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|  | **THE HIGHLAND GEOLOGICAL SOCIETY**Scottish Charity No. SC004427 |

**December 2020**

Dear Members,

 We hope all of you are keeping well during this Covid pandemic and have had opportunities to do some local walking and maybe geologising. The committee wish all our members a peaceful Christmas and sincerely hope you have a safe and healthy 2021.

**Talks on Zoom**

One small benefit from the pandemic has been that we can view lectures through Zoom and, with many of these talks being recorded on YouTube, this year has seen quite an impressive library of geology related lectures building up on the internet.

Some links to websites containing these talks are included in “Items of interest” below.

We have chosen not to put our talks on YouTube for open viewing. Where the speaker agrees, we have recorded them, and Alan Thompson will provide members with a link on request.

Talks held so far on Zoom in 2020 have been:

Andy Moffat: A Big Splat at Clachtoll.

Alan Thompson: The North Coast of Caithness/Sutherland.

Dave Longstaff: A trip down the River Findhorn.

Peter Reynolds: Geology is where you find it: Lochan Uaine and Creag nan Clag

Prof Frank Rennie: A Lewisian Perspective: The Basement of the Earth

Prof Steve Brusatte: The Rise and Fall of the Dinosaurs

**Remaining winter lecture programme**

The remaining talks this winter will all take place on Zoom at 7.30 pm. Details are as follows:

**Wed 16th December 2020: *Building Stone: Making the right choice*, Professor Peter Scott, Emeritus Professor, Camborne School of Mines.**

The Palace of Westminster burnt down in 1834 and in 1839 a team of four led by the well-known architect, Charles Barry, reported on their recommended choice of building stone for the reconstruction. They visited sandstone and limestone quarries throughout Britain including several in Scotland. They described the extent and appearance of each stone in varying detail, gave data on workability, cost and transport, and had some physical and chemical properties measured. They made a qualitative assessment of stone in use by visiting many churches, cathedrals, castles, stately homes and others. They strongly recommended that the Permian Lower Magnesian Limestone (Cadeby Formation) of Bolsover Moor in Derbyshire was the most suitable stone referring to its high strength, pleasing colour and high crystallinity. This recommendation was taken up by Parliament. An offer by the Marquis of Breadalbane to supply granite from his estate near Oban free of cost was declined; granites, porphyries and other stones being rejected on the basis that they could not be worked easily.

The rebuilding overran in cost and time. The availability of the Bolsover Moor stone was inadequate, such that other nearby sources had to be found. The quality of the stone was very variable and deterioration occurred shortly after construction. An enquiry was held and in 1861 a ‘Decay Report’ published, resulting in an abundance of adverse and amusing publicity in the press. Several other building stones, such as Portland Stone, and probably one of several Scottish sandstones, would have been more suitable.

This story retains its relevance today. It illustrates the importance of understanding the detailed stratigraphy of a potential resource of stone and knowing the capacity of a quarry to supply the amount required; the importance of careful on-site selection of the stone and its placing; the importance of colour and colour matching; and, the significance of transport in the overall cost of the delivered product.

**Wed 13th January 2021:** ***In the footsteps of Hugh Miller: New fish finds from the Carboniferous and Jurassic of Scotland*, Dr Tom Challands, University of Edinburgh.**

Hugh Miller’s collection and work on fossil fish from the Devonian of Scotland in the mid 19th century has been an inspiration for many palaeoicthyologists since his time. Importantly, the work of Agassiz, Huxley and Traquair was heavily dependent on that of Miller. Many people working on fossil fish from Scotland have come and gone since Miller’s time though a recent resurgence in finds from the Carboniferous rather than the Devonian have again placed Scotland on the map as a world-class location for fossils recording evolution across the important water-land transition.

I will present some of the recent finds from the Carboniferous of the Midland Valley of Scotland that have caused us to reassess our understanding of the evolution of vertebrates across the Devonian-Carboniferous boundary. I will also highlight the importance of continuing work on the famous Devonian sites of Caithness from recent work on the brain structure of the well-known fish from the Orcadian basin but more importantly the new techniques we can apply to understand the sensory systems of these long-extinct animals.

Finally, new finds from the Jurassic deposits of the Isle of Skye and Sutherland will be presented demonstrating that Scotland has a great deal more to offer with regards fossil fish than the historical Devonian and Carboniferous site.

**Wed 24th February 2021:** ***The Geology of Shetland,* Prof Rob Strachan, University of Portsmouth.**

This talk, which is an addition to the original programme, has been arranged in anticipation of the planned residential excursion to Shetland next summer. It is hoped that it will be of interest to all members, and not merely those who have signed up for this excursion.

The plan for the evening is to hold the Society’s AGM on Zoom at 6.45 pm, to be followed by Professor Strachan’s talk at 7.30 pm

**Thurs 18th March 2021:** ***The Dating Game: One Man’s Search for the Age of the Earth,* Dr Cherry Lewis, University of Bristol.**

**\*\*NOTE THE CHANGE OF DATE\*\*.** When Dr Lewis originally agreed to give this talk, it was planned that she should do so in person on successive nights to HGS and AGS in Inverness and Aberdeen respectively. The pandemic has put paid to that plan, and she will now deliver her talk on Zoom to both HGS and AGS on the same night at 7.30 pm.

**Field Trips 2021**

**Stack of Glencoul**

Donald Fisher has confirmed that he is willing in principle to lead an excursion to the Stack of Glencoul in place of the one planned for last summer, and Reay Forest Estate has confirmed likewise that boat transport will be made available by the estate. It is hoped that the excursion, if it takes place at all, will be towards the end of April or early in May 2021 (avoiding the bank holiday weekend). There will be further discussions, probably in January, to review the situation with Donald and the estate. The outcome of these discussions will be communicated to members in due course.

feasibility

**Shetland**

It has still to be decided whether to proceed with this excursion. The decision will depend on Covid restrictions. Even if it is possible by then to mix freely out of doors, there may still be practical difficulties, for example on account of the fact that we were expecting to share cars and use hostel accommodation.

We were able to transfer the bookings from last summer to next summer, and in summary the programme will be:

Wed 2 June, overnight ferry Aberdeen to Lerwick

Thurs, Fri, Sat, Sun, 3 - 6 June, stay 4 nights at Bridge End Outdoor Centre

Mon, Tues, Wed, 7 - 9 June, stay 3 nights at Saxa Vord on Unst

Thurs 10 June, overnight ferry to Aberdeen, arriving on the morning of Fri 11 June

The trip is currently fully booked, and a waiting list is now in operation. If any member would like to come, he or she should contact Anne Cockroft (hgssec@gmail.com).

At the committee meeting on 30th October it was decided otherwise not to arrange any formal HGS excursions next summer for the time being. Since then there has some encouraging news about vaccines, but it is thought that it is still too early to be making definite plans for formal excursions.

Instead it has been suggested that members individually or in small groups as permitted by the regulations might investigate possible excursions and give short illustrated presentations about them on Zoom (in the manner of Peter Reynold’s presentation in September “Geology is where you find it”) so that other members might then be encouraged to investigate them for themselves.

**Winter lecture programme 2021 - 2022**

It is hoped that by next winter it will be possible to resume meetings in person, as in previous years. Several speakers have kindly agreed in principle to deliver talks, but, with one exception, no dates have been fixed yet, and in view of current uncertainties it may be some time before the full programme can be arranged. Further details will follow when these are known.

**Contributions to Geoparks**

The committee agreed to contribute £250 to each of the NW Highlands Geopark and the Lochaber Geopark to help with their running in these difficult times.

In response the chairman of the NWH Geopark wrote:

 

Likewise, the chairman of the Lochaber Geopark wrote:

“Very many thanks for the generous donation you have made to Lochaber Geopark from the Highland Geological Society. Please pass on our gratitude to your members and tell them that they are always very welcome to visit the Geopark. We look forward to seeing you all in the future”.

**Sinclair Ross library**

As many of you will know Sinclair, an HGS founder member and president of the Society for many years, sadly passed away in 2013. Recently we have been investigating his collection of field notes and papers with a view to putting together field trips, local to Inverness and Moray, and this might be an option for group activities in the future. We also hope to catalogue Sinclair’s material so members can study items of interest.

**Items of interest, geological websites, online resources**

With the widespread use of Zoom to view talks the Aberdeen, Glasgow and Edinburgh Geological Societies have agreed to allow other Society members to attend their lectures.

The Glasgow and Edinburgh Society websites list all their future talks and if you are not a member an email to the relevant secretary will ensure that an invite is sent to you.

In the case of Aberdeen, notices of forthcoming talks, with the appropriate Zoom link, will be forwarded to members when these are received from the AGS.

The Society is happy for members of the other societies in Scotland to attend our talks on Zoom, and to date a few members of the GSG and the AGS have done so.

As mentioned previously, this year has seen many geology lectures being recorded for later viewing on YouTube or other media.

Here is a link to the Angus Miller “Geowalks” website which has (as of early December) 20 talks on Scottish geology for viewing and they’re all recommended. The talks include: Mull: 4 talks (James Westland), Islay: 6 talks (David Webster), Elsa Panciroli (Eigg dinosaur), Katie Strang (Fife fossils) and many others.

<https://www.geowalks.co.uk/geology-talks/>

Edinburgh Geological Society recorded talks:

<https://www.youtube.com/channel/UCPYcOiV-w9rgr_nb52ByV1w>

The Geologist’s Association has put together an exhaustive list of resources which is well worth a look:

<https://geologistsassociation.org.uk/sofageology/>

Palaeocast podcasts:-

<https://www.palaeocast.com/category/mesozoic/>

An excellent, free, online resource on rock forming minerals was released a month ago:-<https://pubs.geoscienceworld.org/books/book/952/An-Introduction-to-the-Rock-Forming-Minerals>

Research paper on rock fall impact into wet sediments at Clachtoll:

KILLINGBACK, ZACHARY (2019) *A Bigger Splat: Rock fall impact processes in wet*

*sediment - an example from Clachtoll, NW Scotland*, Durham theses, Durham University. Available at Durham E-Theses Online: <http://etheses.dur.ac.uk/13350/>

**The Scottish Geology Trust**

<http://www.scottishgeologytrust.org/>

**Aberdeen Geological Society**

<http://www.aberdeengeolsoc.org.uk/>

**Edinburgh Geological Society**

<https://www.edinburghgeolsoc.org/>

**Glasgow Geological Society**

https://geologyglasgow.org.uk/

**Open University Geology Society**

<https://ougs.org/>

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