



EDINBURGH GEOLOGICAL SOCIETY

Promoting public interest in geology and
advancement of geological knowledge



Annual Report and Proceedings

185th Session
2018-2019

www.edinburghgeolsoc.org

Charity registered in Scotland SC008011

Edinburgh Geological Society

Report of Council for the Year Ended 30th September 2019

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Cover picture: Robert Gatliff, our EGS President, explaining how current directions can be derived from cross-bedding in this outcrop of the Passage Formation on the Kinghorn coastal section, Fife (photograph courtesy of Christine Kuhn).

Welcome

The Council of the Edinburgh Geological Society takes great pleasure in presenting the Annual Report and Accounts for the year ending 30th September 2019.

Robert Gatliff, President

Council 2018-19 (Elected 20th March 2019)

President	Robert Gatliff
Vice-Presidents	Tom Challands Emrys Phillips
Immediate Past President	Stuart Monro
Honorary Secretary	Neil Mackenzie
Assistant Secretary (Annual Report)	Don Cameron
Assistant Secretary (Minutes)	Richard Buxton
Honorary Treasurer	Christian Ranken
Membership Secretary	Christine Kuhn
Lectures Secretary	Graham Leslie
Excursions Secretary	Ian Kearsley
Assistant Secretary (Clough/Awards)	Graham Leslie
Assistant Secretary (Excursion Bookings)	Alison Tymon
Assistant Secretary (Geoconservation)	Mike Browne
Publication Sales Officer	Don Cameron
Archivist	Christine Thompson
Scientific Editors	Maarten Krabbendam Tom Challands
Ordinary Members	Beverly Bergman Con Gillen Chris Lofthouse David Stephenson Daryl Sawyer Rachel Walcott

Andrew Rushworth acted as Assistant Secretary (Planning & Finance) to 16th April 2019; since then the Planning and Finance committee has been chaired by Robert Gatliff, EGS President.

Charity Name: Edinburgh Geological Society

Scottish Charity Number: SC008011

Official Contact Address: c/o British Geological Survey, The Lyell Centre,
Research Avenue South, Edinburgh EH14 4AP

Website Address: www.edinburghgeolsoc.org/

Report on Activities

Overview

The Society continued in its primary objective of stimulating and encouraging public interest in geology and the advancement of geological knowledge. The programme of lectures was again well attended, and there was another successful programme of 18 midweek and weekend geological excursions. Angus Miller continued in his paid role as our Promotion Coordinator. Amongst other activities, he organised both a well-attended public lecture evening on the theme of ‘What did the Ice Age ever do for us’ and a series of geological (“Deep Time”) walks during the 2019 Edinburgh Science Festival. A new *Edinburgh Rocks and People* poster was published, aimed at supporting classroom learning. The Society’s affiliated Lothian and Borders GeoConservation Group published new geology walk leaflets for the Bathgate Hills and Dalkeith’s Building Stones. Our Society has also been involved with representatives from Scotland’s other geological societies and its geoparks in instigating a Scottish Geology Trust (see page 12).

Council

The Council met five times during the year to maintain an overview of the full range of activities of the Society. The Finance and Planning Committee met twice to compile and monitor a budget for the financial year 2018-19, and to adjudicate on applications for grants in support of the Society’s objectives. The Council’s Promotion and Coordination Group continued to organise various promotional activities, and a Website Group developed new material and posted current news items on the EGS website.

The Edinburgh Geological Society was founded in 1834 and its objectives are the stimulation and encouragement of public interest in geology and the advancement of geological knowledge. Its governing document is The Laws of the Society, which serves as its constitution. The Society is an unincorporated association with charitable status. Its membership elects the members of its Council as the Charity Trustees at the Annual General Meeting of the Society.

The Council is the management body for the Society and there are a number of Committees which manage particular aspects of the Society’s work and report to the Council. These include the Finance and Planning, Clough, Excursions, and Publications Committees and also the Lothian and Borders GeoConservation Group and Tayside Geodiversity Group. The Scottish Journal of Geology is owned jointly by the Society and the Geological Society of Glasgow. The Society is affiliated to the Geologists’ Association.

Membership

The number of members rose by 17 (2.9%) in 2018-19, with the most significant increase being for Ordinary Fellows (3.7%). Membership levels for the previous session were at their highest for more than 30 years - it is encouraging that they have continued to increase for the 3rd successive year.

	2018	2019	Change
Life Fellow	10	10	0
Ordinary Fellow	408	423	15
Family Fellow	28	27	-1
Senior Fellow	104	106	2
Glasgow Associate	17	18	1
Junior Associate	10	11	1
Distinguished Fellow	8	8	0
Corresponding Fellow	6	6	0
Honorary Fellow	4	3	-1
TOTAL MEMBERSHIP	595	612	17

Clough Medal and Research Grants

The Clough Medal was awarded this session to Dr Tim Dempster (University of Glasgow) in recognition of his exceptional contribution to advancing the understanding of the geology of Scotland and his dedicated training of undergraduate students using the Highlands of Scotland as a ‘natural laboratory’. His work has specifically focused on the metamorphic geology of the Highlands, where he has employed a wide range of technologies to better understand the processes. He is a prolific author, publishing in high impact journals (including *Nature*) on the Dalradian. He has been a member of the Editorial Board of the *Scottish Journal of Geology*. He is an innovative and inspirational teacher, devising the award-winning “Rock around the University” geological trail at the University of Glasgow among much else. His achievements make him a worthy recipient of the Clough Medal.

A contribution of £650 was awarded from the Clough Fund to a group of 5 St Andrews University students towards their field expenses in a project aiming to improve the understanding of alkaline igneous systems in Greenland through mapping of its Tugtutoq Alkaline Giant Dyke System. Their project

has potential benefits for Greenland's mining industry. No awards were made from the Mykura Fund.

Lectures Programme 2018-2019

The programme, organised by Lectures Secretary Graham Leslie, consisted of 9 meetings, and again they were enthusiastically received, with good attendances. An additional EGS Public Lecture was organised by Angus Miller at Our Dynamic Earth on the subject of 'What did the Ice Age ever do for us?' - it attracted a full-house audience. Fellows' Night and the social evening took place on 5 December 2018 at BGS Lyell Centre on the Heriot-Watt campus, with catering organised by Barbara Clarke. Lectures held during the session were:

2018

- 10 Oct **Prof Roy Thompson** (University of Edinburgh): Scotland's energy trilemma
- 24 Oct **Dr Graham Leslie** (BGS): What place for world-class geology in future Singapore?
- 7 Nov **Robert Gatliff** (EGS President): Exploring the oceans - minerals, hazards and ecosystems
- 21 Nov **Dr Tom Bradwell** (University of Stirling), **Dr Carol Cotterill** (BGS) and **Prof Emrys Phillips** (BGS): Public Lecture chaired by Hermione Cockburn (Our Dynamic Earth) - What did the Ice Age ever do for us?
- 5 Dec **Fellows' Night**

2019

- 9 Jan **Dr Dave Millward** (BGS): Rock plants for geologists
- 23 Jan **Dr Roger Anderton**: From Mid-Argyll to Mull: the sea bed geology of the Firth of Lorne
- 6 Feb **Dr Hugh Barron** (BGS): Joint MIS/EGS Lecture - The Glasgow Geothermal Energy Research Site
- 20 Feb **Dr Tim Dempster** (University of Glasgow): Clough Medal lecture and Joint EGS/GGS lecture - Sideways views of Scottish garnets: insights into metamorphic processes
- 6 Mar **Prof Frank Rennie** (University of the Highlands and Islands): A Lewisian perspective: the basement of the Earth
- 20 Mar **Brigid O'Dochartaigh** (BGS): Scotland's aquifers: an introduction to aquifer properties, baseline chemistry, groundwater use & management in Scotland

Promotion of the Society and Public Interest in Geology

Our paid Promotion Coordinator, Angus Miller, and the Council's Promotion and Coordination Group continued to organise various promotional activities to engage the general public and EGS members. These activities included a day-long workshop focusing on the North West Highlands UNESCO Global Geopark, a well-attended Public Lecture at Dynamic Earth, and Deep Time Walks in Holyrood Park as part of the Edinburgh Science Festival.

The Group ran three introductory summer excursions plus a photography workshop in Holyrood Park, all of which were popular with existing and prospective members. EGS co-hosted a successful conference in Edinburgh with the History of Geology Group of the Geological Society. The website group continued to develop new material and posted current news items on the EGS website.

The Society's *Edinburgh Rocks and People* poster was published in autumn 2019. This colourful A2 poster is aimed at supporting classroom learning, and has been professionally designed and printed. The poster includes a superb reconstruction of the Midland Valley in the Carboniferous Period, drawn by volunteer Alison Tymon. It has been distributed to Secondary schools across the Lothian area, to much favourable comment, and it is supported by online learning materials.

Excursions Programme 2019

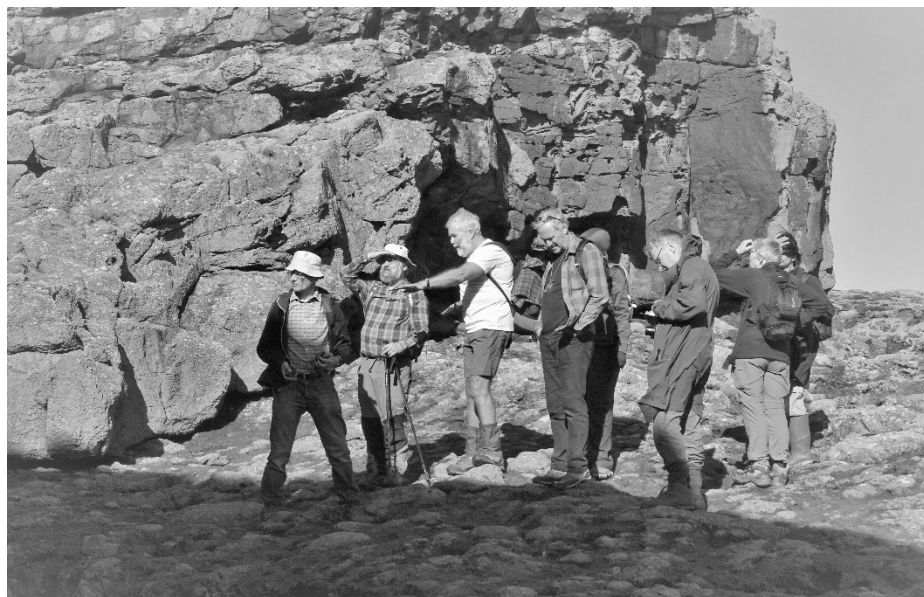
The ambitious programme for 2019 was organised by Ian Kearsley. It featured 11 Saturday or Sunday, 7 Wednesday evening, and Long (week) and Long Weekend excursions. Bookings for all but one of the excursions were taken by Alison Tymon; the Long Weekend excursion was organised by Anne Burgess. Within the programme, 2 excursions were specifically aimed at new EGS members, and another two were incorporated in the Midlothian Walking Festival. Another excursion featured a photography workshop in Holyrood Park. Whereas the Society does not pay a fee to leaders or co-ordinators, an innovation this session was the presentation of a book token to leaders in appreciation of their time and efforts. Most of the excursions were full to capacity, with 333 attendees spread across the Wednesday and weekend day excursions.

The excursions were:

Wed 24 Apr	Corstorphine: Leader Ken Shaw
Wed 1 May	Around Castle Rock: Leader Andrew McMillan
Wed 8 May	Hopetoun shore (jointly with Botanical Society of Scotland): Leader Angus Miller
Sat 1 Jun	Dunbar Cement Quarry and Catcraig: Leader Fiona McGibbon
Wed 5 Jun	Craiglockhart Hill: Leader Richard Smith
Sat 15 Jun	Bishop Hill: Leaders -members of excursion party
Wed 19 Jun	Pavement palaeontology: Leader Al McGowan
Sat 22 Jun	Blairskaith Quarry (jointly with Geological Society of Glasgow): Leader Neil Clark
Sat 29 Jun	East Lothian Quaternary: Leader Emrys Phillips
Sun 7 Jul	Joppa shore: Leader Bob Gatliff (introductory excursion)
Wed 17 Jul	Binny Craig: Leader David Stephenson
Sat 20 Jul	Kinghorn to Seafeld Tower (Fife): Leader Ian Kearsley
Sun 11 Aug	Roslin Glen (Midlothian Outdoor Festival): Leader Angus Miller (2 introductory excursions)
Wed 21 Aug	Cockenzie: Leader Al McGowan
Sat 31 Aug	Bathgate Hills: Leader Con Gillen
Sun 8 Sept	Holyrood Park - photography workshop: Leader Jason Gilchrist
Sat 21 Sept	Holyrood Park: Leader Angus Miller (introductory excursion)

Involvement by the Society in other organised events included:

11,13,15 Apr	Edinburgh International Science Festival - Deep Time walks
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Participants on the Long Weekend Excursion led by Dr Alan Crane examine an outcrop of the Lower Old Red Sandstone Crawton Lavas south of Stonehaven (photograph courtesy of Ian Kearsley).

The **EGS Long Excursion 2019** to Cyprus was enjoyed by 22 participants between 11-18 May. For a full account of the Excursion, see Beverly Bergman's article in *Edinburgh Geologist* issue no. 67 - Spring 2020.

The **Long Weekend 2019** excursion to Stonehaven was enjoyed by 13 EGS members between 20-22 September - it was organised by Ian Kearsley and led by Dr Alan Crane (University of Aberdeen). Over a rare weekend of fine weather, the party examined on the Friday afternoon and Saturday both Devonian volcanic rocks and sedimentary rocks of the Dunottar-Crawton Group south of the Highland Boundary Fault and Dalradian metasedimentary rocks of the Flat Belt and Downbend north of the Fault. Sunday was spent on the foreshore between Cowie and Skatie, where the party progressed down sequence and towards the Highland Boundary Fault zone from the Lower Old Red Sandstone Group's basal Cowie Formation braided river sedimentary rocks to the highly variable igneous and sedimentary strata of the Highland Border Complex.

Publications

Tom Challands writes - 2019 has seen a rise in articles submitted (32) to *Scottish Journal of Geology* (SJG, and published jointly with the Glasgow Geological Society), a reduction in the number of articles that have been rejected (62% for 2018, 46% for 2019), and an increase in the total number of articles published (16, up from 8). The reduction in the number of articles being rejected reflects an increase in the number of high-quality articles being submitted to our journal. Our special issue for Early Career Researchers has attracted a good deal of young talent, and has given us greater exposure throughout research institutions as a suitable journal for publishing timely research on pressing issues in geoscience resources, as well as high-calibre work on Scottish geology.

Our top three most-viewed articles of 2019 included new dinosaur teeth from Skye (Young *et al.* 2019; vol. 55, pp. 7-19), heat from mine waters (Todd *et al.* 2019; vol. 55, pp. 124-133), and Holocene palaeoenvironmental change in the Muck Deep (Arosio *et al.* 2019; vol. 54, pp. 99-114), with an equally diverse range of articles receiving steady but lower numbers of citations.

The *Scottish Journal of Geology* is recovering well from previous lean years as the publishing environment changes and the new initiatives discussed above appear to have been beneficial for our journal.

Two editions of The Edinburgh Geologist were published, under the editorship of Phil Stone and Bob McIntosh. Two full-colour editions (Spring-Autumn) of the EGS Newsletter were produced by our Promotions Coordinator, Angus Miller. These were distributed to members as hard copy, but are also available online, via the Society's website. In addition to keeping members informed about the Society's activities, the Newsletter is proving useful in promoting the Society to a wider readership of non-members. The GeoConservation Groups continued to produce leaflets, as described below; a full list can be found on our website

<https://www.edinburghgeolsoc.org/publications/geoconservation-leaflets/>.

Volumes of EGS book sales were very similar to those of 2017-18, but sales revenue increased by 26% to £3,882. This improvement was entirely due to payment of an unusually large number of carry-over bookshop invoices in the early months of the session. Sales figures were augmented by our agreement to use the EGS website as a conduit for purchase of the new book *Conversations in Stone* (on behalf of the Scottish Geodiversity Forum) and *Deep Time Cards* (ahead of and subsequent to the 2019 Edinburgh Science Festival). The total sales revenue also includes the £501 EGS share of proceeds from sales of the four geological excursion guides published jointly with the National Museums of Scotland.

The last copy of Berwickshire Coast Rocks! was sold in May, and this book is now out of print. Stocks of the ever-popular Assynt Mecca and the geological excursion guide to the North West Highlands are running low again, and second reprints of both will be available in 2019-20.

The entire stock of EGS excursion guides and geoconservation leaflets remains housed in secure rental storage in Leith. Storage continues to cost the Society approximately £1,200 per year, and the search continues for an alternative - ideas from the membership would be most welcome.

Geoconservation Groups (report by Mike Browne, chair)

The Lothian and Borders GeoConservation (Business) Committee met twice during the year and continued its work on the monitoring and designation of Local Geodiversity Sites. The geodiversity working groups for Edinburgh and West Lothian Councils both met once during the year. With the City of Edinburgh Council, the Edinburgh working group published a leaflet and poster promoting the city's 30 Local Geodiversity Sites, with each site being represented by a thumbnail image. A meeting was also held with Scottish Borders Council to set in train the designation of at least 35 Local Geodiversity Sites, surveyed by Alison and Barry Tymon, two of our most dedicated volunteers. Volunteers also started work on up to 25 site surveys for Midlothian, with the Council providing some staff support.

The Volunteer Group met monthly during the winter. Geology walk leaflets for the Bathgate Hills Geotrail and Dalkeith's Building Stones were published with funding from EGS and a contribution from the Edinburgh U3A Geology Group. Both leaflets were also made available as pdf documents on the EGS website - bringing the total up to 34 leaflets that are distributed very widely and for free by this route. Some of our older leaflets now need to be considered for reprinting (or not), or rewriting to meet changed objectives (e.g. Calton Hill and North Berwick).

Members of the Volunteer Group planned and led a number of evening walks as part of the EGS Excursions Programme, and also led two wet walks in Roslin Glen for the Midlothian Outdoor Festival. The Group organised a stall at the Midlothian Science Festival's 'Earth, Space and Dinos' event in Lasswade. The Dalkeith's Building Stones leaflet was launched at this well-attended event.

Tayside Geodiversity Group has restarted, and is currently undertaking site surveys in Perthshire. Members of both our geoconservation groups contributed to a successful Local Geodiversity Sites Training Day organised by the Scottish Geodiversity Forum at Dunkeld in April.

Scottish Geology Trust

Several Council members of the Edinburgh and Glasgow geological societies met early in 2019 to discuss how our societies could collaborate to develop a better model for promoting geology in Scotland, for raising money for specific projects, and to support the growing number of geoparks in Scotland. Members of our societies were later joined by representatives from several universities, SNH, and from industry in very productive follow-up meetings that led to a proposal to set up a Scottish Geology Trust. The principal focus of this Trust will be to promote and celebrate Scotland's geology and its value to society, and to encourage its conservation. As a new Scottish charity, the Trust can also attract funds to promote knowledge in schools, encourage more children to take up learning and careers in the geosciences, and to develop new projects to protect and develop sites in the geoparks, and at Siccar Point and Spireslack, for example. The Trust is expected to be formally launched during 2020.

Acknowledgements

The affairs of the Society are organised predominantly by voluntary effort, assisted by one paid part-time independent contractor (Angus Miller). Members of Council jointly contribute hundreds of hours of time to the running of the Society, much of this in quiet ways behind the scenes. Council is supported by many other people, including lecturers, excursion leaders and organisers.

Grants and Awards

The EGS Grant Scheme supports projects which further the aims of the Society, namely to encourage public interest in geology and to advance geological knowledge. Council considered grant applications on two occasions during the year and the following were approved, to a total of £2,950. The following two tables record awards (total £1,450) made to external (non-EGS) recipients and an EGS-affiliated recipient respectively

Callum Strong (University of Edinburgh)	£800	Contribution to cosmogenic radio-nuclide analysis for his research into the geological evolution of the Nile basin
Lara Reid	£500	Contribution to publishing costs for compilation of a book of prose and poetry (Conversations in Stone) inspired by Hugh Miller
James Westland (Scottish Geodiversity Forum)	£150	Contribution to James' attendance at workshop at the 2019 Scottish Geopoetics conference held in Biggar

Lothian and Borders GeoConservation Group	£1,500	Support for six pamphlets/poster co-funded with various organisations
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A £1,000 external grant was awarded to Derek Leung (University of Edinburgh) as a contribution to high-resolution microscopic images of samples of curling stones, but this sum was not withdrawn from EGS accounts in the current session. Another £500 external grant was awarded to Tom Gernon (University of Southampton) towards the installation of interpretative panels on the geology of Elie Ness and St Monans, east Fife, but this sum was also not withdrawn from EGS accounts in the current session.

Zac French (Tobermory High School, Mull) and Charlie MacKay (Belmont Academy, Ayr) were the 2018 winners of the EGS Science Prize, awarded annually for top marks achieved in the Scottish Environmental Science Higher examination - each recipient received an award of £200.

Financial Review

The Society produced a surplus in 2018-19 of £4,990. This surplus was aided by a number of factors:

- Lower than anticipated expenditure on excursions and on grants, events and initiatives.
- Unlike in recent years, no fees were payable for use of evening lecture facilities at the Grant Institute, University of Edinburgh.

The surplus was further enhanced by gains in the value of the Society's investments, so that total Reserves increased from £133,394 to £139,822.

The Council's policy is that it should maintain a minimum level of Unrestricted Reserves of £50,000 (in previous years £35,000) to guard against financial risks. The current level of Unrestricted Reserves comfortably exceeds that at £98,586. Indeed Council has determined that it can readily continue to fund the Promotion Coordinator costs from its Reserves for the time being. Other initiatives may be similarly funded, although the Council's overall Strategy requires it to keep the level of its Reserves under regular review.

Within the total funds of £139,822 are two Restricted Funds, the Clough and Mykura Funds, which are described in note 6 to the accounts. These Funds make up the remaining £41,236 of the Reserves, having increased by £926 during the year.

The Council is guided by its Strategic Plans for EGS 2015-19 and 2019-23, and by an annual budgeting process under which it allocates and controls expenditure. Its investments are managed by Rathbones, who recently acquired our previous managers Speirs and Jeffrey Ltd, and the Council have taken advice from Anderson Strathern LLP in the preparation of these accounts.

**Approved by the Council of the Edinburgh Geological Society
and signed on its behalf by:**

Robert Gatliff, President

18 March 2020

**Statement of Financial Activities including Receipts and Payment
Account for the year ended 30th September 2019**

	Note	Unrestricted £ 2019	Restricted £ 2019	Total £ 2019	Total £ 2018
<u>Receipts</u>					
Voluntary Income					
Members' subscriptions		9,807	0	9,807	10,188
Gift aid		2,890	0	2,890	2,622
Donations		1,988	0	1,988	350
Investment Income		2,420	1,119	3,539	3,191
Income from Charitable Activities					
Excursions	3	4,696	0	4,696	13,599
Grants and Awards*		0	0	0	0
Fundraising trading					
Sales of Publications		3,882	0	3,882	3,875
Total Incoming Resources		25,683	1,119	26,802	33,825
<u>Payments</u>					
Investment management costs		360	0	360	564
Storage		1,188	0	1,188	1,188
Fundraising trading:					
Cost of sales		978	0	978	3,520
Charitable activities:					
Lectures		532	0	532	1,512
Newsletters		1,596	0	1,596	2,312
Edinburgh Geologist		1,930	0	1,930	1,985
Excursions	3	5,413	0	5,413	13,325
Events/Initiatives (net)		1,496	0	1,496	43
Grants and Awards*		1,850	650	2,500	2,445
Charitable donations		0	0	0	0
Promotions		2,952	0	2,952	4,038
Administration		1,506	0	1,506	1,233
Governance		1,371	0	1,371	2,592
Total Resources Expended		21,172	650	21,822	34,757

Continued overleaf

Net incoming/(outgoing) resources before investment sales and (purchases)	4,511	469	4,980	(932)
Proceeds from sale of investments	10	0	10	1,568
Purchase of investments	0	0	0	(2,156)
	10	0	10	(588)
Surplus/(deficit) for year	4,521	469	4,990	(1,520)

*The 2018 Grants and Awards figures have been reduced by £1,250, which was that year's internal EGS award to the Lothian and Borders Geo-Conservation Group

Statement of Balances as at 30th September 2019

	2019 £	2018 £
Cash Funds		
Cash and bank balances at start of year	23,486	25,006
(Deficit)/surplus shown on receipts & payments account	4,990	(1,520)
Adjustments required to restate to receipts & payments	0	
Cash and bank balances at end of year	28,476	23,486
Stock		
Stock of publications	2,457	1,906
Other stock	425	567
	2,882	2,473
Investments - Analysis of Movements of Investments		
Market value at beginning of year	104,411	
Add: additions to Investments at cost	14,954	
Less: disposals at market value	(14,954)	
Add: net gain on revaluation	1,438	
	105,849	

The notes on pages 17-18 form part of these accounts.

Approved by Council and signed on its behalf by

C Ranken, Treasurer 18 March 2020

Notes forming part of the Financial Statements

1) Accounting Policies

- (a) The accounts have been prepared on a receipts and payments basis.
- (b) The size of the Society is such that the trustees moved the preparation of the accounts from an accruals basis to a receipts and payments basis, as reflected in the 183rd Session Annual Report and Proceedings, as this was felt to be more appropriate. This was to reduce cost and make the preparation of the accounts much simpler.

2) Geoconservation Groups

Lothian and Borders GeoConservation and Tayside Geodiversity groups are constituted as committees of the Society, but have their own office-bearers and bank accounts. Their financial results are included in these accounts.

3) Excursions

Particulars of the Society's excursions etc are as follows:-

	2018/19		2017/18	
	Contributions £	Cost £	Contributions £	Cost £
Day Excursions	846	1,361	1,301	2,186
Weekend Excursions	0	0	280	280
Long Excursions*	3,610	3,875	11,809	10,723
Fellows' Night	240	177	211	136
TOTAL	4,696	5,413	13,601	13,325

*Unlike in recent years, travel and accommodation costs for the Long Week excursion were paid by participants directly to Barrhead Travel rather than through the EGS accounts.

4) Publications

Stocks of publications have been valued at cost.

5) Trustee Remuneration and related party transactions

No members of Council received any remuneration during the year. Costs incurred in entertaining lecturers after the public lectures (£304.27) were refunded to 2 members of Council, and other costs totalling £449.50 incurred on behalf of the Society were refunded to 3 members of Council.

No trustee had any personal interest in any contract or transaction entered into by the charity during the year. One member of the Society entered into a contract for services to provide promotion activity to the Society.

6. Funds

Endowment Funds

The purpose of the Clough Memorial Fund is to provide a medal annually to a geologist whose original work has materially increased the knowledge of the geology of Scotland and the North of England, and to award grants for fieldwork. One grant was made from the Clough Fund during the year. No grants were made from an additional Mykura Fund, which supports fieldwork in Scotland.

Accounting

The gross income from investments and bank interest received during the year, together with net gains (losses) on disposal or revaluation of investments, has been apportioned to the various Endowment funds in the ratio of their opening balances.

The assets of the Society have been apportioned to the various Endowment funds in the ratio of their closing balances.

	Unrestricted Funds £	Endowment Funds		Total £
		Clough £	Mykura £	
Investment income	2,420	560	559	3,539
Grants and Awards	0	0	0	0
Other Incoming resources	23,263	0	0	23,263
Total incoming resources	25,683	560	559	26,802
Grants and awards	1,850	650	0	2,500
Sponsored projects	0	0	0	0
Other outgoing resources	19,322	0	0	19,322
Total outgoing resources	21,172	650	0	21,822
Gains on Investments	991	228	229	1,448
Net movement in funds	5,502	138	788	6,428
Funds brought forward	93,084	20,870	19,440	133,394
Funds carried forward	98,586	21,008	20,228	139,822
Represented by:				
Investments	72,395	16,751	16,703	105,849
Current assets	26,191	4,257	3,525	33,973
	98,586	21,008	20,228	139,822

**Independent Examiner's Report to the Trustees of the
Edinburgh Geological Society**

For the year to 30th September 2019

I report on the Accounts of the Charity for the year ended 30th September 2019 which are set out on pages 14 to 18.

Respective responsibilities of trustees and examiner

The charity's trustees are responsible for the preparation of the accounts in accordance with the terms of the Charities and Trustee Investment (Scotland) Act 2005 and the Charities Accounts (Scotland) Regulations 2006 (as amended). The charity's trustees consider that the audit requirement of Regulation 10(1)(a) to (c) of the 2006 Accounts Regulations does not apply. It is my responsibility to examine the accounts as required under section 44(1)(c) of the Act and to state whether particular matters have come to my attention.

Basis of independent examiner's statement

In the course of my examination, no matter has come to my attention:

- 1) which gives me reasonable cause to believe that, in any material respect, the requirements:
 - to keep accounting records in accordance with Section 44(1)(a) of the 2005 Act and Regulation 8 of the 2006 Accounts Regulations
 - and to prepare accounts which accord with the accounting records and comply with Regulation 8 of the 2006 Accounts Regulationshave not been met, or
- 2) to which, in my opinion, attention should be drawn in order to draw a proper understanding of the accounts to be reached.

Jessie W Craig MA, CA
33 Braehead Avenue
Edinburgh
EH4 6QN

2020

Obituaries

During the year we recorded with the greatest regret the deaths of Mr Gordon Brown, Dr Kenneth John Chew, Mr Alun Davies, Prof Gordon Leslie Herries Davies, Mr Alan Foster, Prof Aubrey Manning, Rev David Redwood and Mr Nicol Watt.

Gordon Brown was an EGS member between 2008-2019.

Kenneth John Chew was an EGS member from 2005 until he passed away on 25 July 2019. After obtaining his BSc and PhD degrees at the University of Aberdeen, Kenneth embarked on a career with Petroconsultants and IHS Energy in Dublin and then Geneva. Kenneth retired to Perthshire in 2006.

Alun Davies - Doug Fettes writes: Alan was born in Trimsarran a small town near Llanelli in South Wales, and although he had an interesting and varied career he remained true to his Welsh roots. He graduated in Geology at Cardiff University and in 1959 he joined the Geological Survey in Edinburgh (he joined EGS in 1957). Here he was involved in a range of projects mainly on the Carboniferous succession of Lowland Scotland. These projects included work on the Spilmersford borehole in East Lothian and on the Sanquhar, Muirkirk and Douglas coalfields. The work involved standard mapping, but it was at a time when coal mining and the legacy effects of mining were of prime importance and, in consequence, Alun was involved in a variety of applied projects that required collaboration with the Coal Authority on the assessment and nature of reserves. He also took part in other commercial projects including initial studies of the Hunterston area and its suitability as a site for a nuclear power station, the work involving general aspects of the engineering geology including the possible effects of major fault systems. This familiarity with applied geology led to Alun's involvement with the Scottish Development Department in the production of thematic maps outlining the suitability of areas for development. An important aspect of this work involved coalfields as well as other mineral resources, for example sand and gravel. These projects occurred at a time when BGS was developing digital maps and data bases. This greatly increased BGS ability to deal with commercial and similar enquiries, and Alun was appointed head of the new enquiry unit, a post he held until his retirement in 1994.

Alongside his geological career he was a passionate and very able sportsman. He was introduced to squash at university, and when he came to Edinburgh he joined the Sports Club, played in their teams and served on their board of directors. Another great love was cricket, and he became a player and supporter of Carlton Cricket club. He was captain of the 1st XI

and went on to become President and Life President of the club. He also served on the SCU including as President. Alun was also a keen fisherman, a skilled craftsman and enjoyed his cars. Above all, he excelled at carving and working with wood, producing many violins and other stringed instruments.

Alun was a very accomplished and widely talented person and combined this with a very friendly and helpful nature - he was a genuine and memorable character.

Professor Gordon Leslie Herries Davies was an EGS member from 1984 until he passed away on 22 February 2019. His obituary on the Geographical Society of Ireland website records that he was one of the most significant figures ‘doing Geography’ in Ireland during the second half of the last century. His teaching career at Trinity College Dublin spanned more than 5 decades, with his teaching remit and principal research interests featuring physical geography (particularly geomorphology), and the history and philosophy of geography. He authored several major books and numerous scientific papers and articles, and he edited several major volumes. Gordon served the Geographical Society of Ireland as president from 1962 to 1964.

Alan Foster was an EGS member between 1987-2019.

Professor Aubrey Manning OBE, FRSE, zoologist, broadcaster and Honorary Fellow of the Edinburgh Geological Society died on 20th October 2018, aged 88; he had been a member of EGS since 2005. Stuart Monro writes: Aubrey was a zoologist of considerable distinction, specialising in animal behaviour, but he was more than that; he was a true natural scientist engaging with all aspects of the way our world works. The hugely popular television series “Earth Story” was a milestone in the engagement of the public with modern Earth science. To get Aubrey to present this series was inspirational. He was the proxy for every viewer who wanted to ask a question but didn’t know quite what to ask. For him, as for the viewer, the story of the Earth, as revealed in the series, was a revelation and a different way altogether of looking at how the Earth works. “Earth Story” opened to the viewers the exciting story that we geologists take very much for granted; namely the emergence of that amazing paradigm Plate Tectonics! I recall him telling me about meeting some of the people who had contributed to the concept, to obtain interviews for the programme, not least Marie Tharp who, with Bruce Heezen, mapped out the Mid-Atlantic Ridge in the 1950s. He said that for a biologist “it was like talking with Darwin”!

Edinburgh Geological Society was proud to accord him Honorary Fellowship, not least because Bill Bryson, in his “A short history of nearly everything” referred to Aubrey as “the English geologist”. We in the Society acknowledged not only his contribution to Earth science but also to his adopted home in the City of Edinburgh. He joined the University of

Edinburgh as an assistant lecturer and held the Chair of Natural History at the University from 1973-1997, thereafter becoming Professor Emeritus. His main research and teaching interests were on animal behaviour, development and evolution, and he was the author of “An Introduction to Animal Behaviour”, which is now in its fifth edition.

As a teacher, he was inspirational, and generations of students whom Aubrey could never recall would remember him with boundless affection. Outside the University, his ability to excite and enthral put him in constant demand as a speaker. His legacy is that all he came in touch with left with a new understanding of the natural world and some of Aubrey’s concerns for its future.

Of late, there have been many obituaries for Aubrey documenting his many contributions as a zoologist, as a lover of nature, as a television presenter, as a teacher and here it is a privilege to document what he has done for Earth science. Aubrey will be fondly remembered by all whose lives he touched but especially by his wife, Joan and his three sons.

Rev David Redwood was an EGS member between 1999-2019.

Nicol Watt was an EGS member between 1993-2019.