

THE GEOLOGICAL SOCIETY OF GLASGOW

Registered Scottish Charity No. SC007013

President: Dr Jim Morrison

www.geologyglasgow.org.uk

November 2016

159/2



A Sauropod track from Duntulm, Skye. To see and hear more come to Steve Brusatte's lecture on the 12th of January when more will be revealed (Photo credit: Steve Brusatte)

In this newsletter:

- Lectures for December, January and February
- Fossil Grove update
- AGM agenda and papers

Lecture meetings

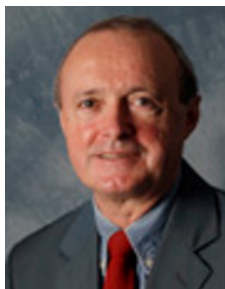
All lectures are held in the *Gregory Building, University of Glasgow, Lilybank Gardens, Glasgow G12 8QQ* (unless otherwise noted). Meetings commence at 7.30 pm.

Details of all the lectures for this session can be found on the society's website. For more information please contact **David Webster** meetings@gsocg.org

Thursday 8th December 2016 (to be preceded by a brief AGM)

Dr Tony Fallick, Scottish Universities Environmental Research Centre
Planet Earth's mid-life crisis: carbon isotopes, concretions and the "Great Oxidation Event"

Around 2.2 billion years ago, the Earth experienced a series of dramatic upheavals which accompanied the transition from a reducing to an oxidising ocean/atmosphere system. The global carbon cycle was perturbed to an extent unparalleled before or since, with the changes documented in the stable carbon isotope record of carbonate ($\delta^{13}\text{C}_{\text{carb}}$). From concretions in sediments, there is evidence that the manner in which organic matter is remineralised under- went radical change. However, the exact sequence of events leading to this "greatest pollution event of all time" (Lovelock) is not yet clear, and several aspects are paradoxical. It is an open question whether there was one or several excursions to high ($\delta^{13}\text{C}_{\text{carb}}$); the end of the high $\delta^{13}\text{C}$ record is reasonably well-established at 2056 ± 6 Ma, but its inception is not well defined, so that only a minimum duration (~ 140 My) is known. The interplay of the records of oxidised carbon (as carbonate) and reduced carbon (as organic matter) is especially problematic. Recent drilling in Arctic Russia by the International Continental Scientific Drilling Program FAR-DEEP Consortium has produced a marvellous new archive of 3.6 km of drillcore with which these and other issues are being addressed.



Tony graduated with a BSc Honours in Natural Philosophy in 1971 at Glasgow University and was awarded a PhD in Nuclear Geochemistry in 1975. He held postdoctoral positions in geology and geography at McMaster University, Ontario and in mineralogy and petrology at Cambridge University. In 1980 he moved to the Scottish Universities Research and Reactor Centre and became Lecturer in 1985, Reader in 1990 and was appointed to a personal professorship in 1996 and Director of the Scottish Universities Environmental Research Centre in 1998. His research interests include stable isotope studies in the earth, the genesis and evolution of ore bodies, the diagenesis of sedimentary sequences and the evolution of hydrocarbon reservoirs, fluid-rock interaction processes, crustal evolution, the application of stable isotopes to environmental issues and the geochemical applications of stable isotope analysis.

Further reading: Kump, L.R., Junium, C., Arthur, M.A., Brasier, A., Fallick, A.E., Melezhik, V., Lepland, A., CCRne, A.E., and Luo, G. (2011): Isotopic evidence for massive oxidation of organic matter following the great oxidation event. *Science*, **334**, pp. 1694-1696.

Thursday 12th January 2017

Dr. Stephen Brusatte, Chancellor's Fellow, University of Edinburgh
Scotland's Jurassic Park: The Isle of Skye and New Fossil Discoveries by the PalAlba Group

Believe it or not, you can find dinosaurs in Scotland. And these dinosaurs turn out to be important on an international scale. The Isle of Skye is one of the few places in the world that preserves fossils of dinosaurs, crocodiles, lizards, turtles, and even tiny mammals from the middle part of the Jurassic Period, about 170 million years ago. Over the last few years the PalAlba team - a collaborative group of Scottish palaeontologists - has been conducting fieldwork on the Isle of Skye. This talk will explain the importance of the Isle of Skye fossils and describe new discoveries made by the PalAlba team, including a remarkable dinosaur tracksite left by colossal long-necked dinosaurs moving through an ancient lagoon.



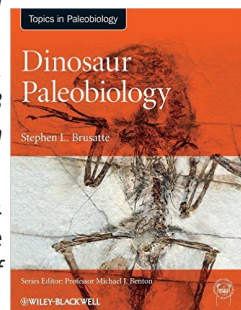
Photo credit: S Brusatte

Steve is a vertebrate palaeontologist and evolutionary biologist who specialises in the anatomy, genealogy, and evolution of dinosaurs and other fossil organisms. His research is profiled often in the popular press and he is a "resident palaeontologist" and scientific consultant for the BBC's Walking With Dinosaurs team.

Steve is currently the Chancellor's Fellow in Vertebrate Palaeontology at the University of Edinburgh. He is interested in the anatomy, genealogy, and evolution of fossil vertebrates. Particular research interests are the origin and early evolution of dinosaurs in the Triassic, the anatomy and genealogy of carnivorous theropod dinosaurs (T. rex and kin), the evolution of birds from theropods, the end-Cretaceous mass extinction, the recovery and radiation of mammals after the end-Cretaceous extinction, and the evolution of marine crocodylomorphs during the Mesozoic. He currently does fieldwork in the Triassic of Portugal and Poland, the Cretaceous of Romania, and the Cretaceous-Paleogene of New Mexico (USA) as well as Scotland aimed at understanding major evolutionary radiations and extinctions. He is the author of the recent textbook Dinosaur Paleobiology (Wiley-Blackwell, 2012), aimed at higher-level undergraduates and graduate students.

Steve graduated in 2006 from the University of Chicago, undertook Masters Degrees at Bristol University and in 2013 was awarded a PhD in Earth and Environmental Sciences from Columbia University (USA).

Further reading: Brusatte, S. L., Challands, T. J., Ross, D. A. & Wilkinson, M (2015): Sauropod dinosaur trackways in a Middle Jurassic lagoon on the Isle of Skye, Scotland. *Scottish Journal of Geology*, **51**, pp.157-164.



Thursday 9th February 2017

Dr. Diarmud Campbell, Chief Geologist, Scotland; British Geological Survey, Edinburgh

Making better use of the ground beneath our cities: Glasgow has shown it helps to ASK

Knowledge of the subsurface is a vital element in delivering successful construction and regeneration projects — yet poor understanding of ground conditions is widely recognised across the UK and Europe as the largest single cause of project delay, as well as overspending. To help address this, the British Geological Survey (BGS) has, through its Clyde-Urban Super-Project (CUSP), developed highly visual, and easy to use, city-scale 3D subsurface models and other geoscience datasets (geochemistry, groundwater, engineering geology etc.) in the Glasgow area. These have been providing new insights into Glasgow's complex superficial deposits and bedrock, the impacts of its industrial legacy, and opportunities for harnessing heat energy that lies beneath the city. Glasgow City Council (GCC) has been a key strategic partner throughout this work, as have many others involved in the development and regeneration of Glasgow. The models are the most comprehensive of their type yet produced in the UK. To make the models and related data more accessible, and to encourage greater use and re-use, of subsurface information, BGS and GCC have established ASK (Accessing Subsurface Knowledge). ASK is a data and knowledge exchange network involving local and regulatory authorities, private developers and their consultants and contractors, and researchers. ASK promotes a digital free flow of subsurface data and knowledge between its partners, for their mutual benefit. The lessons being learnt in Glasgow are also now being shared more widely through a related European COST Action (Sub-Urban) which focuses on sustainable use of the urban subsurface..



Photo credit. BGS

Dr Diarmud Campbell (left in photo) is the British Geological Survey's Chief Geologist, Scotland responsible for the onshore geological surveying and 3D modelling of Scotland. He is also the Chair of a European Cooperation on Science and Technology (COST) Action (TU1206) called Sub-Urban, dealing with the sustainable use of the subsurface of major European cities, and involving over 30 countries.

Before that he was Head of the Hong Kong Geological Survey, giving geological advice to the Hong Kong SAR Government on urban development, infrastructure projects, and landslides. That followed an earlier attachment to the Foreign and Commonwealth Office, to provide assistance to the gold mining industry in Zimbabwe, and involvement in a range of projects with the British Geological Survey, including work on ancient volcanic rocks in various parts of the UK.

Further reading: Campbell, D., Merritt, J., Monaghan, A., Mansour, M., Loughlin, S., Hughes, A., O Dochartaigh, B., Fordyce, F. and Entwisle, D. (2009): 3D attributed geoscience models and related GIS datasets to assist urban regeneration and resolve

environmental problems in and around the Glasgow conurbation, UK. In: EUREGEO 2009: European congress on Regional Geoscientific Cartography and Information Systems, Munich, Germany, 9-12 June 2009. Bayerisches Landesamt für Umwelt, pp. 41-46.

Thursday 9th March 2017

Professor Lorna Dawson, Head of Forensic Soil Science, The James Hutton Institute, Dundee

Soil in criminal investigations: investigation and evaluation in current and cold cases

Forensic soil science is an increasingly important discipline involving soils, minerals, dusts, plants and rock fragments to determine provenance i.e. to provide a chronology of their ownership, custody or location. Soil materials have been used as forensic trace evidence for many years, and are often highly distinctive from one region to another. Such traces are extremely useful in a forensic context, because of their environmental specificity; their high levels of transferability; their ability to persist on items such as clothing, footwear, tools and vehicles; and their high levels of preservation after long periods of time. This resilience makes soil trace materials, frequently present at crime scenes and forensic exhibits, highly valuable forms of intelligence and evidence that can aid crime investigations and reconstructions.

More on this exciting and very different lecture in the next newsletter!

Residential Excursions 2017

Morvern & Ardgour, Lochaber

Dates: Fri 21st to Mon 24th April 2017 (repeated Fri 5th to Monday 8th May)

Leader: Jim Blair of Lochaber Geoconservation

We hope to be based in the Ardgour area where we would have access to Morvern and Ardgour. We plan to meet at the Tourist Info Centre (beside the Ballachulish Slate Quarry) at 11.30 am/12 noon, with road stops to see Strontian granite, Moine rocks, perhaps the Ballachulish Slide & the Lochaline working silica mine (has to be a weekday after 4.30 pm, wellington boots, hard hats, high vis jackets required). Over the weekend we also hope to see lavas from the Mull volcano in Morvern, Tennyson's waterfall (off the lavas), Jurassic fossil beds at Lochaline, a possible Permo-Trias Boundary, an unconformity between Moine/Devonian and another between Moine and Permo-Trias, hopefully an old lead mine and other things! Travel will be by shared private cars – less expensive and better than a coach on single track roads. Although the trips are already fully subscribed following the email circular last month there may be late places so please email restrips@gsocg.org to go on the waiting list.

Advance Notice of Future Trips

Aberdeenshire

Dates: One Fri to Mon weekend in Sept 2017

Leader: Dr Fiona Meade

We plan to see the Aberdeenshire gabbros, granites, pillow lavas, other igneous rocks and possibly the Portsoy lineament (inland) visiting Huntly, Keith, Nigg Bay and other localities.

Raasay

Dates: Fri 27th April to Mon 30th April 2018

Leader: Dr Brian Bell

If you are interested in any of these please email restrips@gsocg.org.

News and Topical Articles

Fossil Grove – Update

The Fossil Grove Trust held its AGM on the 31st October 2016. The Trustees are tasked with managing funds for the benefit of Fossil Grove, but the Trustees do not have any role in running the property as this responsibility sits with the city council. However, the Trustees are working with City Council officers to support the Fossil Grove.

The Trust has appointed Professor Lennon of the Moffat Centre at Glasgow Caledonian University to undertake a review of business case feasibilities. It has also set-up a small sub-group to review the future governance and funding options and to integrate Professor Lennon's work into a strategy for making it viable, getting funding for a new building, and for running any new facility.

The City Council's Land & Environmental Services Dept (LES) have instructed £19k of drainage improvement works following a CCTV survey and they have agreed to keep the gutters and the southern wall clear of debris on a regular basis, fix the leaking gutters and put more bituminous paint on the concrete strip at the base of the south wall. The leaking overflow has been fixed. There are some encouraging signs that the clearance work on the south elevation may have started to reduce some water ingress. In addition LES will fix the current heating system, install a frost-protection thermostat and are getting a short-term loan of environmental monitoring equipment as a pilot. They will make sure the heating is on should a significant period of sub-zero temperatures be forecast. LES are discussing with contractors an upgrade or replacement of the heating system and integration with more permanent monitoring and control equipment. They will also provide options and costs for replacing the lighting.

The Trust's Advisory Group are engaged in procuring a number of conservation studies with the aim of providing science-based guidance on a preferred humidity and temperature regime and an action plan for conservation, salt removal etc once the water ingress has been controlled.

Walter Semple of the Geological Society of Glasgow is now the chair of the Trust.

Glasgow Geology Guide

A guide to the geology of the Glasgow area was published by the Society in 1958, with a revision in the 2nd edition of 1973 and a complete rewrite in the 3rd edition of 1992, which included the Girvan area.

When I became President at the beginning of 2016, I felt it was time to review the

situation and in October, Council felt unanimously that it was time to produce something new. It was thought that the section on Girvan should be omitted this time.

Since the last edition in 1992, many things have changed and we now have the Society's website and the GeoConservation activities of GSG, both of which will have a substantial role to play in any new production. I am writing this piece for the Newsletter to give members an idea of what is going on with the hope that you will contribute ideas and suggestions for localities, presentation, etc.

The format of the new guide is currently under discussion. Some feel that there is no longer the same need for a printed publication and that we can manage electronically. Personally, I feel that there is scope for both approaches and that we can aim for a concise printed section with online supplements for excursions, old and new, which can easily be updated as required.

I am keen that members make their views on this known fairly soon, by email or approaching me directly at meetings – for example at the AGM.

Jim Morrison

Notices

Subscriptions

Thank you to all those members who have renewed their subscriptions for the current 159 Session.

A separate reminder note accompanies this newsletter for those who have yet to renew their subscriptions or who have still to update their bankers order to take account of the subscription increase that became payable from the start of Session 157. If you receive your newsletter by e-mail you will already have been sent a reminder of a missed or under payment by separate e-mail.

If you require to set up a Bankers Standing Order as your routine method for future payments (which is the Society's preferred arrangement), please notify the Membership Secretary. A form can be sent to you electronically or by post.

Annual subscriptions for Session 159 were due from 1 October, 2016 at the following rates:-

Ordinary Membership (Including Scottish Journal of Geology): £25

Associate Membership (available to those over 60, or spouses of Ordinary Members, or members of the Edinburgh Geological Society) : £12.50

Junior Membership (available to those under 25, or full time undergraduates, or recent (4years) graduates) : £6.25

Note that the Scottish Journal of Geology is only sent to Ordinary Members and to those Junior members who pay an annual supplement of £6.25.

Cheques, made payable to Geological Society of Glasgow, should be sent to the Membership Secretary unless a Bankers 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'.

Address changes: The Society maintains the only mailing list of Society members* and any changes should be sent by post or e-mail or communicated by telephone to the Membership Secretary.

* Labels for all mailings, including the Scottish Journal of Geology are produced by the Society from Society records.

Membership Card: The membership card which you should have received with the previous newsletter 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 right of the mailing label used for the newsletter. The number will also be repeated on the label for the next newsletter or can be obtained from the Membership Secretary 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.

Membership Secretary: Dr. R A Painter, e-mail:- gsgmemsec@ntlworld.com

New Members:

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

Miss M Strattan	Glasgow
Miss E E Mann	Glasgow
Miss L Rubietto	Glasgow
Ms S I D Telfer	Glasgow
Mr S J C Dalzell	Hamilton
Ms A Powell	Paisley
Mrs S P Stewart	Strathblane
Miss M M Reilly	Glasgow

Courses at the Glasgow University Centre for Open Studies

Introduction to the Composition & Structure of the Earth (Ref 9173)

Date: Wed Sep 28, 2016 - Wed Mar 22, 2017

Tutor: Simon Cuthbert

Gold – From Stardust to Earth's Enduring Bounty (Ref 2309),

Date: Sat Feb 11, 2017

Tutor: Simon Cuthbert

Scottish Dinosaurs (Ref 2279)

Date: Sat Dec 3, 2016

Tutor: Neil Clark

The Geology and Rocks of North America (Ref 1725)

Date: Thu Sep 29, 2016 - Thu Mar 23, 2017

Tutor: Michael Keen

Geology in the Field (Ref 5847)

Date: Wed Apr 26, 2017 - Wed May 31, 2017

Tutor: Michael Keen

For more information and to book see:

www.gla.ac.uk/study/short/book/#/category/167

Events from other geological societies

Edinburgh Geological Society: www.edinburghgeolsoc.org

23rd November - Prof Brian Upton, University of Edinburgh
Volcanoes and the Making of Scotland

7th December Fellows' Night

11th January 2017 Lecture: Dr Phil Richards, formerly BGS Scotland
Is there a future for the UK oil and gas industry?

25th January AGM (7pm) & Lecture: Dr Brian Baptie, BGS Scotland
Is earthquake activity increasing?

8th February MIS/EGS Joint Lecture: Dr Martin Smith, BGS Scotland
"Tell me Dr Smith what exactly do you mean...": the professional role of a geoscientist

22nd February Lecture: Mike Robinson, RSGS
James Croll: Joiner, Janitor, Genius

Aberdeen Geological Society: www.aberdeengeolsoc.org.uk

Nov 17, 2016 Ben Harte: Metamorphics : the Barrovian & Tilley Zones

Dec 08, 2016 Gordon Walkden: The Amazing Devonshire Marbles and Top Ten British
Decorative stones

Highland Geological Society: www.spanglefish.com/highlandgeologicalsociety

7 December – The real mineral resources of the UK, Professor Peter Scott, Peter W.
Scott Ltd. and Camborne School of Mines, University of Exeter

11 January – WWII mica mines – Knoydart, Andy Moffat, HGS

22 February – AGM – followed by a short talk 'Looking for life on Mars?' – Dr Alison
Wright, HGS

Westmorland Geological Society: www.westmorlandgeolsoc.co.uk

18 January Ashfalls of the North Atlantic – a time marker, Dr. Kent Brooks, WGS.

15th February AGM and Presidential Address, Prof. Emrys Phillips.

Articles for the Newsletter

We would like to include short topical article(s) 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 or the Newsletter Coordinator.

Hon. Secretary: Dr Simon Cuthbert email: sec@gsocg.org

Newsletter Coordinator: David Webster email: meetings@gsocg.org

**Geological Society of Glasgow
Annual General Meeting
Thursday 8th December 2016
Agenda**

1. Welcome
 2. Apologies
 3. Minutes of the Annual General Meeting of Session 158 held on Thurs 10th December 2015
 4. Reports
 - a. *President's report*
 - b. *Meetings Secretary's report*
 - c. *Day Excursions report*
 - d. *Residential Excursion report*
 - e. *Library report*
 - f. *Publications Officer's report*
 - g. *Proceedings Editor's report*
 - h. *Scottish Journal of Geology Editors' report*
 - i. *Website report*
 - j. *Membership Secretary's report*
 - k. *Strathclyde Geoconservation Group*
 - l. *Geodiversity: Argyll and the Islands*
 - m. *Treasurer's report*
 5. Nominations and Election of Office Bearers
 6. AOCB
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AGM Papers and Reports

Item 3: Minutes of previous AGM

Draft Minutes of the Annual General Meeting of Session 158 held on 10th December 2015

WELCOME

The President, Dr Brian Bell, welcomed all present

APOLOGIES

No apologies were intimated.

MINUTES

The minutes of the AGM of Session 157 which was held on 11th December 2014 were approved.

REPORTS

The President went through the reports of the various office bearers, copies of which

had been sent out to members in the newsletter prior to the AGM.

The reports were as follows:-

The President's report

Meeting Secretary's report

Saturday Excursions report

Residential Excursion report

Library report

Publications Officer's report

Proceedings Editor's report

Scottish Journal of Geology Editor's report

Website report

Membership Secretary's report

Strathclyde Geoconservation Group

Geodiversity: Argyll and the Islands

Treasurer's report

NOMINATIONS AND ELECTION OF OFFICE BEARERS

The list of offices coming up for election with nominees, proposers and seconders had appeared in the newsletter. In addition David Muir was proposed as Junior member by the President and seconded by D Webster. These were approved by the members present.

Dr Brian Bell as the outgoing President then introduced Dr Jim Morrison as the succeeding President.

There being no further business the President introduced Dr Bell to give his talk as retiring President on 'Palaeogene magmatism in the British Isles'.

Item 4: Reports

a. President's Report

This time last year, I was coming to the end of a term as Meetings Secretary stretching back to last century. At Council in October, retiring President Brian Bell said, "You'll have nothing to do now, Jim. How about taking over as President?" It seemed so easy, and at the December AGM, that was it.

Things began happening straight away. An article in SJG by John Dewey and three others about the Neoproterozoic to Devonian evolution of Scotland had caused a considerable amount of unhappiness because it made no reference to the considerable contributions of the late Brian Bluck. Various discussions led to Chris Burton writing a formal letter of complaint to SJG, with full Council support. This, and a reply from Dewey will be in the next issue of the journal.

Another matter, namely Fossil Grove, which had been a source of concern for some time, became more serious because of the state of the building and of the fossils themselves following a significant period of neglect by Glasgow City Council. Council member Walter Semple took an interest in this matter, got himself elected to the Fossil

Grove Trust (FGT) and has got things moving during 2016, now being Chairman of FGT. David Webster has also become a trustee and other GSG people, including Margaret Greene, Alan Owen and Simon Cuthbert have also been active in trying to get the Fossil Grove into a satisfactory condition.

The Society's activities have continued in a vigorous manner with a variety of lectures – including one from the retiring Meetings Secretary on 25 years of meetings and lectures. The new person in the job – David Webster – has settled straight into the job and come up with an excellent programme for Session 159. There were various day and weekend excursions, including a memorable one in June when Chris Burton and Jim MacDonald led a group to Garabal Hill near the head of Loch Lomond on a day of beautiful weather.

It is reasonable to report that the Geological Society of Glasgow is in good shape and its members looking forward to another successful year. I would like to thank members for supporting the Society again this session by attending lectures and field trips and I would also like to thank Council members for their efforts and out-going officers for their service.

Jim Morrison

b. Meetings Secretary's Report

Our first lecture of the session on the 8th October had **Dr John Mendum** of the British Geological Survey giving us a fascinating insight into 'Problems of Highland geology, past and present'. He described the nature and origins of the major fold and thrust nappes that have been defined in the Highlands, ranging from the Moine Thrust Belt to the Highland Border, focusing at how such structures were recognised and defined. He discussed what mechanisms of generation and emplacement have been proposed, their consequences, and what problems still remain in their interpretation and finished it off with a enthusiastically-received 3D-demonstration of the possible evolution of the Tay Nappe involving audience participation and pieces of coloured carpet!

On the 12th November we awarded the T. Neville George Medal to **Professor John Cope**, of the National Museum of Wales. He then spoke on 'Redrawing the geological map of South Wales'. He explained that a keen Swansea extramural class in the mid-1970s had demanded more field-work. A geological mapping project was suggested, but had to be suitable for beginners and within an hour's drive. The area finally selected was south of Carmarthen where the 1-inch Geological Survey map showed Ordovician Arenig Series unconformably overlain by Old Red Sandstone. Both had several formations and there were also some Ordovician igneous rocks. Initial mapping of the basal ORS unconformity then progressed into the Ordovician outcrop, proving the Survey succession incorrect. A series of totally unexpected stratigraphical and structural results ensued together with many exciting new fossils. The lecture served to demonstrate that amateurs can really make valuable contributions to science.

Our retiring President **Dr Brian Bell**, from the University of Glasgow, gave his presidential address after the brief AGM on the 10th December. His talk entitled 'Palaeogene magmatism in the British Isles: recent advances and current thinking' outlined the

current understanding of the magmatism that occurred in the British Isles during the Palaeogene period. He used present field observations, together with geochemical and geophysical data, to explain the nature of the volcanic and intrusive activity in this spectacularly diverse magmatic province and set it in the wider context of the North Atlantic Igneous Province, which developed prior to and during the initial stages of ocean floor spreading.

Into 2016 and on the 14th January another stalwart of the Society, **Dr Jim Morrison**, who was the Meetings Secretary for 1990-2015, gave us an extremely entertaining personal review of the meetings and lectures which he has been involved in organising. Jim has been Meetings Secretary for the Society for an unbelievable 25 years - a mammoth undertaking for which the Society is hugely indebted.

Professor Stephen Hesselbo, from the Camborne School of Mines gave the Joint Celebrity Lecture on the 11th February. Stephen is 'Mr Jurassic' and he explained how the combination of traditional stratigraphy, increasingly sophisticated new geochemical methods and the generation of long continuous sedimentary records (such as the Mochras borehole) is yielding new insights into the history of environmental change during the Jurassic 'greenhouse earth'. He placed a particular emphasis on the carbon cycle and the formation of black shales. We hope to ask him back when Mochras v2.0 is completed!

On the 10th March **Dr David Brown** and team gave a very entertaining and informative account of the Glasgow University Tanzania Expedition visit to the East African Rift System in northern Tanzania and its spectacular geology. The purpose of the expedition was to teach both Glasgow and Dodoma students and local Masai people about the unique volcanology and tectonics of the area, and to promote future interaction between the two universities. The team focused on the geology of Embalulu Sekenge, a tuff ring that interacts with lavas and faults of the rift and visited the highly unusual carbonatite volcano, Ol Doinyo Lengai, where they witnessed an eruption. They outlined the inception and planning of the expedition, reported on their spectacular geological findings, and summarised the challenges and life-changing experiences they encountered.

The last lecture of the session was given by **Professor Tim Lenton**, of the University of Exeter on the 14th April entitled 'Revolutions that changed the Earth'. The talk traced the critical 'revolutions' in Earth history that have brought the planet to this point. The 'Inception Revolution', involved the origin of life some 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 some 2.7 billion years ago, culminated in the Great Oxidation of the Earth's atmosphere. The 'Complexity Revolution' started with the origin of eukaryotes and culminated in extreme glaciations and a Lesser Oxidation some 0.8-0.6 billion years ago. Tim explained that 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. The Gaia hypothesis lives on!

Members' Night on the 12th May rounded off Session 158 in the usual fashion with several short presentations by members of the Society. Simon Cuthbert gave a talk on

last year's 'Testimony of the Rocks' expedition which the Society and many generous individual Members supported. Walter Semple gave a short talk on Grand Canaria and Eve Gilmour spoke about her trip to Death Valley. Jim MacDonald's talk was entitled 'Hand me my Kalashnikov - some geological and mineralogical aspects of the Chernobyl catastrophe on its 30th anniversary'. Thank you to all the contributors for their input.

David Webster

c. Day Excursions report

The day excursions program started on June 11th with a visit to the Glasgow Museums Resource Centre in Darnley. The 12 participants made their own way to the centre. Many thanks to Ann Ainsworth for going above and beyond the call of duty to show our members some of the intriguing exhibits that are not usually on public display. Following such good feedback after the trip, I shall be organising a mid-week visit to the GMRC in 2017 for those that were unable to go on a Saturday.

The first day field trip was on 18th June when we took a coach to visit Garabal Hill and Glen Fyne by the bonnie banks of Loch Lomond. The 18 participants were led by Dr Chris Burton and Dr Jim MacDonald. On a beautiful day we gently followed the Garabal Fault as we ascended the 485 metres to the top of Garabal Hill. At the end of the day Jim suggested that this may have been the last time he leads a field trip as he was finding it rather tiring. If this turns out to be the case, may I extend my deep felt thanks to Jim for all the time and effort he has spent over the years imparting his knowledge in such an enthusiastic fashion.

The second field trip was on 25th June and was a walk along the Berwickshire Coastal Path from Cove Harbour to Siccar Point. The 22 participants travelled by coach to Cove Harbour where we were joined by our colleagues from the Edinburgh Geological Society. The leader for the day was Angus Millar who did an excellent job of controlling the large party of c. 40 geo-enthusiasts. After Siccar Point both coaches returned to the rather excellent Mercat Grill in Musselburgh for a joint meal.

The third field trip was on 16th July to visit sites within the Queen Elizabeth Forest Park at Aberfoyle. The coach was rather empty as several of the 13 participants chose to go directly to the park visitor centre as it was closer to their homes than the Gregory Building! Dr Iain Allison led us on a beautiful if strenuous walk along the Highland Boundary Fault to the Lime Craggs Quarry and viewpoint. We then rejoined the coach and investigated an outcrop further up the Dukes Pass. Many thanks to Iain for his enthusiastic leadership.

Our final day field trip was a joint excursion with the Geologists Association on Sunday 2nd October to Balmaha. I initially baulked at agreeing this date since October storms are not rare, but we had the most marvellous weather for our English friends to enjoy the landscape and geological features. Plans for a joint dinner after the excursion had to be abandoned due to a Balmaha Festival, but everyone thanked Dr Chris Burton and Dr Simon Cuthbert for a grand day out.

As ever, could I also thank everybody who joined us on the excursions, without your

participation we would not be able to make these trips happen.

On a final note, I am still struggling a little to get the best funding structure in place for the day trips – balancing whether people drive themselves or come on the bus, charging the correct amount then people dropping out at the last moment etc. To this end, it is my intention to ask for a £20 deposit for each excursion next year with the hope that I can then offer a small refund on the day rather than asking everyone for something extra on the bus. Hopefully everyone will be OK with that since the cost will still be the same as we always merely aim to break even on the cost of each trip

Roy Bryce

d. Residential Excursion report

This year started off with a residential weekend based in the Stag Hotel in Lochgilphead from 16th to 18th April. There were 20 participants including our leaders Dr Iain Allison and Dr Roger Anderton. We spent Saturday on the west side of Loch Sween in the Kilmory area. We followed this up with an excellent group meal at the Smiddy Bistro. On Sunday we drove along the east side of Loch Sween visiting structures along the western coast of the Tayvallich peninsula. Most of us enjoyed a bar meal in the hotel on Sunday night. On Monday we headed north examining the Quaternary geology in the Kilmartin, Ford, and Kilmichael Glassary area of mid-Argyll. Weather throughout the trip was on the good side for Scotland in April and an informative and enjoyable trip was had by all. Having four professional geologists on the trip meant that an interesting variety of explanations of the various features encountered gave plenty of food for thought. Many thanks to Eleanor Duncanson for arranging the meals and accommodation.

On 2nd September 10 participants and our leader Dr Fiona Meade headed over to Warrenpoint in Northern Ireland for our second residential weekend. Some flew, some drove, most took the ferry but despite some acts of God delaying the journey, most met at lunchtime on Friday and visited the Silent Valley Park. The second day saw us all together to visit the Mourne intrusive complex followed by an excellent group meal back at the Lough and Quay hotel. On day 3 we headed down to the republic and parked our cars at the partially mediaeval village of Carlingford, from where we ascended the lower slopes of Sive Foye. We ended the day by taking the scenic drive through Slieve Guillion Forest Park up to the viewpoint which enabled us to comprehend the true size of the Slieve Gullion Ring Complex. Day 4 gave us the opportunity to visit the Cam Lough Quarry where several different rock types could all be seen in an easily accessible roadside location. Our thanks to Dr Fiona Meade for providing a colourful ring bound excursion guide and also telling us about the many local legends which were an interesting alternative to the geological science alternatives.

Roy Bryce

e. Library report

The Library continues to be used as a source of a wide range of books, memoirs, guides and journals for a small but dedicated group of regular users.

Loans: This session 10 users recorded 49 loans over a very wide range of subjects as

follows: Excursion Guides: 20, Regional/National Geologies: 7, History of Geology: 3, Stratigraphy/Structure: 4, Mineralogy/Igneous/Metamorphic: 2, Other: 13 (including GGS Proceedings, Geomorphology Journals, etc.). This range not only shows the wide interests of members but also our library's extensive coverage - especially of geological excursion guides, many of which are not electronically available. The library is open from 7-7.30 pm on meeting nights and is well worth a visit!

Acquisitions: A relatively small number of acquisitions have been received to date, notably a comprehensive set of volumes on the geology of Antarctica, as well as new maps from BGS.University Library.

Not all members may be aware that, on the production of their membership cards, they have access to the University Library, where they may borrow up to 20 volumes (any subject). The geological collections themselves are extensive, with world coverage.

Chris Burton

f. Publications Officer's report

The bookshop has had another busy year. The new publications offered this session included the Geological .Excursion Guide to Stirling and Perth area, Photographic guide to Shetland's Geology, 2016 Lochaber Calendars and, at the end of the session, The Geology of Eigg. The Guide to Stirling and Perth and the Calendars sold out completely. Online orders for the Guides to Gigha and Madeira continued keep me busy. More than 30 Madeira Guides have been sold by mail and the Gigha Guides have sold out. Our overall profit for the year was a little over £400.

Mina Cummings

g. Proceedings Editor's report

The proceedings for session 157 were distributed in good time. My thanks to those who produced the trip reports given the very wet conditions experienced on most days. Very few photos were produced because of the weather but I managed to find suitable images online and have credited the sources. I was also given permission to use a photo posted by the North Clyde Archaeological Society who had been on a field trip to the same area, the Rosneath Peninsula, on a better day

Mina Cummings

h. Scottish Journal of Geology Editors' report

This has been a difficult year for the SJG. Members will already be aware that issue 52/1 was slim and regrettably 52/2 will be the same. Although our readership has risen dramatically as a result of our exposure in both the Lyell Collection and Geoscience World (Steven Brusette's paper on trackways had 2351 readers in a matter of days!), and our impact value is now a respectable 0.87, formidable barriers remain. Not least among these is the shift in emphasis of how the performance of professionals is measured in universities and other institutions. Members of staff are advised (!) that only papers in high impact journals will count towards their assessment. This tenet is

apparently applied across the board and as a result we are ignored by staff and our offers of mentoring for students wishing to publish remain ignored. Apart from our specific problems, the fear is that this will result in a loss to science because papers that might otherwise be suitable for publication in SJG and similar journals will remain unwritten. A substantial number of papers published in recent years have been by retired persons who thankfully cannot be influenced in this way. We are grateful for their contributions but remind readers that we are also open to submissions from others. Geology is prominent among sciences where amateurs can become experts, but where are the papers?

The composition of the Board has changed dramatically in the last year. Robert Duck retired at the end of last year, after many years of service, and has been replaced by Martin Kirkbride (University of Dundee); Alan Stevenson has also retired, again after long service, and is replaced by Heather Stewart (BGS Edinburgh); Brendean Macgabhan has stepped down and we are currently seeking a palaeontological replacement. Finally, Sally Oberst, who has provided sterling service as our Production Editor at the Geological Society Publishing House, has resigned and is replaced by Patricia Pantoş. Fortunately this did not all happen at once.

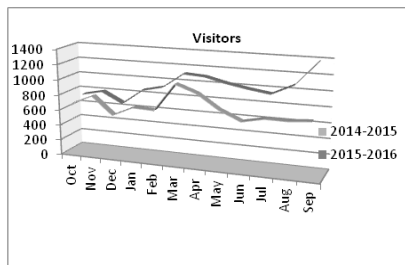
The next year, 2017, promises to be challenging.

Colin Braithwaite

i. Website report

During Session 158, many new items were added to the website. The most significant of these was a new section devoted to displaying material from the society's archive. This section presently contains three main pages. The Anniversaries page contains extracts from the society's proceedings at 25 year intervals from 150 years ago until 25 years ago, and will be updated every year. The second 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, and a paper on climate change was presented to the society on his behalf in 1866. The third 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. 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 presentation of his ideas on mantle convection was 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.

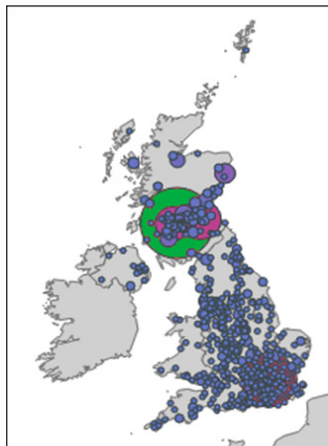
The material in the Archive section was prepared by the society's former honorary archivist, Seonaid Leishman (Arthur Holmes page) and the present honorary archivist Margaret Anderson. I am grateful to them for all their work, and look forward to many riches to come.



The traffic to the website has increased steadily since the website was launched in January 2011. In Session 158 there were 11590 visits to the site, an increase of 30.1% over the total for the previous session (8911). The number of visitors, as opposed to visits, was 8867, an increase of 36.5% over the previous session's total (6494). The chart shows the number of visitors each month for Sessions 158 (2015-2016) and 157 (2014-2015).

The increase in visits reflects increased traffic both from the UK and from abroad. The number of visits from the UK increased from 6317 in Session 157 to 7664. Outside the UK, the three most productive countries were the USA with 948 visits (389 in the previous session), the Philippines with 762 (not in top ten in Session 157) and India with 229 (88). Within the UK, Scotland accounted for 4373 visits (3768 in Session 157), England for 2880 (2394), Wales for 103 (83) and Northern Ireland for 79 (66).

The map shows the amount of traffic from cities within the UK. Glasgow was the most productive city, with 1728 visits (1773 in the previous session), followed by London with 970 (899) and Edinburgh with 503 (581).



Apart from the homepage, the most popular pages were the Rock-forming Minerals page (5.3% of pageviews), the Local Rocks page (3.4%) and the Excursions page (3.4%). The Lectures, Scottish Fossils, Metamorphic Rocks and Membership pages all had 2% or more of pageviews. By far the most productive source of traffic to the website was Google, which was responsible for 7293 visits (4779 in the previous session), but the next most productive was direct logons to the website, which produced 2153 (1922) visits. Bing produced 416 (253) visits and Yahoo 154 (167). The majority of the remaining visits resulted from referrals from other websites. The most productive source of referrals was the Edinburgh Geological Society website (104 this session compared to 100 last session), thecampsies.co.uk (80 compared to 25) and the Geological Society of London website (52 compared to 51). The referrals from visitscotland.com were dramatically down from the previous session, from 352 to 29, and those from Facebook were also down (from 83 to 46). The reasons for these reductions are not clear.

The society's Facebook page continues to prosper and additional posts of news and society events are regularly added to it. One news post reached over 1,000 visitors. Over half of the visitors to the page are under the age of 24 and about half come from the UK. With 886 likes, the Facebook posts are doing very well and will hopefully lead to the recruitment of new young members to the society. If you have a Facebook account, or use other social media, please "like" and forward any society posts that you find

particularly interesting.

As Webmaster, I am responsible for the day-to-day running of the website. In this task I am assisted by four society members. Neil Clark (Web Consultant) and Emma Fairley (Website Coordinator) assist with the development of the site and look after the society's Facebook page. Maggie McCallum takes care of the Geoconservation section of the site and Maggie Donnelly chairs the website working group. I am grateful to all four for their enthusiastic support.

The website requires a continuing input of news items and event details to keep it fresh and topical. I am grateful to society members who have provided such material in the past and encourage all members to continue to send relevant articles and information to: web@gsocg.org.

Bill Gray

j. Membership Secretary's report

	At end Session 158 (30 Sep 2016)	At end Session 157 (30 Sep 2015)
Honorary Members	6	4
Ordinary Members	248	269
Associate Members	65	68
Junior Members	15	13
TOTAL Members	334	356
New Members	21	20
Memberships Closed	43	17

There was a higher number of memberships closed (memberships are closed either by resignation, non-payment of fees or death) than in Session 157. Resignations were higher than normal as were memberships closed due to long term non-payment of fees following the increase in fees in Session 156/157.

Overall membership numbers at the end of Session 158 were lower than in the previous Session 157 as a result. The new members joining rate in Session 158 was little lower than the long term average but higher than in Session 157.

Robin Painter

k. Strathclyde Geoconservation Group

Governance: The office bearers have not changed and Margaret Greene remains chairperson, David Hamilton as Treasurer and Barbara Balfour as Secretary. Maggie McCallum is in charge of website matters and Margaret Anderson in charge of archives. Usually about 8 to 10 members attend the meetings.

Leaflets/Booklets/Geology walks: SGG leaflets continue to be distributed. Where copies are scarce, laminated copies have been dispersed in appropriate outlets. A new leaflet entitled "The Orchard Beds Geo Trail" has been printed and distributed. This leaflet was produced by East Renfrewshire Council in partnership with SGG. Work has

begun on a new booklet which will be about the geology of the tombstones and the quarry in the Glasgow Necropolis.

Margaret Greene led two walks in September as part of the program for Glasgow Open Doors and also led another walk for approx. 20 members of The Geologists' Association of London on Monday 3rd October utilising the Building Stones of Glasgow booklet. The latter donated £20 to SGG funds.

SGG are also considering the future of linking leaflets to mobile phones and tentative steps have been made towards this. SGG leaflets are now available on the GSG website thanks to Bill Gray.

Local Authority Liaison: SGG continue to work with Councils of East Dunbartonshire, West Dunbartonshire, South Ayrshire, North Lanarkshire (ably assisted by SGG members, Paul Carter and Mike Browne), in South Lanarkshire with the Clyde and Avon Valleys Landscape Partnership and in North Ayrshire with the North Ayrshire Landscape Partnership Group. This work entails help with Local Geodiversity Action Plans, help and advice with the geology associated with proposed trails and preservation of sites etc., and liaising with Councils re. identifying sites for inclusion in Local Development Plans.

Field Trips: In July some SGG members visited Douglas Muir Quarry on the outskirts of Milngavie. One of our members, Campbell Fleming, who works closely in an environmental capacity with Tarmac, the owner, showed the group around with emphasis on new exposures. Tarmac is interested in having a board explaining the geology to which the SGG would be asked to contribute ideas.

Outreach: Margaret Greene and Paul Carter continue to attend events where children especially may be introduced to geology. Margaret Greene continues to keep SGG members informed of proceedings at the Executive Committee meetings of the Scottish Geodiversity Forum including the Charter Working Group and other members attend meetings and workshops where possible.

Finances: The SGG Treasurer reported that at 30th September, the end of the financial year the SGG funds stood at £222.

Archives: Margaret Anderson, SGG archivist, has now archived all documents that had been passed to her and these are available to Geology Society members

Fossil Grove: SGG have been active in raising awareness about the state of FG. In April a working party cleared a lot of leaf debris from the side of the FG building and also cleared some of the overgrown part of the quarry.

Margaret Greene

I. Geodiversity: Argyll and the Islands

Due to illness there is not a lot to report for this year, however, the Oban U3A Geology group is back up and running again after a temporary cessation.

See <http://u3asites.org.uk/oban/page/2155>

Alastair Fleming

m. Treasurer's report

More members are now paying our increased subscription. Some paid twice and were refunded. Subscription income is up.

Gift Aid continues to make a substantial contribution to our funds. We continue to encourage members to sign Gift Aid forms for us.

We have been unable to progress on the Conoco-Philips prize which had been awarded to the most outstanding candidates in the Scottish Higher exam. This exam is now withdrawn and we seek an alternative use for this fund.

Following the death of Dr Brian Bluck we have taken custody of the residue of his research fund to finance nineteen annual prizes of £500 to the best final year student.

The publishing costs for the Moine Guide were shared on a 50%/25%/25% basis between the National Museums of Scotland and the Geological Societies of Edinburgh and Glasgow who own the distributed stock in these proportions and pooled profits are shared accordingly. We have sold one copy. Stock reporting has always been unreliable and this year we have received no information from the new Edinburgh Society treasurer who should coordinate this information. Our publication sales returned a profit as below

In House Publication

Closing Stock 157	3889.53
Stock Revaluation Add	<u>112.89</u>
Opening Stock 158	4002.42
Add publications Purchased	<u>206.00</u>
Stock available for sale	4208.42
Deduct Closing stock at 30/9/16	<u>3473.50</u>
Stock assumed sold	734.92
Receipts	<u>1197.88</u>
Gross Profit	462.96
Deduct expenses	<u>48.81</u>
Net Profit	<u>414.15</u>

Room Hire for lectures is now agreed at this level for the next two years with minor increases in janitorial fees.

This year we received no requests for sponsorship. Suitable publicity might be appropriate.

This year there was no subscription to Paleontology. We paid £245 for Volume 58 in December 2014.

The increase in current market valuation of our investments by **£10637** above the previous (cautious) valuation of **£38355** for the Balance Sheet of September 2015 is sufficient despite these days of volatile markets for the Balance Sheet valuation to be increased at this time. I would suggest increasing it by roughly half of the current apparent under valuation to £44,000. This revaluation of **£5645** is entered on the Balance Sheet so as not to confuse it with genuine income.

Ben Browne

Income and Expenditure Account for year ending 30th September 2016

		Session 158		Session 157	
		2015 - 2016		2014 - 2015	
Income					
	Note 1				
1. Subscriptions					
Received during year less refund		7386.74		7023	
Deduct paid in advance this year		-241.67		-93	
Deduct refunds		-110.00			
Add received in advance last year		92.50	7,127.57	120	7051
2. Investment Income					
Dividends		600.30		580	
National Savings		160.29	760.59	267	848
3. Gift aid			1,196.06		1060
4. Conoco-Phillips prizes					
ConocoPhillips 5yr contribution				0	
Transfer from Conoco-phillips fund		0.00		150	
Edinburgh GS	Note 2	0.00		83	
Aberdeen GS		0.00	0.00	83	317
5. Received into Brian Bluck Fund			9,500.00		
6. Publications	In house	net profit	414.15	573	
		Stock revaluation	112.89	527.04	
	Note 3	Moine Guide	net profit	14.40	541.44
				74	647
7. Saturday excursions		net loss		-6.25	Profit 81
8. Week end excursions		Knappdale Profit	29.00		0
		N Ireland Loss	-1.62	27.38	
9. Donations (coffee collections)			227.30		227
Total income			19,374.09		10827
Expenditure					
1. Meetings incl speakers expenses, etc		576.90		626	
Meeting Secretary expenses		431.70		717	
Room Hire	Note 4	3698.88	4,707.48	3269	4612
2. Publication and postage of Proceedings			492.49		542
3. Strathclyde Geoconservation			0.00		100
4. Sponsorship	Note 5		0.00		1875
4. Library and Down to Earth	Note 6		215.00		455
5. Affiliation fees			90.00		90
6. Insurance			198.20		202
7. Conoco-Phillips prizes			0.00		400
8. Brian Bluck Fund		Prize for 2016	500.00		
		Transferred to Reserved Fund	9000.00	9,500.00	
9. Website		Maintenance	360.00	384	
		Upgrade	62.38	422.38	1571
10. Admin costs - postage, stationery, etc					
Hon Secretary expenses(Newsletter)		217.96		250	
Membership Secretary		513.16		711	
President & VP		40.15		0	
Treasurer		54.74	826.01	55	1016
11. Bank Charges			4.00		
Total expenditure			16,455.56		11433
Profit			2,918.53	Deficit	-606

Balance Sheet as at 30th September 2016

Session 158

2015 - 2016

Session 157

2014 - 2015

Members' Funds

Balance as at 30/09/2015

60,968.62

Add revaluation of Investments

5,645.00

Add Surplus for the year

2,918.53

Loss 606

Members Fund as at 30th September 2016

69,532.15

Restricted Funds

TN George fund

380.00

Brian Bluck fund

9,000.00

Note 1

ConocoPhillips fund

1,350.00

Total Funds

80,262.15

Represented by

Current assets

Cash at Bank

Royal Bank of Scotland

15,542.22

4710

National Savings

3,865.70

19,407.92

3705

Cash in hand

Publications sales officer

124.09

67

Membership Secretary

586.84

0

Hon Secretary

109.97

-372

Meetings Secretary

112.05

0

Treasurer

-56.77

-2

Ordinary member/past Vice president

266.97

1,143.15

307

National Savings Income Bond

12,000.00

12000

Current Valuation of investments

Note 7

44,000.00

56,000.00

38355

Room Hire paid in advance

453.00

Stock of Publications

In house

3,473.50

Moine Guide(pending further information)

131.25

Total Assets

80,608.82

LESS LIABILITIES

Subscriptions paid in advance

241.67

Debt for publications

105.00

Total Liabilities

346.67

Net assets

80,262.15

The financial statements were approved on by the Trustees and signed on their behalf I

Signed as approved by the Trustees

.....

President

Dr J Morrison

Signed by the Independent Examiner

.....

Dr Ian Anderson

Item 5: Council Elections

The offices that have come up for election are listed here along with the proposed nominations:

Position	Nominee	Proposed by	Seconded by
Hon. Secretary	Walter Semple	S Cuthbert	J Morrison
Treasurer	Ben Browne*	M Greene	D Webster
Archivist	Margaret Anderson*	W Gray	M Greene
Residential Excursions Secretary	Maggie Donnelly	J Morrison	B Browne
Junior Representative	Matthew Staitis	M Cummings	R Bryce
Publications Secretary	Mina Cummings*	R Bryce	W Semple
Proceedings Secretary	Mina Cummings*	M Donnelly	R Painter
Webmaster	Bill Gray*	M Cummings	R Bryce
Website Consultant	Neil Clark*	M Donnelly	W Gray
Ordinary Member	Simon Cuthbert	J Morrison	B Browne
Editor of SJG	Brian Bell*	N Clark	J Morrison
Editor of SJG	Colin Braithwaite*	J Morrison	N Clark
Independent Examiner	Ian Anderson*	B Browne	M Cummings

Note: * Denotes retiring postholder willing to stand again

Retirees:

Michael Pell has stood down as Vice President. **Simon Cuthbert** has stood down as Hon. Secretary but is standing as an Ordinary Member. **Katerina Braun** has stood down as Residential Excursions Secretary. **David Muir** has stood down as Junior Representative.

Continuing Officers:

The following continue in office: **Jim Morrison** - President, **Brian Bell** - Vice President, **Ben Browne** - Vice President, **Robin Painter** - Membership Secretary, **David Webster** - Meetings Secretary and Newsletter Coordinator, **Chris Burton** - Librarian, **Roy Bryce** - Day Excursion Secretary, **Margaret Greene** - Minutes Secretary, **Emma Fairley** - Website Coordinator, **David Brown** - Ordinary Member, **Bob Diamond** - Ordinary Member.

Council are always seeking new members willing to help out in whatever way they feel they can contribute. There are currently three vacancies for Ordinary Members and next year we will be seeking a new Membership Secretary. Please speak to a Council Member if you are interested.