . tel. no. 01509 843297.

Treasurer: Mr Colin Bagshaw, 150 Scalpcliffe Road, Burton-on-Trent, Staffordshire DE15 9AD, e-mail: Colin.bagshaw@yahoo.co.uk tel. no. 01283 564520

EAST MIDLANDS GEOLOGICAL SOCIETY
48th Anniversary Dinner
11th February 2012 at 8.00 pm

The 48th Anniversary Dinner will be held in the Hemsley Restaurant (formerly the Nottingham University Club) after the February lecture. Join other members on this special occasion for a complimentary glass of wine or soft drink on arrival followed by a three course dinner. Cost is **£23.95** per person.

STARTER

Sweetcorn & Smoked Cheddar Chowder
Red Pepper Reduction
Fan of Galia Melon
Watermelon Sorbet, Pink Grapefruit Dressing
Pear, Walnut & Stilton Salad
Cider Vinaigrette

MAIN COURSE

Pan Fried Chicken Breast
Celeriac Dauphinoise, Wilted Greens & Red Wine Jus
Roasted Salmon Supreme
Crispy Noodles, Bok Choi, Ginger & Lemongrass Dressing
Mushroom Wellington
Madeira Cream

A family style service of vegetables & baby potatoes will be placed on each table.

DESSERT

Chocolate & Dark Cherry Roulade
Kirsch Ice Cream
Blood Orange Tart
Vanilla Mascarpone, Toasted Coconut
Selection of Cheeses
Biscuits, Chutney & Pickled Onions

Please indicate your choice of starter, main course and dessert below.

Booking form: 48th Anniversary Dinner

Please reserve places. My/our choice of the three courses are as follows:

Starter.....

Main.....

Dessert.....

Name & Tel. No:

Cheque payable to EMGS enclosed for £.....

Please send to: Ian Sutton, at 30 Alford Road, West Bridgford, Nottingham NG2 6GJ
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