

HOGG

**Newsletter of the
History of Geology Group
of The Geological Society**



**Number 65
February 2019**

Front cover

Gertrude Elles (1872–1960)—pioneering palaeontologist, geologist and woman of science—who will no doubt feature in HOGG’s centenary celebration of the Geological Society’s first Female Fellows to be held in May (see P. 11), and who gives her name to a new award for public engagement (see P. 18).

(Image courtesy of Sedgwick Museum of Earth Sciences, Cambridge)

Editorial subcommittee

Beris Cox (e mail: beris.cox@btinternet.com)

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The HOGG newsletter will be issued in February (copy deadline 31st January), June (copy deadline 31st May) and October (copy deadline 30th September).

Past newsletters are available at <http://historyofgeologygroup.co.uk/newsletter/> and <https://www.geolsoc.org.uk/hogg-newsletters> .



LETTER FROM THE CHAIR

Immediately after HOGG's *Aspects of the History of Coal and its Mining* meeting and AGM last November, I made a dash from Piccadilly to the new HQ of the Earth Science Department at University College London (UCL) which had been opened by Sir David Attenborough in April 2018. I was greeted by the President and Secretary of the Greenough Society—the student geological society at UCL named after that luminary of the ‘golden age’ of geology, George Bellas Greenough. As part of their lecture and social programme, I had offered, on behalf of HOGG, to give a talk on the history of geology. The students opted for *The Discovery of the Silurian* (which many HOGG members will know is something I have researched and written about). So I found myself in front of a bunch of attentive geology students plus a member of the teaching staff. At the start, I asked how many knew about the Silurian. As you would expect, all were familiar with it as an ‘established’ period of geological time—some more so than others—but the prevailing view was that Silurian was simply a ‘given’ of the geological column (albeit open to refinement and some shifting of date/age boundaries); they had little concept of its historical context and how this has helped to shape subsequent geological thinking. By the end of the lecture, I hoped the students would be a little more enlightened—and I think they were! At the very least, it had been ‘entertaining’ enough for the Greenough Society to want a history of geology lecture to become a regular fixture in their annual programme.



This set me thinking. What does HOGG do to encourage younger students to develop an understanding of and/or interest in the history of geology? One thing we could easily do is to offer a HOGG lecture to other student geological societies. With this in mind, I have identified another six student societies (with a geographical spread) that may well be interested in such an offer. We shall need a list of HOGG members willing to give a talk of about 45 minutes length on some (interesting) aspect of the history of geology. In theory, HOGG has an abundance of such talks—they are, after all, the bread and butter of our meetings and it shouldn't take too much effort to convert a HOGG meeting talk into a HOGG student lecture. If there are enough volunteers, then it should mean that each talk is only called upon once a year (or maybe every couple of years). Any travel expenses would, of course, be reimbursed but the talk is offered on a no fee basis.

The advantages for history of geology are several, not least in raising an understanding that geological knowledge and thinking are contingent, and how these are often an intellectual struggle but also the product of cultural influences. Geology students should be entitled to such powerful understanding. And, looking to the future, the talks should inspire students and help produce a swell of potential new and youthful recruits to HOGG. Accordingly, students will be offered an affordable membership rate. Some of the HOGG Committee have volunteered their services, but if you would be willing to help with this ‘outreach’ venture, then please do email me at duncan.hawley@gmail.com with a title, a couple of sentences’ description, and your location.

To finish, here is a taster of what will be on offer to members over the coming months. May sees the centenary celebration of the first female Fellows of the Geological Society; the HOGG conference at Burlington House has a packed programme of interesting topics and speakers on female geologists lined up, including the current President of the Geological Society of America, together with poster presentations by those who can't otherwise be squeezed into the programme. July will see a joint meeting with the Edinburgh Geological Society based at the Surgeon's Hall, Edinburgh with talks, a city walk and a visit to Hutton's classic section on Salisbury Crag. October will see the 25th anniversary of the founding of HOGG which will be celebrated in York at a joint meeting with the Yorkshire Philosophical Society and including the HOGG AGM. York

was a key provincial centre in the development of geology and the founding location of the British Association in 1831. Expect John Phillips to appear on the programme. There will also be an interesting Smith map to view, and field visits to Kirkdale Cave, made famous by Buckland, and the important Cleveland Ironstone mines. Although Greenough's so-called 'rival' map has a printed date of 1819, it wasn't published until May 1820 and plans for a two-day bicentenary event to celebrate 'the Society's map' and its 'chief architect' in May 2020 are well under way.

I hope you will take full advantage of these meetings and enjoy having your knowledge of the history of geology broadened. To this end, you will find that the HOGG Committee are working hard to keep meeting costs affordable.

Duncan Hawley
e mail duncan.hawley@gmail.com

February 2019

HOGG AGM 2018

The following reports were presented at the 2018 AGM which was held on 22nd November during the HOGG *Aspects of the History of Coal and its Mining* meeting.

CHAIRS REPORT

2018 was a typically busy year for HOGG Committee. One issue which exercised us this year, as it did many organisations like ours, was the introduction of the new General Data Protection Regulation (GDPR) which came into effect on 25 May 2018. This requires us to be more rigorous in our maintenance of our membership data and, amongst other things, to ensure that we have a traceable, specific permission from each of you to communicate with you through the means of your choice.

Our events this year began in May with an Open Meeting convened by Chris Duffin at Burlington House at which an interesting and varied range of papers was read. We would hope to hold such a meeting every other year or so as it is a great opportunity to give a short presentation on your research, whether completed or ongoing, without waiting for a relevant themed event. In September we met in Bath, jointly with the Geological Curators' Group, the Bath Geological Society and the Bath Royal Literary and Scientific Institution. There was an excellent turn-out for this event, demonstrating the value of joint meetings, especially with such like-minded groups as GCG. Our November meeting has been convened at the request of the Geological Society to mark the winding-up of one of its specialist groups, the Coal Geology Group.

Next year's meeting programme begins with a two-day [*now one-day*] event convened by Cynthia Burek, Bettie Higgs and Veronica Cubitt Holmes at Burlington House on [20th and] 21st May to mark the centenary of Geological Society's admission of Female Fellows. In early July we hope to have a meeting in Edinburgh, jointly with the Edinburgh Geological Society: more information to follow. And on 23rd and 24th October, we meet in York for what will be HOGG's 25th Anniversary meeting, convened by Duncan Hawley.

We're also looking further ahead to 2020 and the bicentenary of the publication of Greenough's Geological Society map of England and Wales and possibly a history of polar geology meeting in Cambridge. For more information on all of our meetings and events, do keep an eye out for the HOGG Newsletter and JISCmail notices and updates on the HOGG website.

Organising a meeting is not the simplest of tasks and can be fraught with a significant degree of uncertainty which continues until the day of the meeting itself, so on behalf of HOGG Committee and our whole membership, I would like to express our thanks to everyone who has willingly taken on (or been ever-so slightly coerced into taking on) the job. To make life a little easier, Chris Duffin has recently prepared a useful set of planning notes for the guidance of meeting convenors.

You may have noticed a period of stagnation on our website in the middle of the year when it became necessary to move the site to a new host. This has now been done and we hope that over the course of the next few months you'll see some redesign and expansion of content on our website.

Your Committee is very conscious that we need to do more to promote HOGG and to increase our membership, ideally with more members born post-Cretaceous. To this end, we have agreed to offer a reduced membership rate of five pounds for anyone aged 30 or under. Stephen Cribb has produced a new membership leaflet which we hope to distribute far and wide, and in early November we took a stand at the Geologists' Association Festival of Geology at University College London to let more people know of our existence. We hope to attend regularly at this annual event. We are also trialling a history of geology lecture event to a student geological society, an initiative of Duncan Hawley who will be speaking to the Greenough Society at UCL immediately following our AGM. We hope that this might develop into something which can be offered more widely to other university geological societies.

My three years as Chair comes to an end at this AGM. It has been a honour to take on this role, and I am, of course, deeply indebted to my fellow committee members for all of their work, advice, encouragement, and at times, lively discussion. To Geoff Walton, Chris Duffin, David Earle, Beris Cox, Duncan Hawley, John Henry, Stephen Cribb, Nina Morgan, Sabina Michnowicz and Leucha Veneer, thank you.

Tom Sharpe
12 November 2018

SECRETARY'S REPORT

This has been another encouraging year for the History of Geology Group with a number of interesting and well-attended meetings.

At the beginning of the year we welcomed Nina Morgan and Duncan Hawley onto the committee, and Leucha Veneer took responsibility for the website and matters concerning social media.

The HOGG website and associated social media is under review. As a consequence of changes to the situation regarding our website host, we have to look for a new service provider, but are very grateful to Hannah and Dan who have served us well in previous years.

So far as publications are concerned, the papers presented at the meeting on *Military Aspects of Engineering Geology, Past and Present* (2016) are in the process of being produced as a Special Publication of the Geological Society. At the time of writing, most papers have been published on line, and the hard copy of the volume is imminent. The papers from the joint meeting with the Royal Society of Arts, convened at Burlington House to coincide with the last AGM, are now published in *Earth Sciences History* volume 37.

Meetings since the last AGM include a well-attended Open Meeting, held at Burlington House on 9th May 2018, and at which an interesting diversity of papers was presented. A Joint meeting was also held with the Geological Curators' Group at Bath Geology Museum on the theme of *The Geology of South West Britain. The History of Coal* Meeting will take place at Burlington House on the same day as the 2018 AGM.

The first phase of the Pope's Grotto conservation programme has been completed and HOGG members continue to be involved in the project in an advisory capacity.

The Committee continues to plan for the future, with a meeting celebrating the centenary of the admission of women Fellows to the Geological Society in May 2019. Further prospective meetings of the Group in venues outside London are at the exploratory stage and further details will follow once it has been possible to firm up arrangements. Details of the date of the next AGM and associated meeting will be forthcoming.

It is a pleasure to be able to thank each member of the current Committee for their various contributions and hard work. We look forward to being able to serve the Group over the next year, together with four new members, who have yet to be appointed.

Chris Duffin
1st November 2018

TREASURER'S REPORT FINANCIAL YEAR ENDING 30TH SEPTEMBER 2018

1. HOGG maintains three accounts: Santander Business Account, Co-operative Community Directplus Account, Paypal Account

2. Main items of expenditure

2.1. Committee travel expenses

February 18 £290.65

May 18 £416.96

July 18 £332.84

September 18 £268.05

2.2. Newsletter production

Number 61 £86.80

Number 62 £94.66

Number 63 £90.59

2.3. GA Affiliation fee for 2018 £40

GA group insurance for 2018 £171.36

2.4. Website maintenance No charges this year

2.5. Publicity materials £64.00

2.6. *Earth Sciences History* publishing costs £1040.00

2.7. Total expenditure on these items £2895.91 (previous year £1947.85)

3. Subscription Income and donations

£2490.00

Subscription remains the same for 2019 at £15

4. Meetings

4.1 Soc. of Arts meeting surplus of £214.40

4.2 Open meeting surplus of £113.72

4.3 Bath meeting – accounts awaited from co-convenors.

5. Account Balances

Santander £8775.56

Co-op £ 976.55

Paypal £2617.79

Total £12369.90 (previous year £13859.63)

David Earle

15th November 2018

NEW COMMITTEE MEMBERS

At the AGM in November 2018, the following HOGG members were elected to the committee replacing Stephen Cribb, Chris Duffin, Sabina Michnowicz and Tom Sharpe who were retiring. Duncan Hawley (see HOGG Newsletter 62, p.6) was elected as new Chairman.



Cynthia Burek is Professor of Geoconservation at the University of Chester. Her interests include many aspects of conservation, sustainable development, science communication and the history of geoconservation, the history of women in geology and the roles they have played. She is convening the HOGG meeting in May this year which will celebrate the centenary of the first female Fellows of the Geological Society (see P. 11 of this newsletter). This is her second term on the HOGG committee.



Jill Darrell is a curator in the Earth Sciences Department of the Natural History Museum, London. She is responsible for the Cnidaria (corals etc.) collections and the William Smith Collections of fossils and rocks. She has previously served on the HOGG committee and, most recently, has been involved in the production of *William Smith's Fossils Reunited* which will be published in March this year (see P. 17 of this newsletter).



Dr Cherry Lewis has an interest in the history of medicine and science, specifically the history of geology on which she has published several books. She has previously served on the HOGG committee and was its Chair from 2004–2007.



Dr Peter Riches is interested in the development and history of geology within and about Norfolk and Suffolk, particularly during the Nineteenth Century. He spent most of his career working in the oil and gas industry. He has an MSc in Quaternary Science and a PhD (Royal Holloway, University of London) for research on the Craggs of East Anglia. He is a Fellow of the Geological Society, former Vice President of the Geologists' Association and past editor of the *Proceedings of the Geologists' Association*.

HOGG COMMITTEE 2019

Chairman Duncan Hawley **Vice Chairman** Geoffrey Walton **Secretary** John Henry
Treasurer/Membership Secretary David Earle **Ordinary members:** Cynthia Burek, Beris Cox
(**newsletter**), Jill Darrell, Cherry Lewis (**website**), Nina Morgan, Peter Riches

HOGG WEBSITE

Our main website <http://historyofgeologygroup.co.uk/> is up and running again, and continues to be upgraded. This provides easy access to all aspects of HOGG including details about our meetings and the facility for online registration and payment, as well as subscription renewal. We also have a presence at www.geolsoc.org.uk/ where you will find some useful resources.

HOGG NEW MEMBERS

HOGG welcomes the following new members

Allan Harmon (Hockley, Essex)
Susan Hegarty (Dublin, Ireland)
Bettie Higgs (Cork, Ireland)
Susan Newell (London)
Stephen Ng (Chung On Ng) (Lamma Island, Hong Kong)
William Ralph (Trowbridge, Wiltshire)

HOGG AT THE GEOLOGISTS' ASSOCIATION FESTIVAL OF GEOLOGY Tom Sharpe¹

For the first time, the History of Geology Group presented a stand at the Geologists' Association (GA) Festival of Geology held at University College London on Saturday 3rd November 2018. Formerly known as the GA Reunion, this annual event is a wonderful networking opportunity as it brings together over 40 exhibitors, including a wide range of GA Local Groups, local geological societies, mineral and book sellers, The Geological Society, The Natural History Museum and the British Geological Survey. Our attendance was part of a new move by HOGG to raise awareness of our existence and to attract new members.

John Henry brought along a selection of publications by HOGG members, mainly Geological Society Special Publications, while Chris Duffin sent along a range of posters from our meetings. We also had some 1920's mineral postcards, copies of our new membership leaflet and John Henry's brochure



HOGG Treasurer David Earle at our stand.

about William Smith's Buckingham Street house. In preparation for the event, as discussed by HOGG Committee, David Earle and John had arranged the production of some rather classy pens, bearing our name and website, as freebies. We were pleased with the number of people who visited our stand and showed an interest in our work, and we even had one new member joining there and then! Certainly a worthwhile event which should be on our calendar every year.

¹ e mail tom.sharpe1@me.com

SUE TURNER RECEIVES TOM VALLANCE MEDAL for 2018

HOGG member Dr Susan Turner, Honorary Research Fellow at the Queensland Museum, has been awarded the Tom Vallance Medal for 2018 by the Earth Sciences History Group of the Geological Society of Australia. Introduced in 2011, the Medal is awarded biennially to a person who has “made a significant contribution to researching, recording, investigating, documenting and/or publishing about people or places or events of historical importance to the geological sciences in Australia or Australasia.” Susan is noted for her work on the careers of Australian women geologists.



Image courtesy GSAust.

The medal is named after Dr Thomas George Vallance (1928–1993), geologist and historian of science, who was formerly Associate Professor at the University of Sydney. Originally a petrologist, he researched and published many articles and papers on famous, infamous and little-known early pioneers in the field of earth science. He was a foundation member of INHIGEO and for some years one of its Vice-Presidents.

https://www.gsa.org.au/Public/Specialist/Earth_Sciences_History/ESHG/Tom_Vallance_Medal/

CHRIS DUFFIN RECEIVES MARSH AWARD FOR PALAEOLOGY 2018

On January 11th 2019, Chris Duffin who retired as HOGG Secretary at the AGM last November was presented with the Marsh Award for Palaeontology 2018. The ceremony took place at The Natural History Museum in London.



(Image courtesy NHM blog)

The Marsh Christian Trust was founded in 1981, as a grant-making body by Brian Marsh. In addition to its grant-making, over the past 30 years the Trust has developed an awards scheme to provide recognition to those who work to improve the world we live in. Recipients of Marsh Awards are always people who make a difference by selflessly contributing their time and energy to causes that they believe in.

The three awards (for Mineralogy, Palaeontology and Best Earth Sciences Book of the Year) are run in partnership with the Natural History Museum, and form part of a larger scheme of some 80 awards that the Trust runs in collaboration with 40 charitable organisations, spanning the areas of Heritage, the Arts, Social Welfare, and Conservation.

<http://www.nhm.ac.uk/events/the-marsh-awards-for-palaeontology-mineralogy-earth-sciences-book.html>



ASPECTS OF THE HISTORY OF COAL AND ITS MINING

John Henry¹ reports on the HOGG meeting held at Burlington House, London on 22nd November 2018

The origin of this meeting was initially in response to the Geological Society's 2018 theme, the Year of Resources, and to note the demise of the Coal Geology Group. The speakers, drawn together by HOGG vice-chairman Geoffrey Walton, delivered a comprehensive set of presentations covering the early and recent history of coal mining/quarrying in Great Britain, and in the wider world.

In the opening talk, *The Coal Acts 1938–1943; the Forgotten Nationalisation*, **Richard Trounson** outlined the largely unknown pre-history of nationalisation of the coal industry. Under English Common Law, mineral rights belonged to the surface land owner. Fragmented ownership hampered and complicated the development of coal mining in some areas, while in other areas large land owners effectively became local monopolists. The 'unification' (under government supervision) of the interests in then unworked coal, and the detachment of mineral rights from individual landowners and their transfer to the government, in line with legal practice in most other countries, was gradual. Then, it was relatively uncontroversial technical legal work, but it enabled the rapid post-war nationalisation of the coal industry. That this story has been 'forgotten' may be because it was the work of a coalition government led by Neville Chamberlain, and was eclipsed by the failure of his Appeasement policy to prevent World War II. It was a fascinating example of how the legal framework can impede or facilitate an industry's expansion and, in coal's case, the management of its decline.



Geoffrey Walton then spoke about the *Development and decline of British Opencast Coal Mining*, drawing on his early and subsequent career experience working for the Opencast Executive (OE) and then as a consultant. Opencast mining of coal began in 1942 during WWII, and expanded up to the 1980s under the National Coal Board (NCB), although acting largely independent of it because the NCB was primarily about deep coal mining. At its peak, opencast coal mining employed 100 geologists within the OE and the Geological Survey. The coal geology aspect was largely about estimating quantities and was highly contractual but the major professional impact was the development of geotechnical engineering in response to several quarry wall collapses.

With the decline of the coal industry in Britain, many experienced coal geologists moved abroad including the next speaker **Larry Thomas**. In his presentation *The evolution of coal mining in the Far East (i.e. not including India)*, he first outlined the historical background of coal mining in this region. In the cases of Japan, Korea, Malaysia, Indochina (now Viet Nam, Cambodia and Laos), small economic coal reserves were largely exhausted in the 19th and early 20th centuries mainly to fuel steamships. Exceptionally, following the Fukushima nuclear disaster, coal mining has restarted in Hokkaido. Coal mining continues in North Korea, but its extent is not known. Coal mining and quarrying has expanded rapidly in China and Indonesia with the discovery of huge reserves. Expansion has been fuelled by the demand of large coal-fired power stations, themselves only feasible with these new resources. Indonesia is a major exporter of high quality, low sulphur coals. China's internal market uses its entire production and it is a major importer, not only from Indonesia, but also from Canada and Australia.

Following lunch and the HOGG AGM, **Ted Nield** spoke about *The Mountain that moved—how Aberfan dethroned King Coal*. The spoil slope failure in 1966 at Aberfan was a disaster waiting to

happen. It killed 144, of whom 116 were children in their school. The catalogue of human failures, individual and institutional, to investigate and relate previous non-fatal spoil slope failures to continuing practice and to recognise the hazard to Aberfan of continued tipping, was and is appalling. The Aberfan Disaster set the stage for a societal shift that ultimately led to the abandonment of deep-mined coal, and growing reluctance to pay the environmental and safety costs of all kinds of mineral exploitation.

In *Local geologists on the Great Northern Coalfield, 1790–1840*, **Leucha Veneer** spoke of the activities of two local societies, the Newcastle Literary and Philosophical Society (NLPS), and the Natural History Society of Northumberland, Durham and Newcastle-upon-Tyne (NHSND&N), to develop geological knowledge and to use that knowledge to exploit coal. A principal character in both societies was Rev. William Turner (1781–1841). The NLPS's initial interest became sporadic; this led to the founding of the NHSND&N which had some success with local mapping and collating mine data. Real progress waited until the arrival of Ordnance Survey one inch scale mapping in the 1860s, and professionalisation of geology and mining by the establishment of the Geological Survey and the Royal School of Mines.

Alan Cobb spoke about the continuing legacy of past mining in *Coal Mining Subsidence; some Aspects of its History*. The expression on the surface of subsidence relates to the method of mining, its depth, and the nature of the overlying formations. Although largely abandoned, subsidence may continue/restart with the failure of supporting pillars and/or the rise of ground water to its original level. The fissuring of surface rocks by its flexing during subsidence permits infiltration and the alteration of rock, particularly mudstones; this has led to landslides decades after the end of mining. Alan traced the legislation of the first half of the 20th Century, which permitted surface owners to injunct or claim compensation, and defined the circumstances for compulsory purchase.

Turning to the early history of geologically informed prospecting, **Hugh Torrens** traced the career of *John Bateman Longmire (1785–1858), the mining engineer who went to Russia in 1817 to look for coal, instead of William Smith*. Longmire worked for his uncle, John Bateman (1749–1816) who was the mining engineer for Lord Lowther's coal mines at Whitehaven, then the deepest and most extensive in Britain. He studied under Jameson at Edinburgh and, having fallen out with the mine's new owner, found himself available to accept a commission to prospect for coal in Russia. The Tsar's main armament factory at Tula, approx. 200 km south of Moscow, required coal to fuel its works. Although, with his team of seven he bored many trial holes, he was unable to improve on the known low grade, thin bedded brown coals. Only much later was it appreciated that in Russia, coal was available below the Permian, contrary to Longmire's or William Smith's British experience. An earlier invitation to Russia found William Smith only in 1823 (Phillips 1844, p.106)—the annual salary of £800 would have resolved his financial woes.

Geoffrey Walton summed up the conference aptly; the historical experience of British coal mining, of enabling and being driven by industrial expansion to the point of resource exhaustion and considerable environmental degradation, is being repeated on a larger scale by emerging economies under greater market pressures. While in Britain we are concerned about remediating the physical and social legacy of abandoned mines and switching to cleaner sources of energy, our efforts are reduced to insignificance by the contribution to global warming by the continuing and expanding use of coal elsewhere.



The conference was very well received. Thanks go to Geoff and the presenters for an interesting day, with topics ranging over the early and recent history of coal, and the impact of its extraction.

¹ e mail geol.maps@virgin.net

FUTURE HOGG EVENTS

***GROUP VISIT TO SEE DINOMANIA**

Saturday 23rd February 2019, 3 pm

New Diorama Theatre

15–16 Triton Street, Regent's Place, London NW1 3BF

See P. 20 for further details.

***A CENTENARY CELEBRATION OF THE FIRST FEMALE FELLOWS OF THE GEOLOGICAL SOCIETY OF LONDON**

21st May 2019

Burlington House, Piccadilly, London

See P. 11 for further details.

***SCOTTISH OPEN MEETING**

11th–12th July 2019

Joint meeting with Edinburgh Geological Society

Surgeons Hall, Nicolson Street, Edinburgh

See P. 12 for Call for Papers.

***JOINT MEETING WITH THE YORKSHIRE PHILOSOPHICAL SOCIETY**

23rd–24th October 2019 including HOGG AGM

York Explore Library & Archive and Yorkshire Museum, York

See P.12 for further details.

***GEORGE BELLAS GREENOUGH MAP BICENTENARY**

May 2020

University College and Burlington House, London

See P. 13 for more details and Call for Papers.



A CENTENARY CELEBRATION OF THE FIRST FEMALE FELLOWS OF THE GEOLOGICAL SOCIETY OF LONDON

Burlington House, Piccadilly, London

21st May 2019

CONVENORS: Prof. Cynthia Burek c.burek@chester.ac.uk Dr Bettie Higgs b.higgs@ucc.ie
Dr John Cubitt jmcubitt@gmail.com

A buffet dinner at Burlington House after the conference will further celebrate this historic anniversary.



KEYNOTE: Robbie Gries, President of the Geological Society of America
(author of *Anomalies: Pioneering women in the petroleum industry 1917–2017*)
will speak on

World War I through affirmative action—women in petroleum geology make a difference.

Other speakers and poster-presenters include **Paddy Boylan, Cynthia Burek, Susan Hegarty, Bettie Higgs, Martina Kolhl-Ebert, Cherry Lewis, Mary Orr, Consuelo Sendino and Sue Turner.** Topics covered are as diverse as individuals' contributions to geological research, the first FGS including the first female President of the Geological Society, through to women at the dawn of diamond discovery in Siberia, and a feminists' guide to dinosaurs.

REGISTRATION FEES include coffee, lunch and tea, plus a book of abstracts.

HOGG members & affiliates* £45 Non-members/affiliates £50
Evening celebration (optional): Wine Reception £10 *followed by* Hot Buffet Dinner £35

(* affiliates are Geol. Soc. fellows, GA members, Women's History Network members)

Complete the registration form on P.27 of this newsletter *or*
Register online at <https://historyofgeologygroup.co.uk/>

Further details at <https://historyofgeologygroup.co.uk/> and
<https://www.geolsoc.org.uk/HOGG-Female-Fellows-Event>



**ASPECTS OF THE HISTORY OF GEOLOGY IN
SCOTLAND
AND
THE NORTH OF ENGLAND
SCOTTISH OPEN MEETING**



Surgeons Hall, Nicolson Street, Edinburgh EH8 9DW

Thursday 11th–Friday 12th July 2019

CALL FOR PAPERS

Offers of papers of 20–25 minutes on any aspect of the history of geology in Scotland and the north of England, including work in progress, are welcome for this joint meeting of the History of Geology Group and the Edinburgh Geological Society, to be held at the Surgeons Quarter in central Edinburgh. This meeting will comprise a day of presentations (Thursday 11th July) followed by a field day (Friday 12th) featuring a walking tour, taking in sites linked with the history of geology around the city, as well as Hutton's Section on Salisbury Crags.

Convenor: Tom Sharpe, 4 Abbey Mains Cottages, Haddington, East Lothian EH41 3SB
email tom.sharpe1@me.com

Please send titles and abstracts to Tom Sharpe at the address above by 1st March 2019.



**JOINT MEETING WITH THE
YORKSHIRE PHILOSOPHICAL SOCIETY**

York

Wednesday 23rd–Thursday 24th October 2019



The programme is yet to be finalized but talks on Day 1 will be held in the Marriott Room of York Explore Library & Archive followed by behind-the-scenes tours of the adjacent Yorkshire Museum. The meeting will also include the 2019 HOGG AGM. Talks will cover John Phillips' work in York as well as the contributions of other York-based geologists to the development of geology. There will be a viewing of the YPS William Smith map (a late issue) as well as specimens collected by John Phillips. An optional Day 2 will include field visits to Kirkdale Cave and East Rosedale mines.

Further details will be given in the next (June) newsletter and on the HOGG website
<https://historyofgeologygroup.co.uk/>.

Expressions of interest should be sent to the convenors:
John Henry (geolmaps@virgin.net) *or* Duncan Hawley (duncan.hawley@gmail.com).

GEORGE BELLAS GREENOUGH MAP BICENTENARY MEETING

MAY 2020

UNIVERSITY COLLEGE and BURLINGTON HOUSE, LONDON

As noted in the last newsletter, HOGG is planning an event to mark the bicentenary of the publication, in May 1820, of Greenough's (Geological Society) geological map.



The plan is to hold a two day conference in early May 2020 with papers/presentations on all aspects of the map, but also providing insights into Greenough (GBG)—not least because he tends to be portrayed as the 'villain' (or should that be 'Baron') of early geology. One aim of the conference is to help present a more rounded view of GBG—geologically and personally—including his involvement in setting up University College London (UCL).

We are hoping that this event will stimulate research and new information about Greenough and elucidate understanding about the production and sales of this important map.

We hope to publish a volume based on the presentations at the conference and other contributions, as appropriate.

Convenors: Duncan Hawley (HOGG) and Prof. Ian Wood (UCL)

Proposed Programme

The event will aim to explore the 'genius' of Greenough, and we are looking to include some of the following aspects:

- the contribution Greenough made to the early development of geology—philosophical, political and social.
- aspects of the 1820 map—philosophy/purpose, methods, 'state of the art' geological knowledge, the representation of geology (decisions about base map and colouring), the revised editions of 1840 and 1865.
- the influence/legacy of the 1820 map on:
 - subsequent maps of England & Wales geology (reduced 1826, T B Loader 1831+, Arrowsmith 1834+, Walker Bros/Knipe 1835+, other and later competitors (e.g. Phillips 1838),
 - the development of geology (e.g. Sedgwick & Murchison checking and discovering errors and the subsequent influence on their careers),
 - the de Villiers/Dufrenot/de Beaumont geological map of France,
 - H T de la Beche and the development of mapping/maps in the Geological Survey,
 - Greenough's India map (1854).
- clarifying (debunking?) the 'myths' surrounding GBG's approach (hero?, villain?...or is the reality more nuanced?)—this might explore the connection with Smith.

- background/life of GBG—to help understand the map and his geological works in context: family—father, mother and grandfather and 'extended' family, e.g. the Colston's of Ireland, education and early geological experiences—Gottingen and the Hartz Mts, the Alps and touring Italy, wealth, investments and philanthropy, connections and support for the arts, e.g. friendship with Decimus Burton, Sir Francis Chantrey, membership/involvement in other learned societies (RGS, Zoological, BAAS , Ethnological etc)

Visits

The aim is to incorporate a number of visits to sites connected with Greenough and view his archive material, with the following possibilities currently in discussion:

- Greenough's residences in Whitehall and Regent's Park (Grove House)
- Kensal Green Cemetery—Greenough's tomb
- UCL Earth Sciences Dept to view Greenough specimens
- Geol. Soc. Archives (Burlington House)
- UCL archives (currently at National Archives in Kew)

Greenough Map reproduction

Plans are in hand to produce a high quality reprint of the 1820 Greenough map, in association with the British Geological Survey, as a special edition for HOGG members/subscribers; this will also include the Memoir with background notes.

Expressions of interest

At this stage, we are inviting expressions of interest for presentations, papers or posters on any topic relating to the Greenough geological maps of the 1st, 2nd or 3rd editions and their impact, or on any other aspect of Greenough's work and life.

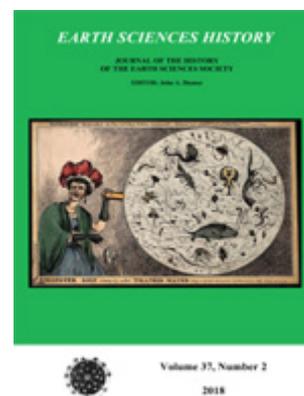
Brief proposals of likely topics or working titles should be sent to Duncan Hawley at duncan.hawley@gmail.com

BOOK AND MAP NOTES

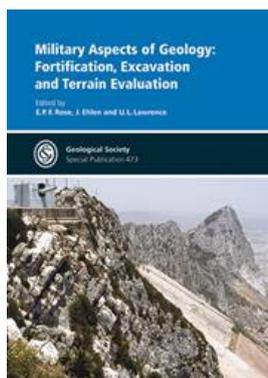
Earth Sciences History, Vol. 37, No. 2 2018

The first eight papers in this issue (listed below) are based on presentations given at the joint meeting of HOGG and the Royal Society of Arts held in London in November 2017 (see HOGG Newsletter 62, pp. 7–9).

- *Poking its nose into everything: The Society for the Encouragement of Arts, Manufactures and Commerce.* Susan Bennett. pp. 229–246.
- *John Player's 'Geological Observations' of 1764–1766, and his contributions to the Society of Arts journal Museum Rusticum et Commerciale.* **Hugh Torrens** and Madeleine Gill. pp. 247–265.
- *The Society of Arts map awards and the encouragement of geologic mapping.* **C. John Henry.** pp. 266–292.



- *Geologists John Farey and William Smith awarded silver medals for agriculture.* **Cherry Lewis.** pp. 293–308.
- *Negative geology: Humphry Davy and forming the Royal Institution's mineral collection, 1803–1806.* Frank A. J. L. James. pp. 309–332.
- *Illustrating the ideal: Crystal models and illustrations in the early nineteenth century.* Jane Insley. pp. 333–341.
- *National water supply, debates between geologists and engineers and the role of the Society of Arts.* **John D. Mather.** pp. 342–362.
- *Promoting Art, Manufactures and Commerce in one: The Society's role in the development of a British marble industry.* Gordon Walkden. pp. 363–379.



Military Aspects of Geology: Fortification, Excavation and Terrain Evaluation

edited by **E. P. F. Rose**, J. Ehlen and U. L. Lawrence

GSL Special Publication 473

GSL Publishing House. 2019.

ISBN 978-1-78620-394-6 hardback

List price £110 Fellows' price £55 Other societies £66

“This book complements the Geological Society's Special Publication 362: *Military Aspects of Hydrogeology*. Generated under the auspices of the Society's History of Geology and Engineering Groups, it contains papers

from authors in the UK, USA, Germany and Austria. Substantial papers describe some innovative engineering activities, influenced by geology, undertaken by the armed forces of the opposing nations in World War I. These activities were reactivated and developed in World War II. Examples include trenching from World War I, tunnelling and quarrying from both wars, and the use of geologists to aid German coastal fortification and Allied aerial photographic interpretation in World War II. The extensive introduction and other chapters reveal that ‘military geology’ has a longer history. These chapters relate to pre-twentieth century coastal fortification in the UK and the USA; conflict in the American Civil War; long-term ‘going’ assessments for German forces; tunnel repair after wartime route denial in Hong Kong; and tunnel detection after recent insurgent improvisation in Iraq.” [publisher's notes]

Coastal fortification

- *Military use of geologists and geology: a historical overview and introduction.* **Edward P. F. Rose**, Judy Ehlen and Ursula L. Lawrence. pp.1–29.
- *The landslide-damaged Roman fort at Lympne in SE England.* Edward N. Bromhead. pp.31–45.
- *Groundwater supplies to maritime and coastal defences in southern England: a story of risk and innovation.* **John D. Mather.** pp.47–60.
- *American coastal defence Third System forts: how geomorphology and geology dictated placement and influenced history.* Stephen W. Henderson. pp. 61–82.
- *The northern Atlantic Wall: German engineering geology work in Norway during World War II.* Hermann Häusler. pp. 83–108.

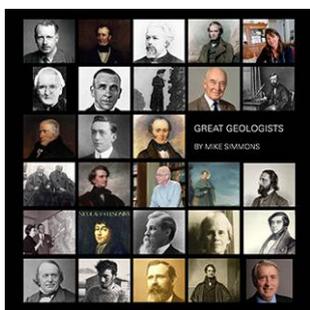
Excavation

- *Trench construction and engineering geology on the Western Front, 1914–18.* Peter Doyle. pp. 109–130.
- *German military geology and military mining on the Eastern Front in World War I.* Dierk Willig. pp. 131–150.
- *Quarrying Companies Royal Engineers in World War I: a geologically constrained innovation to support British armies on the Western Front.* **Edward P. F. Rose.** pp. 151–171.

- *Quarrying Companies Royal Engineers in World War II: contributions to military infrastructure within the UK and to Allied forces during the North African, Italian and NW Europe campaigns.* **Edward P. F. Rose.** pp. 173–200.
- *Tunnelling Companies Royal Engineers in World War II: excavation of bomb-proof facilities in France, Gibraltar, Malta and the UK.* **Edward P. F. Rose.** pp. 201–232.
- *Engineering geological considerations for the ‘Old’ Beacon Hill Railway Tunnel, Hong Kong Special Administrative Region.* Alexander D. Mackay. pp.233–239.
- *Geological considerations of contemporary military tunnelling near Mosul, northern Iraq.* Mark H. Bulmer. pp. 241–265.

Terrain evaluation

- *Geological influence of the Great Red River Raft on the Red River Campaign of the American Civil War.* Danny W. Harrelson, Nalini Torres, Amber Tillotson and Mansour Zakikhani. pp. 267–273.
- *Aerial photographic intelligence during World War II: contributions by some distinguished British geologists.* **Edward P. F. Rose.** pp. 275–296.
- *One hundred years of cross-country mobility prediction in Germany.* Florian Malm. pp. 297–306.



Great Geologists

M. D. Simmons
Halliburton. 2018.

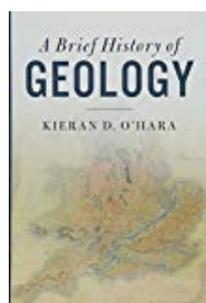
ISBN 978-1-9160054-1-9 softback (available from author while stocks last)

ISBN 978-1-9160054-0-2 e book (free download at <https://joom.ag/ggLa>)

“For the last three years, Halliburton Technology Fellow Mike Simmons has written an article on a Great Geologist for our NefTex[®] Exploration Insights magazine. All 35 short biographies have now been compiled into one volume celebrating the lives and works of Great Geologists. The history of geoscience is marked by the work of exemplary scientists, who through their endeavours, changed the way we think about the Earth, its history, processes and resources. Some made huge intuitive leaps, recognising, for example, the immensity of geological time or the mobility of the continents. Others described rocks, minerals and fossils in the field, or laboratory, and provided vital data that allowed theories to develop. Others still embraced new technologies, such as geophysics, that enabled what cannot be observed directly to be interpreted. Many led colourful lives or overcame adverse circumstances. These are people worth knowing more about, not least, for the inspiration they provide.”

[<https://www.ienergy.community/Smart-and-Connected-EP-15>]

“The lives and scientific works of 35 Great Geologists are summarized by Prof. Mike Simmons in the first book of its kind. Highlights in the development of geological thought from the 17th century to the present day are captured in this series of readable and extensively illustrated biographies.” [publisher’s notes]



A Brief History of Geology

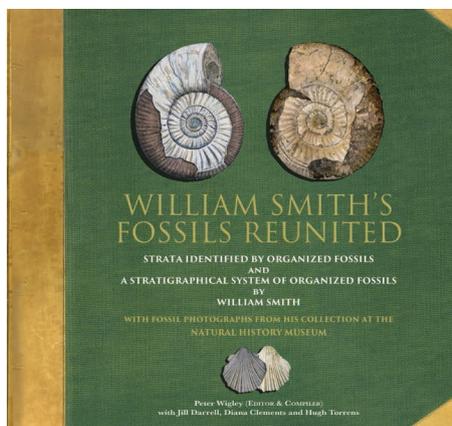
Kieran D. O’Hara

Cambridge University Press. 2018. xi+262pp.

ISBN 9781107176188 hardback RRP £24.99

“Kieran D. O'Hara's book provides a brief and accessible account of the major events in the history of geology over the last two hundred years, from early theories of Earth structure during the Reformation, through major controversies

over the age of the Earth during the Industrial Revolution, to the more recent twentieth-century development of plate tectonic theory, and on to current ideas concerning the Anthropocene. Most chapters include a short 'text box' providing more technical and detailed elaborations on selected topics. The book also includes a history of the geology of the Moon, a topic not normally included in books on the history of geology. The book will appeal to students of Earth science, researchers in geology who wish to learn more about the history of their subject, and general readers interested in the history of science.” [publisher’s note]



William Smith's Fossils Reunited

Peter Wigley (editor) with **Jill Darrell**, Diana Clements and **Hugh Torrens**

Halsgrove Publishing. March 2019 160pp.
ISBN 978 0 85704 3375 hardback £34.99

“William Smith is considered by many to be the Father of English Geology and is best remembered for his remarkable geological map of England and Wales, made in 1815. From an early date, Smith recognized that many of the strata which he showed on his map were characterized by the fossils they contained. In 1816, he started a book called *Strata Identified by*

Organized Fossils which, although unfinished, was a fundamental work in establishing the science of stratigraphy. In this book, Smith figured fossils from each stratum. The fossil plates were exquisitely engraved by the renowned illustrator, naturalist and mineralogist, James Sowerby, from fossils provided by Smith.

Although a brilliant geologist, Smith was an unlucky businessman and because of his precarious financial position he was forced to sell his extensive fossil collection to the British Museum. In *William Smith's Fossils Reunited*, the authors have included new photographs of fossils from Smith's Collection, now housed at the Natural History Museum. These photographs have been arranged next to the original engravings, and in some cases, Smith's sketches. Smith's original texts for both *Strata Identified* and a later work *Stratigraphical System of Organized Fossils*, which catalogued the fossils, have been reprinted within the book. As Smith roamed the English countryside collecting fossils, he was careful to note the exact geographical location of each fossil and also the rock layer from which it came. In this book, these locations are shown on copies of Smith's own geological maps.

With a Foreword by Sir David Attenborough, *William Smith's Fossils Reunited* is intended both for the William Smith enthusiast and also for those with a more general interest in the work of this remarkable pioneering geologist. The fossil illustrations and maps in this exquisite volume are aesthetically pleasing in their own right and demonstrate the extraordinary skill of early nineteenth-century engravers and map makers.” [publisher's notes]

There will be a book launch at the Geological Society, Burlington House on Friday 22nd March—a date chosen to coincide closely with the 250th anniversary of the birth of William Smith.

.....ALSO OF INTEREST?

(In this and the preceding Book and Map Notes, authors' names in **bold** indicate HOGG members)

Aspen, P. 2018. Alexander Murray Cockburn, Curator of the Museum of Geology at Edinburgh University. *The Geological Curator*, **10(9)**, 531–533.

David Bate. 2018. Drayton’s *Poly-Olbion*, 1613–1622. *Mercian Geologist*, **19(3)**, 128–129.

Thomas Hose. 2018. A wheel in Edwardian Bedfordshire: A 1905 Geologists’ Association cycling excursion revisited and contextualised. *Proceedings of the Geologists’ Association*, **129(6)**, 748–769.

Nina Morgan. 2018. Distant Thunder: Rock star. *Geoscientist*, **28(10)**, 26. [on geologist William Bernard Robinson (W.B.R.) King’s role in World War I and WWII].

_____ 2018. Distant Thunder: A Christmas cracker. *Geoscientist*, **28(11)**, 28. [on meteor strike at Barwell, Leicestershire, Christmas Eve 1965].

_____ 2019. Distant Thunder: Romance of the Fossiles. *Geoscientist*, **29(1)**, 28. [on John Hailstone (1759–1847) and the distraction of matrimony].



GERTRUDE ELLES AWARD FOR PUBLIC ENGAGEMENT

In 2018, the Palaeontological Association introduced a new award for public engagement in the field of palaeontology which was named after the pioneering palaeontologist, geologist and woman of science Gertrude Elles (1872–1960). In the Association’s most recent *Newsletter* (No. 99, pp.35–37), their President Paul Smith wrote “Principally known for her work on graptolites and Lower Palaeozoic stratigraphy, Elles was a pioneer in many respects. She was one of the first female lecturers at the University of Cambridge, the first female Reader at the University, a recipient of the Lyell Fund of the Geological Society in 1900, the first female recipient of the Murchison Medal of the Geological Society (1919), and the first female Council member of the Geological Society (1923–1927).....and a few months after being awarded the Murchison Medal, she was in the first group of twelve women admitted as fellows of the Geological Society. Not restricting her activities to geology, she was the Red Cross commandant of a hospital for soldiers during World War One, for which she was appointed MBE in 1920. At Newnham College, Cambridge, she was successively Demonstrator, University Lecturer, Director of Natural Science, and Vice-Principal (1925–1936). Pertinently in relation to the Association’s new award, Elles was President of the British Association for the Advancement of Science in 1923 (now the British Science Association).....She was not just a pioneering palaeontologist and geologist, but also had an influential position in the early twentieth century vanguard of women in science....”

Gertrude Elles will no doubt feature in HOGG’s May meeting celebrating the centenary of Geol. Soc. female fellows (see P. 11).

SICCAR POINT UPDATE

As reported in *Down to Earth Extra* (November 2018), visitors to the world famous site at Siccar Pont in Berwickshire, Scotland, are now able to see a significant improvement in signage thanks to a new partnership between the Edinburgh Geological Society and the oil and gas operator Siccar Point Energy. The Company has funded new information boards at the site, as well as 20,000 leaflets that highlight the unique history and geology of Siccar Point. In 1788, James Hutton described the rocks on either side of the unconformity exposed there and declared that in geological time “he saw no vestige of a beginning, no prospect of an end.” Today, Siccar Point is something of a Mecca for geologists from around the world who come to this place to pay homage to Hutton



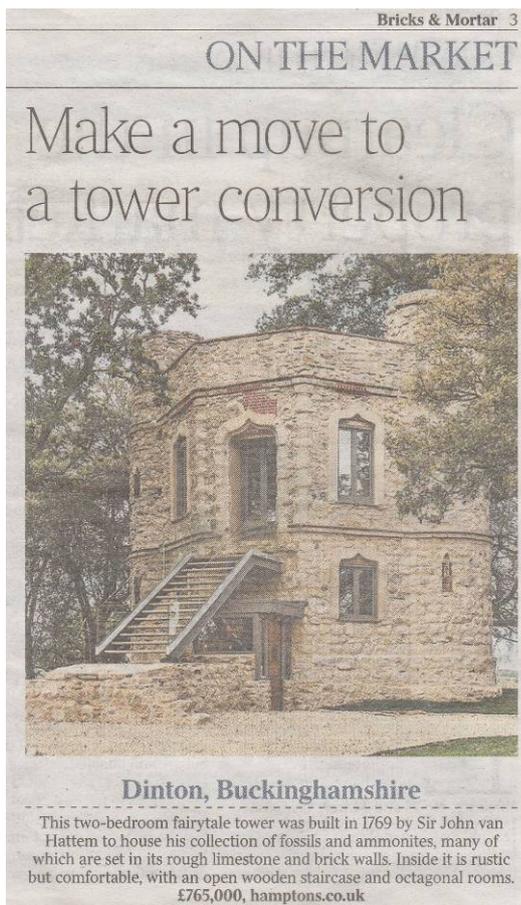
Image courtesy Down to Earth Extra

and what was, at the time, a controversial idea. Doug Fleming, Chief Financial Officer of Siccar Point Energy said “As an oil and gas company, geology is at the heart of what we do. Hutton is an inspiring example of a scientist who followed the evidence and defied the conventional wisdom of the day. It’s a great example for a young company and a fascinating piece of Scottish history to preserve and to continue learning from.” The company is also exploring further opportunities to enhance the site with the Edinburgh Geological Society.

(Based on report in *Down to Earth Extra*, November 2018, pp. 3–4)

AMMONITES IN THE WALLS

Anthony Brook¹



The photograph (*left*) appeared in the *Brick & Mortar* Supplement of *The Times* newspaper on Friday 25th January 2019. I would have passed it over with only a brief glance, but the caption arrested my attention.

This 'fairytale tower', also known as Dinton Castle, was built as an extravagant Gothic folly in 1769 by Sir John van Hattem (1725–1787) on his country estate. It is sited 500 metres north of Dinton House, by the Oxford to Aylesbury road, on the crest of a ridge giving panoramic views over the Vale of Aylesbury in Buckinghamshire. Sir John was an important local landowner, antiquarian and natural-historian, who preserved his considerable collection of fossils in a more ‘constructive’ way, by setting them into the exterior limestone walls of this two-storey building with its twin circular towers.

Dinton Castle was in ruins before the turn of the 19th century, and remained in a much-photographed ruinous state for many decades thereafter. A Building Site Report of this Grade II* Listed 'building' in August 2016

was despairing, with urgent action required for its preservation. The report stated that “the structure includes many large, locally-found ammonites incorporated into the external walls: they are now in poor condition due to exposure to the elements, and several are missing”. During 2017, the ruins underwent a very careful year-long restoration which has brought the building back into use as an unusual 'des. res.' which is currently for sale.

Hopefully, there is already a historic/photographic record of Sir John's fossil collection and the ‘Ammonites in the Walls’.

¹ e mail anthony.brook27@btinternet.com

OTHER FUTURE MEETINGS AND EVENTS

BREAKING GROUND—WOMEN OF THE NORTHERN COALFIELDS

MINING ART GALLERY, MARKET PLACE, BISHOP AUCKLAND DL14 7NP

13th October 2018–24th March 2019

Daily 10.00–16.00hrs last entry 15.30hrs

Admission: adult £5, concessions £4, under 16s £1

For more information, visit

<https://www.aucklandproject.org/events/mining-art-gallery/>



DINOMANIA

NEW DIORAMA THEATRE

15–16 TRITON STREET, REGENT'S PLACE, LONDON NW1 3BF

19th February–23rd March 2019

Tues.–Sat. 19.30hrs Sat. matinée 15.00hrs



“165 million years ago, an iguanodon is killed in the heart of a rainforest. Time passes, the rainforest becomes the South Downs, and every part of the iguanodon degrades and disappears—except one tooth. 197 years ago, in safe, affluent 1820’s Sussex, a country doctor finds the tooth. But where does it fit in the story of an earth created by God just 6,000 years ago? *Dinomania* is a story of scientific endeavour, bitter rivalry and terrible lizards.” (Synopsis from UK Theatre Web)

The Geological Society is one of the sponsors of this production by the multi-award-winning Kandinsky theatre company.

HOGG GROUP VISIT, SATURDAY 23RD FEBRUARY 3.00PM

John Henry (HOGG Secretary) writes:

“HOGG is organising a group visit to see the matinée performance of Dinomania at 3:00pm on Saturday 23rd February..... Tickets may be booked through the website <https://www.newdiorama.com/whats-on/dinomania> at £15.00 (no concessions) and collected at the box office which opens at 2:00 pm. There is a coffee bar and seating to the side of the lobby. Access is excellent. It is all on one level—approaching the New Diorama, into and through the lobby, into the theatre, and to accessible toilets. There are no seat reservations and the theatre opens a few minutes before the play starts. The play lasts about 90 minutes without an interval.

The New Diorama is a small 80 seat theatre in a modern building located in a new pedestrian area within five minutes’ walk of Great Portland Street tube station on the Circle Line. Nearby there is an attractive, affordable restaurant, where we can go after the play to have a drink or early supper; see <https://www.drakeandmorgan.co.uk/the-refinery-regents-place/>. Regent’s Place, is a modern office and residential complex on the north side of Euston Road, near Great Portland Street on the Circle Line, Warren Street on the Northern and Victoria Lines and Regent’s Park on the Bakerloo Line. The theatre’s address is 15-16 Triton St, London NW1 3BF. This is a pedestrian lane more or less parallel to Euston Road.

We hope you will come to enjoy Dinomania and a meal afterwards. Please book directly, but let me know (john@geolmaps.com) that you are coming and if you will be staying afterwards to eat, so that I may inform the restaurant. I suggest we meet in the coffee shop off the theatre lobby by 2:45pm.”



**JOINT CONFERENCE OF THE YORKSHIRE GEOLOGICAL SOCIETY (YGS),
UNIVERSITY OF HULL AND HULL GEOLOGICAL SOCIETY**
University of Hull, Lecture Theatre 1, Allam Medical Building
Saturday 23rd March 2019, 09.30–17.30hrs

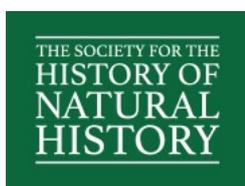
YORKSHIRE GEOLOGY, LANDSCAPES AND ART

Over the centuries, the diversity and natural beauty of Yorkshire's landscapes and geology have inspired and influenced many celebrated writers and observers, including at least two Poets Laureate (Wordsworth and Ted Hughes), significant novelists (e.g. the Brontës, Winifred Holtby), writers on geology (e.g. Adam Sedgwick and John Phillips) and travellers, with many contemporary poets and writers continuing this tradition. Our full day programme of talks and readings brings together leading experts in geoscience, English literature and Yorkshire's landscape and culture. Speakers include (in alphabetical order) Patrick Boylan, Mike Elliott, Matt Fratson, Rose Horspool, Nina Morgan, Roger Osborne, Mike Stephenson, Jane Thomas, Hugh Torrens and Catherine Wynne. Prose and poetry readings on the theme will be drawn from the writings of Anne and Emily Brontë, Celia Feinnes, John Hutton, Winifred Holtby, Ted Hughes, John Leland, Édouard-Alfred Martel, Meaux Abbey Chronicle, Michael McKimm, Blake Morrison, John Phillips, Sylvia Plath, J B Priestley, Adam Sedgwick, Thomas Sheppard, Colin Speakman and William Wordsworth.

REGISTRATION AND HOSPITALITY

Participants wishing to join the speakers for a finger buffet lunch, including dessert and juice or mineral water are required to purchase lunch tickets in advance at £8.75. Please see the YGS EVENTBRITE page (<https://ygs23march2019.eventbrite.co.uk>) to book. Ticket sales close on 16th March 2019.

For participants wishing to make their own lunch arrangements, registration on Eventbrite is NOT required and attendance is FREE. Pleasant indoor seating is available for those wanting to bring a packed lunch. Alternatively, the nearby Library Café and Students Union offer drinks and light refreshments to eat in or take away.



TRADING NATURE

**The Society for the History of Natural History Summer Meeting and
AGM, in association with the Geological Curators' Group
THE KING'S MANOR, UNIVERSITY OF YORK
4th–5th June 2019**



This two day international meeting will examine the role of agents, dealers and commercial enterprises in the history of natural history. A great deal has been recorded about those collecting and studying the natural world over the past 400 years. Much less is known about those who helped supply them. Often underplayed and viewed as peripheral and sometimes even shady figures, the endeavours, contributions and motivations of these 'middle-men and women' are often overlooked. The boundaries and realities of their everyday activities are frequently blurred and sometimes misunderstood. This meeting aims to shed new light on the lives, work and impact of these often undervalued participants and contributors in the development of collections and research in the natural sciences.

The meeting will aim to explore:

- The lives and roles of traders and dealers in natural history collecting networks.
- The contributions of agents, dealers and commercial enterprises to the development of, and understanding in, the natural sciences.
- The role of sale rooms and auction houses and other types of businesses as part of the culture of collecting.
- The supply of natural history material of all kinds to private collectors, museums and universities.
- The historical trade in specimens (living and non-living), around the world.
- Trade networks and routes, and the ethics of trade over the past 400 years.
- The role of colonialism, and those involved, in the establishment and contribution to international trade.
- The environmental and social impact of trade, be it political, economic, cultural, or environmental.

Further information at <https://shnh.org.uk/all-events/trading-nature-june-2019/> and <https://geocurator.org/events/87-trading-nature>

**ICMG19—THE 13TH INTERNATIONAL CONFERENCE ON MILITARY
GEOSCIENCES
PADOVA (ITALY) 24th—28th JUNE 2019**



Conference Theme:

Peace Follows War: Geosciences, Territorial Impacts and Post-conflict Reconstruction

The Conference will be held between Monday 24th June and Friday 28th June 2019, at the University of Padova in northern Italy. The Conference is being organised on behalf of the IAMG by the Department of Historical and Geographic Sciences and the Ancient World (DiSSGeA) and the Italian Society of Military Geography and Geology (S.I.G.G.Mi). A post-conference field trip will be organized from Saturday 29th June to 4th July in the Dolomites (Italian Alps).

Location

Padova is located in north-eastern Italy, 20 minutes from Venice. It is close to the beaches of the Adriatic Sea and to the Dolomites, one of the most scenic regions of the Alps. Conference delegates and accompanying guests have easy access to the historic cities of northern and central Italy such as Milan, Verona, Bologna, Florence and Rome (ranging from 30 minutes to 3 hours train journey) with their many artistic treasures. The recommended port of arrival is the International Airport Marco Polo in Venice.

Themes

The following themes have been identified as being of significant interest. Other topics may be considered upon receipt of abstract. Potential attendees are encouraged to contact the organisers with thoughts on additional themes.

- Post-conflict reconstruction • Trafficability and military mobility •
- The Alpine operational environment • Venetian military history • WW1 era history of northern Italy
- Military tunneling • Conflict archaeology • Geomorphological constraints to warfare •
- Military cartography and GIS • Geospatial intelligence and Remote Sensing •
- Modern embedded geologists • Military fortifications and lines of defences •
- Borders and boundaries • Military tourism and monuments • Geo-military cultural heritage •

Geoscientific lessons learnt from World War II.

Key Dates

- First circular: May 2018
- Second circular: December 2018
- Third circular: January 2019
- Abstract submission deadline: 15th February 2019
- Abstract acceptance notification: 15th March 2019
- Early registration deadline: 15th April 2019
- Late registration deadline: 15th May 2019
- Fourth and final circular: May 2019

The 2ND CIRCULAR including

Call for Abstracts • Author guidelines • Provisional Programme • Conference fees
is now available at www.icmg19.it



44TH INHIGEO SYMPOSIUM

VARESE—COMO, ITALY

2nd–12th September 2019

Center for the History of the Mountains, Material,

Culture and Earth Sciences

University of Insubria

The 44th INHIGEO Symposium will take place at the University of Insubria, with scientific sessions being held in Varese and Como, and a final session in memory of Nicoletta Morello at the Visconti medieval castle in Somma Lombardo.

Participants will be based in Varese and transport for the sessions in Como and Somma Lombardo will be provided. The morning scientific session in Como will be followed by a half-day visit of the city.

There will be a Mid-Meeting Field Trip and a Special Program for accompanying persons. The conference will be followed by a Post-Meeting Field Trip.

CONFERENCE THEMES

- History of the Earth sciences in mountain environments
- History of communication in the geological sciences.
- General contributions on the history of geology

ORGANIZING COMMITTEE

Ezio Vaccari, *chair* (Director of the Center for the History of the Mountains, Material Culture and Earth Sciences - CHMCES, University of Insubria)

Libera P. Arena (CHMCES, University of Insubria)

Andrea Candela (CHMCES, University of Insubria)

Carlo Dossi (Department of Theoretical and Applied Sciences, University of Insubria, Varese)

Maria Faccioli (CHMCES, University of Insubria)

Francesca Gambino (Department of Earth Sciences, University of Turin)

Pietro Mosca (Institute of Geosciences and Earth Resources, National Research Council, Turin)

Alessandro Michetti (Department of Science and High Technology, University of Insubria, Como)

Marco Pantaloni (Institute for Environmental Protection and Research - ISPRA, Department of Geological Survey of Italy, Rome)

Donatella Reggiori (Transnational Association Official Guides of Monte San Giorgio, Meride)

Silvio Renesto (Department of Theoretical and Applied Sciences, University of Insubria, Varese)

Luigina Vezzoli (Institute of Geosciences and Earth Resources, National Research Council, Pisa)
with collaboration from Fabiana Console (ISPRA Library, Rome and Italian Geological Society)

CONFERENCE VENUES

The conference will take place in an area of North-Western Lombardy also known as the Italian 'lake district', located within the mountains and the attractive scenery of the Prealps bordering Switzerland.

University of Insubria (Varese and Como)

The *Università degli Studi dell'Insubria*, established in 1998, is one of the first universities in Italy to adopt a new organizational network model with separate administration seats in different cities. The main centres are based in Varese and in Como. The university logo (*sigillo*), symbolizes the historical and cultural links with both communities of this area of Lombardy. The conference will be held in the most distinguished buildings of the university:

Villa Toeplitz, built towards the end of the 19th century on a hill in the Varese district of Sant' Ambrogio Olona, was bought in 1914 by the founder of the Banca Commerciale Italiana, Giuseppe Toeplitz. The villa was renovated with addition of a metal dome where an astronomic specula was installed. The building is surrounded by an eight-hectare garden-park, designed in the Italian and English styles.

Sant'Abbondio Cloister, built in the 16th century as part of the medieval Basilica di Sant'Abbondio, is a great example of the Como Romanesque style. It is located outside the town walls, at the side of Monte Croce, in an area that has always been of great importance for churches and necropolis. It was restored both in the 19th and in the 20th century.

Visconti Castle (Somma Lombardo)

The origin of the old castle seems to date back to the 9th century. The development of the ancient construction, for the most part residential, took place from the year 1448, when the brothers Francesco and Guido Visconti (members of the noble family Visconti of Milan), in order to escape disputes with the Ambrosian Republic, took refuge in their old estate of Somma. Within a few years, the noble residence was rebuilt, enlarged and surrounded by defensive ditches. Today the castle, having a large exterior quadrilateral appearance, encloses three castles built around three large courtyards, enhanced by porticos and with independent entrances. The castle is also home to the Visconti di San Vito Foundation, which will host the final sessions of the conference.

REGISTRATION FEES (early bird registration)

Conference Fee

350 € (Euros) for Delegates

250 € (Euros) for Students and Early Career Scientists*

Fee will include: conference material; welcoming cocktail; coffee breaks and lunches during the conference (3rd, 4th, 6th, 7th September); transport for the sessions in Como and Somma Lombardo; cocktail in Como; conference dinner in Varese.

* Students, including PhD students, will be asked to provide a letter from a university professor or tutor. Early Career Scientists (including fellowship holders) will be asked to provide a CV and a letter of reference for evaluation.

300 € (Euros) for Accompanying Persons

Fee will include: Special Program with lunches (3rd, 4th, 6th, 7th September), welcoming cocktail, transport to Como and Somma Lombardo, cocktail in Como; conference dinner in Varese.

Excursions

120 € (Euros) for one-day Mid-Meeting Field Trip—max 30 participants Fee will include: transport, lunch, museum entrance ticket; field guide.

500 € (Euros) for five-day Post-Meeting Field Trip—max 30 participants Fee will include: transport, lunches (8th, 9th, 10th, 11th September), cocktails in Turin (10th, 12th September), hotel in Turin (10th, 11th September), entrance tickets, field guide.

Registration fees do not cover hotels in Varese during conference and fieldtrips. A list of hotels in Varese will be provided in the Second Circular.

VISA INFORMATION

Citizens and permanent residents of the Schengen Area and from the following list of countries do not need a visa to enter in Italy as well as in the European Union (EU): Andorra, Antigua and Barbuda, Argentina, Australia, Bahamas, Barbados, Brazil, Brunei, Canada, Chile, Colombia, Costa Rica, Dominica, El Salvador, Georgia, Grenada, Guatemala, Honduras, Israel, Japan, Kiribati, Malaysia, Marshall Islands, Mauritius, Mexico, Micronesia, Nauru, New Zealand, Nicaragua, Palau, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent, Samoa, Seychelles, Singapore, Solomon Islands, South Korea, Timor Leste, Tonga, Trinidad and Tobago, Tuvalu, Ukraine, United Arab Emirates, United States of America, Uruguay, Vanuatu, Venezuela.

Citizens and permanent residents from other countries can find all the information and forms needed to apply for visas at the website <http://vistoperitalia.esteri.it/home/en>

CONFERENCE PROGRAMME

Monday 2nd September (Varese)—Welcoming reception in the evening.

Tuesday 3rd September (Varese)—Plenary sessions at the University of Insubria

Wednesday 4th September (Varese)—Plenary sessions at the University of Insubria

Thursday 5th September—Mid-meeting field trip

Friday 6th September (Como)—Plenary session at the University of Insubria; afternoon walking tour in Como (historical-scientific heritage and building stones) and cocktail by the Lake Como

Saturday 7th September (Somma Lombardo)—Plenary sessions at Visconti Castle, visit to the Castle and to the Geodetic Point in Somma Lombardo, return to Varese and conference dinner

Sunday 8th to Thursday 12th September—Post-meeting field trip (will begin in Varese on Sunday 8th in the morning and will end in Varese on Thursday 12th September in the evening, not earlier than 7pm)

SPECIAL PROGRAMME FOR ACCOMPANYING PERSONS

The special programme will include guided tours to various sites and localities of cultural, artistic and archeological interest in Varese and its surroundings, in Como and near Somma Lombardo.

MID-MEETING FIELD TRIP

The mid-meeting one-day field trip, as a reconstructed Geo-Historical Itinerary, will follow the path of the geo-palaeontological excursion on the Prealps north of Varese, undertaken by the participants of the 7th meeting of the Italian Society of Natural Sciences in September 1878 in the area of Monte San Giorgio and Valceresio. Some ancient quarries and sites of 19th century palaeontological excavations will be visited, with stops in Induno Olona, Brenno, Viggiù, Saltrio and Besano, including the Museum of Fossils. Sturdy footwear for walking will be required.

POST-MEETING FIELD TRIP

The post-meeting five-day field trip will include, during the first two days, the UNESCO World Heritage Site of Monte San Giorgio, one of the most important fossil localities in the world for the Middle Triassic (studied since the mid-19th century), the mining park of Cortabbio, the ancient quarries in Valceresio. The last three days of the field trip will include visits to the ancient quarry of Ornavasso, Turin and its adjacent Susa Valley in the Piemonte region (NW Italy). The geo-touristic walking-tour in the centre of Turin will include historical and architectural aspects of the buildings as well as their geological features. The participants will be shown a wide variety of Alpine rocks used in palaces and historical monuments for both aesthetic and structural reasons.

The Susa Valley is a long valley located in the core of the Western Alps and is identified as one of the main corridors of communication between Italy and France. Selected sites will be used both to describe principal geological and geomorphological features of this part of the Western Alps and to discuss the development of theories and interpretation proposed by geologists during the 19th and 20th centuries. In addition, buildings and monuments will be visited focusing on the rocks used in their construction. During the last day, participants will visit the *Museo Egizio* (Egyptian Museum)

in Turin, the second most important Egyptian museum of the world, following an archaeological and archaeometric itinerary explained by an archaeologist and conservation scientists. The excursion will end with a visit to the *Museo Nazionale della Montagna* (National Museum of the Mountain).

CALL FOR PAPERS

Please send your abstract by email as an attached Word file and according to the following instructions to inhigeo2019@uninsubria.it

1. **Abstract Title**
2. **Author** (full name, academic title, institution, address and email)
3. **Abstract** (max 2,000 characters—approximately 300–350 words. Please use formatted Microsoft Word, using size 12 Times New Roman font. The text should be single-spaced)
4. **Conference Themes** (select the most appropriate theme for the abstract)
5. **Type of Abstract** (indicate preference for an oral presentation or a poster)

Only one abstract per participant will be allowed: in the case of multiple authors, please indicate the corresponding author who will present the paper and will be considered the first author.

IMPORTANT DATES

15th February 2019—Deadline for abstract submission

3rd March 2019—Notification of abstract acceptance and Second Circular

14th April 2019—Closure of early bird registration for all Conference Fees (including accompanying persons), Mid-Meeting Field Trip, Post-Conference Field Trip.

After 14th April 2019, registration fees will be: € 420 for Delegates, € 300 for Students and Early Career Scientists, € 360 for Accompanying Persons, € 144 for the Mid-Meeting Field Trip, € 600 for the Post-Conference Field Trip

31st July 2019—Third Circular

For more information visit the website <https://inhigeo2019.jimdofree.com> or write to inhigeo2019@uninsubria.it or to ezio.vaccari@uninsubria.it

INHIGEO SYMPOSIA 2020–2021

- **2020** 45th INHIGEO Symposium **New Delhi, India** (in association with the 36th International Geological Congress); 2nd–8th March
 - **2021** 46th INHIGEO Symposium **Krakow, Poland**, 18th–24th July
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FEMALE FELLOWS MEETING

21st MAY 2019

REGISTRATION FORM

Name

Address

.....

.....

E mail Phone no.

Member of HOGG or GA or Women's History Network or GS fellow
@ £45.00 per person = £.....

Non-member or affiliate @ £50.00 per person = £.....

Speaker @ £40.00 per person = £.....

Become a HOGG member @ £15.00 per person = £.....

Evening Celebration (optional):
Wine Reception @ £10.00 per person = £.....

Hot Buffet Dinner @ £35.00 per person = £.....

TOTAL £.....

Please make cheques payable to HOGG and write 'Female Fellows' on the back.

Send the completed form and cheque to:

David Earle (HOGG Treasurer)
61 Straight Road
Old Windsor, Berkshire
SL4 2RT

Alternatively, if you wish to pay by bank transfer, please contact

David Earle (e mail daearle@btinternet.com).

HOGG STANDING ORDER MANDATE

Name of bank or building society.....

Branch address.....

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Sort code.....Account number.....

Account name.....

Please pay the amount of £15 (fifteen pounds) to the History of Geology Group of the Geological Society (Santander Business Account, Sort code ___ - ___ - ___ Account number _____) on 1st January (or closest date thereto) following the date of this instruction and annually thereafter until terminated by me in writing. **[NB Account details will be inserted by the HOGG Treasurer.]**

Signed.....Date.....

PLEASE SEND THE COMPLETED MANDATE TO

**David Earle (HOGG Treasurer)
61 Straight Road, Old Windsor, Berkshire SL4 2RT**