



# THE GEOLOGICAL SOCIETY OF GLASGOW

## Newsletter - June 2025

### Recordings of past lectures

St Andrews students' Greenland Expedition <https://youtu.be/giy1WE9L-Cw>

Stuart Haszeldine: Carbon Capture & Storage <https://youtu.be/oXiIQD7eHdk>

Heather Stewart: The Abyss Gazes Also Into You <https://youtu.be/-6b9bi-AehM>

Paige dePolo: Pantodonts from New Mexico <https://youtu.be/RWamAw6uo10>

Luisa Hendry: Promoting geology through social media <https://youtu.be/ksMcrrTyCg8>

Alex Dunhill: Ecology and Mass Extinctions <https://youtu.be/uR3zB0XpyQM>

David Webster: The Geology of Colonsay <https://youtu.be/CMCq0nMHG8s>

Student Grant Lectures: NW Highlands deformation and Tin Mineralisation <https://youtu.be/YEO-pAOd3j4>

### Members' Night:

Ian Veitch & Campbell Forrest: Climbing the Loch Laggan Pegmatite <https://youtu.be/UDk8oErDvE8>

Katie Strang: Women in Geology <https://youtu.be/-7dTfdTEhHA>

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

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### Day Trips Excursion Programme

Full details of day trips and booking are now published on the [website](#), and you can book and pay through webcollect.

Contact [excursions@gsocg.org](mailto:excursions@gsocg.org) if you have difficulties and to join the field trips whatsapp group.

#### **11 June – Glasgow Necropolis. *Leader: Margaret Greene***



Necropolis Hill is one of the highest points of Glasgow. It stands proud simply because it is the outcrop of an intrusion of more resistant dolerite rock into the surrounding weaker sandstone. This can be seen in the quarry at the southern side of the Necropolis. The present landscape has been extensively remodelled during the ice ages over the last 2 million years. Broad ice sheets have repeatedly moved out from the mountains to the Firth of Clyde, moving across the Glasgow area scouring the landscape and depositing sand and gravel from west to east. This gives Necropolis Hill its characteristic shape of a steep side due to the harder rock on the side facing the Cathedral, then tapering out to the east. This afternoon trip will explore the geology of some of the remarkable monuments in this cemetery. The architecture, sculpture, views and stories continue to amaze. <https://geologyglasgow.org.uk/event/necropolis-tour/>

#### **19 July – Burnmouth. *Leader: Katie Strang***

The rocks exposed along the foreshore at Burnmouth in the Scottish Borders are early Carboniferous in age and belong to the Ballagan Formation. They were deposited in a low-lying vegetated coastal wetland around 350 million years ago, when Scotland as we know it was a very different place! During this time we were situated at low latitudes close to the equator and experienced a hot and humid climate. The area was subject to vast droughts and flooding, sea levels fluctuated and sandy river channels meandered across the land. It was in this setting that we also saw the first tetrapods (four-limbed animals with backbones) making their way on to the land.



Originally these rocks were laid down on a relatively flat surface and they stayed this way until a period of significant tectonic activity and continental collision known as the Variscan orogeny, which happened between 380 and 280 million years ago. These intense tectonic forces caused the rocks at Burnmouth to be uplifted, tilted and faulted, eventually resulting in the striking near vertical orientation we will see on the shore today!

<https://geologyglasgow.org.uk/event/burnmouth/>

## **2 August – Girvan. Leaders: Neil Clark, Katie Strang and Gary Hoare**

A jaunt over to Girvan with our friends from the Edinburgh Geological Society to explore Mid-Ordovician to Early Silurian fore-arc sequences. We will examine stratigraphical sequences ranging from shallow to deep marine, viewing the cyclical and fault-controlled deposition investigated to guide the understanding of the palaeo-environment. We will also have a chance to look at interesting rocks and fossils on the foreshore.

<https://geologyglasgow.org.uk/event/girvan-joint-egs-trip/>

## **September**

Details to be confirmed. Events to be part of Scottish Geology Festival.

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## **Residential Excursion Programme**

### **4th-8th September 2025 – Glenelg, and Kintail: Leader: Simon Cuthbert.**

This four-day excursion visits part of the northwest Highlands opposite the Isle of Skye that is well known for its dramatic scenery and human stories, encompassing the dramatic fjord of Loch Duich and Lochalsh, Eilean Donan Castle, the hidden gem of Glenelg and Sandaig Bay. Exposed in these hills and shores, emerging from under the Wester Ross Supergroup (the “Moines”), is an enigmatic complex of ancient gneisses - the Glenelg-Attadale Inlier (GAI), the largest of the so-called “Lewisianoid” basement Inliers of the Northern Highlands Terrane. The rocks resemble the Lewisian Complex further north, but enclose a beautiful garnet-pyroxene rock-type - eclogite - that formed at extreme pressure when this continental crust was subducted during continental collisions. This is the only example in the British Isles of well-preserved eclogite and is unusually old for such rocks - early to mid-Proterozoic - and were formed long before they were caught up in the Caledonian orogeny and thrust westwards along the Moine Thrust system. This area is where some of the great figures of Scottish geology have worked and we can admire their insights and originality.

For further information please contact [excursions@gsocg.org](mailto:excursions@gsocg.org)

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## **Geonatter**

Next Geonatter event: 4 June @ 1:30 pm - 3:00 pm

Kelvin Hall 1445 Argyle Street.

A chance to look at rocks and fossils, chat informally to others, ask questions about geology and find out what's happening locally. Monthly event. Future dates: 2 July, 6 August

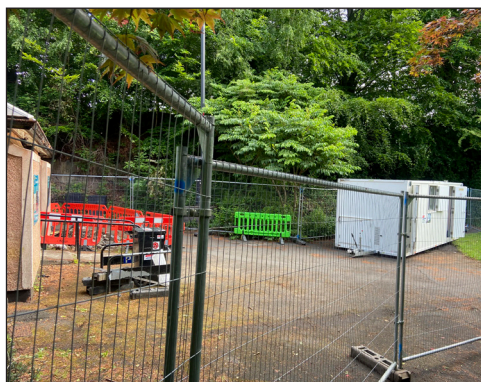
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## **Fossil Grove Renovation Programme**

The programme has finally started. Internal scaffolding in place, fossil trees now protected, electrical downtakings are in progress, and the site has been secured. Demolition of the old plant room and drainage work commenced.

See <https://fossilgroveglasgow.org/renovation-project-2024/>

Open afternoon planned 15th June (part of Glasgow Science Festival) 12-4pm



## **Recent Papers on Scottish Geology**

- Leather, D. and Brown, J.F., 2025. Gypsum pseudomorphs, subaqueous cracks, lake-bed morphology and palaeoclimate in the Middle Devonian lacustrine flagstones of Orkney, Scotland. *Scottish Journal of Geology*, **61(1)**, pp.sjg2024-001.
- Day, J.M., 2025. Cr-spinel seams formed by mush assimilation in the Great Eucrite, Ardnamurchan, Scotland. *Journal of the Geological Society*, pp.jgs2025-035.
- Gutteridge, P., 2025. Amicrobially-Mediated Carbonates in the Mesoproterozoic Stoer Group of NW Scotland; earliest evidence of life in Britain?. *Journal of the Geological Society*, pp.jgs2024-269.
- Feng, K., Bowyer, F., Curtis, A., Poulton, S.W., Pichevin, L. and Wood, R., 2025. Persistent dysoxia in very shallow seas across the late Cambrian SPICE event, Durness Group, UK. *Geology*.
- Kirkland, C.L., Erickson, T.M., Johnson, T.E., Prave, T., Strachan, R.A., Daggitt, M.L., Hartnady, M.I.H., Reddy, S.M., Taylor, R.J.M., Ribeiro, B.V. and Rankenburg, K., 2025. A one-billion-year-old Scottish meteorite impact. *Geology*.
- Law, R.D., Thigpen, J.R., Mako, C.A., Kylander-Clark, A., Caddick, M.J., Moore, L.R., Becker, C., Holdsworth, R.E., Strachan, R.A. and Leslie, A.G., 2025. The timing and significance of mid-crustal shearing and exhumation of amphibolite-facies rocks along the Great Glen Fault Zone, Scotland. *Journal of the Geological Society*, **182(4)**, pp.jgs2024-264.
- Pugsley, J.H., Hole, M.J., Jolley, D.W., Millett, J.M., Howell, J.A., Hartley, A., Quirie, A.K., Westland, J. and Famelli, N., 2025. Basaltic fissure eruptions of the Mull Lava Field, British Paleogene Igneous Province. *Journal of the Geological Society*, pp.jgs2024-239.
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## **Scottish Geology Trust**

SGT held its first Geosites ‘Geoblitz’ on Arran at the end of April. Roughly 20 volunteers, all with varied levels of geological knowledge, came to help. Each day the volunteers were divided into small teams and tasked with heading into the field to fully document an assigned Geosite. Once finished, the teams worked together to upload the collected data to the Geosites map. The endeavour was a huge success, with thirty new Geosites documented. The 2nd Geoblitz is already being planned for East Lothian on Sunday 28 September. Contact [angus@scottishgeologytrust.org](mailto:angus@scottishgeologytrust.org)

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## **Geological Society of London - Free Lectures**

The Geological Society hosts public lectures throughout the year to share knowledge with the geoscience community. These monthly lectures are open to everyone and free to attend.

Details on their website [here](#)

17 June: Forged by fire - How can volcanoes shape out landscapes, lore and lives

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## **Geology Bites**

Three recent episodes to enjoy: see [www.geologybites.com](http://www.geologybites.com)

### **Vic Baker on Megafloods**

Megafloods are cataclysmic floods that are qualitatively different from weather-related floods. In the podcast, Vic Baker explains our ideas as to what causes megafloods and describes the striking evidence for such floods in the Channeled Scablands of Washington State and in the Mediterranean.

### **Mike Hudec on Salt Tectonics**

Salt structures tens of kilometers in scale are common occurrences in the Earth’s crust. And because salt is extremely weak compared to most other rocks and minerals, it is the first to deform in the presence of stresses. This can have a dramatic effect on what happens to surrounding rocks, especially in compressive environments.

### **Folarin Kolawole on Rifting**

What happens when continents start to rift apart? In the podcast, Folarin Kolawole describes the various phases of rifting, from initial widespread normal faulting to the localization of stretching along a rift axis, followed by rapid extension and eventual breakup and formation of oceanic lithosphere.

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## **Down to Earth**

June episode of Extra [here](#)

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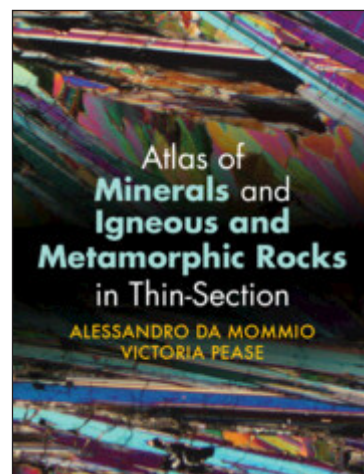


## **Book Section**

### **Atlas of Minerals and Igneous and Metamorphic Rocks in Thin-Section**

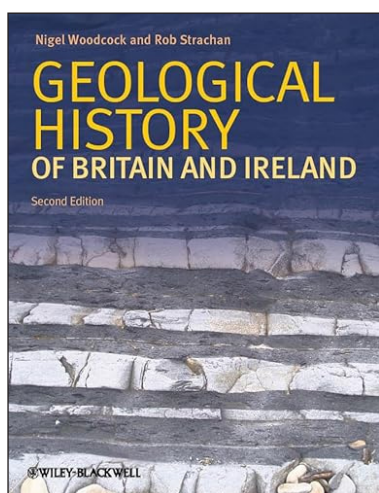
The Atlas of Minerals and Igneous and Metamorphic Rocks in Thin-Section provides the geology student and geoscientist with a stunning new color atlas of the main rock-forming minerals and igneous and metamorphic rocks in thin-section. It showcases minerals in various settings and degrees of alteration and preservation to allow users to best identify their own specimens in practice. Chapter 1 highlights the distinctive characteristics used to identify different minerals. Building on this base, following chapters describe rock textures and types, summarizing their petrogenesis within a plate tectonic framework. This book also includes insights into how additional information from petrographic thin-sections can be obtained using modern analytical methods to increase our understanding of geological processes. The Atlas is an indispensable reference textbook for all facilities that use a petrographic microscope, for professional geoscientists, and as an aid for any student studying minerals and rocks.

<https://www.cambridge.org/core/books/atlas-of-minerals-and-igneous-and-metamorphic-rocks-in-thinsection/ADFB0278B958262434B1C08C2D07CC4F>



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### **Geological History of Britain and Ireland**



Britain and Ireland have a remarkably varied geology for so small a fragment of continental crust, with a fine rock record back through three billion years of geological time. This history would have been interesting enough if it had been played out on relatively stable continental crust. However, Britain and Ireland have developed at a tectonic crossroads, on crust once traversed by subduction zones and volcanic arcs, continental rifts and mountain belts. The resulting complexity is instructive, fascinating and perplexing.

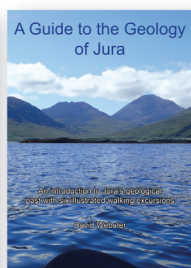
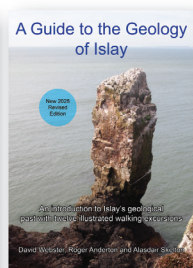
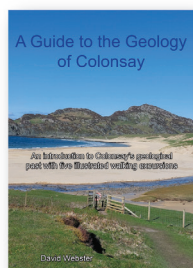
Geological History of Britain and Ireland tells the region's story at a level accessible to undergraduate geologists, as well as to postgraduates, professionals or informed amateurs. This second edition is fully revised and updated, reflecting our continually developing knowledge of the region's geology. Full coverage is again given to the rich Precambrian and Early Palaeozoic history, as well as to later events more relevant to hydrocarbon exploration. The book is an essential starting point for more detailed studies of the regional geology. Additional resources for this book can be found at:

<http://www.wiley.com/go/woodcock/geologicalhistory>

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### **Geological Guides to Islay, Jura and Colonsay**

All three books for £25! Now available from [www.islaygeology.org](http://www.islaygeology.org)



These guides describe varied excursions on Islay, Jura and Colonsay that tell the fascinating story of their geological past from 2 billion-year old gneiss to the Ice Age. The geology of each walk is described at an introductory level with maps and photographs and the book also contains an introduction to geology section.

For those with some geological background there is a section describing the geological framework in more detail with some key references for further reading. The walks range from leisurely rambles to more demanding longer excursions – most of which are readily adaptable with shorter easier options.

### **Geological Society of Glasgow**

<https://geologyglasgow.org.uk/>

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**Secretary:** David Webster [sec@gsocg.org](mailto:sec@gsocg.org)