



EDINBURGH GEOLOGICAL SOCIETY

Promoting public interest in geology and the advancement of geological knowledge

Spring Newsletter 2020

This season's lecture programme has had super support, reflecting the quality of our excellent speakers and perhaps the new earlier start time. We look forward to a varied set of excursions as detailed in this newsletter. Special thanks to Phil Stone, who steps down after editing 22 editions of The Edinburgh Geologist since 2009. It is with some trepidation that I am busy putting together the autumn edition! Thanks also to Alison Tymon for all her work in taking Excursion bookings for the last three years. The Council is giving enthusiastic support to several new ventures highlighted below. I urge members to participate in what we hope will be a year to focus on promoting Geology in Scotland. Finally I'd like to welcome our new President, Tom Challands, who begins his term shortly after the AGM on his return from a fellowship in Australia.

Robert W Gatliff, EGS President, president@edinburghgeolsoc.org



EGS Members on an excursion to Dunbar Cement Quarry in 2019. Photo: Ian Kearsley

2020 – a year for celebrating Scotland's geology

It is shaping up to be a busy year with a range of events promoting and celebrating geology in Scotland. The new Scottish Geology Trust is being launched in the autumn, with support from EGS and a wide range of other organisations. The Trust's first project is to organise the Scottish Geology Festival in September and October. Organisations across the country are invited to plan events with a geological theme – talks, walks, family activities, exhibitions. You can find out more about the Trust and the Festival at www.scottishgeologytrust.org.

The work to establish the new Trust has led to greater collaboration between EGS and our sister societies across the country. Members are reminded that you are welcome to attend field trips and lectures organised by the Glasgow, Aberdeen and Highland Geological Societies. You'll find links to their excursion programmes from our [website](http://www.edinburghgeolsoc.org).

Science Festival event at the Botanic – From living plants to fossils

What do fossil plants tell us about the evolution of different plant types? Join EGS volunteer and botanist Heather McHaffie for a walk through the Royal Botanic Garden Edinburgh, exploring modern plant species and their links with fossilised plant remains from the geological past. Organised in partnership between the Botanic and EGS.

Walks take place at 2pm on 14, 16, 18 April. Book tickets through the Botanic or the Science Festival website www.sciencefestival.co.uk.



You may also be interested in 'The Science of Poetry' with Prof Patrick Corbett from Heriot-Watt University and poet Dr Colin Will. Find your inner poet with inspiration from rock samples. Wednesday 15 April, 7.30pm.

DATES FOR YOUR DIARY

14, 16, 18 April
Edinburgh Science Festival at the Botanic: From living plants to fossils

Wednesday 22 April, 7pm
Excursion: Water of Leith – Colinton

Saturday 2 May, 10.30am
Excursion: Lammermuir Deans and Dunglass

Wednesday 6 May, 7pm
Excursion: Whinny Hill, Holyrood Park

13–19 May 2020
Long Excursion to the Isle of Man

Wednesday 27 May, 7pm
Excursion: Blackford Hill

Wednesday 17 June, 7pm
Excursion: Wardie Shore

Saturday 27 June, 10.30am
Excursion: Queensferry to Hound Point

Saturday 11 July, 9am
Excursion: Arbroath to Auchmithie

Wednesday 15 July, 7pm
Excursion: Dalkeith Buildings

Saturday 25 July, 11am
Excursion: Spittal Shore

Saturday 1 August, 9am
Excursion: Gasswater Barite Mine

Saturday 22 August, 9am
Excursion: Kirkcaldy and West/East Wemyss

18–20 September
Weekend Excursion: Ballantrae Complex

Sunday 20 September, 10am
Introductory Excursion: Holyrood Park

Saturday 26 September, 10am
Introductory Excursion: Siccar Point and Pease Bay

Excursion Programme 2020

At the core of our Excursion Programme are full-day excursions on Saturdays and shorter evening excursions on Wednesdays. The programme is organised by Excursions Secretary Ian Kearsley, and each excursion is led by a geologist with expert knowledge of the locality. Visit the EGS website at www.edinburghgeolsoc.org/excursions/ for full details of each excursion. Please read and take note of the Code of Conduct & Safety Guidelines.

You must book in advance for all excursions, as numbers are limited for safety reasons. Bookings are taken by email to excursions@edinburghgeolsoc.org or online. Please give your address and phone number/s, and a contact in case of an emergency (name, relationship and phone number/s). This information will only be used in connection with 2020 excursion bookings.

Please notify the excursions team by email if you have booked an excursion and are not able to attend, to avoid disappointing others who may be on a waiting list.



Eating lunch and hunting for fossils at Blairskaithe quarry, 2019. Photo: Ian Kearsley.

Residential Excursions

13-19 May 2020

Long Excursion to the Isle of Man

There are still one or two places available on the Long Excursion to the Isle of Man, which Dr David Quirk and Dr David Burnett have kindly agreed to lead. Dates have been chosen to fit with the tides, leaving Edinburgh on Wednesday 13 May and returning on Tuesday 19 May. If you are interested, contact Anne Burgess, preferably by email to longexcursion@edinburghgeolsoc.org, or by letter to 21 Woodside Place, Fochabers IV32 7HE. All emails will be acknowledged, so if you do not get a response within a couple of days, please try again.

18-20 September 2020

Weekend Excursion: Ballantrae Complex

Leader: Professor Alastair Robertson, University of Edinburgh

The Ballantrae ophiolite is exposed near and along the Ayrshire coast, south of Girvan. It is the best place in Scotland to gain insights into the world ocean during the early Ordovician, c. 470 million years ago. Excellent exposures include deformed remnants of oceanic lithosphere and deep-sea sedimentary rock. There are also contrasting sedimentary rocks that formed during and after the emplacement of the oceanic rocks onto continental crust to the north (the now-buried Midland valley block). Structures include evidence of thrusting, folding and (later stage) faulting. The Complex is interpreted as having formed at mid-ocean ridge, fore-arc and/or seamount settings (to be discussed in the field).

After an introductory meeting on the Friday evening we will spend two full days in the field. Most of the exposures to be visited are easily accessible along the coast. If you are interested in joining this excursion contact the Excursions Secretary Ian Kearsley who can provide additional information and advise when bookings will be taken. Places will be limited to around 20. Once booking opens places will be allocated on a first come basis.

Day Excursions

Saturday 2 May, 10.30am to 4.30pm.

Meet at Wester Aikengill Farm.

Lammermuir Deans and Dunglass

Leader: Fiona McGibbon

This excursion will examine the spectacular geomorphological features exposed in Fairy Glen. Later, at Dunglass, we will visit the coastal termination of a glacial outwash channel cut into Carboniferous strata. A visit will also be made to the Collegiate Church of Dunglass to see the memorial to James Hall, a friend of James Hutton and early experimental petrologist.

Saturday 27 June, 10.30am to 4pm (followed by high tea).

Meet in South Queensferry.

Queensferry to Hound Point (joint with Geological Society of Glasgow)

Leader: Richard Smith

This joint excursion will start at the slipway opposite Hawes Inn. We will view the bridges then continue eastwards to Hound Point to examine the Carboniferous sedimentary and igneous rocks along the coast. High tea will be arranged in South Queensferry.

Saturday 11 July, 9am to 5.30pm

Arbroath to Auchmithie

Leader: Alastair McGowan

This excursion will follow the coastal trail starting from Auchmithie, south to Arbroath. We will study the Upper and Lower Devonian sandstones and conglomerates and their interaction with coastal erosion to produce a spectacular suite of geomorphological features.

Saturday 25 July, 9am to 5.30pm

Spittal Shore, Northumberland

Leader: Ian Kille

We will walk from Spittal to Cocklawburn through an almost complete foreshore exposure from the top of the Scremerston Coal Group through the Lower and Middle Limestone Groups. We will also consider the tectonic setting, the changing paleogeography and the legacy of coal and limestone mining.

Saturday 1 August, 9 am to 5pm

Gasswater Barite Mine

Leader: Graham Leslie

Barite mineralisation has been worked in the past at a number of locations in the western part of the Midland Valley. This excursion will examine the setting and nature of the mineralisation at Gasswater mine: a series of NW-SE trending trenches and other mining features on the northeast bank of the Gass Water, East Ayrshire. Mining took place there between 1920 and 1964. The workings and spoil heaps will be examined to determine the style and associations of the mineralisation.

Saturday 22 August, 9am to 5pm

Kirkcaldy and West/East Wemyss

Leaders: Ian Kearsley and Steve Livera

This excursion will consider two sections within the Carboniferous strata of Fife. In the morning we will look at the transition from Lower Limestone Formation to the Limestone Coal Formation between Seafield and Linktown to examine the rocks exposed on the shore and discuss the industrial archaeology related to historical coal mining. In the afternoon we will travel to West Wemyss and walk the section through Middle and Upper Coal Measures strata to East Wemyss where we will search the spoil from Michael colliery for Carboniferous plant remains. We will also consider the origin and past uses of the famous caves.

Wednesday Evening Excursions

Wednesday 22 April, 7–9pm

Water of Leith – Colinton

Leader: Beverley Bergman

Colinton Dell forms part of the steep-sided, post-glacial river valley of the Water of Leith. The early Carboniferous bedrock is mainly sandstone and mudstone. Thin beds of limestone and oil-shale are also present, the latter typical of the former oil-shale mining industry of the Lothians.

Wednesday 6 May, 7–9pm

Whinny Hill, Holyrood Park

Leader: Angus Miller

On this excursion we will visit a succession of lava flows from the Arthur's Seat volcano which form tilted trap topography across Whinny Hill. We will also examine some igneous intrusions.

Wednesday 27 May, 7–9pm

Blackford Hill

Leader: Richard Smith

The purpose of this excursion is to examine the geology of Blackford Hill, composed of Devonian andesite lavas and agglomerate, and Hermitage of Braid. We will also view various geomorphological features related to glacial activity including 'Agassiz Rock'.



Emrys Phillips explains some of the Quaternary features of East Lothian during an excursion in 2019. Photo: Ian Kearsley.

Wednesday 17 June, 7–9pm

Wardie Shore

Leader: Tom Challands

Wardie shore in north Edinburgh has been a favourite with geologists and palaeontologists since the early 19th Century. This excursion will explain recent work done at Wardie, and visit a new information board installed by EGS and the Scottish Wildlife Trust.

Wednesday 15 July, 7–9pm

Dalkeith Buildings

Leader: Tom Challands

To coincide with the publication of the LBGC leaflet on Dalkeith's building stone, this excursion will walk the paths and streets of Dalkeith to consider the use and source of building materials in the town. We shall see examples of locally quarried Upper Carboniferous sandstones as well as stone from other parts of Scotland and further afield.

Introductory Excursions

Aimed at new EGS members but open to all.

Sunday 20 September, 10am to 1pm

Holyrood Park

Leader: Angus Miller

The Arthur's Seat volcano dominates the centre of Edinburgh and is a superb example of a small, partly-eroded basalt volcanic cone. It gives the opportunity of exploring different parts of the volcanic system including intrusions, lava flows and vent material.

Saturday 26 September, 10am to 2pm

Siccar Point and Pease Bay

Leader: Bob Gatliff

Siccar Point, described as the most important geological site in the world, demonstrates an unconformity between two sets of sedimentary strata and was used by James Hutton to support his world-shaking ideas of geological time and natural processes. We will visit Old Red Sandstone exposures at Pease Bay before walking across a grassy field to view Siccar Point.

Recent project grants

EGS offers small grants to projects that further the aims of the Society. There have been 7 applications so far this year, and grants have been awarded to:

£260 to geoHeritage Fife for a leaflet on Elie.

£880 to Euan McIntosh, an MRes student in Glasgow, for a project on the mineralisation and eastward tectonic correlation of the Loch Maree Group.

£500 for a "Girls into Geoscience" workshop in Glasgow.

£800 to Allan Audsley, PhD student at Stirling University for "Scotland's Pockmarks" project to understand the link between gas-escape features and buried carbon on the seabed around western Scotland.

Discussions are continuing with Urban Good CIC about a contribution to an Urban Nature map for Edinburgh.

EGS autumn activities: dates to note

We are planning a series of events in the autumn, as part of the Scottish Geology Festival. Further information will be included in the Autumn Newsletter, distributed in early September.

Friday 25 September Nigel Trewin Memorial Lecture

Following a successful inaugural lecture in Aberdeen, this lecture series in memory of Nigel Trewin continues in Edinburgh with a public lecture by Nick Fraser, head of the Department of Natural Sciences at National Museums Scotland. The event is being organised by the Friends of Hugh Miller and EGS.

Thursday 1 October Geopoetry 2020

This gathering, on National Poetry Day, celebrates how geology has inspired poets in the past and present and will bring together poets and geologists to “encourage the rocks to speak”. Organised by the Geological Society, the Scottish Poetry Library and EGS. The organisers are seeking contributions by 31



May, which will form the basis of a programme of talks, walks, readings and workshops and ultimately a publication. Further information at www.geolsoc.org.uk/geopoetry20.

17-18 October Geologists' Association conference

EGS is helping to host the GA Annual Conference in Edinburgh, with a full day of talks at Surgeon's Hall and Sunday morning field trips. Further details at geologistsassociation.org.uk/conferences.

Rapid progress in identifying Local Geodiversity Sites in Scottish Borders

Lothian and Borders GeoConservation has been active for nearly 30 years, working with the local authorities to identify and promote suitable Local Geodiversity Sites. However, until now there has been only limited activity in the Scottish Borders area. That has changed dramatically in the last three years, thanks to the mammoth effort of Alison and Barry Tymon. They have visited about 250 sites across the area, and identified 35 potential local sites for consideration by the local authority.

Lothian and Borders GeoConservation and Tayside Geodiversity are committees of EGS. The local groups work to raise awareness of sites and geodiversity through publications, interpretation boards and events.

New members are always welcome, and there are a variety of ways in which you can get involved in these friendly, informal groups. You can find out more at www.edinburghgeolsoc.org/home/geoconservation/ or contact Mike Browne at lbgeoconservation@edinburghgeolsoc.org.

Membership Subscriptions

Subscriptions for 2019-20 were due on 1st October 2019. If you have overlooked making your payment, please remedy this NOW by making a bank transfer to Edinburgh Geological Society (sort code 80-02-73, account number 00285438) giving your surname and first initial as a reference or sending a cheque (payable to Edinburgh Geological Society) to the Membership Secretary. Setting up a standing order for your next renewal on 1st October 2020 will ensure you receive future mailings and reduce our administration time.

Contact the Membership Secretary if you are unsure about your membership category, and to update your contact details (e.g. telephone, postal and email addresses). This will ensure you are kept informed and all our publications reach you promptly.

Join the EGS News email list

You may not have signed up to receive selected emails from our Honorary Secretary – we send out 2-3 emails a month to keep members informed of last-minute changes, upcoming events and other news of interest to members. Please email the Membership Secretary to be included.

Society contacts

President Robert Gatliff
president@edinburghgeolsoc.org

Honorary Secretary Neil Mackenzie
secretary@edinburghgeolsoc.org

Honorary Treasurer Christian Ranken
treasurer@edinburghgeolsoc.org

Membership Secretary Currently vacant
membership@edinburghgeolsoc.org

Lectures Secretary Graham Leslie, agle@bgs.ac.uk

Excursions Secretary Ian Kearsley
excursions@edinburghgeolsoc.org

Publications Sales Officer Don Cameron
booksales@edinburghgeolsoc.org

Promotion Coordinator Angus Miller 0131 555 5488
promotion@edinburghgeolsoc.org

**Edinburgh Geological Society,
The Lyell Centre, BGS – Second Floor, Research Ave S,
Edinburgh EH14 4AP**

www.edinburghgeolsoc.org

The Edinburgh Geological Society is a friendly and informal organisation with a wide range of members of varied backgrounds and interests, united in an interest in rocks and the science of the Earth. This newsletter is published in September and March, with details of our lectures and excursions programme.

ISSN 2399-7001