



The
Geological
Society

North West Regional Group
Newsletter

Autumn 2022



**Your guide to Geological Society events in the North West -
2022/23**

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COMMITTEE NEWS

During the AGM on 26th January 2022 the current roles within the Committee were agreed:

<i>Chair:</i>	Andy Moore
<i>Secretary:</i>	Catherine Kenny
<i>Treasurer:</i>	Rob Hunt
<i>Outreach Officer:</i>	Katherine Harrison
<i>Social Media:</i>	Phil Patterson
<i>Chartership/Mentoring Contact:</i>	Marie Convery
<i>A-Level Lecture Coordinator:</i>	Nik Reynolds
<i>Programme Co-ordinator:</i>	Foz Jammal
<i>Newsletter Editor:</i>	Caroline Jones

Molly Brown has resigned as Early Careers representative due to work commitments – we would like to thank Molly for all her contributions to the committee!

The AGM will be held in January, so if you would like to join the committee or have any ideas for events, trips and lectures then please email the secretary! Catherine Kenny will be stepping down as Secretary at the AGM so if you'd like to be Secretary get in touch!!

The photograph used on the cover of this year's newsletter is from the Peak District fieldtrip and features the ever moving Mam Tor being admired by some enthusiastic geologists (photo: C Jones).

LOOKING BACK AT 2021/22

Schools geo-challenge

The 2022 competition went ahead on-line this year and we had two schools from the north west reach the final, Aquinas and Altrincham.

- Altrincham entry - a video about Mount Nyiragongo
- Aquinas entry - a powerpoint presentation about Natural Nuclear Fission

Lectures and Field Trips

We hope you all enjoyed our previous season of fascinating lectures and field trips:

"The Lapis Lazuli and Silver Roads - from Hindu Kush to the Whole World", presented by Robin Grayson on 17th February 2022.

Robin gave us a fascinating insight into the minerals of the Hindu Kush and the ancient trade across Europe and Asia. The star of the show was lapis lazuli (sorry silver, even the association with vicious Vikings could not detract from the most heavenly of minerals).

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Image from lecture

I am sure I wasn't the only one who wondered if they could have wedged a boulder of lapis into a ruck sack and made it out alive! It was interesting to hear about the interplay between global politics, organisations and the artisanal mining and jewellery communities who have worked with these beautiful minerals for millennia. After hearing about the amazing projects and people Robin has worked with, I was almost as green as the lovely apple jade. (C. Jones)

"The Building Stones of Knutsford" Field Trip lead by Fred Owen on 27th February 2022.

Our first face-to-face event in almost 2 years was a spot of urban geology around the streets of Knutsford with Fred Owen.



Who knew that you could look at ancient evidence of volcanoes, deltas, sand dunes, fossil shells and tropical reefs in Knutsford?! Some lovely examples of gabbro,



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ammonitico rosso, Portland stone, blue pearl larvikite, and a granite complete with xenoliths.



We had a lovely afternoon in some rare sunshine, learning about all the different building stones and also the history of Knutsford. Many thanks to Fred! Fred has written a geology trail guide which is available to buy from the Knutsford Heritage Centre, which is itself also well worth a visit. (C. Kenny, text and photos).

"Mine Instability, Mining Legacy Assessment and the '10T rule'", presented by Scott O'Neill on 17th March 2022.

This was an absolutely fascinating lecture that provided a thorough introduction to England's mining history, coal measures geology and mine engineering solutions through the ages (some derived using slightly more maths and physics than others...). The hour passed far too quickly,



Image from lecture flyer

and I wanted to hear more! Scott treated us to some fantastic archive photographs of opencast pits that exposed "pillar and stall" underground workings, which

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demonstrated the varying degree of coal extraction and collapse mechanisms above such workings.



Bell & Donnelly, 2006 (from lecture slide)

He explained the derivation of the 10T Rule, how different organisations have interpreted it and the potential dangers of unilaterally applying it without completing a thorough mine hazard assessment. Scott rounded off the lecture by describing a few case studies that demonstrated this point graphically. The photographs of voids appearing overnight in the founding level of a new road still haunt my dreams. (C. Jones)

The Peak District lecture and field trip (June 2022)

Huge thanks to Pete Webb for delivering a fantastic lecture and a fascinating field trip. I thoroughly enjoyed it, even a bit of torrential rain didn't dampen the enthusiasm!





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Our day of geological treats started in Miller's Dale. We carefully followed a path through a wildflower meadow dotted with orchids to examine a collection of huge boulders scattered along the base of the quarry face. Pete pointed out corals and beds of palm-sized brachiopods, which helpfully show the "way up" in the thick bedded facies of the Carboniferous Limestone (see photo on previous page). A short jaunt down the vale to Raven's Tor and Pete showed us the Miller's Dale Lower Lava (basalt) and two converging faults in the overlying limestone (whilst being watched by some bemused climbers).



Close inspection of slicken sides in progress...

After lunch we wandered along the Monsal Trail at Litton Mill, inspecting the dramatic sides of the old railway cutting, where we saw the thin-bedded limestone facies, with plenty of cherts and the Miller's Dale Upper Lava. There was much discussion about the curious features of the lava (see below photo) and the juxtaposition with the overlying limestone, in which the beds went from near horizontal to 45 degree above the lava.



Pondering lava placement

We then drove north, up through the stratigraphic sequence, via a gorge of impressive reef limestone north of

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Castleton, to Windy Knoll to inspect our last limestone outcrop. The weathered karst forms a reservoir for elaterite (biodegrade petroleum, which looked and smelt like tar) that had oozed from the overlying Edale Shale.



Happy geologists in sunshine on Mam Tor landslide

Following a "what happened here" explanation of the mangled road on Mam Tor landslide, we scrambled over the lower beds of the Millstone Grit where Pete pointed out some classic sole trace fossils on sandstone boulders that marked the base of turbidite deposits.



Trilobite in the Edale Shale (fossil is <1cm in length)

Catherine found a tiny trilobite (that nearly got trilo-bitten during a classic "silt or clay" test...) in a displaced outcrop of shale on the Mam Tor landslide. This little treasure caused much excitement as fossils, especially marine ones, are extremely rare in the Edale Shale.

Much fun was had and fabulous geology admired. Thank you again, Pete, for a fantastic day. (Text: C. Jones. Photos: C. Kenny and C Jones).



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We hope you all enjoyed these lectures and field trips! Huge thanks to our lecturers, field trip leaders and to Andy Moore and Catherine Kenny for chairing the Zoom Rooms!

We're always open to ideas for fieldtrips and lectures so if you have a topic you are keen to hear something on, or have a lecture you would like to deliver, or a field trip, please contact the Secretary!!

NORTH SEA ROCK CORE FOR SALE!

It has come to our attention (thanks Phil) that North Sea Core is upcycling unwanted core that has been donated by various companies. They do selection boxes and hand samples for educators and framed slabs and core displays for gifts or as rock-art for your home office.

So, if you fancy a nice piece of geo-art please follow this link: <https://www.northseacore.co.uk/>



Science as art (Image from North Sea Core website)

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WHAT'S HAPPENING IN 2022/23

The following programme of events is planned by the North West Regional Group for this coming season:

Date	Title / Speaker
13 and 22 September	Field trip to the copper mines at Alderley Edge (fully booked)
October	Field trip to the Williamson Tunnels, Liverpool
10 th November 7pm	VIA MS TEAMS Core samples from North Sea exploration wells with Henk Kombrink from North Sea Core CIC
December	Joint event with EGGS/ICE TBC
January	AGM Geological Pub Quiz and Chips
February	Trip to Isotopx for The Mass Spectrometry of Geology
March	Trip to The Great Orme Mines, Fish and Chips in Llandudno and in the afternoon, The Geology Of Deganwy with Jonathan Wilkins
April	Early Careers Event Alderley Edge Field Trips
May	The Building Stones Of Knutsford (re-run for those who missed it!) with Fred Owen

CHARTERSHIP AND MENTORING

If you are going for chartership take a look at the "Events" page on the Geological Society.

There is also a group on LinkedIn for **Mentoring**. If anyone is looking for a mentor, or would like to volunteer to be a mentor, please check it out!

<https://www.linkedin.com/groups/8777938/>

For Chartership and Mentoring queries, please contact Marie Convery from our Committee! You can email the Secretary and she will pass the message on.

THANKS

We wish to extend our thanks once again to all the speakers who delivered our programme last year and we hope you enjoy the programme for the up and coming year.

Best regards to you all on behalf of the Committee,

**Caroline Jones, Newsletter Editor
North West Regional Group of the
Geological Society of London**





The North West Regional Group is YOUR society - If you have any comments or questions, or you have a brilliant idea for a lecture or field trip that you would like us to organise, or if you could offer to lead a field trip, then please feel free to make contact using geologicalsociety.northwest@gmail.com

SOCIAL MEDIA

We have an active Facebook webpage which we encourage you to visit. We try and keep these sites up to date with information regarding meetings and other relevant interesting geological bits and bobs we find!!!



OUR FRIENDS IN THE NORTH WEST

LGS: Liverpool Geological Society
<http://www.liverpoolgeologicalsociety.org/>

MGA: Manchester Geological Association
<http://www.mangeolassoc.org.uk/indoormeetings.php>

ICE: Institution of Civil Engineers North West
<https://www.ice.org.uk>

CLA: Geological Society Contaminated Land Group
<https://www.geolsoc.org.uk/contamland>

Geological Society Code of Conduct for Meetings and other Events (inc. Online)

- *The Geological Society of London is a professional and learned society, which, through its members, has a duty in the public interest to provide a safe, productive and welcoming environment for all participants and attendees of our meetings, workshops, and events regardless of age, gender, sexual orientation, gender identity, race, ethnicity, religion, disability, physical appearance, or career level.*
- *This Code of Conduct applies to all participants in Society related activities, including, but not limited to, attendees, speakers, volunteers, exhibitors, staff, service providers, representatives to outside bodies, and applies in all GSL activities, including ancillary meetings, events and social gatherings.*

Breach of the Code of Conduct

- *If an incident of proscribed conduct occurs either within or outside the Society's premises during an event, then the aggrieved person or witness to the proscribed conduct is encouraged to report it promptly to a member of staff or the event's principal organiser.*
- *Once the Society is notified, a member of staff or a senior organiser of the meeting will discuss the details with the individual making the complaint. Any witnesses who have been identified, and then the alleged offender will be consulted before determining an appropriate course of action.*
- *Confidentiality will be maintained to the extent that it does not compromise the rights of others.*



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