

THE
GEOLOGICAL SOCIETY
OF
GLASGOW

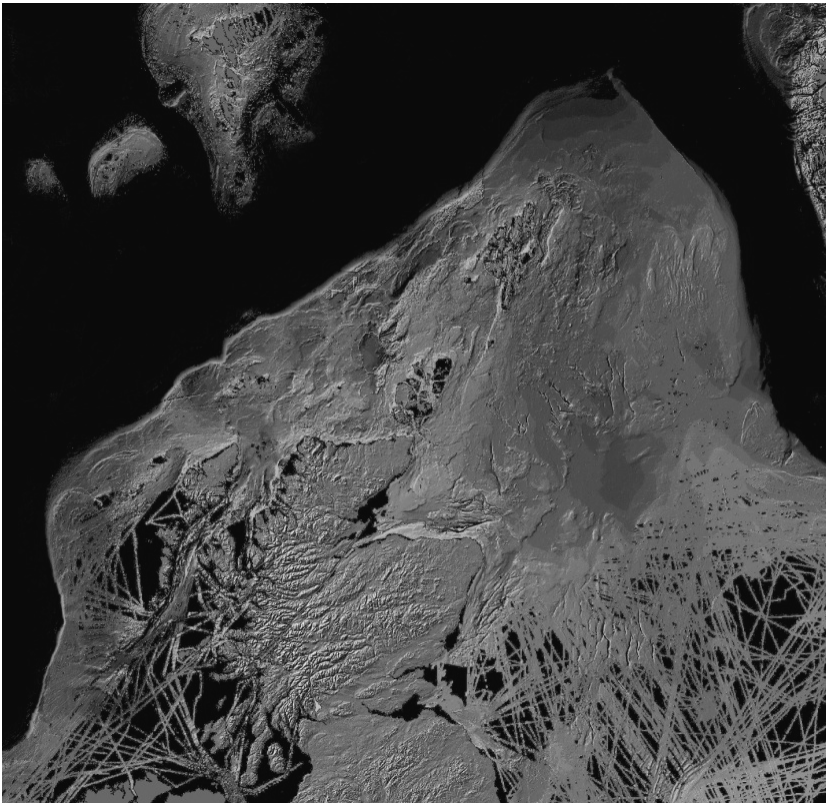
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President: Dr Brian Bell BSc(Hons) PhD

www.geologyglasgow.org.uk

September 2013

156/1



Seabed mapping, UK continental shelf (courtesy of Dr Tom Bradwell, British Geological Survey – see November lecture meeting)

Welcome to the Geological Society of Glasgow's Session 156 for 2013-4. We extend a warm welcome to members old and new for the new session and we hope you enjoy this year's programme of events.

Lecture meetings:

Introduction to GSG Lecture Programme 2013-14

Once again we have been very fortunate that seven speakers have kindly given their time to come and speak to us in what I hope members will find an interesting and varied programme.

We occasionally have Joint Lectures with another local Society and this year we have invited the Glasgow Archaeological Society to join us at our opening meeting in October to hear **Richard Bates** of St Andrews University talk about Doggerland. We have all heard of Dogger Bank – a famous fishing area that gave its name to the offshore weather area. The seabed here was one of the last parts of the North Sea to be inundated after the retreat of the ice and studies of the seabed have yielded both geological and archaeological findings.

You may remember that last session **Tom Bradwell** from the British Geological Survey in Edinburgh was, unfortunately, unable to talk to us about the melting of the Scottish Ice Sheet. We are very pleased that he will now give this presentation in November. You may have seen some of his publications in the *Scottish Journal of Geology*. He tells me that BGS have completed new sections of seabed mapping, including the Firth of Lorne.

Many of our members are great enthusiasts for geodiversity and are members of the *Scottish Geodiversity Forum*. In December, our AGM will be accompanied by a talk from **Jim Hansom** of Glasgow University. Jim will be discussing the importance of geodiversity and its future developments.

2013 is the centenary of Frederick Soddy's discovery of isotopes and for our Joint Celebrity Lecture, **Chris Hawkesworth** of St Andrews University is going to explain how the study of isotopes has contributed to the study of geological time and how the continental crust has formed and evolved.

Peter Treloar is a Glasgow graduate who has spoken to us before and is coming back to discuss aspects of minerals and mineralization, including studies of metamorphism in the High Himalaya and of gold from West Africa.

Another old friend, **Rob Strachan** of Portsmouth University is returning this year to tell us about some outstanding new discoveries in Shetland, including a whole new suite of rocks dated at about 900 Ma which relate to the jockeying of Scotland between Laurentia and Baltica.

The final lecture of the session will be the latest episode of our continuing saga

of North Atlantic Opening, to be presented by **Simon Passey** of Cambridge University. Dr Passey is another graduate of the Glasgow University and an expert on the geology of the Faroe Islands, with their highly distinctive scenery, their volcanic rocks and their key position in the opening of the North Atlantic.

I hope these varied contributions will provide us with enlightenment and stimulation from October to April. Any suggestions of topics or speakers for future lectures will be, as always, most welcome.

Jim Morrison, Meetings Secretary

October Meeting

The first meeting of the session will take place on **Thursday 10th October** at 7.30 pm in the Gregory Building, University of Glasgow, Lilybank Gardens. The speaker will be:

Dr Richard Bates

University of St Andrews

who will speak on

Doggerland extended – submerged prehistory in northern Scotland

The rising sea levels at the end of the last Ice Age inundated vast landscapes of the North Sea that had once been home to thousands of people. Investigations of these landscapes in the south on an area known as Doggerland are providing new insight on the environments and people that lived on the drowned lands in key periods of pre-history. Lessons learned from these investigations are now being applied to Scotland's coastal zones where recent discoveries could herald a re-interpretation of our past.

November Meeting

The second meeting of the session will take place on **Thursday 14th November** at 7.30 pm in the Gregory Building, University of Glasgow, Lilybank Gardens. The speaker will be:

Dr Tom Bradwell

British Geological Survey, Edinburgh

who will speak on

Ice streams in the British (Scottish) ice sheet, theory and observations – from onshore and offshore.

Recent advances in geological data acquisition onshore and offshore, combined with the increased complexity and power of coupled ice-sheet-ocean-climate models have resulted in a better understanding of Pleistocene ice sheets. These advances have revised ideas of a largely terrestrial, relatively small, British Ice Sheet to a much larger ice sheet covering around 75% of the British Isles, the continental shelves and most of the North Sea Basin at its maximum. More importantly, perhaps, is the recent identification of ice streams - large transient fast-flow

corridors - within the last British Ice Sheet. Ice streams are prone to non-linear behaviour and are responsible for governing the large-scale geometry of ice sheets. In this talk I will outline the onshore and offshore glacial geomorphology of Northern Scotland, focusing on the evidence for ice streaming. These findings are then used to elucidate the pattern and style of British Ice Sheet retreat from the UK continental shelf edge back to the Highlands of northern Scotland. Aspects of this work are still in progress, however, these new results form an exciting, controversial, new interpretation of events in Scotland at the close of the last glaciation.

December Meeting:

This will take place on Thursday 12th December and will be our **Annual General Meeting**, to be followed by a **lecture** to be presented by **Dr Jim Hansom** of the University of Glasgow on *What has geodiversity ever done for us? Answers from a coast near you!*

Over the coming weeks we shall be seeking new members for election at the AGM. The success of the Society relies on the continuing support of our members and the time and commitment of those who volunteer to serve on Council. This session we will have vacancies for the posts of **Publications Officer** (to run the Bookshop), **Day Excursion Secretary** and **four Ordinary Members** and would welcome nominations for these by early December. We may also be seeking a new **Treasurer**, and would especially welcome expressions of interest for this important and responsible position.

Notices:

Articles for the Newsletter:

We would like to include one short, topical article in each Newsletter. If you have news of a recent event or discovery, opinions on geological matters, or wish to let people know about aspects of geology in the Glasgow area or the wider world, then please send your article to the Hon. Secretary, Simon Cuthbert. Articles should be no longer than 300 words. Pictures may be included; colour images are welcome but should reproduce well in monochrome; all images must comply with copyright and information from other sources should be acknowledged. Articles will also appear for a limited period on the Society website. We will, as usual, be pleased to receive notices of upcoming events, and these will appear separately to the topical articles in this Notices section.

Scottish Journal of Geology:

This is a reminder that Geology Society of Glasgow members who are eligible to

receive the paper version of the Scottish Journal of Geology now have free online access to the full content of the journal, including back issues, via the Lyell Collection. This involves a one-off, free subscription activation where you select a user name and password. The steps to setting up access to the Lyell Collection are as follows:

- 1) Go to the subscription activation page www.lyellcollection.org/cgi/activate/ibasic and enter your subscriber ID number. This is your four-digit GSG member number prefixed with the letters GSG; for example, if your GSG membership number is 1004 then your subscriber ID is GSG1004. You can find your GSG member number from the address label of a recent SJG or billet mailing, or you can contact the Membership Secretary at gsgmemsec@ntlworld.com.
- 2) Select a username and password that you will use to login and view the journal. Once you've completed the subscription activation, you will be able to access the SJG site at sig.lyellcollection.org or using the link from the main Lyell Collection webpage www.lyellcollection.org.

If you have any problems with access to the Lyell Collection, please contact the Hon. Secretary, Simon Cuthbert.

Membership subscriptions:

Annual subscriptions for Session 156 are due from **1 October, 2013** at the following rates:-

- *Ordinary Membership: £20*
- *Associate Membership £10* (available to those over 60, or spouses of Ordinary Members, or members of the Edinburgh Geological Society)
- *Junior Membership £5* (available to those under 25, or full time undergraduate students).

Note that the Scottish Journal of Geology is only sent to Ordinary Members and to those Junior Members who pay an annual supplement of £5.

Methods of Payment: Cheques, made payable to ***Geological Society of Glasgow***, should be sent to the Membership Secretary unless a Banker's Standing Order has been signed. Please indicate the Member for whom payment is being made if not apparent from the cheque e.g. a cheque from 'Anyone' paying for a member 'Someone else'. *Please note that the membership card enclosed with this newsletter indicates our anticipation that you intend to renew your membership*

subscription for Session 156. If you have an existing Bankers Standing Order this should happen automatically. If you currently pay by cheque then please remember to send in your subscription for Session 156 to the Membership Secretary at the address below.

If you would like to make future **payments by Bankers Standing Order** (*this is the preferred method of payment from the Society's point of view*), please advise the Membership Secretary when you send in your cheque for this year. We will send you a Bankers Standing Order form so you can arrange to make future payments via your bank. Alternatively you can download a Bankers Standing Order form from the GSG website and forward the completed form to the Membership Secretary at the above address.

Address changes: The Society maintains the only mailing list of Society members; labels for all mailings, including the Scottish Journal of Geology are produced by the Society from the membership record. Any changes should be sent by post or e-mail or communicated by telephone to the Membership Secretary.

Membership Card: The enclosed card not only gives information on the lecture programme, but can also be used to provide proof of membership when necessary. To validate it you need to add your name and reference number, which is printed on the mailing label used for this newsletter. The number will also be repeated on the label for the next newsletter or can be obtained from the Membership Secretary at any time by phone, e-mail or post. When joining the **University Library**, proof of identity e.g. photo driving licence, passport, travel card, matriculation card (through an Adult Education Class) will also be required, in addition to the presentation of a membership card for Session 156.

New Members: We extend a warm welcome to the following new members:-

Mr G Hoare	Stewarton
Mr F McKechnie	Bishopton
Mr A McBride	Mugdock
Mrs M Fisher	Alexandra
Miss L Kerr	Newmilns
Prof C Munro	Bearsden
Mr C I Campbell	Glasgow

Bookshop:

The Society's bookshop stocks a large selection of geology-related books, maps

and pamphlets. It is open to browse and make purchases after the winter lecture meetings. Selected titles are listed in the Society website (<http://www.geologyglasgow.org.uk/bookshop/bookshop/>). Most of the books in this list can also be purchased from www.Amazon.co.uk through the website's customised Amazon bookshop. If you want to purchase a book that is not on the list, or any other item that Amazon sell, you can help the Society by making your purchase from the Amazon home page using the link from the Bookshop page. The Geological Society of Glasgow is a participant in the Amazon EU Associates Programme, an affiliate advertising programme designed to provide a means for sites to earn advertising fees by advertising and linking to Amazon.co.uk. Each purchase that takes place through the customised Amazon bookshop or the link to the Amazon home page generates a commission of approximately 5% of the sale price (excluding VAT) for the society. Further information is available from GSG Council Member Bill Gray (books@gsocg.org).

Courses at the Glasgow University Centre for Open Studies

<http://www.gla.ac.uk/courses/openstudies/>

- *Evolution of the Earth, life and environment* – Mike Keen, Ben Doody and others – 19.30-21.30 Wednesdays from 25th September (22 meetings + 2 full day excursions at weekends).
- *Introducing geology* – Simon Cuthbert - 19.30-21.30 Tuesdays from 1 October 2014
- *The geology of Australia and New Zealand* – Mike Keen – 14.00-16.00 Thursdays from 3 October 2013 (18 meetings).
- *The Cretaceous world* – Mike Keen - 10.00-16.00 Saturday 9 November 2013 (one meeting).
- *Lunar Geology: Origin and history of the Earth's moon* – Simon Cuthbert - 09.30-16.00 Saturday 1 February 2014 (one meeting).
- *Volcanoes and the environment* – James MacDonald – 19.30-21.30 Wednesdays from 5 February 2014 (6 meetings).
- *Scottish gold* - John Faithfull and others - 10.00-13.00 Saturday 8 March 2014 (one meeting).
- *Geology in the field* – Chris Burton & James MacDonald - 10.00-13.00 Wednesdays from 23 April 2014. Introductory meeting + 5 full day excursions.
- *Geological study tour to south east France* - Judith Lawson and Mike Keen (spring 2014; dates to be announced, contact COS to be placed on mailing list).

Events from other geological societies:

Edinburgh Geological Society

For information about the lecture and excursion programme see

<http://www.edinburghgeolsoc.org>

Aberdeen Geological Society

<http://www.aberdeengeolsoc.org.uk/>

3rd October: Nigel Trewin (University of Aberdeen) *Scottish Fossils!*

10th October: Dave Hodgson (University of Leeds) *Surprises during rises? Controls on the timing of sediment dispersal beyond the shelf-edge.*

31st October: Steven Bowden (University of Aberdeen) *Shiny Rocks, Missing Microbes and the Pitch and Yaw of a Merry Monsoon at Okinawa.*

14th November: Helen Plumb (Just Gems) *Ethiopian Opals*

28th November: David Cornwell (University of Aberdeen) *Seismological snapshots of the birth of a new ocean in Ethiopia.*

12th December: Christmas Lecture and Party Alan Crane (University of Aberdeen) *Aotearoa - a plate margin journey.*

Highland Geological Society:

<http://www.spanglefish.com/highlandgeologicalsociety/index.asp>

9 October: Dr Dave McGarvie (Open University) *Volcanoes of Chile and Alaska*

6 November: Dr John Faithfull (Hunterian Museum) *The Geology of Mull*

4 December: Don Stewart (Highland Geological Society) *Enigmatic limekilns and limestones of Speyside.*

Westmorland Geological Society:

<http://www.westmorlandgeolsoc.co.uk>

16th October: Dr. Charlotte Vye-Brown, BGS. *The evolution of rifting and volcanism in the Afar Depression.*

20th November: Peter del Strother, Consultant. *The Middle Jurassic of Ketton, Rutland.*

18th December: *Jacob's Join and members' night.*

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