



EDINBURGH GEOLOGICAL SOCIETY

Promoting public interest in geology and the advancement of geological knowledge

Autumn Newsletter 2023

As you may know, I became President at the last AGM despite having fractured my pelvis a few days previously, which is why I wasn't present in person! I had spent the previous 6 months following the society's workings, so I'm familiar with the challenges ahead.

One issue is the top heavy age profile of the society – my own grey hair blends in nicely. Yet our lectures have a possible audience of at least tens of undergraduate students. To attract some of these, we will hold 'pizza and pop' sessions before some lectures this year, from 6pm in the Grant Museum. All welcome.

At these sessions you can also discuss EGS business with Council members – how we work; our funds; the role of Council and EGS members. We are also considering a new AGM format, to give more time for members to contribute and to develop an attractive event that members actually want to attend.



EGS only functions because of volunteers. My day job of teaching geology at the University of Edinburgh includes running a Masters' course in Geo-Energy (subsurface energy, but not oil and gas). EGS tasks have to fit in my spare time. If you can help, please do enquire – we need you.

A second challenge is the future of the Scottish Journal of Geology, in an academic world now dominated by 'impact factors' and other metrics. If you don't know what these are, then breathe a sigh of relief. We have a new Editor (many thanks to Heather Stewart) after Colin Braithwaite's geological-length stewardship. The publishers will no longer produce a printed edition, so change is in the wind.

Here's looking forwards to a successful 190th session!

Mark Wilkinson, EGS President,
president@edinburghgeolsoc.org

Public Lecture by Tom Sharpe: Mary Anning and her Sea-Dragons Friday 6 October, 6.30pm at Dynamic Earth



An 1830 reconstruction of the Lias of Dorset, featuring many of Mary Anning's discoveries.

Mary Anning was a pioneering fossil collector and dealer who lived and worked in the small town of Lyme Regis during the first half of the 19th century. It was an unusual occupation, especially for a woman. Despite her working class origins, but intellectually gifted, by her late 20s Mary Anning had gained international fame for her remarkable discoveries in the early Jurassic rocks of the Dorset coast. Amongst these were the first ichthyosaurs and plesiosaurs to be scientifically described. These strange 'sea-dragons', some first exhibited in Edinburgh,

captured the imaginations of both the public and the gentleman-geologists who dominated the new science and flocked to Lyme Regis to seek her out.

Her letters show that Mary Anning was more than a mere fossil seller and that she can be considered the first professional palaeontologist. However, as a woman she was excluded from the formal scientific discussions of her discoveries at the Geological Society of London. Today, she is better known than most of her male geological contemporaries.

Tom Sharpe is a geologist and historian of geology, and author of *The Fossil Woman A Life of Mary Anning* published in 2020. Following his talk, Tom will be joined by a panel of palaeontologists to answer questions and discuss Mary Anning's legacy and their personal journeys into palaeontology.

The lecture celebrates UNESCO International Geodiversity Day: a worldwide celebration, bringing people together on 6th October each year, to promote all the many aspects of geodiversity.

Tickets £5, free for EGS members and young people. Book at www.edinburghgeolsoc.org/public-lecture/



The Clough Medal and Clough Memorial Award

The Society recognises excellence in geology by making two prestigious awards, the Clough Medal (awarded annually) and the Clough Memorial Award (awarded every two years).

The Clough Medal for 2023-24 will be awarded to Prof Anthony (Tony) R Prave in recognition of his wide-ranging outstanding contribution to geology. Although Scottish-based for over 30 years, his work has a planet-wide remit, and as a geological polymath he has made major contributions in the fields of sedimentology, palaeontology, metamorphic, igneous and ore geology, as well as isotope chemistry. He has combined this with a heavy teaching load, inspiring thousands of students with his outstanding breadth and depth of knowledge of Scottish geology and his skills as a communicator. He has an impressive publication record, his papers having a total of nearly 6,000 citations. His contribution and achievements make him a worthy



recipient of the Clough Medal, in recognition of his wide-ranging research and innovation, inspirational teaching, and great dedication in advancing geological knowledge both within and furth of Scotland.

Nominations for the Clough Medal 2024-25 are invited by 31 March 2024.

The Clough Memorial Award for 2023-24 will be awarded to Dr John MacDonald, Senior Lecturer in the School of Geographical and Earth Sciences, University of Glasgow. His PhD study was on the geochronology of the Lewisian Gneiss, resulting in a number of important papers which have played a key part in the recent reinterpretation of the Archaean gneisses. He is currently working on the environmental significance of anthropogenic geomaterials, in particular through a NERC-funded £10M project on environmental remediation in Glasgow which includes the potential for using industrial waste deposits as a carbon sink. He is also an enthusiastic teacher, both in the classroom and in the field.

Project and Fieldwork Grants

Project Grants support projects that encourage public interest in geology or advance geological knowledge. Grants have been awarded to:

- £500 to Emily Brown for a Scottish Geology Trust pilot project to promote geosites across Scotland.
- £850 to Dylan Jones to determine the concentration of caesium isotopes in soils along the Solway Coast.
- £995 to Zoe Lynn for a GeoBus International project to support activities in Namibia in 2023.
- £360 to Katie Strang for ten polished thin sections of Carboniferous coprolites in Fife.

The next application deadline for Project Grants is 31 October 2023. Applications may be from organisations or individuals, and requests of up to £1,000 will be considered.

Fieldwork Grants from the Clough and Mykura Funds support geological field work at home or abroad. In 2023, grants have been awarded to:

- £500 from the Mykura Fund to Ella Davis: Determining tectonic transport directions in the southern part of the Northern Highlands Terrain.
- £500 from the Clough Fund to Joanna Maria Kalita: mapping and sampling the major lithologies on Coll and Tiree to obtain geochronological data for the Lewisian Gneiss using U-Pb dating of zircons, and comparing the results with mainland dates.
- £300 from the Mykura Fund to Kang Xie: Palaeoclimatic and sea-level changes reconstruction using a unique metamorphic cave-grown speleothem on Iona.

The next application deadline for Fieldwork Grants is 31 March 2024.

Full details of all grants and awards are on our website at <https://www.edinburghgeolsoc.org/home/grants-and-awards/>.



Carboniferous coprolite (36mm in length) showing inclusions of fish remains including actinopterygian scales and teeth, and acanthodian spine fragments. From the Sandy Craig Formation, near Burntisland, Fife. *Photo: Katie Strang.*

**The Scottish
Geology Festival –
1 September to 8 October 2023
www.scottishgeologytrust.org/festival/**

It is Scottish Geology Festival time again, with an amazing range of events across the country, including guided walks, online talks, boat trips and geological exhibitions – there's something for everyone!

Lecture Programme 2023-24

Our varied programme of illustrated lectures runs from October to Easter, on Wednesday evenings. These meetings are open to the public, there is no charge, and visitors are most welcome.

The lectures take place in the Hutton Lecture Theatre of the Grant Institute, The King's Buildings, James Hutton Road, Edinburgh EH9 3FE. We intend to also continue to broadcast our lectures online via Zoom and also record them for later viewing on our YouTube channel.

Contact Angus Miller for details of how to access the lectures online: promotion@edinburghgeolsoc.org

For information about each lecture, including more detailed abstracts where available, visit <https://www.edinburghgeolsoc.org/lectures/>.

The new (5th) edition of The Geology of Scotland is due to be published later this year. This year's programme continues the thread from last session, with lectures delivered by key authors contributing to several chapters of the new book.

Graham Leslie, Lectures Secretary agle@bgs.ac.uk

2023

Friday 6 October, 6.30pm

Public Lecture by Tom Sharpe: Mary Anning and her Sea-Dragons – see page 1 for details

Wednesday 18 October, 7pm

Clough Memorial Award lecture: Dr John Macdonald, University of Glasgow

New Perspectives on Modern Geology: Anthropogenic Geomaterials

This lecture will be preceded by an informal 'pizza and pop' session, from 6pm in the Grant Museum. All welcome.

Wednesday 1 November, 7pm

Prof John Marshall, University of Southampton
Geology of Scotland, chapter 9: the Old Red Sandstone

Wednesday 15 November, 7pm

Uisdean Nicholson, Heriot Watt University
Into the Nadir: a new candidate impact crater at the Cretaceous-Paleogene boundary

Wednesday 29 November, 7pm

Prof Rory Mortimore, University of Brighton (with Danny Long, Shell UK)
Cretaceous Scotland: Inner Hebrides, offshore basins, Atlantic rifting and marine transgression

Wednesday 14 December, 7pm

Fellows' Night

This meeting, close to the anniversary of the foundation of the Society, is a chance to meet other members informally, with refreshments served from 6.30pm, followed by a series of short talks given by members. If you would like to give a short talk on a subject of interest to members, please email Chris Lofthouse on fellowsnight@edinburghgeolsoc.org.

2024

Wednesday 17 January, 7pm

Prof Matthew Thirlwall, Royal Holloway
Geology of Scotland, chapter 8: Caledonian magmatism

Wednesday 31 January, 7pm

Adrian Shaw, University of Glasgow
How the Church of Scotland viewed the work of James Hutton

Wednesday 14 February, 7pm

MIS/EGS Joint lecture: Kieran Parker, Geological Survey of Northern Ireland
Platform for Atlantic Geohazard Risk Management (AGEO)

Wednesday 28 February, 7pm

Clough Medal lecture: Prof Tony Prave, University of St. Andrews
There is nothing left to learn about this scrap of NW Europe

Wednesday 6 March, 7pm

Prof Rick Law, Virginia Tech
Geology of Scotland, chapter 8: Scandian tectonics

Wednesday 13 March, 7pm

Stuart Harker
Eocambrian outcrops and hydrocarbons in Southern Oman

Wednesday 27 March, 7pm

Dr Helen Fallas, BGS & Dr Colin MacFadyen, NatureScot
Geology of Scotland, chapters 18 & 19: Environment, Geoheritage and Conservation



Members on an EGS Excursion examine an unusually well-exposed shale sequence from the Visean Alston Formation at Berwick. *Photo: David Graham.*

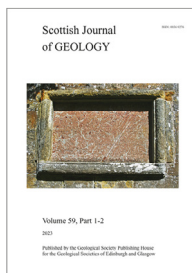
Lothian and Borders GeoConservation Volunteer Group will meet at 7pm on Wednesdays 27

September (in person), 25 October, 22 November, 24 January, 21 February and 20 March.

All welcome, contact Mike Browne or Angus Miller for meeting details.

Scottish Journal of Geology

EGS and the Geological Society of Glasgow have signed a new agreement with the Geological Society Publishing House, to continue the Scottish Journal of Geology. You can read more about this in the editorial of The Edinburgh Geologist. Print copies of the journal will no longer be distributed to all Ordinary Fellows; online access will continue as before, <https://www.edinburghgeolsoc.org/publications/lyell-collection/>. When you are logged in to the Lyell Collection, you can set up a Publication Alert from the Account section, and you will receive an email when a new paper is published.



We are considering options to print and distribute a full-colour edition of future issues, for any member who would like them, at a cost of £5-10 per issue. Volume 59 is due in November, and further information will be circulated by email.

Arthur's Seat Volcano Trail, Sunday 1 October – volunteers needed

This self-guided event in the Scottish Geology Festival needs volunteers, who will be stationed at locations around the park to chat to visitors about the geology and landscape with the aid of handouts and maps. Please contact Ruth McKeen at ruth.s.mckeen@gmail.com or 07850 408 099.

Excursion to the Garvellachs

A 3-4 day trip with Tony Spencer and David Webster is being planned for May 2024. This will be based at an outdoor centre on Lunga with daily trips to the Garvellachs. Numbers will be limited to 10 people and we expect to hold a ballot for places. Further information will be circulated by email.



'The Bubble', Eileach an Naoimh, The Garvellachs: a spectacular example of glaciotectonic structures within the Dalradian Supergroup.

Can you help organise the Excursion Programme and the Long Excursion?

Could you be our next Excursions Secretary? We are looking for someone who is organised and efficient, to help plan next year's programme. You don't need specific geological knowledge and you will be working with an experienced team!

The annual Long Excursion, a staple of EGS activities for decades, has been organised by Anne Burgess since 2008; Council is very grateful for all her efforts over the years and hope that someone will come forward to organise next year's planned excursion to the North West Highlands.

Membership Subscriptions

Our online membership database is hosted with WebCollect. If you pay by direct debit, you don't need to take any action – your subscription for next year will be taken automatically on 1 October and you will see it on your bank statement as "Gocardless Edinburghgeo". Please consider setting up a direct debit if you do not already do so – contact our membership secretary, Euan Mitchell.

Society contacts

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Edinburgh Geological Society

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edinburghgeolsoc.org

The Edinburgh Geological Society is a friendly and informal organisation with a wide range of members of varied backgrounds and interests, united in an interest in rocks and the science of the Earth. This newsletter is published in September and March, with details of our lectures and excursions programme.

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