

Newsletter - August 2025

Provisional Lecture Programme

Second Thursdays of the month. Venues TBC

Put these dates in your diaries and the full programme will be in the September newsletter.

9 October

13 November

11 December (AGM)

8 January 2026

12 February

12 March

9 April

14 May (Members' Night)

Deceased Member

I am sorry to have to pass on the sad news that Jim Martin died on the 10 August, from complications arising from sepsis that first developed in May. He died peacefully in Edinburgh's Western General Infirmary.

Jim was an active member of the society for many years, regularly attending indoor meetings and excursions along with his wife Lynne, and he served as the day excursions secretary from 2008 until 2011. Before retiring, Jim worked for IBM, and he used his professional computing expertise to oversee the specification and commissioning of the society's new website, which came into operation in January 2011. Jim and Lynne moved to Edinburgh in 2013 and they joined the Edinburgh Geological Society, but they also remained members of our society until recently.



Jim was an energetic, enthusiastic, knowledgable and generous person, who reached out to people and made many friends in the society. He will be greatly missed.

Lynne has indicated that the funeral will be a private family event.

Fossil Grove Renovation Programme

The repairs programme is underway; for latest news see https://fossilgroveglasgow.org/renovation-project-2024/





Recent Papers on Scottish Geology

Eisenhauer, G.B., 2025. A potential Middle Devonian example of fish *Mortichnia* from Achanarras Quarry, Caithness, Scotland. **Scottish Journal of Geology**, pp.sjg2025-004.

Scottish Geology Trust

Scottish Geology Festival 1 September to 12 October 2025

The Scottish Geology Festival will be running again in September and October 2025 with the theme: *Volcanoes in our Neighbourhood*. A programme will be issued shortly, but there's still space for more events. You can submit an event using this form: www.scottishgeologytrust.org/festival-submit-event/

Last year's Festival saw over 130 events across the country and online; from guided walks, online talks, beach pebble events, geological exhibitions and much more. We hope you enjoyed it as much as we did – if you missed any of our online talks, you can catch them over on our <u>YouTube</u> channel! A huge THANK YOU to all our partners, organisers and fabulous volunteers for making it such a success. The Festival is organised and run entirely by volunteers, and it's only possible thanks to the support of our members. If you enjoyed the events, please consider becoming a member of the Trust to help us continue making a difference and spreading the word about Scotland's incredible geology.

We'd love to hear your ideas for this year's Festival, please get in touch – festival@scottishgeologytrust.org

Geosites Database

The new version of the Geosites website is now live: https://geosites.scottishgeologytrust.org. There are changes to the map, which should be easier and faster to use, and now has a geolocation button which, if you're in the field and using a mobile device with GPS enabled, allows you to see exactly where you are in relation to the site boundary. When enabled, the geolocation button will track your current location on the map.

Some changes have also been made to how information is added and edited:

- Geosite and photograph information can be edited inline, without having to navigate between pages. This should make it easier to see all the information added to a site, without having to go back and forth between pages. The geoconservation issues section has also been added to the main page, to make them more prominent they appear in the left column, underneath the 'report a problem' button
- Multiple photographs can be uploaded at once using the drag-and-drop functionality.
- Project notes the notes in the yellow box which are only visible to logged-in users have changed. Multiple different notes may be added to each site now, instead of the single text box that we had before.
- The names of contributors appear alongside information and notes added to the site (but this is also only visible to those who are logged in)
- There's a button to automatically sort photographs chronologically, and a new drag-and-drop interface which should make sorting easier when there are many photographs for a site.
- Geosite collections have been removed because of a lack of use. Only two collections were added to the database.
- Finally, there are also some styling changes to the site mostly to make it look better and be easier to read when there's a lot of information thanks to all the contributions! Panoramic photographs also display in-full on the new site.

As with any new system, there may be bugs. If you come across anything that isn't working as it should, or have any other questions or suggestions, contact Daniel (daniel@scottishgeologytrust.org).

Earth Heritage

Download the issue here The current issue, no 63 includes articles on:

- Scotland's revised Geodiversity Charter
- A new Global Geopark for Arran
- Exploring geological sites and features through art projects and sketching
- Various IUCN initiatives
- The forthcoming Geologists' Association photographic competition and conference

BBC - In Our Time

Excellent episode on the Evolution of Lungs with Steve Brusatte.

https://www.bbc.co.uk/programmes/m002d8t2

Geology Bites

Two recent episodes to enjoy: see www.geologybites.com

Andreas Fichtner on the Frontiers of Seismic Imaging

The podcast explains how, despite the many fiendish obstacles that stand in our way, we are making steady improvements in our ability to image the Earth on both regional and global scales.

Renée Tamblyn on the Origin of Continents

When the Earth formed, it was covered by a hot magma ocean. So when and how did thick, silica-rich continental lithosphere form? Were the first, ancient continents similar to the present-day continents? And did the continents form in a burst of activity at a certain point, or was it a gradual build-up over Earth history?

Down to Earth

July episode of Extra <u>here</u>
August episode of Extra <u>here</u>

Geology at the Fringe

If you are around in Edinburgh this Festival period, there are some geo-themed Fringe events to check out!

Planetarium Lates at Dynamic Earth - Experience Dynamic Earth after hours with these adults-only showings, with immersive visuals and stunning storytelling in Edinburgh's only Planetarium, plus themed cocktails and mocktails at our Planetarium bar. Whiskey Under the Stars and Dark Side of the Moon

Hutton in Edinburgh - Join Jane Westhead and Angus Miller for a theatrical walking tour exploring the Edinburgh of the 1700s with Scotlands most famous Geoscientist James Hutton. Daily at 2pm until the 25th August, (NOT wed 20th) for more information and bookings, click here

Mairi Campbell: Living Stone (Pendulum Trilogy) - A distinctive blend of live music and song with visual art, exploring the stories and mysteries of a millstone from the isle of Lismore. 17:00 Sunday 10th, Thursday 14th and Sunday 17th, for more information and bookings, click here

From Primordial Soups to Primates in Suits: The Evolution of All Life on Earth - After 3.5 billion years, Dr David Jones has evolved — research biologist by day, stand-up comedian by night. He's set himself the gargantuan challenge of telling the complete story of life on Earth in one hour. Daily 17:00 - 18:00, for more information and tickets, click here

Poems and Rocks: John Hegley and Patrick Corbett - A creative writing workshop with music, drawing and rock handling. Come talk the chalk and chew the land's fat with John and Pat. For more information and bookings, click here.

**Lowrney to the Mean Argencing interesting performance adventure where kids become because taskling climate.

Journey to the Moon - An engaging interstice performance adventure where kids become heroes tackling climate change. 11th - 16th, 9:50am for more information and bookings, click <u>here</u>

Edinburgh Geological Society Field Excursion, Almeria, Spain, May 2025

Austen Brown reports:

On the 3rd May, four intrepid members of GSG (namely; Lindsay and Elizabeth Ferguson, Rhona Pate and Austen Brown) joined with the Edinburgh GS contingent at Alicante Airport for onward travel by hired car to Almeria - located in a lovely bay in the South East-most corner of Spain.

This area 'suffers' from a severe lack of rainfall and consequent lack of natural vegetation which makes for readily viewed structural exposures (unlike Scotland). It also gave rise to the 'Spaghetti Westerns' of yesteryear – sites of which are now tourist attractions.

This week long trip was organised by Emma Bedda and led by Prof Dorrik Stow to whom we are all most indebted for their knowledge and effort on our collective behalf.

Our site visits focussed mainly on quite recent geological processes in the coastal region (within approx. the last 10Ma) whereas revealing glimpses of the ancient bedrock of the Hercynian Massif (Iberian Continent) were noted in exposures during our 2.5 hr drive south to Almeria. As one might expect for 500 Ma rocks, they are highly metamorphosed and folded with black schists, quartzites and marbles with some volcanics thrown in for good measure!

Much of the geology of southern Spain and the Mediterranean in general is currently influenced by the northward migration and subduction of North Africa under Europe. However none of this movement results in a simple story with a mass of faults, earthquakes and sub- plates being formed as a consequence. One such, the Carboneras Fault results in



a 'zone', up to 2km wide of mangled and pulverised rock, some of which is dated as Triassic mixed with Neogene sediment and metamorphic basement material (see photo).

The river channel exposures are spectacular, - however equally devastating has been the damage caused by major earthquakes (last one in 1865) With an approximate intervals of 150 years, another may be expected soon?

Transtensional strike slip faults (part of the NE-SW trending Trans-Alboran shear zone) resulted in very deep, steep sided basins being formed, whilst African collisional uplift of the surrounding mountains and a historically much wetter climate resulted in sediment accumulation within these marine basins (turbidites, marls with slumps) – which now continue to be uplifted and exposed along with the

local Cordillera (=mountains). One spectacular horizon has an approx. 50m wide exposure of black schist debrite as half a mountainside has crashed into the Tabernas Basin.

The Messinian Salinity Crisis, as the Mediterranean partially dried around 6 Ma ago, resulted in the crystallisation of vast deposits of Gypsum in the Sorbas Basin. We were fortunate to join a guided tour of water-eroded caves in which the quite massive crystals flashed and shone in the light of our head torches. Spain apparently produces around 30% of the world's gypsum output and so is mined extensively despite the area now being a Natural Park.

The extreme SE of the province (S of the Carboneras Fault) is flanked by a series of now extinct volcanoes (ages of 16-7 Ma but one as young as 2 Ma). These have generally been submarine eruptions and do not exhibit the explosiveness which one might have anticipated (though there is some evidence of this). The magma generally has been of andesitic and dacitic composition. These volcanoes do not appear to have been large, perhaps only just emerging above the marine surface, before being eroded and subsequently colonised by coral reefs giving rise to the modern limestone capping – now at about 1- 200m above current sea level!

In addition to the above, we were able to spend an afternoon exploring the area's former Rodalquilar Gold Mine. Started as a Pb-Zn-Ag mine in the early 1800s, gold in the quartz veins was discovered and there have been various phases of exploitation, resulting latterly in a cyanide/carbon heap leach operation. In 100 years of mining, the output was around 10 tonnes of gold!

Our last half day resulted in a trip to another volcanic caldera – The El Joyazo Garnet Volcano – again with a cap reef structure around the rim. It appears that this small volcano had endured a minor explosive eruption resulting in a caldera (with a later small 'peak' in the centre), but not removing all of the surrounding coral reef. Small garnet crystals abound in the stream bed and in the rock debris around the side walls. This garnet discovery brought 'El Joy' to one lady member of our party who collected vociferously!

Then back to Almeria and we had a final evening Italian style dinner with all concerned and a toast to Dorrik and Emma for their efforts in enduring our questions and company for a week!

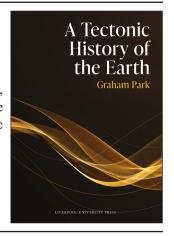
New book announcement from Liverpool University Press.

A Tectonic History of the Earth GRAHAM PARK

Tectonic movements in the Earth's crust, such as the assembly and break-up of continents, are related to the mantle-wide system of convection currents, where upward flows promote break-up and downward flows accompany subduction, collision and orogeny. Major tectonic episodes are linked to environmental changes such as ice ages and mass extinctions.

Hardback | 9781780461144 | £39.99

332 pages, 200 × 260 mm



Geological Society of Glasgow

https://geologyglasgow.org.uk/

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