

Newsletter

Sussex Mineral & Lapidary Society

Issue 11 - June 2025



Talisker Bay, Skye, Photo Credit C Foley

From the Editor

Welcome to the latest edition of the SMLS Newsletter. Thank you to all this month's contributors, I hope you enjoy the selection. Summer is here, please send in your photos of the minerals and fossils that you have found or recently acquired, our readers would love to see them.

Samantha



Inside this issue

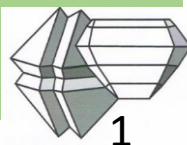
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From the Chair



Dear Members,

As we approach the AGM in July it has been a busy time for the Committee. Priority was to get nominations for a new Chair and Vice Chair, which I am very happy to say, was successful. Without this, SMLS could easily have ceased to be, and that would have been a very sad way to end 55+ years. We can talk more about this in July but I have to say a big thank you to the Committee for their hard work particularly during the last 3 months, and in particular to Nick who focussed us all on the task in hand. As you know Nick will be standing down from Vice Chair and also leaving the Committee this year. His contribution to SMLS over the last 15 years has been so important to our ongoing success as a society. I will also be stepping down from the Chair but staying on the Committee and I look forward to working alongside our new team.

A big thank you to Catherine for organising this years trip to Skye. All went smoothly and the weather was perfect. Long walks across dry meadows with orchids and other wild flowers, stunning scenery, no midges, what could be better! This year Pam joined me for the first time, a glorious introduction to Skye, but maybe unlikely to be repeated given the unpredictable weather.

We have the annual summer gathering hosted by Nick and Louise in August. Please come along, enjoy the food, the company and chat about minerals and look at Nicks splendid collection. It is always a lovely event and great to meet everybody in person.

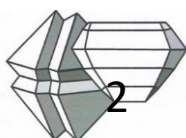
Please also support the AGM in July, either in person or on zoom, details have been sent out and a reminder will follow. Don't forget our AGM is a 'Show and Tell Session', do take part. and there will be light refreshments with strawberries and cream.

Enjoy the hot weather.

Colin



Torrin Quarry, Skye - photo credit, C Foley



Events

25th-29th June – Saint Marie Aux [Mine](#)

4th July – SMLS AGM Zoom link [here](#)

19th-20th July - North Pennines Mineral Expo

20th July – Oxford Mineral Show

26th-27th July – Kempton Park Rock n Gem [Show](#)

9th August – SMLS Summer Gathering



OXFORD MINERAL & FOSSIL SHOW
Gems * Crystals * Fossils * Minerals *
Ancient artefacts * Books
EXETER HALL, OXFORD RD,
KIDLINGTON OX5 1AB

16 March 2025
11 May 2025
20 July 2025
23 Nov 2025

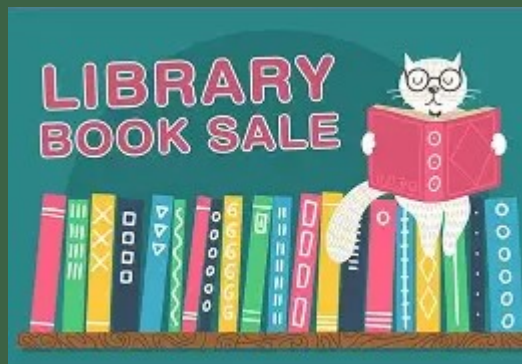
Sundays 10.00 - 4.00pm
* Free Entrance & parking * Refreshments
Further information: www.oxfordshows.co.uk
facebook.com/oxfordmineralfossilshow
UK Mineral & Fossil Events Co. proudly hosts the Oxford Shows

Something to share with others?

We love getting contributions from our members so if you read something of interest or even see a fantastic picture please send a link to the Editor @ smlsnews72@gmail.com

Roy Starkey would like to rehome some of his books.....

You can find the list of what is available [here](#)

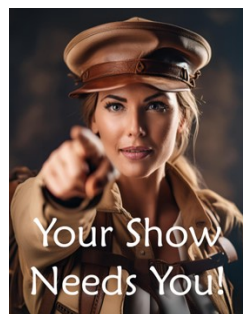


In case you missed club talks

DropBox link for Rob's Indian Carnelian talk [here](#)

Dropbox link for Phils talk on Charles Rashleigh [here](#)

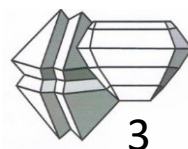
Dropbox link for Spirifer minerals collecting in the Congo [here](#)



We need volunteers to help out at our show on Saturday 15th November. If you are willing to lend a hand for a few hours please let any one of the Committee members know.

If you are able to distribute show flyers for us please let me know how many and I will get them to you (smlsnews72@gmail.com).

There is now a dedicated show guide on the website at [smls.online](#).





Stephen Poropat with fossil named Judy the sauropod (see below. Photo credit Smithsonian Magazine/MSN.

Fossils

Dinosaurs could hold key to cancer [discoveries](#)

Europe's most complete stegosaurian skull unearthed in Teruel, [Spain](#)

Birds nested in Arctic alongside [dinosaurs](#)

What a dinosaur ate 100 million years ago—
Preserved in a fossilized time [capsule](#)

Dinosaur fossils found in 1970s are missing
link in evolution of [T rex](#)

Ancient fossils reveal how life rebounded after
mass extinctions of [dinosaurs](#)

Fossil discovery suggests sauropods didn't
chew their [food](#)

'Mary Anning': Swiss Animation Unearths the
Childhood Backstory of a Legendary Fossil
Pioneer [Feature](#)

A 90-million-year-old Pterosaur Fossil With
3.5-meter Wings Found In [Japan](#)



Pterosaur – photo credit AMNH/D. Finnin | The Daily Galaxy -- Great Discoveries Channel

Minerals & Rocks

Museum scientists unlock recipe for Kryptonite-like mineral which could power a greener future for [Europe](#) (image below)

All about [Yooperlites](#)

Why seismic waves spontaneously race inside the [Earth](#)

The environmental impact of mineral [mining](#) (BBC sounds)

Microcline: from mining by-product to space building [block?](#)

Ancient Mars may have had a carbon [cycle](#)

New mineral Janmuite from [China](#)

Three new mineral species from New [Mexico](#)

Outback Crystal Hunters – Season Two, aquamarine, fluorite, Darwin Glass and rare Ocean Kyanite. Watch on Discovery Channel.



Darwin Glass from Tasmania – photo credit Tasmanian Geographic.



Jadarite (the new Kryptonite) - Photo Credit NHM

Gems & Lapidary

How Cartier Became One of the Most Iconic Names in [Jewelry](#)

Montana Sapphires: Treasures of the American [West](#)

The Sri Lankan Corundum [Conundrum](#)

The 24-Year-Old Gem-Cutter Making Her Mark on Lapidary [Design](#)

Ahead of Her Time: The Jewelry of Suzanne [Belperron](#)

6,620ct. Emerald Drives Grizzly to \$24.8M Auction [Total](#)

393ct. Sapphire and Marie Antoinette-Related Pink Diamond Top [Christie's NY](#)



Cartier Tutti Frutti
Bracelet in the V&A
Photo credit V&A

Quote of the month

“Why has not anyone seen that fossils alone gave birth to a theory about the formation of the earth, that without them, no one would have ever dreamed that there were successive epochs in the formation of the globe.”



Georges [Cuvier](#)

Use Ctrl + Click on the underlined text to link straight to the articles.

Online shopping deal of the month

Rare kyanite ore specimen for £10.68, they do own up to it being lab grown in the small print. I didn't know kyanite could be lab grown – can it?



Ring of the month



A fancy-vivid-pink diamond ring stole the show at the recent Bonhams jewelry sale in Hong Kong, where it brought in HKD 4.4 million (\$567,724).

Chuckle Corner



The Giga Pearl

As the June birthstone is pearl we take a look at the amazing Giga Pearl shown on the front cover of this newsletter.

Among the pantheon of natural curiosities, the Giga Pearl stands alone in both scale and scientific significance. Weighing an extraordinary 27.65 kilograms (61 pounds), this specimen is currently recognised as the largest certified natural pearl in the world. Unlike the iridescent, gem-quality pearls familiar to the jewellery trade, the Giga Pearl belongs to a markedly different category: it is a non-nacreous concretion formed within the giant clam *Tridacna gigas*.



Atypical Genesis: Concretion versus Nacre

Most pearls encountered in commerce are nacreous, consisting of concentric layers of aragonite platelets secreted in response to an irritant lodged within the soft tissues of molluscs such as *Pinctada maxima* or *Pinctada margaritifera*. These structures display a high degree of symmetry and lustre, and their genesis is relatively well understood.

By contrast, the Giga Pearl represents a phenomenon more akin to geological concretion than to conventional pearl formation. It formed not in free suspension but as a massive, sessile growth along the inner shell wall of *T. gigas*, accumulating over an extended period—potentially spanning several decades or even centuries. The result is a biomineralised mass primarily composed of calcite and aragonite, layered in a radiating structure rather than the orderly nacreous layering seen in typical pearls. The absence of nacre excludes the Giga Pearl from classification as a gem-quality pearl, yet it elevates it to an object of exceptional palaeobiological and mineralogical interest.

Biomineralisation at Scale

The Giga Pearl represents a unique case study in the process of molluscan biomineralisation under stable, unperturbed environmental conditions. Its uninterrupted growth trajectory suggests an absence of harvesting pressure and environmental stress, permitting sustained calcification over time. As with coral skeletons and speleothems, such formations may serve as reservoirs of palaeoenvironmental data, retaining stable isotope ratios that could yield insight into historical ocean chemistry. Moreover, its exceptional size prompts questions regarding the metabolic and genetic factors that facilitate such large-scale mineral deposition in *T. gigas*. There is scope for further investigation into the regulatory pathways controlling calcium carbonate polymorph selection, growth rates, and shell matrix protein interactions in non-nacreous pearl formation.

It has its own website [here](#)

Provenance and Recognition

Long kept as a family heirloom, the Giga Pearl only recently underwent gemmological certification. The Gemological Institute of America (GIA) confirmed its authenticity and composition, noting its record-breaking size and unique morphology. While other famous non-nacreous pearls—such as the Pearl of Lao Tzu and the Pearl of Puerto—have previously attracted attention, none match the Giga Pearl in mass or documented mineral composition.

Convergence of Disciplines

For the mineralogical and scientific community, the Giga Pearl occupies an interdisciplinary space: a biological artefact with geological characteristics, a collector's trophy with academic value. Its existence underscores the continuum between the organic and inorganic, and serves as a compelling case for expanding research into molluscan biomineralisation beyond the constraints of commercial pearl production.

As an object of natural history, the Giga Pearl reminds us that the most profound scientific narratives often lie not in perfection but in exception—where biology and geology coalesce to produce something truly singular.



The Giga Pearl with its owner - Photo credit Pollocks Jewellers

Learn about pearl farming [here](#)



The SMLS group had a fantastic time in the Isle of Skye. Amazing sunny and warm weather continued the entire week so we were very happy.

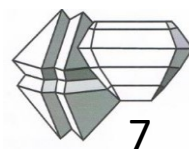
We started off with a group dinner at the old school in Dunvegan, followed by a day collecting at gorgeous Oisgill Bay which required some fancy parking manoeuvres as they were widening the road there.

Monday we went to the marble outcroppings near the Torrin quarry, unfortunately the quarry was flooded so it wasn't an option for us this trip, but was really nice to see the old derelict marble localities.

Tuesday and Thursday were spent independently doing our own thing, which consisted of a wildlife tour for some, more specific collecting for others (Waterstein Head or Camas Malag near Torrin) and general sightseeing for the rest.

Wednesday we walked the north side of Talisker bay with amazing views! Fish and chip dinner at Portree concluded Thursday evening.

Friday some of us had to leave early, so the rest of us did an exploratory hike along the cliff tops behind Talisker. Stunning views but the locality wasn't accessible unfortunately. One for another time maybe in a kayak or similar. We followed this with a nice group dinner at our accommodation.

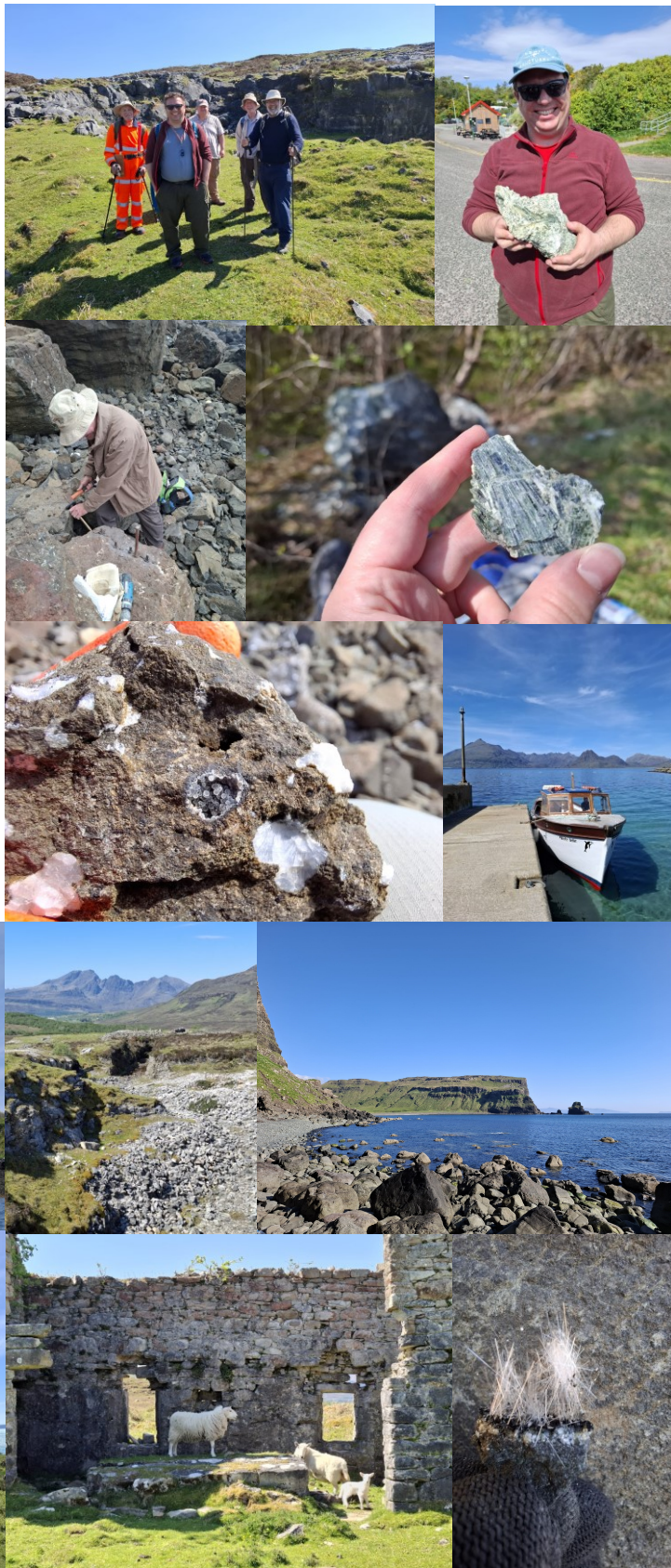


SMLS Field Trip to Skye May 2025 – Catherine Foley continued

Saturday we all headed off in our own directions, two of us went to Raasay and did the whiskey distillery and drove to the Brochal castle for the views. Different coloured sea on one side of the island to the other! Was very interesting to see the deep blue in comparison to the bright teal colour of effectively the same waters.

We found/collected all sorts of minerals and specimens, including: Orange Calcite, Chabazite, Stilbite, Gyrolite, Mesolite, Analcime, Heulandite, Aragonite?, Chalcedony, Epidote, Actinolite, Thomsonite, Apophyllite, Prehnite, Levyne, Erionite / Offretite.

In summary, a fantastic trip with nice company and great locations, looking forward to another trip at some point as always :)





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