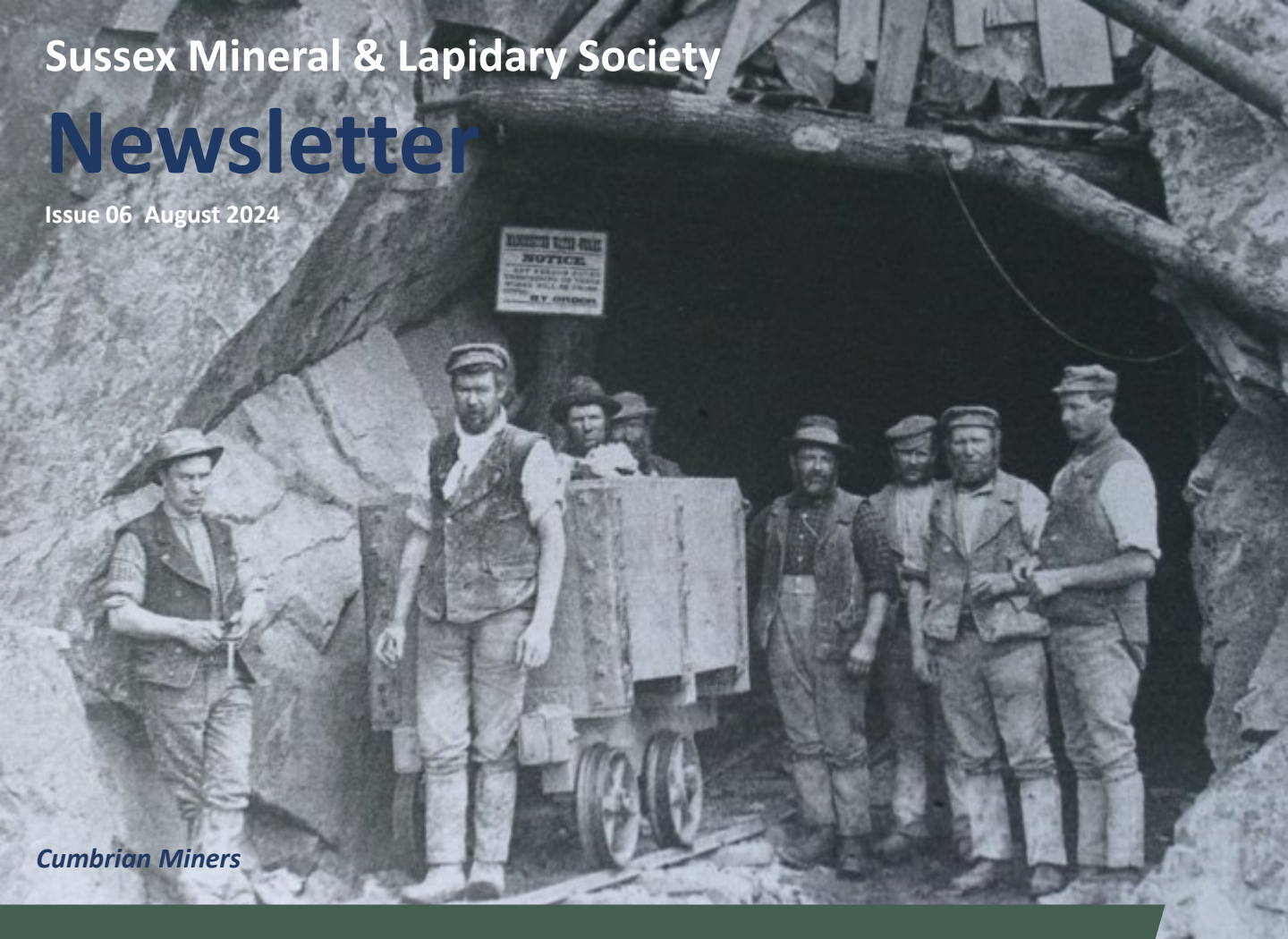


Newsletter

Issue 06 August 2024



Cumbrian Miners

From the Editor

Welcome to the sixth edition of the SMLS Newsletter. Thank you to all this months contributors, I hope you enjoy the selection. The SMLS website ([smls.online](https://www.smls.online)) has had a refresh – you no longer need to login to access content. If this causes anyone problems please let me know.

Samantha

smlsnews72@gmail.com



Inside this issue

Pg2 – From the Chair

Pg3 – Events, a roundup of what's on over the next couple of months

Pg4-5 – News, a selection of articles covering, minerals, fossils, gemstones and more

Pg6-17 - Articles, topical selection for your interest

Pg18 – Sales



From the Chair



Dear Members,

The July AGM was a good time to reflect back on the SMLS year and to thank the committee, and many other members who have contributed to SMLS activities. It was also a good time to enjoy strawberries and cream for those members able to come along in person, and not forgetting the really enjoyable talk from Steve on South Wales. Visiting South Wales used to be an annual event for SMLS, and it was good to look back at the various sites we have visited. It was also a reminder of the challenges we face getting access to collecting sites, they used to be easily accessible 20 years ago.

The existing committee all volunteered to contribute to another year, so in reality it is business as usual. The next challenge, apart from Nick organising the annual barbecue, is the 2025 program. We have a first draft of possible speakers, but it would be great to hear from any members who know of a possible speaker, or would like to volunteer a talk. Typically we like a 50:50 mix of internal and external speakers.

The Sussex Mineral Show is now well advanced in terms of planning, and after the summer break we will be following up with members who have volunteered to help on the day. If you would like to support the show with a few hours of your time, please let me know. John Pearce is also looking for some additional contributions for the tombola prizes, so please dig through your garage for some specimens that need rehousing.

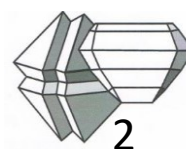
I wish you all an enjoyable summer break and we can also catch up on news at the August barbecue.

Thanks again for all your support over the year.

Colin



Chesil Beach
Dorset, UK



Events

10th August – SMLS Summer Gathering

6th September – Club Meeting “Minerals of Scordale” – Peter Briscoe Zoom link [here](#)

7th September – Hampshire Mineral & Fossil Show link [here](#)

9th-12th September – Field Trip N.Ireland

13-15th September – BMS Symposium

4th October – Club Meeting “Lavriion Minerals” Phil Taylor

5th–6th October – [Nature Unearthed](#), New Mineral Show (Ardingly Show Ground)

13th-14th October – [Bakewell Rock Exchange](#), Lady Manners School, Bakewell

In case you missed it

You can access the June recording of John White’s talk on lapidary [here](#).

You can access the July recording of Steve Plants talk on Welsh Minerals [here](#).

Hampshire Mineral & Fossil Show

Saturday 7th September 2024
Oasis Academy, Lordshill, Southampton
(SO16 8FA) 10 am to 4 pm

MINERALS, FOSSILS, PREPARATION EQUIPMENT, GEMS, JEWELLERY
& BOOKS. Over 50 tables of SALES & DISPLAYS inc DINOSAURS!

Admission £1
(Free to Junior Rookwatch members & accompanied children under 14)



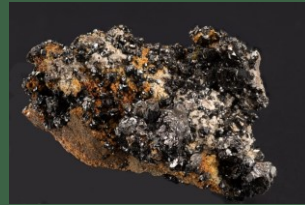
Refreshments available
Show organised by Southampton Mineral & Fossil Society
For further information, visit our website www.sotonminfos.org.uk or email
contact@sotonminfos.org.uk

Next Club Meeting – Friday 6th September

Minerals of Scordale, by Peter Briscoe



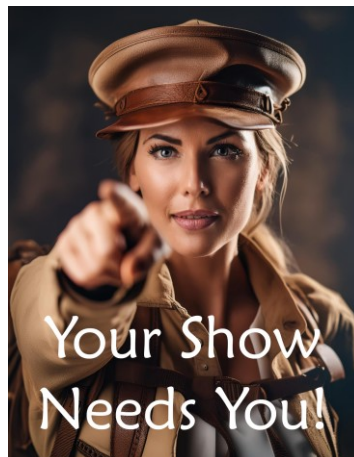
Fluorite, Siderite,
Galena & Sphalerite
Rampgill mine,
Nenthead, Cumbria,
England



Sphalerite
Carrs mine,
Nenthead, Cumbria,
England



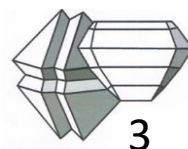
[Click here
to shop](#)



We need volunteers to help out at our show on Saturday 16th 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.





Amazing trilobite find – photo credit Earth

Fossils

Fossils show huge salamanderlike predator with sharp fangs existed before the [dinosaurs](#)

NHM - Most pristine trilobite fossils ever found shake up scientific [understanding](#)

Dinosaur Fossils Unlikely Source Of Ancient Griffin [Myths](#)

Revolutionising Fossil Excavation With Cutting-Edge RFID [Technology](#)

The hidden gem beach perfect for a fossil [hunt](#)

Why are there marine fossils at the top of Mt. [Everest?](#)

Over 400 Cretaceous dinosaur footprint fossils discovered in SW [China](#)

Sixty-million-year-old grape seeds reveal how the death of the dinosaurs may have paved the way for grapes to [spread](#)

Ancient polar sea reptile fossil is oldest ever found in Southern [Hemisphere](#)

Minerals & Rocks

Letter of apology to the petrified [forest](#)

Ancient crystals show insight into Earth's [history](#)

Unearthing the Paris Mineral [Museum](#)

What are [thundereggs](#)?

Amazing fake [tourmalines](#)

Primalite or [Clinochlore?](#)

Fake gold and [rhodochrosite](#)

Fine Art Minerals Viewing at the 2024 Nanjing Show - [Part 2](#)

Ian Bruce and a ~~weird~~ interesting [tourmaline](#)

Fine Art Minerals in Sainte [Marie](#)

Walkabout in Sainte [Marie](#)

A new periodic [table](#)



Photo credits
Paris Mineral
Museum

Thunderegg -
Photo credits
David Rix
Eibonvale/Wiki
Commons



Gems & Lapidary

Rio Tinto framing diamonds as works of [art](#)

Bling for men is no small [trend](#)

Christie's rakes in £11m at Paris [auction](#)

The jewels of [Bridgerton](#)

Do consumers care about diamond [origin?](#)

Two massive diamonds in a [week](#)

A Modern Jewellery Alchemist: [Adam Neeley](#)

British Museum gems on sale on [Ebay](#)

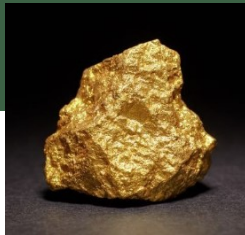
De Beers to Stop Producing Lab-Grown Diamonds for [Jewellery](#)

Alrosa to Spend \$274M to Develop New Gold [Deposit](#)

Polishing Mintabie [Opal](#)



Mahenge Garnet & Diamonds
Credit Adam Neeley



Gold nugget – credit Alrosa

Something to share?

If you have read or watched something interesting email it to The Editor at smlsnews72@gmail.com and it will be considered for future issues.

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

Videos & Podcasts

[Gems, Friends & Books](#), Benjamin Zucker

Objects of Vertu

Cartier Tutti Frutti Necklace Smashes Estimate at [Christie's](#)



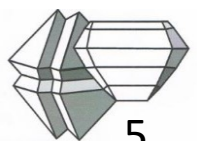
Tutti Frutti – photo credit Christies

A Preview of the Past: The Las Vegas Antique Jewellery & Watch [Show](#)



Photo credit Rapaport

Chuckle Corner



Spotlight on Congo Children Trust our charity partner for this years show

Congo Children Trust supports vulnerable street children in the Democratic Republic of Congo. Their flagship project, Kimbilio, works in the southern city of Lubumbashi supporting over 500 children each month, with the aim of reuniting them with their families. Kimbilio runs an outreach centre offering food, emotional support and healthcare; as well as four homes with holistic family settings for children under their care.



A lot of these kids scratch a living from artisanal mining. One of Kimbilio's aims is to end child labour.



How they work

Kimbilio Day centre - providing holistic care to children on the streets and try to get them back to their families where possible and appropriate.

Kimbilio Homes - they offer children the chance of stability and care provided by the Congolese families who live on site.

Kimbilio Primary School - they provide a high standard of education to former street children, as well as local children who otherwise would not be able to go to school.

Kimbilio Young Mums' Training School - they offer hair and beauty training to enable teenage mums to have new positive opportunities to support their young children and prevent them from having an upbringing on the streets.

Kimbilio Sewing Schools - they provide training to mothers of children who have been on the streets due to poverty, to learn new skills which will help them to feed their children again.



Volunteers will be selling these wonderful and colourful handmade bags to support the charity. They make fantastic Christmas presents.

Read [More Here](#)

St Marie Aux Mines Show - June 2024

I attended the recent St Marie Aux Mines Show together with my wife and Roy and Mary Starkey. It is the largest show in France and takes place every year at the end of June in the old mining village of St Marie Aux Mines (the clue is in the name).

The show takes over the whole village and every scrap of space in the centre of town is put to good use. Streets are lined with pavilion style tents which contain dealers selling their wares. High end dealers reside in the theatre, alpine specialists in the swimming pool, healing crystals in the school and so on. There is also a separate gem show.

With around 1,000 dealers, it takes several days to see the show properly and there really is something for everyone there – minerals and fossils, polished and carved items and equipment.

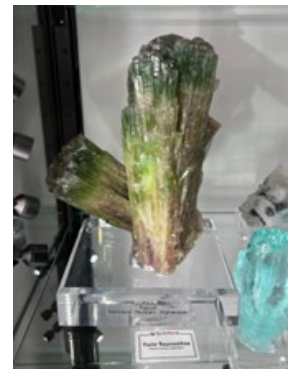
Roy and I spent a happy two days giving the show an absolute pounding and managed to each buy a few things. I have a penchant for garnets and was also able to find a few British pieces including an absolutely stunning large Frizington baryte; but it is surprising just how few British minerals there are in a show so large.

There were wonderful pieces on display with stunning price tags to match, but one must not lose sight that you are looking at mineral perfection. The trick is to work through the dealers outside the theatre and see if some nice pieces at less aggressive prices can be found.

There is a good social scene there too, whereby you bump into many old friends and can have a good lunch and a beer or glass of wine. The weather can be really hot; this year it was hot but not unbearable, but you needed to keep up the hydration and wear a hat and sunscreen!

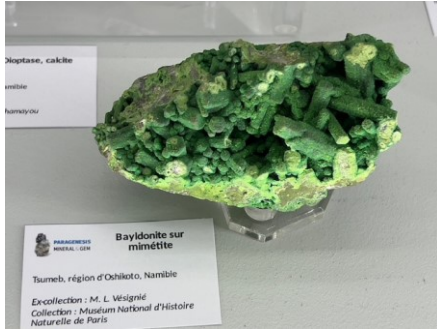
So until next year.....

Nick Hawes

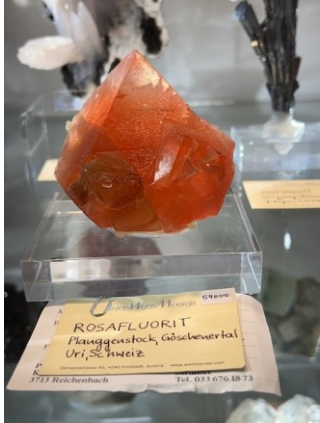




Minéral: ELÉONITE
Mina Weil - Zuzang
Dahou - CHINE



Neptase, calcite
minérale
Namaliyou
Baydonite sur
mimette
Tsarab, région d'Oshikoto, Namibie
Excollection : M. L. Vésigné
Collection : Muséum National d'Histoire
Naturelle de Paris



ROSAFLUORIT
Planggenstock, Gabsbeverthal
Uri, Schweiz



Tourmaline (rubellite) Morganite, Aïzet, Quartz
Cura + Pail, Kamer, Afghanistan
Calci
Ripponi, Cumberland, USA



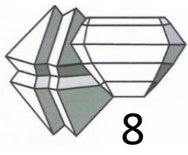
Fluorite
Buckden Mine | Innesophum
Wye | Dartmoor | England



DEMANTOID
Bribery Mountain, Sussex County,
West Annapolis, America, 1981



7000,-
Silver
Pohl's Erzberg, Erzberg
Erzberg | Steiermark | Germany



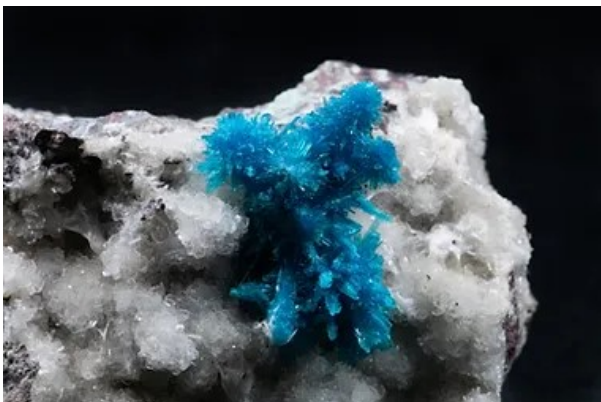
Discovering the Wonders of Cavansite and Pentagonite

Cavansite and pentagonite are two stunning and captivating minerals that often enchant collectors and crystal enthusiasts alike. Both known for their vibrant blue hues and intriguing crystal formations, these minerals share many similarities yet possess unique characteristics that set them apart. In this blog, we will look at cavansite and pentagonite, their histories, occurrences, uses in jewellery, metaphysical properties, and why they are cherished by collectors.



Cavansite was discovered in 1967 in Malheur County, Oregon, USA. Named after its chemical components: Calcium (Ca), Vanadium (V), and Silicate (Si).

Pentagonite was first identified in 1973 in the Wagholi Quarry in Pune, India. Named for its distinctive five-pointed star crystal formation.



Cavansite (top left):

- Colour:** Bright blue to blue-green.
- Crystal Form:** Cavansite typically forms in small, well-defined crystal clusters, often radiating from a common centre, creating beautiful rosette or spherical shapes.
- Chemical Composition:** $\text{Ca}(\text{VO})\text{Si}_4\text{O}_{10}\cdot 4(\text{H}_2\text{O})$ (Calcium vanadium silicate hydrate).

Pentagonite (below left):

- Colour:** Vivid blue, similar to cavansite but can sometimes appear slightly darker.
- Crystal Form:** Pentagonite forms in slender, elongated, and prismatic crystals, often forming star-like clusters or sprays.
- Chemical Composition:** $\text{Ca}(\text{VO})\text{Si}_4\text{O}_{10}\cdot 4(\text{H}_2\text{O})$ (Calcium vanadium silicate hydrate), identical to cavansite, but with a different crystal structure.

Differences Between Cavansite and Pentagonite - Despite their similarities in colour and chemical composition, cavansite and pentagonite can be distinguished by their crystal forms. Cavansite's radiating rosette clusters differ from the elongated, star-like formations of pentagonite. While this is a helpful distinction in my experience it can sometimes be tricky to tell them apart and I often see crystals described interchangeably. Nature does not always cook to the prescribed recipe and the piece below is a case in point! Most people would probably describe it as cavansite in the absence of obvious star like formations.



Discovering the Wonders of Cavansite and Pentagonite – continued

Commonly Associated Minerals: Both cavansite and pentagonite are often found with other minerals. They can both be found with any of these other minerals so we cannot use these associations to help us identify pieces that are perhaps not clearly one or the other crystal shape.

Stilbite: Stilbite is a common zeolite mineral often found in association with both cavansite and pentagonite. Stilbite typically forms in sheaf-like aggregates or radiating clusters and has a pearly lustre with colours ranging from white to pink or yellow

Heulandite: Heulandite, another zeolite, frequently occurs with these blue minerals. It appears in tabular crystals or massive forms with colours that can include white, pink, red, orange, and green.

Apophyllite: Apophyllite crystals are often found alongside cavansite and pentagonite. Apophyllite is usually colourless or white, forming transparent to translucent pyramidal or cubic crystals.

Calcite: Calcite, a common carbonate mineral, is also associated with cavansite and pentagonite. Calcite can appear in a variety of forms and colours, often forming scalenohedral or rhombohedral crystals.

Quartz: Quartz crystals may be present in the same geodes or cavities as cavansite and pentagonite. Quartz is typically clear or white, forming hexagonal prisms.



Localities and Reasons for Specific Occurrence

Both cavansite and pentagonite are predominantly found in the Wagholi Quarry, Poona (Pune) region of Maharashtra, India. The unique geological conditions in this area, characterized by volcanic basalt rock formations, provide the perfect environment for these minerals to form.

Other Occurrences:

- Minor deposits of cavansite have also been found in the USA and New Zealand.
- Pentagonite remains almost exclusively associated with the Indian deposits.

Current Mining Status

As of the latest reports, mining activity at the Wagholi Quarry has significantly reduced. This reduction is due to various factors including regulatory issues, environmental concerns, and the exhaustion of accessible high-quality deposits. Local authorities have imposed stricter regulations on quarrying activities to mitigate environmental impact, which has also contributed to the decline in mining operations.

Availability of Specimens:

High-quality specimens of cavansite and pentagonite are becoming increasingly rare. Many of the easily accessible deposits have been exhausted, leading to a decrease in the availability of new material on the market. Collectors and dealers primarily rely on existing stocks and previously mined specimens, which are often sold at a premium due to their rarity.

Alternative Sources:

While minor occurrences of cavansite have been reported in places like the USA and New Zealand, these deposits are not as significant or productive as those in India. Consequently, the bulk of the world's supply continues to come from the Wagholi Quarry.

Discovering the Wonders of Cavansite and Pentagonite – continued

Suitability for Jewellery

While cavansite and pentagonite are visually stunning, their use in jewellery is limited due to their relative softness and fragility (Mohs hardness of 3 to 4). They are more suitable for decorative pieces and collector's items rather than everyday wear. I have seen cavansite jewellery advertised for sale, whilst it looks stunning and is certainly unusual in jewellery I would advise caution on account of the very soft nature of the crystals, it will not be very durable.

Conclusion

Cavansite and pentagonite are remarkable minerals that captivate with their vibrant hues and intriguing crystal structures. Understanding their differences, histories, and properties enhances appreciation for these beautiful gems. Whether valued for their aesthetic appeal, scientific interest, or metaphysical properties, cavansite and pentagonite remain cherished treasures in any mineral collection.



Mineral Identification Competition (5)

How good are your mineral identification skills? Take part for a chance to win a specimen, points will be accumulated over the year. Identity = 2 points, Country = 1 point, specific locality = 1 point. Email answers to smlsnews72@gmail.com

Specimen 04 answers were – Duftite from Tsumeb



1st place – Rob Tripp

2nd place – Robert Turner

There is still time to catch them up though!

Specimen 05



Field Trip – Fife June 24 – by Nick Hawes

John Taylor, our trusty guide for the week, lives in the little village of Pitlessie and his local pub was the rendezvous point for us to meet up and discuss the coming trip. Planning always goes better with a pint and an excellent meal!

Sunday 9 June – we visited Orrock Quarry where we signed in and were given a briefing by the Assistant Manager before heading into the quarry which is mining basalt for road metal, processed via a large tarmac plant on site. We were also introduced to Katie Strang, the Curator of Mineralogy and Petrology at the Hunterian Museum, who is hoping to do a research project on the site. As we progressed into the quarry and up a level or two we could see quite amazing formations of columnar jointing in both horizontal and vertical formations. Who needs Fingal's Cave?!

The quarry is famous for calcite and quartz mineralisation, with some nice amethyst being produced from time to time. We spread out and were able to find good examples of amethyst, quartz and calcite in vugs within the lava. Our visit lasted only a couple of hours and we felt that if we had been able to stay longer, we could have found a lot more material, such was the productivity of the site. Definitely a site worth a return visit at some point. Thanks to John for arranging the trip and for Breedon for allowing us access.

In the afternoon we went to the old disused Goat Quarry to search for pyrite cubes which form in the shale layers between Carboniferous Limestone. It was a huge elongate quarry that was starting to get reclaimed by nature, so the wild flowers were beautiful on a nice sunny day. John directed us to the collecting site and we all had a good scrabble around, but failed to find much apart from a few traces of pyrite and other sulphide mineralisation. One of the highlights though was the presence of some very rare lichen which thrives on the sulphide content of the shale rock.



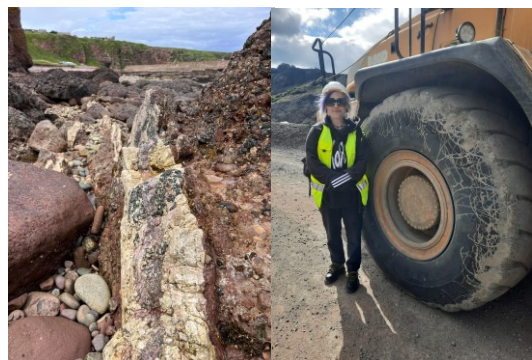
Field Trip – Fife June 24 - continued

Monday 10 June – Agate Day! We started at Balmerino beach, then moved on to Tayport beach and finally ended up at a small inland quarry at Rathilet Farm. Searching for beach agates is difficult as the sites have been well picked over and they hide among myriads of other rocks and quartz pebbles. Anyhow perseverance paid off and we all found at least one specimen at each site. The quarry was unique in that the agates in the basalt had been baked by a large dyke intruding next to the site. We all did well at this site, finding several agates which were often red in colour with some nice banding. John warned us that they are best prepped by grinding rather than cutting as they are so fragile due to the heating.

Tuesday 11 June – A visit to the headquarters of the Scottish Lapidary Club in Edinburgh. The club rents a building in which it houses a large workshop filled with all manner of lapidary and jewelry making equipment, together with a range of displays of Scottish and other minerals, and a lending library of mineral and jewelry related books. We were made most welcome by club members and were allowed to look around and admire some wonderful mineral specimens. One of their members tried to cut one of my agates from Rathilet, but due to its fragility it broke apart (I should have listened to John!!). We could purchase some cut agates and pick up give aways which was most generous of our hosts.

We were all amazed at this fabulous facility and wondered just how much it would cost to do something similar at SMLS? (anyone got a couple of £million?)

After lunch we headed to the stores of the National Museums Collections Centre where we were met by the mineralogical curators Dr Rachel Walcott and Emily Brown. They introduced us to the site and took us to see the analytical labs before taking us into the mineral store room to reveal the treasures held within. Our time was brief but we were able to see a range of Scottish classics, including material from Leadhills, meteorites, Alva silver mine and the famous sapphires from the Isle of Lewis among many other things. Thanks go to Rachel and Emily for making us so welcome.



Field Trip – Fife June 24 - continued

Wednesday 12 June – we covered two sites – firstly Lunan Bay to search for agates. A wonderful sunny day in a most beautiful location. The beach has a base layer of rocks and pebbles which can get covered by sand. The trick is to get a scouring tide that washes the sand off and exposes the underlying material that contains agates, jaspers and other interesting pebbles. Fortunately there were some exposures available to us and we all found some interesting pieces. Again, however, diligent searching was required and the pickings were scarce.

In the afternoon we went to Auchmithie beach and harbour and searched for rocks washed out of the Devonian conglomerates there which form large cliffs. A magnificent piece of geology, let alone the interesting boulders and cobbles. We all collected many examples of material for cutting and polishing at a later date. There is also an interesting baryte vein there containing some rare iron and aluminium minerals.

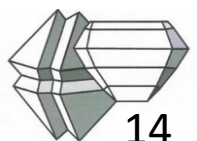
Thursday 13 June – we visited Grange Quarry at Burnt Island in the morning. This old quarry is now thoroughly wooded over and John took us to an area of old dumps which were mostly comprised of Carboniferous shale. We dug into this, extracting the larger lumps which we split in search of fossils. The site is famous for producing the seed cones of various Carboniferous *Lepidodendron* type trees and we all found some representative samples as well as pieces of fish coprolites.

In the afternoon we searched Burnt Island Beach for more Carboniferous fossils and pieces of vein agate.

Friday 14 June – we collected at West and East Wemyss Beaches. The morning was spent at East Wemyss looking again for Carboniferous fossils in the shales which were washing onto the beach from a large dump. The afternoon saw us searching for more Carboniferous fossils and we were fortunate to find some large blocks of shale that had fallen out of the cliffs and which were packed with fossil fern leaves. These beaches also produced examples of stromatolites, septarian nodules which show great vein structure when cut and anthracite and quartz intergrowths which make Picture Stone like specimens when cut and polished.

John was a fabulous guide for our week together and had planned our visit to perfection including arranging for fine weather for all but the Friday, which was tremendous. At each site he opened the doors of his trusty van and showed us the material available from each site, with trays full of give aways for us to choose from to supplement anything we might find at each location for ourselves. This was fabulously generous and our thanks go to John for such an interesting and varied trip which all of us really enjoyed, not least the final night's dinner back in John's local pub again.

As thanks for organising the trip, we presented John with a sum of money which he asked to be donated to the Scottish Geology Trust, for which he dedicates six weeks of his time each year, presenting material to the public as part of the Scottish Geology Festival.



Dioptase: A Gem of Vivid Green Beauty

Dioptase is a stunning emerald-green copper cyclosilicate mineral with the chemical formula $\text{CuSiO}_3 \cdot \text{H}_2\text{O}$. It forms beautiful, vibrant green crystals that are often transparent to translucent and exhibit a vitreous to adamantine lustre. Dioptase crystallizes in the trigonal system and is known for its well-formed, prismatic crystals. Large crystals are rare, clusters of small crystals are more commonly found. Dioptase is also known to be pyroelectric meaning that it can become electrically polarised and generate a temporary voltage. Tourmaline also has this property - pyroelectric crystals often attract dust as a result.

Dioptase is typically found in the oxidation zones of copper deposits. Major deposits have been discovered in various parts of the world, including Kazakhstan, Namibia, the Democratic Republic of Congo, and the United States (Arizona and California).



History and Cultural References

Dioptase was categorised first by JC De Lamétherie in 1793 as a 'primitive version of emerald'. Russian mineralogists mistook it for emerald due to its intense green colour. Whilst photographing pieces for this blog I found an emerald hiding in the dioptase department, it was only on closer inspection that the imposter revealed itself!

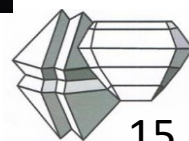
It also went by the names of achrite, emeraudine, copper emerald or kirghisite. Three main things enabled mineralogists to differentiate dioptase - its lower hardness, its higher specific gravity and the fact that its green colour was due to copper. It was only then that it was recognised as a new mineral.

The name "dioptase" is derived from the Greek words "dia," meaning "through," and "optos," meaning "visible," referring to the mineral's transparency.

Due to the intensity of its colour, dioptase was also used as a pigment in painting. The use of dioptase as a green pigment can be traced back to Neolithic times, including the famous group of ceramic figures of 'Ain Ghazal' dating from the 9th century BC, in today's Jordan. Three of these thirty-two ritual statues, half-size human figures modelled in white plaster, had their eyes formed with a cowrie shell, a bitumen pupil, highlighted with a vivid green dioptase pigment.

Despite its beauty, dioptase has never been widely used in ancient jewellery, likely due to its relative rarity and lower hardness. Being 5 on the Mohs scale of hardness means that dioptase is softer than quartz and will not be durable enough for use in jewellery. You might just be able to mount it in a brooch or pendant that has occasional use by a careful owner.

I have seen a very small number of faceted dioptase crystals but they are very rare and I am still searching for a good one for my gem collection. Dioptase is also brittle (like emeralds) so extra care is needed.



Dioptase: A Gem of Vivid Green Beauty

Dioptase vs. Diopside: Understanding the Differences

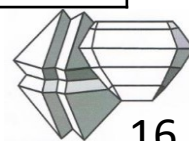
Sometimes these two distinct crystals are confused, most likely because of the similar names and because diopside is green and diopside is often green, although diopside comes in other colours as well (black, brown, yellow and blue). You can see from the table below that they have similar properties, the easiest way to tell them apart is by colour, diopside is definitely a rich emerald green, diopside is much more of a limey grass green. You are also very unlikely to see diopside in jewellery, diopside is used in jewellery and is sometimes referred to as Russian diopside or chrome diopside.

Conclusion

Dioptase, with its vivid emerald-green colour and striking crystal formations, is a gem that captivates both the eye and the soul. Discovered in the late 18th century and often mistaken for emerald, diopside has carved out its niche in the world of minerals and gemstones. Though relatively soft for extensive jewellery use, its beauty makes it a prized piece for collectors and occasional wear.



	Dioptase	Diopside	Emerald
Chemical Composition	$\text{CuSiO}_3 \cdot \text{H}_2\text{O}$	$\text{CaMgSi}_2\text{O}_6$	$(\text{Be}_3\text{Al}_2(\text{SiO}_3)_6)$
Colour	Vivid emerald green	Typically green, but can also be black, brown, yellow, or blue.	Green
Mohs Hardness	5	5.5 to 6.5	7.8-8
Transparency	Transparent to translucent	Usually transparent to translucent	Transparent to translucent
Occurrence	Found in the oxidation zones of copper deposits	Found in metamorphic and igneous rocks	Hydrothermal veins in granitic rocks
Locality	Kazakhstan, Namibia, DRC, USA	Siberia, Pakistan	Columbia, Brazil, China, worldwide
Colouration	Green colour from copper	Green colour from chromium	Green colour from chromium and/or vanadium



AGM Meeting Summary – 5 July 24

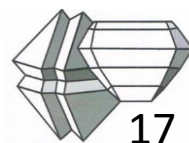
The SMLS AGM was held on Friday 5th July., face to face at the church hall and open on zoom to all members. Chairman's report, Treasurer's report and annual accounts were issued to members 7 days prior to the meeting. SMLS was chaired by Colin Brough.

There were no questions from members on the reports or the accounts. Motion to accept the accounts: Proposed by John Pearce, seconded by Susan Tyzack, approved by members

Members agreed to have a single vote on the SMLS officers and Committee members:
Chair: Colin Brough, Treasurer: Catherine Foley, Secretary: Alan Simmonds. Committee: Samantha Durrant, Mike Doel, Nick Hawes, David Alderton, John White, Rob Tripp, Caroline May. Accounts Scrutineer for 2025: Nick Hawes. Proposed by Austin Woodbridge, seconded by John Pearce, Approved by Members.

Members were asked to give consideration on how SMLS can best use the society funds following the generous mineral donations. This must be in line with the purpose of SMLS, which is to promote and interest and understanding in mineralogy. The committee will consider options and report back to members.

Meeting closed.



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Native Gold



Cumberland Quartz



Rosalite from Germany



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Chris Smith Duque

Fine mineral and landscape artwork, commissions

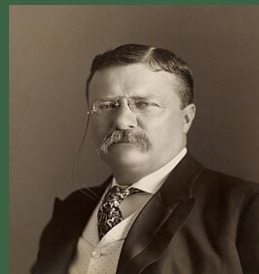
<https://chrismithduque.myportfolio.com/>



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Quote of the month

“Burning fossil fuels is like breaking up the furniture to feed the fireplace because it’s easier than going out to the woodpile.”



Theodore [Roosevelt](#)