THE GEOLOGICAL SOCIETY OF GLASGOW

Newsletter - November 2025

Lecture Programme

Venue - Kelvin Hall Lecture Theatre at 7pm.

Meet the speaker afterwards and have tea/coffee etc in the Activity Room, Kelvin Hall (Geonatter Room).

Parking is available at the adjoining Bunhouse Car Park (currently £3 for the evening).

Thursday 11th December 2025 (NOTE: The lecture will be preceded by the society's AGM).

Prof David Bond, University of Hull

"Mass extinctions: are we all doomed?"

It is likely that Planet Earth faces an impending extinction crisis if humans cannot curb their excesses and given that the fossil carbon pool (i.e. that in geological storage) contains 10,000 x the carbon in the entire biosphere, the end of our CO2 glut seems distant. Some say the modern extinction has already begun, because species are disappearing at an alarming rate as a result of various anthropogenic pressures. How can we, as the supposed agents of this environmental and ecological catastrophe, know what will happen? Predicting the future is difficult, but fortunately, the fossil record provides many clues from the past. Precedent for the modern lies in the five major mass extinctions of the Phanerozoic (the most recent of which famously wiped out the non-flying dinosaurs 66 million years ago). Life on Earth has faced countless more near misses. What causes these disasters? Is today really like the past? Is the sixth mass extinction inevitable? We will explore these questions, and inevitably fail to answer them, through a case study of the End Permian Mass Extinction (EPME). As many as 96% of species were wiped out on "the day the Earth nearly died". But why? And could it happen again?

David Bond works on mass extinctions. Over the past twenty years he has been lucky enough to travel to >30 countries to collect rocks and fossils that help him and his collaborators understand what drove some of the greatest biotic catastrophes of the past c. 444 million years. In the past few years he has been working on three crises that occurred between the Middle Permian (c. 262 Ma) and end Triassic (c. 201 Ma) - an interval of extremes of climate, extinction and evolution. His focus has been the Boreal Realm of northern high latitudes and he has spent a lot of time in the Canadian and Russian Arctic and Svalbard. In a bid to do fieldwork somewhere warmer he is a Co-Investigator on a large NERC-funded project gathering data on evolution, extinction and environmental change through the entire Devonian Period in northern Spain.

Prior to moving to Hull he worked at the Norwegian Polar Institute in Tromsø, and before that, down the M62 in Leeds. As well as collecting rocks from interesting places, like many a geologist he likes cricket and beer and has qualifications in both!

Further Reading (and In Our Time appearance)

Wignall, P. B., He, T., Bond, D. P. G., & Howard, A. S. (2025). The Triassic-Jurassic boundary beds of eastern and north-eastern England: facies, environments and carbon isotopes. *Proceedings of the Yorkshire Geological Society,* **65(3-4)**. https://doi.org/10.1144/pygs2024-005

Yin, L., Yang, M., Lu, J., Wu, X., Peng, X., Wang, W., Tang, M., Zhou, K., Zhang, P., Shao, L., Bond, D. P. G., & Hilton, J. (2025). Pliensbachian (Early Jurassic) deep-time peatland evolution in Northwest China driven by climate change. *International Journal of Coal Geology,* **310**(5 November 2025), 104871. https://doi.org/10.1016/j.coal.2025.104871

Yin, L., Yang, M., Lu, J., Ling, Z., Hu, X., Bian, X., Zhou, K., Zhang, P., Liu, L., Shao, L., Hilton, J., & Bond, D. P. G. (2025). Onset of large-scale terrestrial organic carbon burial driven by Early Devonian changes in vascular plants and environments. *Palaeogeography, palaeoclimatology, palaeoecology,* **674**, 113039. https://doi.org/10.1016/j.palaeo.2025.113039

In Our Time (BBC Sounds) *The Late Devonian Extinction*. https://www.bbc.co.uk/programmes/m000sz7x

Recordings of past lectures

David webster: the Early Evolution of the Dalradian Basin. https://youtu.be/K0AE0BaWxOY

Dr. Katie Strang: The Geology of Gilmore Hill and the Gilbert Scott building. https://youtu.be/WZrnQIucaYo

GSG YouTube channel https://www.youtube.com/channel/UCfNSIvgEbUfLWMsCeNiRm1w/

Future Lectures

Date	Speaker	Affiliation	Title / topic
8th January 2026	Iain Neill	University of Glasgow	From collision magmatism to a geothermal future in the Northern Highlands
12th February	Elsa Panciroli	NMS Edinburgh	**T.N. George Medallist lecture.** Discovering Mammals in the time of Dinosaurs
12th March	Keyron Hickman Lewis	Birkbeck, University of London	Astrobiology and the Torridonian
9th April	Brian Bell (Prov)	University of Glasgow	Sedimentary systems in the Paleocene lava fields of the Inner Hebrides
14th May	Members' Night		

AGM Notice

The Society Annual General Meeting will be held on Thursday 11th December, at 7pm in the Kelvin Hall Lecture Theatre, immediately preceding the December Lecture. The Agenda, Previous Minutes, Proposals for Council Members and the Proceedings Booklet (containing Reports and the Annual Accounts) are being sent to Members via email along with this newsletter. Printed copies of the Proceedings will be available at the AGM.

If you want a copy of the Proceedings Booklet posted to you (FoC), then please email the Hon. Secretary.

Social Event after the Lecture in the Geonatter Activity Room.

Residential Field Trip - Cromarty May 22-24 2026

Those of you who have expressed an interest to Lindsay will get an email shortly from her asking for confirmation and a link to webcollect for payment of a deposit.

New Members

We welcome the following new members:

Michaela Turanski	Edinburgh
Gavin Sinclair	Glasgow
Sheena Fuhrman	Ayrshire
Reinhardt Fuhrmann	Ayrshire
John Digney	Buchlyvie
Edana Sutherland	Glasgow
Gemma Duffy	Glasgow

Geonatter

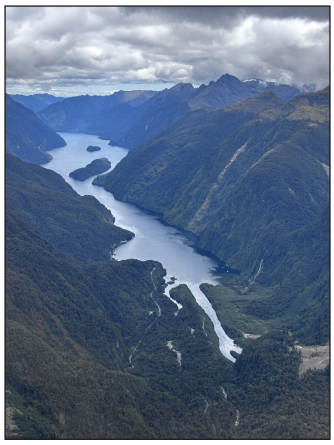
Usually the First Wednesdays of the month - however the next one is the **17th of December** as the room is not available on the 3rd. It's still at 1:30 in the Kelvin Hall - All welcome! Bring your rocks and fossils to be identified.

Geological Society of London - Public Lectures

15 December 6pm. **"The Garvellach Islands Scotland a rare record of Snowball Earth"** In Person and on Zoom - Register here

Down to Earth

December episode of Extra here



Geology Bites

A new episode to enjoy: see www.geologybites.com

Keith Klepeis describes how magma travels from the base of the crust to the upper crust forming conduits, feeder dykes, and mushroom-shaped intrusions along the way. Many of his discoveries come from a region that provides an exceptional window into the origin, evolution, and structure of plutons – the Southern Fiordland region of New Zealand's South Island

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Deep-Time Trail at Siccar Point

The Scottish Geology Trust are delighted to announce that the Deep time Trail has just received a significant grant from a local community fund. With just a few thousand £ more, they will reach their targets and ensure that they can build all aspects of the trail and realise their vision.

They have also got plans for educational outreach with local primary schools, and anything extra they raise above the target will be used for next phases of development at Siccar Point - promoting and integrating the trail into the wider region, and beginning plans to install steps down to the shore. https://www.crowdfunder.co.uk/p/siccar-point

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NW Highlands Geopark

Next Zoom Talk – Peter Gutteridge on Microbially-mediated carbonates in the Mesoproterozoic Stoer Group; earliest evidence of life in Britain?

December 9th at 7:30. More info here

Virtual Seminars in Precambrian Geology

Lots of good recordings of talks by experts on Precambrian Geology from around the world. The latest talk is by Frankie Dunn on the Ediacaran Biota

The radiation of animals across the Ediacaran-Cambrian transition is one of the most transformational events in Earth history, radically changing Earth's surface environments. However, while fossils from the Cambrian are readily recognized as belonging to extant groups, those from the late Ediacaran Period show distinctive forms with no counterparts among living species. Although these Ediacaran fossils are often held to represent the antecedents to modern animal groups, their strange anatomies have meant that, for the most part, they have been eschewed from the debate and their unique insight left unrealized. My work combines novel morphogenetic data and phylogenetic systematic studies to show that these unique fossils are animals to the exclusion of alternatives and likely occupy a critical position in the tree of animal life. This conclusion enables me to integrate Ediacaran macrofossils into debates concerning the ancestors of major animal lineages and the mode of early animal evolution. Link to YouTube channel here

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Recent Paper

Montgomery, A.W., Holdsworth, C.M., Martin-Roberts, E., Watt, I. and Gilfillan, S.M. 2025. In situ mineralisation of UK onshore igneous rocks offers significant CO2 storage potential. *Earth Science, Systems and Society,* **5(1)**, pp.esss2024-001.
