HOGG

Newsletter of the History of Geology Group of the Geological Society of London

Number 56
February 2016

Front cover

Jonathan Otley by an unknown artist, oil on canvas.

Courtesy of Keswick Museum & Art Gallery where the painting and Otley's surveying instruments and personal effects are on display. www.keswickmuseum.org.uk

This year sees the 250th anniversary of the birth of Jonathan Otley (1766–1856). Often called the 'Father of Lakeland geology', Otley came from a working family at Loughrigg, not far from Ambleside, and was first employed as a basket maker, watch repairer and engraver. In 1791, he moved to Keswick where he established a modest business as watch and clock repairer and maker. He was interested in natural history, particularly geology and meteorology, and undertook topographic survey work in the district. He supplemented his income by working as a guide, and produced a topographical map of the Lakes for tourists (1818) and later a guide (1823) which contained an important chapter on the geology of the Lake District. He soon became recognized as a local authority on the geology, and eminent men of science such as the geologists Adam Sedgwick and John Phillips, the Manchester chemists John Dalton and William Henry, and the Astronomer Royal, George Airy, became his friends and correspondents.

A plaque on his workshop and home in the present Kings Head Court, Keswick reads "Here lived Jonathan Otley 1766–1856 Geologist and Clockmaker. A humble student of nature and science who laboured for his fellows". He is buried in Crosthwaite churchyard.

Sources:
Oldroyd, D. R. 2002. *Earth, Water, Ice and Fire: Two hundred years of geological research in the English Lake District.* Geological Society Memoir No. 25.

www.keswick.org— the official visitor website for Keswick.

Editorial subcommittee
Beris Cox (e mail: beris.cox@btinternet.com)
David Earle (e mail: daearle@btinternet.com)

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

HOGG NEWSLETTER 56

CONTENTS

LETTER FROM THE CHAIR

May I begin by wishing everyone a belated Happy New Year! The New Year sees a new HOGG Committee take office, and we held our first meeting on 9th February. This is indeed a very new committee, with half of us either joining for the first time or rejoining after a break. We welcome new faces Sabina Michnowicz, Geoff Walton and Stephen Cribb, while Chris Duffin has only recently taken over as Secretary, and I am returning, this time as your Chairman. We join the old lags of David Earle, Ted Rose, Jill Darrell and Beris Cox. We take over from the experienced crew under the helm of John Henry, and I would like to express my thanks, on behalf of us all, to John for his hard work and dedication to the job for the last four years, a term specially extended to oversee, as he did with great élan, the Group's involvement in the bicentenary of William Smith's map, and in particular for masterminding the installation of a plaque on the site of Smith's house in Buckingham Street. He was ably supported by a great team, and thanks are due also to those Committee members who have now stepped down and who have contributed so much to the success of the Group in recent years: Cherry Lewis, Alan Bowden, Dave Williams, Tom Hose and Dick Moody. They won't be escaping entirely free as we will certainly be roping them in to some of our forthcoming activities or at the very least, picking their brains as and when.

At our meeting, the Committee appointed as Vice Chairman Geoff Walton who brings a wealth of experience of the extractive and engineering geology industries, and I'm pleased to say that David Earle continues as our Treasurer. I'm delighted, too, that Beris Cox has agreed to continue with her fine job on the Newsletter and brings to the Committee her deeper knowledge of the Group. She and David, along with Jill and Ted, provide a valuable continuity with the outgoing Committee.

We held our AGM in Bristol in November and had a wonderful day at the university and museum, viewing some of the many highlights of the remarkable collection of Joan and Victor Eyles in the University Library, as well as examining a copy of Smith's 1815 map in the Earth Science Department and one next door in the City Museum. Thanks to all who contributed to the success of the day, especially Michael Richardson (Special Collections Librarian), Vicky Purewel at the museum, Hugh Torrens who spoke about his friends the Eyles and their collection, and to Cherry Lewis for pulling it all together.

We have inherited an exciting meetings programme for this year, starting very soon with a joint meeting with the Geological Society's Petroleum Group and the Petroleum History Institute on the history of petroleum geology on 4th–5th March, partly organised by Dick Moody. After the meeting, there's also planned a field trip to the UK's earliest oil and gas fields in the East Midlands and the Peak District. This is followed soon after with a behind-the-scenes look at the Natural History Museum arranged by Chris Duffin for 15th March. You'll find full details of these meetings elsewhere in this Newsletter. In June, we've been invited to join the Geologists' Association on a re-creation of one of their early field excursions, by Thames river boat, to the Goring Gap (see pp.22–23). In the second half of the year, we have a field trip on 9th September linked with the Extractive Industry Geology biennial conference at Birmingham University, led by Geoff Walton and Hugh Torrens. And last, but far from least, Ted Rose has put together a fascinating programme for 16th November on military aspects of engineering geology: past and present, jointly with the Geological Society's Engineering Geology Group; this will include our AGM.

On Committee, we are starting to look ahead to our meetings programme for 2017 and beyond—in fact, as far as 2019–20! So keep an eye on the website and on the Newsletter for details.

Tom Sharpe
email tom@tomsharpe.co.uk
February 2016

HOGG AGM 2015

The 2015 HOGG AGM was held at the University of Bristol on 21st October 2015 during the Visit to the Eyles Collection. For the benefit of those members who did not attend, the reports of the Chair and Treasurer are included here.

Chair's Report for 2015

This year was the Bicentenary of William Smith's *A Delineation of the Strata of England and Wales with Part of Scotland* in 1815. It has certainly dominated my year and with today's visit to the Eyles collection here at the University of Bristol, HOGG's last meeting of the year, the celebration continues.

The HOGG year began with the unveiling on Smith's birthday, 23rd March, of a commemorative plaque at 15 Buckingham Street in London where he lived from 1804–1819. I would like to thank, in particular, Dick Moody who invited his friend Sir David Attenborough to unveil the plaque. Sir David was very important in attracting publicity for the launch of the Bicentenary. I would also like to thank the Geological Society for paying for the plaque.

This was soon followed in April by a two day conference, *William Smith, 200 years of the Map*, at Burlington House, with associated visits to the Natural History Museum and to Churchill, Smith's birth place. The majority of the papers will be published next April in *Earth Sciences History.* I would like to thank my co-convenors Cherry Lewis and Dave Williams for their considerable administrative and moral support in accomplishing this conference. I thank Jill Darrell and her colleagues at the Natural History Museum for the display of fossils and rock samples from the William Smith collection. This private display was an amazing opportunity for Smith's fans. The coloured figures that will appear in the conference edition of *Earth Sciences History* are not free. HOGG greatly appreciates the donation of £300 by Stuart Baldwin towards the colour-printing costs. Colour-printing is vital to comprehending map figures. Finally, I would like to thank Hugh Torrens for his support as a mentor and generator of ideas and contacts. Hugh's help was vital in conception and nurturing of the HOGG conference, not to mention his several speaking, writing and guiding engagements in the general Smith cause this year.

Between Smith events, Tony Brook organised and contributed to the triennial Open Meeting, the fourth such event in the past decade. Tony initiated the Open Meeting concept which is intended to provide a platform for new entrants into the field of the History of Geology, and I would like to acknowledge and thank him for his work.

This year, HOGG ventured into publishing. For the Bicentenary, your committee decided to publish a limited subscribed edition of the *Memoir* by William Smith that accompanied his map. It was a considerable success. I would like to thank Hugh Torrens and Tom Sharpe for the introduction which they co-authored. It is a valuable contribution to Smith scholarship which deserves wider circulation. I would like to thank Cherry Lewis for her hard work and dedication as editor of this edition of the *Memoi*r and for establishing the specification and achieving the high quality production. The profit from this first venture will contribute to the colour production costs of the Smith conference edition of *Earth Sciences History*. HOGG expects to build on this success, with high quality subscription publications in the future that won't be limited editions.

I would like to thank Beris Cox, editor of the HOGG newsletter for the past eight years, who continues to produce excellent issues. Beris has been past treasurer and is part of the vital memory of the committee. She is currently co-opted to the committee and we commend her to the next committee.

In the past two years, the HOGG website has been initiated and managed by Cherry Lewis who we thank for her energy and dedication to creating a good shop-window for HOGG which we pass over to the new committee.

As I will be relinquishing the chair this year, I would like to thank the committee and membership for their warm support. The committee hands over HOGG with a programme in place for 2016 and in good financial shape. We have unfortunately several members whose terms coincidently end this year; however, the retiring committee members will continue to support the new committee with their experience when requested. Although we have not been able to elect a chair from among the members carrying forward, we are able to recommend a viable working arrangement which I will lay before you later in the agenda.

John Henry

Treasurer's Report for 2015
Financial Year ending 30th September 2015

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:

October 14	£328.30
January 15	£258.80
May 15	£297.40
July 15	£189.40

2.2 Newsletter production:

No. 52	£106.32
No. 53	£145.30
No. 54	£93.70

2.3 GA Affiliation fee £40.00 (group insurance for field trips)

2.4 Website maintenance £500.00

2.5 Total expenditure on these items £1959.22 (previous year £1884.13)

3. Subscription Income
£2390.00
Subscription remains the same for 2016 at £15.

4. Meetings and Publications
4.1 Geology and Medicine 2 (November 2014) profit of £480.93
4.2 Open Meeting (June 2015) profit of £164.88
4.3 William Smith memoir (August 2015) profit of £606.11

5. Account Balances:

Santander	£4106.23
Co-op	£8459.05
PayPal	£153.36

David Earle
19.10.15

HOGG COMMITTEE 2016

Chairman Tom Sharpe **Vice Chairman** Geoffrey Walton **Secretary** Chris Duffin
Treasurer/ Membership Secretary David Earle
Ordinary members Beris Cox (**newsletter**), Stephen Cribb, Jill Darrell, Sabina Michnowicz , Ted Rose.

HOGG SUBS 2016

Annual subscriptions (£15.00) are due at the beginning of January.
Thank you to those who have already renewed.

If you do not pay by standing order and have not yet renewed for this year, please do so now by either

a) Visiting the HOGG website http://historyofgeologygroup.co.uk/ **and following the renewal option on the JOIN US page (payment by credit/debit card or direct bank transfer).**

OR

b) Sending a cheque (*payable to HOGG*) to the
HOGG Treasurer (David Earle)
61 Straight Road, Old Windsor, Berkshire SL4 2RT.

In future years, please consider paying by standing order. This will save both you and HOGG time and money, and will enable us to keep subscription rates low. Just complete the standing order mandate at the back of this newsletter and send it to the HOGG Treasurer (address above).

The Treasurer (email daearle@btinternet.com) also maintains the HOGG membership list so please ensure he has your correct contact details, including e-mail address, and advise him of any future changes, otherwise HOGG news and alerts will not reach you.

HOGG NEW MEMBERS

HOGG welcomes the following new members

Nicholas (Nick) Booth, London
Arthur Murchison, Sacremento, California, USA
Margaret Poole, Paddock Wood, Kent

HOGG WEBSITE

Since October 2012, HOGG has had its own website at http://historyofgeologygroup.co.uk/. This is our main website although we continue to have a presence at www.geolsoc.org.uk/. The HOGG site provides easy access to all aspects of HOGG including details about HOGG meetings and the facility for online registration and payment, as well as subscription renewal. When the new committee has settled in, we will be appointing one of its number as a contact; in the meantime, if you have any queries about the site, please contact the Newsletter editor (beris.cox@btinternet.com).

HOGG NEWSLETTER

Contributions to the newsletter are welcome. If you are aware of any forthcoming events or meetings of potential interest to HOGG members, please let us know (contact details inside front cover).

If submitting digital copy, please provide the text as a Word document, and the illustrations separately as jpg or tif files.

Thank you!

HOGG FIELD EXCURSION TO PROVENCE, FRANCE 3rd–9th OCTOBER 2015

John Henry[1]

Descending through a vertiginous cloudscape into driving rain and lightening, the runway at Marseille only appeared as we slapped into it. We were intact. Our host and guide Eric Buffetaut and his colleague, Thierry Tortosa, met us and led us through the storm to our hotel. Parts of the motorway were flooded axle deep and keeping in convoy was a challenge. Elsewhere in the region, 20 drowned in the flash flooding; but we arrived safely at our hotel in Aix en Provence. The driveway was too steep for the van to gain traction in the wet so we hauled our bags up from the street. After such an entrance, everything that followed was sunshine and easy-going.

On Sunday, Thierry, who is the curator of palaeontology for the Musée d'Aix, met us at the large suburban warehouse which houses the museum's fossil collection. The old museum building had reverted to its owners and while a new one is being built, all collections are in storage.

Aix en Provence fossil store.

Montagne Sainte-Victoire.

The regional structure consists of E-W trending synclinal troughs bounded by narrower strongly deformed anticlinal ranges folded during the Cretaceous. The troughs have substantial infill, up to 1,000 m thick, eroded from the high ranges and deposited as alluvial fans, terraces, flood plains and lacustrine sediments. The wide alluvial/lacustrine plain provided sustenance and nesting sites for the seven dinosaur families—five herbivorous and two carnivorous—which thrived here.

Caches of dinosaur eggs are frequently found around 'Eggs' en Provence. *Rhabodon* was first discovered in the Aix region during recent A8 motorway construction which has yielded major finds in the past ten years thanks to the co-operation and support of the contractor.

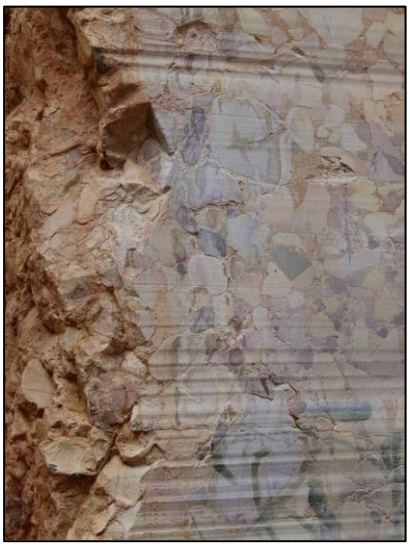
Following the sumptuous lunch—the portions were large wherever we ate—we visited the Domaine Départemental des Roques Hautes, a park on the lower slopes of Mont Sainte-Victoire, familiar to many from the paintings of Paul Cezanne. Thierry, also leader of the palaeontological expedition in the Mont Sainte-Victoire National Nature Reserve, led us to a low red clay mound to find dinosaur eggs which eventually we did. The matrix is as hard as the eggs, making extraction extremely difficult. Egg shell fragments were everywhere although so small that they were not immediately recognisable. For more information on fossil finds by Thierry and his team, see http://nmnh.typepad.com/smithsonian_fossils/.

Low clay mound—an island site in alluvial plain providing nesting sites for abundant dinosaurs.

Outline of dinosaur egg shell.

At the other end of the park, we visited a disused quarry famed for its pink to yellow brecciated marble that adorns Versaille. We ended this hot afternoon on the shaded terrace of a local tavern restoring our hydrostatic balance. In the evening, we walked into the charming centre of Aix which appears to have no modern or high rise building but many enticing restaurants.

Abandoned quarry in Roques-Hautes regional park.



Sawn face revealing texture of brecciated marble in quarry.

The next morning we drove west then north by motorway for two hours to the Gorge de l'Ardèche, which opens into the Rhône valley just north of Orange. The Ardèche has deeply incised meanders in karst terrain. The down cutting occurred rapidly in less than 100,000 years, approx. 7.2–5.3Ma during the Messinian Salinity Crisis, when the Mediterranean dried up. The narrow cornice highway follows the brink with frequent *belvederes* for stopping to admire and photograph the stunning scenery.

At the upstream end of the gorge is the dramatic Pont d'Arc. The gorge provided a home for early

Aurignacian man. It had a sheltered microclimate below the windswept plateau and its caves provided shelter. One cave had a special significance.
The limestone ridge, through which the Ardèche flows, points like a finger to the Grotte Chauvet's original entrance which was blocked by a rock slide and discovered only 20 years ago. Inside, astounding paintings from 60,000 years ago adorned the walls. It was immediately recognised as a national treasure and vulnerable to deterioration, like the cave paintings at Lascaux. Therefore, access was limited to researchers for short periods, but the remarkable next consequence was the creation of a substitute cavern meticulously copied from the original within an attractive modern structure on the plateau above. The cave detail—geological, geomorphological and artistic—is utterly convincing. The cave art is far older than any previously discovered, but more advanced in technique and artistry.

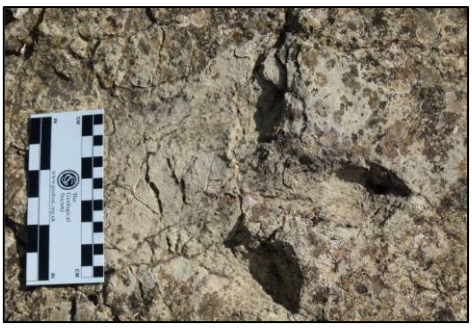
Entrance to the reconstructed cave.

Replica of 60,000 year old cave painting.

We spent the night outside the village of Vallon-Pont-d'Arc in an auberge by the river, a short walk from the natural arch. Tuesday morning, we drove west and south from Vallon on minor roads over the rugged forested eastern footslopes of Mt Lozère, through tiny mining towns strung along tight shadowed valleys. To some, the largest of these, Grand Combe in a small coal basin, was reminiscent of South Wales.

Natural arch over the River Ardèche.

View to north of St Laurent-de-Trèves. Florac in middle distance.



After lunch at Florac, we ascended to the hamlet of St-Laurent-de-Trèves, above which we saw dinosaur footprints and wonderful views. In the past, villagers believed the footprints were *fleurs de lys*. (photo *left*).

Continuing westward, we reached the Gorges de la Jonte, as incised as the Gorge de l'Ardèche but wider and not meandering.

The route descended gradually between the Jurassic limestone cliffs forming the gorge walls and dominating the view above and ahead. Shadows draw in early in these deep valleys and we drove in prolonged dusk arriving at the small city of Millau.

In the morning, we visited the Musée de Millau on the market square. Pride of place in the palaeontology section was occupied by the ichthyosaur, *Occitanosaurus tournemirensis.*

Occitanosaurus tournemirensis and admirers.

Left: Group photo. Back row, left to right: Chris Duffin, Jim Spencer, Di Smith, Gay Hamilton-Williams, Eric Buffetaut. Front row, left to right: Richard Trounson, Margaret Poole, Elizabeth Pendleton, Dick and Zoe Moody.

Departing Millau, we visited the new Viaduc de Millau, an engineering marvel. The road deck of the central span would comfortably clear the Eiffel Tower. The geology at the north end consists of clays and marls compared to dolomitic limestones at the south. The foundation solutions, crucial to the whole structure, have successfully contained differential settlement to less than 5 cm over its 2.46 km length. The viaduct reduces to five minutes, the previous summer holiday delays of one to two hours on the old route through Millau, and makes the city far more. pleasant.

Viaduc de Millau from the north.

South of the viaduct, the E11/A75 autoroute traversed the high dry limestone plateau of the Grands Causses, an unfenced short-grass prairie with occasional clumps of trees not unlike the high plains of North America. The 7 km descent of the autoroute from the plateau is another spectacular feat of civil engineering. In the late afternoon, we arrived at Cruzy, where Éric Buffetaut has supervised excavations for the past 20 years. The Musée de Cruzy stayed open for us. It is well run by knowledgeable volunteers and displays local finds. Cruzy is remarkable for the involvement of local people and its town council in supporting, by providing access to private land, fossil storage, museum display and student accommodation, the continuing excavations by regional universities. On our first evening, Éric led us to a large warehouse on the edge of the village where a long table had been set to accommodate the students, teachers and "*les Anglais*". The table ran the length of the fossil store and seated over 40 of us. The village had laid on a barbeque and supplied local wine and the reception was enthusiastic.

The village of Cruzy lies in the hills of the Saint-Chinian area, famous for its wines, just south of the Palaeozoic Montagne Noire. As at Aix, the regional structure consists of broad synclinal troughs bounded by narrower anticlinal ranges but here, during the Mesozoic, the predominantly continental fill alternated with occasional marine incursions with subsequent substantial folding and faulting. The systematic annual excavations at various sites around Cruzy carried out by the *Centre National de la Recherche Scientifique* and the *Association Culturelle, Archéologique et Paléontologique de l'Ouest Biterrois* have discovered thousands of specimens. The diverse assemblage includes coelacanths, bony fishes, salamanders, lizards, turtles, crocodiles, frogs, ornithsichian and saurischian dinosaurs, birds (including the giant flightless *Gargantuavis* and enantiornithines) and mammals. Dinosaur eggs are common.

University of Montpelier students excavating on Montredon.

We visited the University of Montpelier students at their excavation high on Montredon near Montouliers. The organisation and activity was impressive and was yielding fragments of mammal remains first discovered in the debris of badger setts in the late 19th Century. *Deinotherium*, *Hipparion*, rhinos, pigs and sabre-toothed cats have been discovered here.

On out last day, *en route* to the airport, we visited Les Baux-en-Provence. Baux (pronounced Bo) gives it name to bauxite, the ore of aluminium, first described by the geologist/chemist Pierre Berthier in 1821. It was mined extensively in the area but, by the end of the 20th Century, it had been completely worked out. Baux is sited dramatically on a limestone outlier standing above the Camargue, the delta of the Rhone. Many of the dwellings of Baux are partly carved into the karstic rock. Window frames in cliff faces attest to modern trogdolites.

Aerial view of Les Baux-en-Provence. Courtesy of local council.

On the edge of Baux, the huge caverns at Carrières du Val d'Enfer are evidence of block extraction of chalks. Since 2012, the caverns have become 'Carrières et Lumières' where assemblages of famous works of art are projected on the blank quarry walls, ceilings and floors in collages that move to classical and newly composed music. We experienced a work based on the paintings of the Sistine Chapel. In the cathedral-like space of the quarry, it was truly exciting. On that high, we finished. Just a couple of hours later, we were back at Marseille Marignane airport to begin our return home.

Entrance to chalk mines of Baux.

Massive thanks go to our leaders Éric Buffetaut and Dick Moody, to Thierry Tortosa who was with us in Aix and in Cruzy, and to the volunteers in the Museum, at the barbeque and on the digs at Cruzy who together made this a wonderful learning journey.

[1] e mail john@geolmaps.com

FUTURE HOGG EVENTS

***EUROPEAN OIL & GAS INDUSTRY HISTORY CONFERENCE**
Thursday 3rd–Friday 4th March 2016
A joint conference with the Petroleum Group of the GSL and the Petroleum History Institute marking a number of important anniversaries including 150 years of oil exploration in Poland & Romania, the centenary of the drilling of the first oil well in the UK and 50 years of oil production onshore Spain.
Further details on page 12 of this newsletter.

***BEHIND THE SCENES VISIT TO THE NATURAL HISTORY MUSEUM SOUTH KENSINGTON, LONDON**
Tuesday 15th March 2016
An afternoon visit to the Palaeontology Section of the Earth Science Department of London's Natural History Museum.
Further details on page 13 of this newsletter. Registration form on page 26.

***JOINT FIELD TRIP WITH EIG BIENNIAL CONFERENCE**
Friday 9th September 2016
A joint field meeting with the Extractive Industry Geology (EIG) Conference attendees.
Further details on page 14 of this newsletter.

***MILITARY ASPECTS OF ENGINEERING GEOLOGY, PAST AND PRESENT**
Wednesday 16th November 2016
Burlington House, Piccadilly, London ***including HOGG 2016 AGM***
A joint meeting with the GSL's Engineering Group, convened by Ted Rose and Dr Judy Ehlen, to mark the centenary of the year in which (Sir) Edgeworth David was deployed on the Western Front, the first "engineering geologist" to serve as such with the British Army in combat.
FINAL CALL FOR PAPERS on page 14 of this newsletter.

European Oil & Gas Industry History conference
3rd–4th March 2016
Burlington House, Piccadilly, London

CONVENORS: *Jonathan Craig* (eni upstream, Milan), *Jeff Spencer* (President of the Petroleum History Institute), *Dick Moody* (Kingston University London & HOGG), *Fiona MacAulay* (Rockhopper Exploration & GSL Petroleum Group), *William Brice* (Petroleum History Institute), *Rasoul Sorkhabi* (Energy & Geoscience Institute, University of Utah)

- The focus of the conference will be to examine the history and heritage of the oil industry from the earliest onshore drilling (and digging) to its development into the industry that we know today, and also to examine the transition from conventional to unconventional resource plays in the onshore arena.

- Keynote speakers from across the UK, Europe and the USA will share the historical framework of exploration and development activities. Invited Keynote Speakers include:

DICK SELLEY: *UK Shale Gas Exploration—From 1875 to Now*
JON GLUYAS: *Argyll: A Field Reborn, Twice*
FERDINANDO CAZZINI: *The Early History of the Oil & Gas Industry in Italy*
JEAN-JACQUES BITEAU: *The History of the Oil & Gas Industry in the Aquitaine Basin*

- There will be a field trip over the weekend following the conference to examine the history, industrial archaeology and geology of the UK's earliest oil and gas fields in the East Midlands and the Peak District. During the trip, a memorial plaque and information board will be unveiled at the Hardstoft-1 well site in Derbyshire, marking the 100th anniversary of the drilling of the well under the Defence of the Realm Act to reduce Britain's dependence on oil imports.

- A Geological Society *Special Publication* is planned in association with the conference.

- A poster session will be held during the conference.

REGISTRATION

Register for this conference online at www.geolsoc.org.uk.
HOGG members can register at a reduced fee (£100); choose the 'Other Societies' booking option when registering.

- For further information, please contact: Laura Griffiths, The Geological Society, Burlington House, Piccadilly, London W1J 0BG T: 020 7432 0980 or e mail: laura.griffths@geolsoc.org.uk

- HOGG contact is Prof. Dick Moody (e mail rtj.moody@virgin.net)

‘BEHIND THE SCENES’ VISIT TO THE NATURAL HISTORY MUSEUM, SOUTH KENSINGTON, LONDON

TUESDAY 15th MARCH 2016 afternoon

All HOGG members and friends are invited to attend a ‘Behind the Scenes’ visit to the Palaeontology Section of the Earth Science Department at London’s Natural History Museum.

DATE: Tuesday 15th March 2016

TIME: Meet outside the Flett Lecture Theatre (adjacent to the entrance to the ‘Geological Museum’ in Exhibition Road) at 13.45hrs. Participants will be collected from the entrance by Dr Chris Duffin at 13.50hrs, signed in, and escorted to the Palaeontology Section. Visit to finish around 17.00hrs.

MUSEUM HOST: Dr Paul Taylor

PROVISIONAL PROGRAMME:

- **1.** INTRODUCTORY TALK on the origin and history of the NHM and its collections (duration *c*. 30 minutes).

- **2.** VISIT TO COLLECTIONS. Demonstrations and discussion at three stations:

A. Louis Agassiz and Fossil Fishes (Patterson/White Library; Fossil Fish Section) View the copy of the *Recherches sur les Poissons Fossiles* (1833–1843). Chris Duffin to demonstrate the volume, supported by specimens from the fossil fish collection especially those collected by Sir Philip de Malpas Grey Egerton and Lord Enniskillen, purchased by the NHM in the 1880’s.

B. Historical collections of Sir Hans Sloane (17th Century), Thomas Pennant (18th Century) and Charles König (18th Century).

C. Fossils and Folklore
Led by Paul Taylor and Chris Duffin.

COST: Members of HOGG and/or GA £5 per person
Others £7 per person

<u>REGISTRATION CLOSES ON MARCH 7th</u>

REGISTRATION FORM
AT THE BACK OF THIS NEWSLETTER

EIG BIENNIAL CONFERENCE JOINT FIELD TRIP

Friday 9th September 2016

There will be a joint field meeting on Friday 9th September with the EIG (Extractive Industry Geology) Conference attendees, following their biennial gathering at Birmingham University on 6th–8th September. The trip will be by coach departing at 09.15hrs from the University and returning by 17.00hrs, and may include visits to a museum and mineral sites relevant to the industrial development of Greater Birmingham, and appropriate for the 250th anniversary of the founding of the Lunar Society. The leaders will be Geoffrey Walton and Hugh Torrens. The cost of the coach, lunch etc. will be about £25. Further details to be finalised but for more information, please contact:
Geoffrey Walton at geoffw@dustscan.co.uk

MILITARY ASPECTS OF ENGINEERING GEOLOGY: PAST AND PRESENT

Burlington House, Piccadilly, London
Wednesday 16th November 2016

FINAL CALL FOR PAPERS

A whole-day meeting at the Geological Society, Burlington House, Piccadilly, London is being convened for November this year under the auspices of HOGG and the GSL's Engineering Group, and promoted also by the Institution of Royal Engineers. It will follow the precedent of a meeting in November 2009 on *Military Aspects of Hydrogeology*, with 12 oral presentations. Like that meeting, it is hoped that it will generate about 20 manuscripts to be worthy of peer-reviewed publication as one of the GSL's books.

The meeting is scheduled for 2016 to mark the centenary of first deployment of an engineering geologist by the British Army to support combat operations—Major (later Sir) Edgeworth David on the Western Front in 1916—with book publication in 2018 to help mark the centenary of the end of the First World War.

Papers on any aspect of military engineering geology, both historical and topical, will be considered for presentation and/or publication. Suitable subjects include fortification, tunnelling, quarrying, military construction projects (e.g. ports, airfields) and terrain assessment. Papers describing work in the two World Wars will be particularly welcome; also those describing later conflicts, and recent work related to redundant or ageing military facilities. Speakers currently scheduled include John Mather, Tony Brook, Peter Doyle, Ted Rose, Eddie Bromhead and Paul Nathanail from the UK, Hermann Häusler from Austria, and Dierk Willig and Florian Malm from Germany. Preference for the remaining talks will be given to speakers who can focus more on 'present' than 'past' aspects, but chapters for the book have no such preference, and are acceptable subject to peer review.

A programme for the meeting, with details for online registration, will be provided via the HOGG and GSL websites before the end of May, and within the HOGG newsletters to be issued in June and October. Those interested in contributing a talk or poster, and/or an article for publication, are asked to make contact before 28th February with one of the convenors: *Edward P.F. Rose* (e-mail ted.rose@earth.oxon.org; home telephone: +44 (0)1425 279124) or *Judy Ehlen* (e-mail judyehlen@hotmail.com) or the EGGS Committee representative *Ursula Lawrence* (e-mail Ursula.Lawrence@capita.co.uk).

EARTH SCIENCES HISTORY

The papers presented at HOGG's "200 Years of Smith's Map" meeting, held in April last year, will be included in a special issue (Vol. 35 No. 1) of the journal *Earth Sciences History*. Its editor John Diemer has provided a draft listing of the contained papers:

Tom Sharpe. *William Smith's 1815 map,* A delineation of the Strata of England and Wales*: Its production, distribution, variants and survival.*

C. John Henry. *William Smith: The maps supporting his published maps.*

Martyn Pedley. *New light on the 1824 William Smith Northumberland County map: A joint work by Smith and Phillips.*

Patrick Wyse Jackson. *William Smith and Ireland: Sources of Irish geological information on his geological maps.*

John Mather. *William Smith: The principles of stratigraphy, and their impact on the search for underground water supplies.*

Peter Riches. *A breach too far? East Norfolk's place in William Smith's search for success.*

Cherry Lewis. *David Mushet, John Farey and William Smith: Geologising in the Forest of Dean.*

Hugh Torrens. *William Smith (1769–1839): His searches for a money-earning career.*

Richard Irving. *William Smith and Tucking Mill: The story of a geologist and his cherished home.*

C. John Henry. *A note on 15 Buckingham Street.*

Geoffrey Walton. *A note on William Smith's drainage works near Churchill.*

Anthony Brook. *A note on William Smith and the Transwealden extension of the Upper Ouse Navigation.*

John Diemer writes "To ensure that you receive a copy of the issue, please consider joining the History of Earth Sciences Society (HESS) if you have not already done so. The subscription rate remains a bargain: $50 for print **or** online, or $65 for both print **and** online. For that subscription, you will receive two issues for 2016 (Volume 35, Numbers 1 and 2). If you elect online subscription, you will also have access to all back issues of *Earth Sciences History* for as long as your subscription remains active. You may join the society using a major credit card through the HESS website with Allen Press: http://earthscienceshistory.org/

Notice the 'login' link at upper-right. If you have yet to register with this site, please notice the 'Register Now!' link at lower-left. To access all subscription and payment information, simply click on the 'Subscriptions' link. Allen Press uses PayPal to process credit card payments, but you do not have to have a PayPal account to proceed. For those who prefer to subscribe by mail, please send a check in US dollars to David Spanagel, PO Box 70, Lancaster, MA 01523. Remember to specify your subscription preference and mailing address.

With your membership, you receive two issues of *Earth Sciences History*, the premier journal in the field. It treats the earth sciences broadly, from peat bogs to seismographs. We are a small but resolute band with international reach, so every membership counts. Please subscribe today."

John Diemer, Editor *Earth Sciences History* jadiemer@uncc.edu

UNIVERSITY OF OSLO, NORWAY, DOCTORAL RESEARCH FELLOWSHIP to investigate the history of concepts of geological time in the 18th century

"A PhD Research Fellowship in cultural history and museology is available at the Department of Culture Studies and Oriental Languages (IKOS), University of Oslo. IKOS seeks to recruit a PhD candidate with excellent research qualifications who will investigate new regimes of historicity in the 18th century."

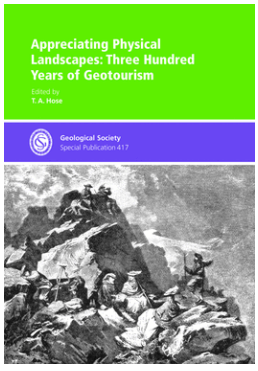
"The successful applicant will address the issues of the main project, *Geological times: Heritage and history of knowledge*. This main project aims to address the establishment of and changes in regimes of historicity within different time periods. The applicant will design a project based on work with the archives of the Mining Seminar in Kongsberg, founded in 1757, and/or archives from other European Mining Seminars in the same period. The project should explore how new conceptions of geological time were negotiated in relation to wider knowledge cultures in the 18th century and investigate the establishment of new regimes of historicity."

"The successful candidate will join the department's vibrant and internationally oriented research community in cultural history and museology, where contemporary perspectives within heritage studies are in fruitful dialogues with historical approaches."

The appointment is for three years. Application deadline 22nd February 2016.

Further details at http://uio.easycruit.com/vacancy/1570205/62042?iso=no

BOOK AND MAP NOTES



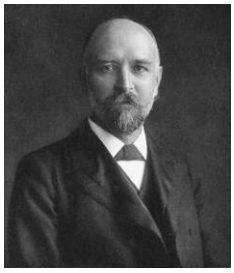
Appreciating Physical Landscapes: Three Hundred Years of Geotourism
Thomas A. Hose (editor)
GSL Special Publication 417. 2016. 248 pp.
ISBN 978-1-86239-724-8 hardback
List price £100.00 GSL fellows £50.00 Other societies £60.00

This volume grew out of the HOGG conference entitled *Appreciating Physical Landscapes: Geotourism 1670–1970* held at Burlington House on 23rd October, 2012. The conference was convened and organized by Dr Tom Hose who has edited the volume.

Geotourism, as a form of sustainable geoheritage tourism, was defined and developed, from the early 1990s, to contextualize modern approaches to geoconservation and physical landscape management. However, its roots lie in the late 17th Century and the emergence of the Grand Tour and its domestic equivalents in the 18th Century. Their participants and numerous later travellers and tourists, including geologists and artists, purposefully explored wild landscapes as 'geotourists'. The written and visual records of their observations underpin the majority of papers within this volume; these papers explore some significant geo-historical themes, organizations, individuals and locations across three centuries, opening with 17th Century elite travellers and closing with modern landscape tourists. Other papers examine the resources available to those geotourists and explore the geotourism paradigm. The volume will be of particular interest to Earth scientists, historians of science, tourism specialists and general readers with an interest in landscape history.

CONTENTS

Arthur Smith Woodward: his life and influence on modern vertebrate palaeontology
Z. Johanson, P. M. Barrett, M. Richter and M. Smith (editors)
GSL Special Publication 430. 2016.

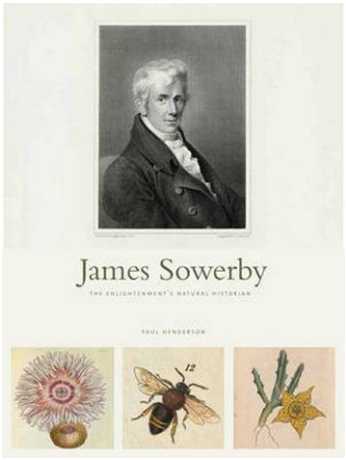


This volume comprises the proceedings of the Arthur Smith Woodward 150th Anniversary Symposium which was held in May 2014. It has been published 'Online First' by the Geological Society of London. Several of the papers are free to download as are two substantial supplements. All the papers and supplements can be found by following the link http://sp.lyellcollection.org/online-first/430

The volume will be available in hardback in late February/early March 2016.

Any queries to Mike Smith at the Natural History Museum; e mail Mike.Smith@nhm.ac.uk

---



James Sowerby: the Enlightenment's Natural Historian
Paul Henderson
Royal Botanic Gardens and Natural History Museum. 2015. 331 pp.
ISBN 978 184246 596 7 hardback
£35.00

Review by John Henry[1]

I approached this remarkable biography with a specific interest in James Sowerby (1757–1822)'s involvement with William Smith (1769–1839), but soon found that the applied breadth of Sowerby's talent and curiosity drew me to the whole man. Like Smith, he was a self-made man rising from the artisan class with a confident, highly motivated sense of mission. Unlike Smith, he was happily married and had a large family who worked as a production team and continued in the field of natural history illustration and taxonomy for four subsequent generations until the 1950s. He lived and worked in Lambeth, London for most of his life, published prolifically and managed his finances effectively.

Although he was a Fellow of the Geological Society, he was more involved in the Linnean Society and is generally better known for his botanical and mycological works. To begin with he was an artist and engraver who was deeply curious, carefully observant and interested in the natural history that he illustrated. His great talent as an illustrator attracted, in particular, botanists who realised that the success of their works depended hugely on the quality of illustration. His scientific knowledge grew through his clients, but he overtook many of them to become not only the 'go-to' illustrator but the 'go-to' expert for identification of unusual plants, fungi and minerals. He understood the taxonomic significance of his specimens and combined a high level of detail, elegant composition and accurate colouring with a production facility that churned out consistently high quality illustrations for others and for his own publications. He was part of a network of correspondents who exchanged information and natural history objects across the British Isles and Europe. He built his own museum which was open to the public.

Sowerby's interest in matters geological developed later in his career while he was still producing monthly instalments of his botanical illustrations. In Henderson's biography, Chapter 9—Minerals, crystals and colours, Chapter 10—Meteorites and a 'sword from heaven', and Chapter 12—Mineral conchology, specifically deal with Sowerby's earth science works and the individuals he worked for and corresponded with. He illustrated works by the mineral dealer John Mawe and was loaned minerals to figure in his own publications by the great collector Philip Rashleigh. He exchanged and illustrated fossils with and for Gideon Mantell; he corresponded with James Parkinson and Georges Cuvier. He named ammonites after William Conybeare, Gideon Mantell and George Greenough.

John Farey wrote descriptions for Sowerby's *Mineral Conchology* and produced a supplementary index giving the stratigraphical position of the fossils. Henderson writes that it was probably Farey who introduced Sowerby to William Smith. While information about Sowerby's uncompleted work for Smith, *Strata identified by organized* (*sic*) *fossils containing prints on colored* (*sic*) *paper of the most characteristic specimens in each stratum*, is disappointingly absent, the biography provides the context for that situation. Sowerby was an extremely busy and successful illustrator and publisher who recognised when a product was not selling and experienced in stopping unsuccessful production however interesting it was personally. In the period 1816–19, when he was working on Smith's *Strata Identified*, he was also writing and/or illustrating six of his own works and illustrating five others. Most of his own work was published in parts, on a subscription basis, continuing for months and years to maintain a steady income to support his large family and to invest in his museum, collecting and publishing ventures.

Henderson clearly admires his subject, but this is no hagiography. He reads between the lines of the surviving correspondence to explore the sometimes difficult working friendship with James Edward Smith, founder of the Linnean Society, and the troubled relationship with his second son, George. But these were clouds on the generally sunny aspect of a likeable serious individual who was generous with his knowledge.

Sowerby would have been pleased with the production of this first full biography. Of course, it uses his illustrations prolifically to its great benefit, but the design—layout, typography, cover, end-papers, paper quality and integration of text, captions and figures—and finished quality is to a very high standard. Henderson writes clearly and the book is heavy only in the sense of *avoirdupois*; although quarto format, at 1.4 kg it is difficult to support while reading in bed. The text is supported by a very necessary family tree, bibliographies of Sowerby's works, and works about him, extensive endnotes and an effective index. I liked this book very much and can strongly recommend it.

Gleaned from Henderson's extensive bibliography of Sowerby's works:

Sowerby's earth science publications

1804–1817 *British Mineralogy, or, coloured figures intended to elucidate the mineralogy of Great Britain*. London: Richard Taylor. 5 volumes, 550 plates.

1805–08 *Description of models to explain crystallography, or, An easy introduction to the understanding of the formation of crystals, so essential to the knowledge of all substances, chemical or mineralogical*. London: Sowerby. 2 parts, 2 plates to accompany a box of glass crystal models.

1811 *A Short Catalogue of British minerals According to a New Arrangement. Part 1. Combustibles and Earths*. London: B. Meredith. 72pp.

1811–1817 (–1820) *Exotic Mineralogy: or, coloured figures of foreign minerals, as a supplement to British Mineralogy*. London: B.Meredith. 2 vols, 168 plates.

1812–1822 (1846) *The Mineral Conchology of Great Britain; or coloured figures and descriptions of those remains of testaceous animals or shells, which have been preserved at various times and depths in the earth*. London: B. Meredith (v.1); Arding & Merrett (v.2); W. Arding (v.3). 3 volumes, 308 plates. Continued after his death by his son, James De Carle Sowerby, a further four volumes.

1819 *A list of minerals with Latin and English names and numerous synonyms arranged according to a system founded upon the specific gravities of their component parts: with references to British and Exotic Mineralogy*, London: W. Arding. 22pp. Printed in the form of museum labels.

1819 *A list of rocks and strata arranged in the order they generally occur in, placing those which compose the external surfaces of the Globe last; made out chiefly from late authorities with reference to figures in Sowerby's works in mineralogy and mineral conchology*, London: W.Arding. 8pp. Printed in the form of museum labels.

1819 Some account of the Spiral tubes or ligaments in the genus *Terebratula* of Lamarck, as observed in several species of fossil shells, in *Trans. Linn. Soc*. 12: 514–16. 1 plate. (Read 6th Nov. 1814 and 7th Feb. 1815).

1821–22 (1834) *The Genera of Recent and Fossil Shells, for the use of students in conchology and geology*. London: E J Stirling. 2 volumes, 265 plates of which most in the first 17 of 32 parts were by James Sowerby. Collaborative effort with his son George Brettingham Sowerby, with James De Carle Sowerby continuing in his father's place after 1822.

1822 On a fossil shell of a fibrous nature, the fragments of which occur abundantly in the Chalk strata and in the Flints accompanying it, in *Trans. Linn. Soc*. 13: 453-8. 1 plate. (Read 1st Nov. 1814).

Others' earth science publications illustrated by James Sowerby

1812 MAWE, JOHN. *Travels in the interior of Brazil, particularly in the gold and diamond districts of that country by authority of the Prince Regent of Portugal, including a voyage to the Rio de la Plata, and an historical sketch of the revolution of Buenos Ayres*. London: Longman *et al*, 9 plates by Sowerby, 6 of minerals.

1816–1819 SMITH, WILLIAM. *Strata identified by organized* (*sic*) *fossils containing prints on colored*

(*sic*) *paper of the most characteristic specimens in each stratum.* London: W. Arding. 32pp. 19 plates.

1816 KENDALL, FREDERICK. *A descriptive catalogue of the minerals and fossil organic remains of Scarborough and the vicinity*. Scarborough: T. Coultas. 316pp. Various versions with varying numbers of plates supplied by Sowerby from *British Mineralogy* and *Mineral Conchology*.

1820 MAWE, JOHN. *Familiar lessons on mineralogy and geology explaining the easiest methods of discriminating minerals, and the earthy substances, generally called rocks, which compose the primitive, secondary, floetz or flat, and alluvial formations: to which is added a description of the lapidaries' apparatus*. London. 2nd edition, 1 plate with 22 minerals.

1820 MAWE, JOHN. *Instructions for the management of the blow-pipe, chemical tests etc*. London. 47 pp. 1 plate (frontispiece).

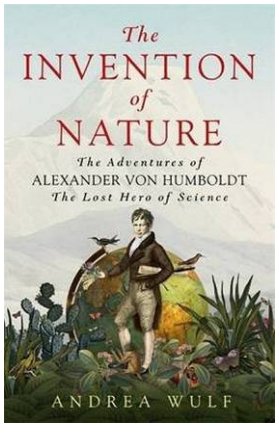
ENGLISH TRANSLATION OF KÖPPEN & WEGENER (1924)

An English translation of *Climates of the Geological Past* by Vladimir Köppen and Alfred Wegener, first published in German in 1924 is now available, and can be purchased at www.schweizerbart.de/publications/detail/isbn/9783443010881

This is an English translation (with German facsimile) of a landmark text on early palaeoclimatological research—in fact, a textbook of palaeoclimatology.

Alfred Wegener is best known for his theory of continental drift (*The Origin of the Continents and Oceans* 1915). Less widely known but equally important, are the studies he conducted on the climates of the past with his colleague and father-in-law Vladimir Köppen which they jointly published in this book. Only one edition was ever published, and all but a few private copies were destroyed during World War II rendering the book essentially unavailable.

(Source: INHIGEO Circular 2015 No. 4 December 2015)



The Invention of Nature: The adventures of Alexander von Humboldt, the lost hero of science
Andrea Wulf
John Murray. 2015. 473pp.
ISBN 978-1-84854-898-5 hardback £25.00

Having been shortlisted for the Costa Book of the Year 2015 (and winning the Costa Biography Award 2015), this book has been widely reviewed (e.g. *New Scientist* 05/09/15, *The Independent* 16/10/15, *The Guardian* 13/11/15).

"Alexander von Humboldt is the most brilliant polymath you've never heard of. The thrillingly readable story of a visionary 18th century scientist and adventurer who travelled the globe, from the South American rainforests to the Siberian steppes, and foresaw the destructive impact of mankind on the world." (Costa Award judges)

Plenty of geological/historical interest.

DEPOSITS MAGAZINE

Tony Brook has drawn attention to certain recent articles of historical interest in the printed and online *Deposits Magazine*. Of particular interest to Tony, was Martin Simpson's article *Iguanodon is older than you think: the public and private announcement of Gideon Mantell's giant prehistoric herbivorous reptile* (Issue 44. p. 33. 2015; posted online 02/12/15).

Other recent titles which he spotted are *Rival theories by English amateurs: Matley and Trechmann* by Stephen Donovan (posted 04/12/15; about the geological evolution of the Caribbean basin) and *The Geology of Charles Darwin* by Stephen Donovan & Cor Winkler Prins (posted 05/01/16).

See the full index of online articles at www.depositsmag.com/index

---

"THE IGUANODON RESTAURANT"

The arts company Emerald Ant, which is based on a sheep farm in West Dorset, has joined forces with the Shanty Theatre Company and the Friends of Crystal Palace Dinosaurs to research and create a new street show called "The Iguanodon Restaurant". The show features Richard Owen, Gideon Mantell, William Buckland, Mary Anning and Charles Lyell. The plot begins in 1812, in Lyme Regis, with Anning's discovery of an ichthyosaur, and then moves on to Cuckfield and Maidstone with Mantell's fossil discoveries. Then follows the well known banquet of 1853 which took place inside the life-size iguanodon reconstruction in London's Crystal Palace Park, and the publication of *On the Origin of Species* in 1859. The show culminates at the Oxford evolution debate of 1860 with giant bishops and smoking machines. The company plans "to offer exploding blancmange, pigeons flying from pies, a strata-Smith banqueting table, speaking portraits, and excessively long beards". The drama will show "how fossils transcended from being mere curiosities in 1800 to the embodiment of prehistory by 1860, how scientists' interpretation of fossils has progressed over the years, and how the discovery of fossils led to theories of extinction and evolution that shocked the world".

With funding from various sources including a Palaeontological Association's Engagement Grant and a grant from the Geologists' Association Curry Fund, the company made initial plans for touring starting on the Jurassic Coast in Dorset, and then travelling across Sussex and Kent to Crystal Palace. Over the next five years, they hope to visit the North Yorkshire 'Dinosaur Coast' in 2018, and possibly Belgium, as well as touring music and science festivals. Their planned schools programme will include performances and fossil interpretation workshops with palaeontologists and artists working together. According to Sarah Butterworth of Emerald Ant, "Our research has brought in scientists and historians at the Natural History Museum, London and UCL …… We have visited iguanodon discovery sites in Cuckfield and Maidstone, and gauged local communities' knowledge about the amazing discoveries on their doorsteps. Working with Shanty Theatre Company, we have devised structure and content for a very funny, fast and furious 20-minute show". Funding from the Arts Council, announced in December, will enable further progress to be made with the build (scaled model shown *left*) and tour plans.

Sources: Palaeontological Association Newsletter 90 (2015) and www.emeraldant.com

OTHER FUTURE MEETINGS AND EVENTS

READING THE ROCKS: THE REMARKABLE MAPS OF WILLIAM SMITH
NATIONAL MUSEUM OF WALES, CATHAYS PARK, CARDIFF
UNTIL 28th FEBRUARY 2016

An exhibition to commemorate the bicentenary of William Smith's 1815 map *A Delineation of the Strata of England and Wales, with part of Scotland* (see HOGG Newsletter 55, pp. 23-24).

CLEAN WATER FOR LONDON
GEOLOGICAL SOCIETY, BURLINGTON HOUSE, PICCADILLY, LONDON
LOWER LIBRARY and LYELL ROOM
UNTIL 4th MARCH 2016

As part of the GSL's 'Year of Water' celebrations, this exhibition introduces some key figures of 19th Century hydrogeology who led the way in researching and sourcing an adequate supply of drinking water for the capital. The display includes Joseph Prestwich's map of water-bearing strata around London, the first British geological map to show hydrogeological information.

GSL NORTH-WEST REGIONAL GROUP
PROMINENT FEMALE PIONEERS IN GEOLOGY
CHESTER UNIVERSITY
Beswick Lecture Theatre, Parkgate Road, Chester CH1 4BJ
THURSDAY 3RD MARCH 2016 7pm (prompt start)
SPEAKER: Prof. Cynthia Burek

Women played crucial roles in certain areas of the development of geology at the end of the Victorian era up until 1930. This talk will focus on the first female fellows of the Geological Society and use members from that elite number to illustrate various roles that women undertook. These roles will be examined within certain discipline areas and case studies shown of women and how they have influenced the development of geology within the set time period. The social context will also be set for their work. The contributions of Catherine Raisin, Maria Ogilvie Gordon, Gertrude Elles, Ethel Skeat and Ethel Wood will be among the work examined.

WOMEN IN FOCUS: INSPIRATIONAL WOMEN OF THE LEARNED SOCIETIES
BURLINGTON HOUSE, PICCADILLY, LONDON
TUESDAY 8th MARCH 2016 2.30–4.30 pm

Celebrating International Women's Day on Tuesday 8th March, a unique behind-the-scenes tour of the Learned Societies of Burlington House.

Discover the female pioneers that blazed a trail for women in arts and science through items from the archives of the Royal Academy, Society of Antiquaries, Linnean Society, Royal Astronomical Society, Royal Society of Chemistry and the Geological Society.

From the artwork of the first elected female Royal Academician to the fossil collections of Etheldred Bennett (1776–1845), this special event is sure to enlighten and entertain, revealing fascinating stories from the histories of the Learned Societies.

To book a free ticket, contact the Royal Academy events team at events.lectures@royalacademy.org.uk

---

AAPG/SEG INTERNATIONAL CONFERENCE & EXHIBITION
BARCELONA, SPAIN
3rd–6th APRIL 2016

A session entitled ***History of Petroleum Geosciences*** will be organized during the American Association of Petroleum Geologists (AAPG) and Society of Petroleum Geophysicists (SEG) International Conference & Exhibition to be held in Barcelona in April 2016 (**http://barcelona2016.ice.event.org/**). The focus will be on Europe and North Africa although presentations on other parts of the world are also being considered. The session will be chaired by HOGG member Prof. Piotr Krzywiec (e mail piotr.krzywiec@twarda.pan.pl) to whom enquiries should be addressed.

GEOLOGISTS' ASSOCIATION (GA) EXCURSION TO GORING GAP
SATURDAY 11th JUNE 2016

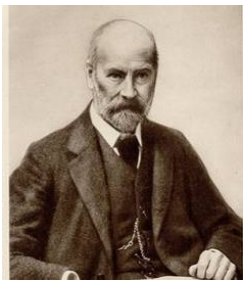
This excursion welcomes all geoscientists and partners; you do not have to be members of the GA.

Separating the Chilterns chalk from the Berkshire Downs chalk, the Goring Gap is arguably the most impressive fluvial landform in Britain. From the Jurassic lowlands around Oxford, the River Thames flows anomalously across the Chalk uplands of the Chiltern Hills/Berkshire Downs via 'The Gap', and then enters the London Basin, initially on to the Lower Tertiary (Lambeth Group) in the Reading area. Sir Aubrey Strahan, who served as the Director of the Geological Survey from 1914–1920, originally proposed that the Thames was superimposed from a former Tertiary cover on to the underlying Chalk. Other interpretations, such as glacial lake overflows, have been postulated but our present day understanding of the geology gives no support to them. As William Whitaker appreciated, 'The Gap' is primarily the result of

fluvial processes operating over a several million year time-scale.

In 1895, the GA held an 'Excursion to the Goring Gap' under the leadership of Geological Survey geologist William Whitaker, and J. F. Blake (*Proc. geol. Assoc.* **14**, 175–176). The GA party of 50 arrived at Reading Station and walked to the river at the Thames Promenade where they embarked on the steam-launch 'Fashion'. This took them up river to Goring through the incised stretch of the Thames. There, they walked west into Berkshire and climbed Streatley Hill before returning to Goring in Oxfordshire. They boarded the launch again and sailed upstream a little, before returning to Reading. It is proposed to repeat the 1895 excursion as precisely as possible.

The 2016 excursion will commence at Reading railway station which is 10–15 minutes' walk from the same landing stage as used in 1895. The 'Caversham Princess' (Thames River Cruises) has been chartered for the entire day and will be available for boarding from 09.30hrs. The vessel has ample space and both decks are covered. There is a bar with real ale and other drinks. Scenically, this reach is undoubtedly the finest on the entire Thames. Departure is scheduled for 10.00hrs and the initial journey will take between 2–2.5 hours (two locks have to be passed). The former confluence with the River Kennet/Sulham Gap will be seen. Three historic buildings—Mapledurham Hall, Hardwick House and Basildon Park—will be passed and a historian will explain their significance. Upon arrival in Goring,



the party will undertake a *c.* 6 km circular walk to Streatley Hill; this is capped by the Westland Green gravels, one of the oldest Thames river terraces. A climb of *c.* 100 m (and descent) is involved. A range of geological features will be examined including evidence for the progressive incision of the River Thames in the form of a series of river terraces and landforms due to former cold climate processes. Sir Aubrey's grave will be visited in Streatley churchyard. Non-hill walkers may enjoy the immediate environs of Goring at a more leisurely pace. A late lunch will be taken in Goring (there are several pubs and tea rooms) before re-boarding at Goring Lock for a 16.00hrs departure back to Reading arriving at 18.30hrs at the latest. Given a viable number of participants, a live jazz band will play during the return leg.

Tickets are £25.00 per person.
Book via the Field Meetings page of the GA website www.geologistsassociation.org.uk/

41ST INHIGEO SYMPOSIUM
CAPE TOWN, SOUTH AFRICA
27TH AUGUST–4TH SEPTEMBER 2016

The 41st INHIGEO Symposium will be part of the 35th International Geological Congress (www.35igc.org) to be held in Cape Town, South Africa in August–September 2016.

The Third Circular is available at
www.35igc.org/Content/Downloads/35th_IGC_Announcement_ThirdCircular.pdf

A "History of Geoscience" theme is listed under a Core Topic of "Geoscience and Society"; the INHIGEO Secretary General (Associate Professor Barry J. Cooper barry.cooper@unisa.edu.au) is the designated co-ordinator.

The historical symposia suggestions under the "History of Geoscience" theme are listed as

- 1. General contributions on the history of geology.
- 2. Historical studies of Gondwana.
- 3. Local (indigenous) understanding of geology.
- 4. History of fossil man investigations.
- 5. History of geology over the past 50 years.

Field trips

A one-day pre-Congress field trip is being planned around Cape Town by INHIGEO Vice President North America Greg Good on Saturday 27th August 2016. It will cater primarily for INHIGEO members. The exact itinerary of this field trip is not yet worked out but the idea is to visit several historical sites near Cape Town visited by John Herschel and Charles Darwin in their geological fieldwork.

A general day excursion for all Congress participants during the Congress will visit the historically important "Sea Point contact".

- Abstract submission closed on 31st January 2016.

- Early Bird Registration has opened and will close on **31st May 2016**.

www.inhigeo.org

FUTURE INHIGEO SYMPOSIA

Future venues/dates for the annual INHIGEO symposia are as follows:

2017 42nd Yerevan, Armenia (12th–18th September; 50th anniversary INHIGEO conference).

2018 43rd Mexico City, Mexico (4th–14th November).

2019 44th Como/Varese, Italy.

2020 45th New Delhi, India.

2021 46th Poland.

HOGG STANDING ORDER MANDATE

Name of bank or building society……

Branch address…….

…….

……..

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

VISIT TO THE NATURAL HISTORY MUSEUM, LONDON

15th MARCH 2016

REGISTRATION FORM

Name: . . . . . .

Address: . . . . . .

. . . . . .

. . . . . .

Tel. No. . . . . . .

E mail . . . . . .

I am a HOGG and/or GA member. Yes / No (delete as appropriate)

HOGG and/or GA members £5
Others £7

I enclose a cheque payable to HOGG for £. . . . . .

REGISTRATION CLOSES ON 7th MARCH

Please send the completed form and cheque by FIRST CLASS POST to

Dr Chris Duffin
146 Church Hill Road
Cheam
SUTTON
Surrey
SM3 8NF

e mail enquiries/expressions of interest to cduffin@blueyonder.co.uk