

THE GEOLOGICAL SOCIETY OF GLASGOW

Registered Scottish Charity No. SC007013

President: Dr. Jim Morrison

www.geologyglasgow.org.uk

April 2016

158/4

Summer field excursions inside!



The Mountains of Mourne “sweep down to the sea”; the rounded hills are a series of granites. The angular peaks of the Carlingford Igneous Centre (right) are formed of hard, mafic, gabbro.

This area is the location for our 2016 residential excursion from the 2nd to 5th September. See inside for further details and booking information

In this newsletter:

- April & May Lecture Programme
- Summer Excursion Programme: Details and Booking Forms

Welcome to Newsletter 158/4

This newsletter contains a lot of information, and very importantly, three forms for you to tear/cut out, complete and return if you're interested in either a day excursion, the residential excursion to Northern Ireland in September or in making a contribution to Members' Night .

**Dr Simon J Cuthbert, Honorary Secretary,
The Geological Society of Glasgow,**
e-mail: contact@gsocg.org

New Archive section on website

The website has a new section devoted to displaying interesting material from the society's archive. The section presently contains four pages. The first, Introduction, describes the content of the archive and how members can access it.

The second page, Anniversaries, contains extracts from the society's proceedings for 150 and 125 years ago, and will eventually be extended to cover years at 25 year intervals until 25 years ago. The extract from 150 years ago was published on March 22 1866, 150 years to the day before the publication of this news item. One of the items in the extract is the report of a paper on climate change read on behalf of James Croll, whose picture accompanies this article.

The third page is devoted to James Croll, a Scottish geologist who published an astronomical theory of climate change in 1864, 60 years before the more famous Milutin Milankovitch published his very similar theory. Croll held the post of janitor at the Andersonian College and Museum in Glasgow from 1859 until 1867, after which he joined the British Geological Survey. The James Croll page contains a biographical notice from "History of the Geological Society of Glasgow, 1858 - 1908" and also the text of the paper presented in 1866.

The fourth page is devoted to Arthur Holmes, an eminent English geologist of the 20th century, who, like Croll, was a man ahead of his time. Influenced by Wegener's hypothesis of continental drift, he developed a model that explained how mantle convection could lead to the breaking up of continents. In an eerie echo of the Croll-Milankovitch scenario, this model was very similar to the concept of seafloor spreading developed 35 years later in the 1960s as part of the theory of plate tectonics. Holmes first presented his ideas on mantle convection to the Geological Society of Glasgow in January 1928, and the Arthur Holmes page contains a summary of his lecture, taken from the original account in the society's minute book.

The archive material in the new section has been prepared by the society's former archivist, Seonaid Leishman (Arthur Holmes page) and the present archivist Margaret Anderson. We are grateful to them for their work, and look forward to many riches to come.

Bill Gray.

Lecture meetings

All lectures are held in the *Gregory Building, University of Glasgow, Lilybank Gardens, Glasgow G12 8QQ* (unless otherwise noted). Meetings commence at 7.30 pm.

Thursday 14th April 2016

Professor Tim Lenton, University of Exeter

Revolutions that made the Earth

Today, nearly four billion years after life first appeared on Earth, the planet hosts an abundance of complex life. Very recently, a new development – intelligence – has arisen. The varied and complex life on the planet today both maintains, and is supported by, fertile land and oceans and an oxygen-rich atmosphere. Life and the global environment have co-evolved such that neither would exist in its present form without the other. I will trace the critical “revolutions” in Earth history that have brought the planet to this point. They can be briefly summarised as:

- The “Inception”, involving the origin of life ~3.7 billion years ago and the establishment of recycling ecosystems fuelled by anoxygenic photosynthesis;
- The “Oxygen Revolution”, started by the origin of oxygenic photosynthesis ~2.7 billion years ago and culminating in the Great Oxidation of the Earth’s atmosphere;
- The “Complexity Revolution”, starting with the origin of eukaryotes and culminating in extreme glaciations and a Lesser Oxidation ~0.8-0.6 billion years ago.

Our planet is now in the midst of what might be a new revolution. A single species, namely our own, is in the process of transforming the planet. But for the first time in the history of the Earth the agents of planetary change have a dawning collective awareness that they are changing the world. We can’t be sure if this will come to rank alongside the great revolutions that made the present Earth, not least because it is very much still underway. But the main preconditions for an Earth system revolution appear to be in place. The talk will address the question; what will it take for this to be a successful revolution?.



Tim studied Natural Sciences as an undergraduate at the University of Cambridge. Reading Jim Lovelock’s books on Gaia ignited his passion for studying the Earth as a whole system. This led to his PhD studies on what regulates the nutrient balance of the ocean and the oxygen content of the atmosphere, supervised by Professor Andrew Watson at Plymouth Marine Laboratory and later the University of East Anglia. After gaining his PhD, Tim worked at the Centre for Ecology and Hydrology, Edinburgh, where he built a simple coupled carbon cycle and climate model, and

then coordinated the development of the GENIE family of Earth system models. In 2004 he returned to UEA and built up an Earth system modeling group, working on key events in the coupled evolution of life and the planet, including human-induced global

change. He recently published a book on this with Andrew Watson called 'Revolutions that made the Earth' (OUP, 2011). Tim moved to the University of Exeter in 2011, where he is focusing on understanding these past revolutions, on developing an evolutionary model of the marine ecosystem, and on early warning of climate tipping points.

Tim's work identifying the tipping elements in the climate system won the Times Higher Education Award for Research Project of the Year 2008. He has also received a Philip Leverhulme Prize 2004, a European Geosciences Union Outstanding Young Scientist Award 2006, the British Association Charles Lyell Award Lecture 2006, and the Geological Society of London William Smith Fund 2008. Tim is a Fellow of the Linnean Society and a Fellow of the Geological Society.

Thursday, 12th May 2016

Members' Night

Short presentations by members of the Society. Members' Night is an opportunity for Society members to give short presentations or displays about their own interests and adventures in geology. If you are interested in presenting then please contact the Hon Secretary, Simon Cuthbert either by email or using the form at the end of this newsletter. One presentation that has been arranged will be by some participants in last year's 'Testimony of the Rocks' expedition which the Society and many generous individual Members supported.

Edinburgh Geological Society: Appointment of Promotion Secretary

The Edinburgh Geological Society is a voluntary association of around 500 members whose principal aims are to encourage public interest in geology and to advance geological knowledge. The Society has recently approved a Strategy for the next five years and now wishes to engage a Promotion Secretary on a self-employed basis to assist with its implementation. The Promotion Secretary would raise the Society's profile, promote its publications and publicise its events and initiatives.

It is envisaged that the work would be carried out over a two-year period (subject to review after the first year) and require on average about one day per week. Payment for services would be £100 per day, plus relevant approved expenses. Total remuneration, including expenses, would be a maximum of £5,000 per annum. Applications for this work should comprise a statement of relevant experience and of the reasons why the applicant would be suitable, supported by a separate CV. To be considered for this work, applicants should have: good communication skills, the ability to work well in a team, a track record of taking the initiative but also working to targets and deadlines, good IT skills, and an interest in earth sciences. A qualification in geology would be an advantage but is not essential.

Applications should be sent by email to Christine Thompson at christinethomps@gmail.com, from whom further details are available, by 30 April 2016.

Summer Day Excursion Programme

Excursions usually leave from the Gregory Building, Lilybank Gardens at the times stated – please check the synopsis for details.

Please note that a deposit is usually required for each excursion. The deposit is set at a level to recover the anticipated costs of the trip. In addition, please be aware that the balance of costs will be recovered by a small surcharge on the day of the excursion. High tea on trips 3 and 6 will be at participants' own expense. Members who take their own vehicles will be asked to contribute towards the cost of the excursion.

Please request a booking form by email - you will be given contact details for the form and deposit: daytrips@gsocg.org.

1. Saturday 11th June. Geology Collection at Glasgow Museums Resource Centre

This morning excursion is a guided tour of the Glasgow Museums Resource Centre at 200 Woodhead Road, South Nitshill Industrial Estate, Glasgow G53 7NN. You will need to arrange your own transport. The centre is about 5 minutes walk from Nitshill railway station. Museum staff will be showing us some of the many items in the geology collection which are not on public display. Because of restricted space within the building, numbers will be limited to 15 but, in the event of higher demand, a further trip will be offered on another occasion. There will be no charge for this excursion.

Leader: GMRC staff

Meet at the building for a 10:00 start, (own transport).

2. Saturday 18th June. The Garabal Hill - Glenfyne Igneous Complex

This complex, close to the head of Loch Lomond, together with the Arrochar Igneous Complex forms part of a group of post-orogenic intrusions known as the South Grampians Suite, which were intruded into the Southern Highland Group during the mid-Silurian (ca 425 Ma). The rocks of the complex are dominantly dioritic and high in potassium, but with an extraordinary petrological range from ultrabasic picrites to acid granodiorites, this wide range being the result of magmas derived, unusually, from not one but several parental lithologies, including both crustal and mantle types.

The excursion will be confined to the area immediately to the east of the Garabal Fault, between Lochan Beinn Damhain and Garabal Hill itself. Here picrites, gabbros, hornblendites and a range of pyroxene-rich diorites and granodiorites and the relationships between them can be seen, all under the thermally-metamorphosed roof of the intrusion.

NB: The area is accessed from the A82 near Beinglas Farm along a relatively easy but fairly long ATV track followed by a short hill-traverse. The distance from the A82 is ca 4.6 km (2.85 miles). There will be some rough terrain on Garabal Hill itself. Given the distances, the excursion will be a long one and will require an 8 am start.

Leaders: Dr Chris Burton & Dr Jim MacDonald

Leaving Gregory Building at 08:00, travelling by coach

3. Saturday 25th June. The Berwickshire Coastal Path

Joint Excursion with the Edinburgh Geological Society

We will visit Cove Harbour to view Carboniferous sedimentary rocks, then return to the cliff top to follow the Berwickshire Coastal Path around to Pease Bay (lunch stop, view Devonian sedimentary rocks). We will then continue along the coastal path to Siccar Point. You can view Siccar Point safely from the viewpoint above, or, if conditions permit, descend a steep grassy slope that may be slippery. Siccar Point itself is rocky and potentially slippery underfoot. Participants should only descend to Siccar Point if they are physically fit, properly equipped with walking boots and the conditions are suitable: grass not too wet, not too windy. We will then return the short distance to the Siccar Point car park for coach pickup around 4pm. The excursion will be followed by high tea, in company with our Edinburgh colleagues, and we will aim to return to Glasgow by around 19:00.

Leader: Dr Angus Miller

Leaving Gregory Building at 09:00, travelling by coach

4. Saturday 16th July. Aberfoyle area

The Highland Boundary Fault passes through Aberfoyle and brings up the low grade metamorphic rocks of the Dalradian succession against the upturned conglomerates of Lower Devonian age. Slivers of Highland Border Complex rocks occur in the fault zone. The greywackes and slates of the Southern Highland Group of the Dalradian here form the downward closing synform of the major Aberfoyle anticline. On this excursion we shall examine the various rock types, their sedimentary and tectonic structures in order to confirm the accepted view, first expounded over 40 years ago by Shackleton, that the major structures have been overturned. Some of the walking will be along forestry tracks but there will also be rougher boggy and heathery ground to traverse.

Leader: Dr Iain Allison

Leaving Gregory Building at 09:00, travelling by coach

5. Sunday 2nd October. Balmaha

Joint excursion with the Geologists' Association

The Geologists' Association (in London) are visiting Glasgow for a "Behind the Scenes" visit to the Glasgow Museums Resource Centre. They have asked that we assist them with organising a local field trip and we have suggested a joint trip to Balmaha to examine the Highland Border Complex which here has great diversity in lithologies. We will also examine both the Lower and Upper Old Red Sandstone rocks with a view to determining the nature of their accumulation and provenance.

Their group size is normally 20 to 25, comprising older/retired adults with a keen interest in geology, although varied levels of knowledge. We think this would be a good opportunity to meet some fellow enthusiasts and so have suggested stopping off for high tea on the way back to Glasgow.

Leaders: Dr Chris Burton

Own transport - meet at Balmaha Car Park at 09:45 for a 10:00 start

Residential Excursion 2016

Exploring N.E. Ireland's Palaeogene Volcanoes

2nd to 5th September 2016

The British and Irish Palaeogene Igneous Province formed 61-55 million years ago as part of the North Atlantic Igneous Province and relates to the opening of the North Atlantic Ocean. The BPIP comprises both lava fields (like the Antrim Lavas) and central igneous complexes as seen at Slieve Gullion, Carlingford and Mourne. These igneous rocks are Ireland's most recent period of volcanism and represent the eroded roots of large volcanoes.

This trip will explore a range of volcanic features, from a caldera forming ring complex, to spectacular cone-sheets. We will see a variety of igneous rock types, including basalt, rhyolite, gabbro and granite and explore the textures that form during magma mixing. We will also look at some of the regional geology, including the local Silurian metasedimentary rocks, formed on the floor of the Iapetus Ocean and deformed during the Caledonian Orogeny, when northern and southern Ireland became joined together. We will see the effect the hot magmas had on these rocks, baking and melting them around the intrusions.

The trip will commence on Friday 2nd September 2016 with a half day field trip scheduled for the afternoon, allowing for travel in the morning. There will be full day trips on the Saturday/Sunday and a half day on the Monday morning (5th September 2016).

To book please use the [Booking Form](#) at the end of this newsletter or request one by email from:

Residential Excursion Secretary Katerina Braun restrips@gsocg.org

Strathclyde Geoconservation Group (SGG) News

Fossil Grove

SNH carried out an assessment at the Fossil Grove SSSI as part of its programme of Site Condition Monitoring (SCM). SCM is the formal process by which SNH periodically monitors the designated natural features of protected sites (including SSSIs) across Scotland.

The SSSI was visited by SNH staff (geological advisor Colin MacFadyen and local officer Andy MacGregor) on 16 December 2016. During the visit, it was observed that while there have been no gross changes to the fossils, there is localised deterioration, in the form of disintegration of the surfaces of some fossil tree roots, that may be attributable to excessive moisture.

This is likely to result in the feature being considered in unfavourable condition. This assessment is considered interim only, pending the results of a more detailed assessment of the deterioration observed and its causes.

At the last Fossil Grove Trustees meeting in February a request was made that the City Council set up a meeting with representatives of the Society, SGG, the Steering Group, the Trustees, the Hunterian, SNH, the Parks Dept and Glasgow Life to discuss various options and such a meeting has been organised for 19th April. The President of the Society has written to the Chair of the Fossil Grove Trustees proposing that the City Council transfer the site to the Trust who would then take on management, funding for a new building etc. Things hopefully will now start moving!.

The petition raised by Margaret Greene will help show the level of interest and concern. A clean up of the exterior and environs has been organised for 4th April at 11 am.

Orchard Beds Geo-Trail

A new leaflet for the Orchard Beds Geo-Trail in Rouken Glen has been printed and distributed by East Renfrewshire Council in partnership with the SGG. For more information go to <http://www.roukenglenpark.co.uk/RGP-SSSI>

Condorrat

Funding for geological interpretation at Condorrat has been obtained from North Lanarshire Council. Paul Carter and Mike Browne are visiting various sites across the Council area.

If you are interesting in getting involved in any aspect of Geoconservation please contact Margaret Greene sgg@gsocg.org

More more information see the Geonservation pages on the Society's website at:

<http://www.geologyglasgow.org.uk/geoconservation/>

Notices

Subscriptions & Membership

We give a reminder that the annual membership fees for the Society for the new Session (159) which begins 1st October 2016 are as tabulated below.

We encourage those few who have yet to make their annual subscriptions for the current Session (158) to do so. Rates are as follows:

Ordinary Membership	£25	Includes Scottish Journal of Geology
Associate Membership	£12.50	Eligible to those over 60, or spouses of Ordinary Members, or members of the Edinburgh Geological Society.
Junior Membership	£6.25	Eligible to those under 25, full time undergraduates, or recent (4 years) graduates. Scottish Journal of Geology is available on payment of a £6.25 supplement.

If you require to set up a Bankers Standing Order (which is the Society's preferred arrangement) as your routine method for future payments (payment for the next session's membership falls due on the 1st October), please notify the Membership Secretary, who can provide you with the appropriate form to arrange this with your bank. Alternatively you can download this form from the membership section of the Society's website and follow the instructions given there.

If you need to top up your membership subscription to the current rates you can do this via the address given below.

Address changes: The Society maintains the only mailing list of Society members. If you are changing your postal address or your e-mail address, do not forget to let the Membership Secretary know by post, e-mail or telephone. Otherwise newsletters and SJG mailings will go astray.

Those who customarily pay by cheque can send a cheque payable to the Geological Society of Glasgow at the address below.

Any queries regarding the above should be addressed to the Membership Secretary,

Dr. R. A. Painter

e-mail: gsgmemsec@ntlworld.com

New Members

We extend a warm welcome to the following new members:

Mr D Green	Lydbrook
Dr H Kennedy	Bearsden
Dr I Kennedy	Bearsden

Courses at the Glasgow University Centre for Open Studies

Geology in the Field

Wednesdays 10:00-13:00 from 20th April 2016 (6 meetings) Tutors: Dr Mike Keen, Dr Iain Allison, Dr Jim MacDonald, Dr Alistair McGowan.

Field studies and examining rocks in the field are the basis of all geology. We will examine the geology and geomorphology of a series of areas within easy reach of Glasgow. You will be shown how to identify a range of rocks and geomorphological features within the landscape by experienced fieldworkers. There will be five full-day excursions by private car. Walking will generally be easy and no prior knowledge of geology needed. A short preliminary meeting will be held the week before to discuss field sites and travel arrangements. Daily field trips will be held 27/04/16 - 25/05/16

For further information see: www.gla.ac.uk/study/short/contact/

Events from other geological societies

Edinburgh Geological Society www.edinburghgeolsoc.org

Saturday Excursions:

Saturday 11 June, Tantallon. Leader Tom Challands, University of Edinburgh

Saturday 25 June, Cove, Pease Bay & Siccar Point. Leader Angus Miller, Geowalks

Saturday 23 July, St Andrews, Fife. Leader: Rosalind Garton, University of St Andrews

Saturday 20 August, Silver Glen, Alva & Mill Glen, Tillicoultry. Leader Con Gillen, EGS

Saturday/Sunday 3/4 September Holyrood Park. 2 day Mapping Session Leader S Cuthbert

Wednesday evening excursions (at 7pm)

Wednesday 13 April, Dalkeith Country Park. Leader Angus Miller

Wednesday 20 April, Corstorphine Hill. Leader Ken Shaw, EGS

Wednesday 11 May, Mills and medicinal wells: a walk through Stockbridge. Leader B Bergman

Wednesday 22 June, South Queensferry Shore. Leader Richard Smith

Wednesday 6 July, Local Geodiversity Sites of East Edinburgh. Leader Alistair McGowan,

Aberdeen Geological Society www.aberdeengeolsoc.org.uk

28th April, Hugh Morel (Iona Energy). Life of an Oil Field- What do we do for a living?

5th May, John Stevenson (University of Edinburgh). Historic Impact of Icelandic Volcanoes on NW Europe.

Highland Geological Society www.spanglefish.com/highlandgeologicalsociety

9-11 April, Skye Geology - Dr Iain Allison (University of Glasgow)

11-12 June, Banffshire Coast – Dr John Mendum (BGS)

7 August, Duntelchaig (South of Inverness) – Ann Reynolds (HGS)

2-3 September, Tayvallich – Roger Anderton

Open University Geological Society www.ougs.org

The Society AGM and Social Weekend is taking place in Scarborough on Friday 15th – Sunday 17th April. Professor Bill McGuire will be delivering the Geoff Brown Memorial Lecture, and there will be field trips to local sites on the Sunday.

The Symposium 2016 is taking place in Exeter on Friday 8th – Sunday 10th July.

Members' Night: Request to contribute

Thursday 12th May 2016:

Please use this form or email the following information to the Hon. Secretary

Title of contribution:.....
.....
.....

Name

Address

.....

.....

Telephone/Fax/email

.....

Please complete the details below:

I wish to make a presentation as follows (please tick box as appropriate):

- Oral presentation with Powerpoint slideshow or overhead projector
- Bench-top display
- Wall-mounted poster
- Lap-top computer "kiosk"-style slideshow (member's own laptop)

Please Note: Oral presentation speakers are requested to keep their talks to a **maximum** of 15 minutes *including* question time. In the event that more than four requests are received for oral presentations GSG Council will select those to be included in the programme; successful requests will be informed by e-mail or post by 1st May.

Please return this form by *Friday 22nd April* to:

Dr Simon J Cuthbert, Honorary Secretary,
The Geological Society of Glasgow,
email: sec@gsocg.org



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Booking Form for Day Excursions 2016

A deposit is requested for each chargeable booking. Since coach hire is required this deposit is non-returnable. **No bookings will be accepted without the deposit.** A further small levy may be collected on the bus on the day of each excursion. All cheques should be made payable to: **The Geological Society of Glasgow.**

Date	Excursion	Leader	Tick to apply	Deposit amount	Deposit enclosed
Saturday 11th June	Glasgow Museums Resource Centre	GMRC staff		None	
Saturday 18 th June	Garabal Hill - Glen Fyne	Chris Burton and Jim MacDonald		£15	
Saturday 25 th June	Berwickshire Coastal Path	Angus Miller		£20	
Saturday 16 th July	Aberfoyle	Iain Allison		£15	
Sunday 2 nd October	Balmaha	Chris Burton		None	
Total number of trips				Total enclosed	



Your Name (please print).....
 Email
 Address

 Phone number

Emergency Contacts

In case of an emergency we may need to contact someone on your behalf, while you are on the excursion. Please provide details below.

<u>Name of contact</u>	<u>Relationship</u>	<u>Phone numbers</u>
.....
.....

Please complete this declaration:

I confirm that I have read and will comply with the Society's recommendations on field safety (overleaf).

Signed

Dated

Safety in the Field

Although geological fieldwork is a pleasurable activity, by its nature it may involve some risks. These can be minimized by observing sensible precautions. It is important that everyone undertaking fieldwork is alert to both the general and specific risks and can take responsibility for their own safety and for the impact this may have on the safety of others.

A general *Code for Geological Fieldwork* is published by the Geologists' Association.

Field Excursions organized by the Society are conducted on the understanding that members and guests are aware of their general responsibilities. For its part, the Society, through excursion leaders, will issue specific warnings where conditions differ from those likely to be encountered by an active person of normal health during a weekend ramble in the hills. Participants are specifically asked to:

- (a) Inform the party leader in advance of the field excursion, in confidence, of any medical condition which may have a bearing on their own safety or on that of other party members.
- (b) Observe all safety instructions given by the party leader. Inform the leader if they wish to leave the party and inform him/her immediately of any illness or injury.
- (c) Provide themselves with warm and waterproof clothing (brightly coloured if possible), strong waterproof boots that provide some grip, and carry a small personal first-aid kit.
- (d) Carry a survival bag, whistle, spare clothing, and survival rations when working in remote or mountainous regions.
- (e) Wear a hard hat whenever there is a risk from falling objects. This is obligatory when visiting quarries, mines, building sites or road sections under construction and, in the interests of safety, members may wish to obtain their own.
- (f) Always wear impact resistant safety goggles or spectacles when hammering tough or splintery rocks, or using chisels. Never use a second hammer as a chisel. Beware of standing too close to others using either.
- (g) Take special care on steep slopes (e.g. scree slopes, cliffs and quarries); on muddy slopes and slippery shore-sections, and when working on roadside cuttings or exposures, particularly when construction is in progress. Be alert when crossing roads and railways, it is easy to get distracted. Check the times of tides, remembering that high winds may make them higher than you expect, and ensure that you are familiar with the exit points from coastal sections.
- (g) Obtain the permission of landowners or factors before entering property. Permission to collect samples may be required and special permits are necessary on Sites of Special Scientific Interest (SSSI's).
- (h) Avoid overhanging or unstable rock faces, especially during thaw conditions after a cold spell or after heavy rain. This is particularly important in quarries but also on some coastal cliffs where large sections may fall without warning.

Booking Form for Residential Field Excursion to N.E. Ireland

Name(s):			
Address:			
Landline Tel. No.			
Mobile No.			
Email:			
Accommodation: Please tick one box	<input type="checkbox"/>	Shared twin room (£50 per person per night for B&B and dinner)	To share with: Estimated arrival time:
	<input type="checkbox"/>	Shared double room with your partner/spouse (£50 per person per night for B&B and dinner)	Estimated arrival time:
	<input type="checkbox"/>	Tick this box if you would like me to extend your accommodation booking to include Thursday and/or Monday Night (1 st /5 th Sept) –	
	<input type="checkbox"/>	I will make my own arrangements for accommodation.	
Dinner: Please tick one box	<input type="checkbox"/>	I will have dinner with the group on Friday evening (Cost included in room rate quoted above).	
	<input type="checkbox"/>	I will have dinner with the group on Saturday evening (Cost included in room rate quoted above).	
	<input type="checkbox"/>	I will have dinner with the group on Sunday evening (Cost included in room rate quoted above).	
	<input type="checkbox"/>	I will make my own arrangements for dinner.	
Packed Lunches: Please tick one box	<input type="checkbox"/>	I would like a packed lunch from the hotel for Saturday – (£5 consisting of sandwiches, fruit, crisps, homemade cake and a bottle of juice/water)	
	<input type="checkbox"/>	I would like a packed lunch from the hotel for Sunday – (£5 consisting of sandwiches, fruit, crisps, homemade cake and a bottle of juice/water)	
	<input type="checkbox"/>	I would like a packed lunch from the hotel for Monday – (£5 consisting of sandwiches, fruit, crisps, homemade cake and a bottle of juice/water)	
	<input type="checkbox"/>	I will make my own lunch arrangements.	
Travel: Please tick one box	<input type="checkbox"/>	I would be happy to take my car to Ireland and give a lift to passengers to/from Ireland. State No. Passengers:	
	<input type="checkbox"/>	I would be happy to take my car to Ireland and give a lift to passengers on the field days. State No. Passengers:	
	<input type="checkbox"/>	I would prefer not to take my car, but will do so if required. Ideally I would prefer to take a lift from someone else.	
	<input type="checkbox"/>	I would like a lift in someone else's car.	
	<input type="checkbox"/>	I will make other travel arrangements. (Please specify)	



Do you have any special dietary requirements for breakfast/dinner/packed lunch?
Please specify.

Emergency Contact Details:

If an emergency arises whilst I am on the excursion the Society may contact the following person(s):

Name:Telephone:.....

Name:.....Telephone:

Membership

Please tick

I/we am/are a member/s of the Geological Society of Glasgow

Declaration:

I/we confirm that I/we have read and will comply with the Society's guide to field safety (provided with this booking form). I enclose a cheque (payable to Geological Society of Glasgow) for the deposit of **£30.00 per person**.

SignedPrint name

Date.....

Please note that the later you cancel the less likely it is that you will get all or part of your deposit back. Once the society has passed on your deposit to the hotel it is very unlikely that it will be refundable. If two people are sharing a room and one person cancels, it may in fact be necessary for that person to pay the full balance. You are strongly advised to buy travel insurance to cover you for any such losses.

Please email the Residential Excursion Secretary (Katerina Braun) for a form and the return address and then send the form and the deposit.

restrips@gsocg.org