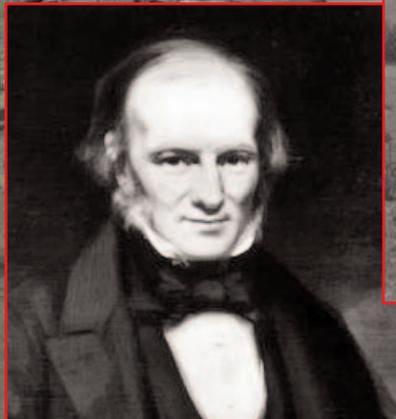


Number 30  
May 2007

# HOGG

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



## Front Cover:

**Background:** Section through burnt and unburnt oil shales at Burning Cliff near Clavells Hard, Kimmeridge, Dorset.

**Oil Rig:** ‘The first deep well in the UK, Portsdown No1, was spudded in January 1936 on Portsdown Hill overlooking Portsmouth harbour. This was the first deep well test drilling in the UK, drilling into a strong 'anticline'. The well penetrated 6556 feet of Jurassic rocks and Triassic rocks finding a small quantity of oil at one level only. Several other sites in the Hampshire, Dorset and Sussex regions were also drilled and small quantities of oil were found but the wells were abandoned due to the poor development of the reservoir beds. Operations were moved to the Midlands and the North resulting eventually in a major find close to the village of Eakring in Nottinghamshire at Dukes Wood which is now the site of the Dukes Wood Oil Museum’.

(Cover image is from the Dukes Wood Oil Museum archives, with due acknowledgement; further information about this museum and the area of natural beauty surrounding it, can be found at: [www.dukeswoodoilmuseum.co.uk/index.htm](http://www.dukeswoodoilmuseum.co.uk/index.htm))

Oil shales and the early exploration for oil onshore UK were the focus of a HOGG meeting in Weymouth in April. A report of that meeting appears elsewhere in this newsletter.

**Portrait:** James ‘Paraffin’ Young. Web sourced image.



The History of Geology Group would like to thank the Petroleum Exploration Society of Great Britain for the donation given towards the organisation of the History of Oil Shales Meeting held in Weymouth between the 19-22, April 2007

**Editor: Peter Tandy**

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# William Smith Map Restored

Peter Tandy

On Thursday 1st February 2007, invited guests attended the Geological Society at Burlington House, to witness the unveiling of the newly restored geological maps by William Smith and G. B Greenhough. The unveiling was conducted by the President, Richard Fortey, FRS. Restoration of the map was sponsored by NPA Satellite Mapping, and Nigel Press of NPA was on hand to outline their role in the restoration.

Hugh Torrens, generally acknowledged as the foremost authority on William Smith gave a brief history of the map.

Simon Winchester, author of the book “The Map that Changed the World”, which chronicled Smith's life and production of the map, and made its existence known to a vast worldwide audience, was sadly unable to attend, due to a cabin crew strike. Also in attendance was Lord Derwent, one of whose ancestors worked with William Smith on the Hackness estate.

A nice touch was the availability of specially bottled real ale (3.8% ABV), called “Baker's Dozen”, to add to the excellent food.



**Richard Fortey, President of GSL, & Nigel Press of NPA with a portion of the map in the background.**

(Image: Ted Nield)



**Hugh Torrens speaks about William Smith, looked on by Jackie Fortey, Robin Cocks & Richard Fortey**

(Image: P.Tandy)



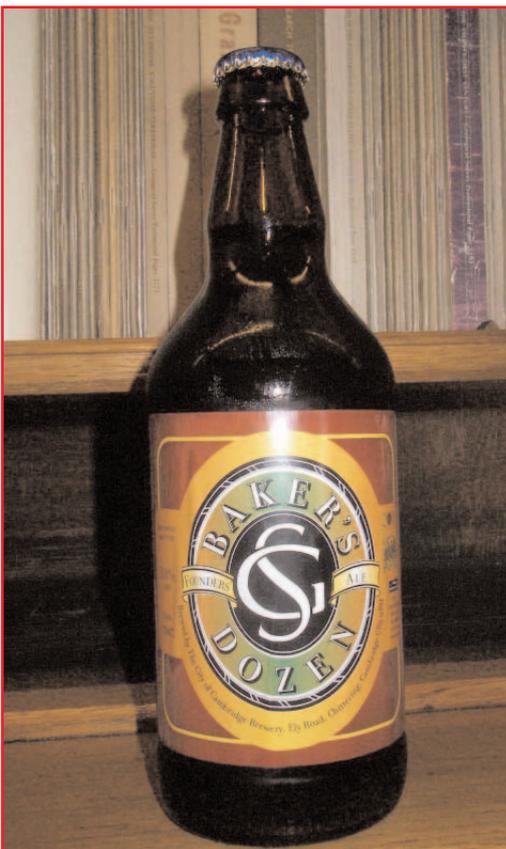
Opposite: **Guests line the stairs to listen to speeches**

(Photos: P.Tandy)

Below

**Richard Fortey looks on as Nigel Press of NPA, relates how NPA restored the map**

**Specially bottled "Baker's Dozen" real ale was available** (Photo: P.Tandy)



### **Baker's Dozen**

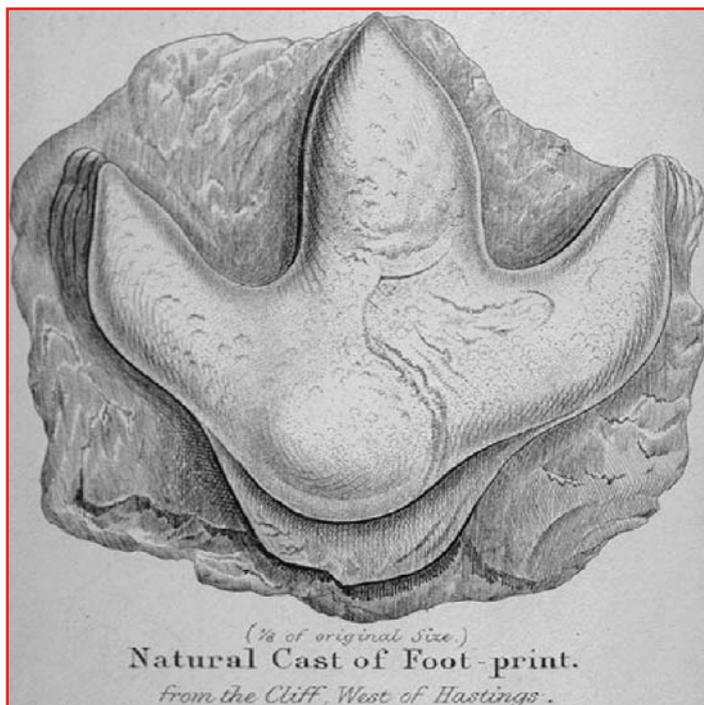
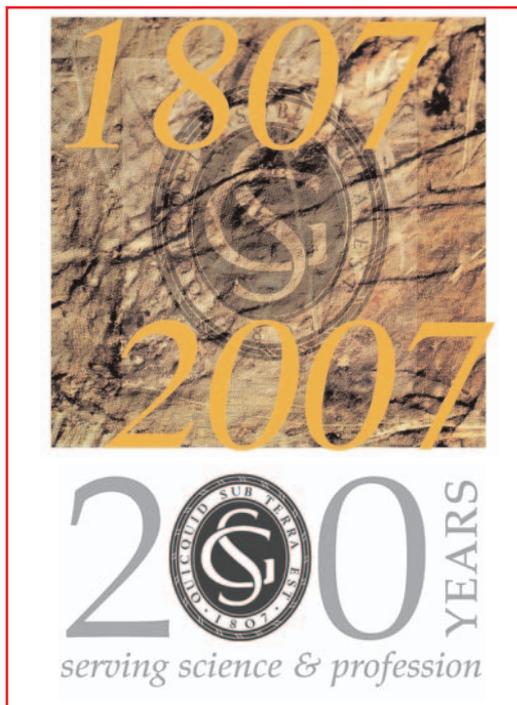
“Baker's Dozen”: there were 13 original founder members of the Geological Society, although only 11 were present when the idea was floated. And 13 is, traditionally, a baker's dozen. Q.E.D. **Verdict on it:** “very drinkable, though at 3.8% ABV, a little light for me” (P.Tandy)

### **“Baker's Dozen” is still available!**

For those not able to be there (at the map unveiling, not the 1807 founding!), and who would like to try this product, it is (late April) still available via Realale.com (see their website, or visit their shop at 371 Richmond Road, Twickenham, Middlesex ) at a reasonable £2.70 for 500ml (and for every bottle sold, 10p is donated by Realale.com to the GSL for the Centenary year).

The meaning of “Baker's Dozen” was lost on a few people for a while - I shall leave it to the reader to work it out here (if you are really stuck the answer is given at the end of this article)

## Bicentennial Walks



### Walk the Geological Way!

As part of the Society's Bicentennial celebrations, Dr Eric Robinson will lead a couple of guided "geological" walks through the streets of London.

#### “The White Cliffs of Dover Street”

**Dates: Thursday 17 May & Thursday 21 June 2007**

The focus of this walk is to look at the two distinct 'geologies' (topography and construction material) of the surrounding area.

The walk will take in some of London's most famous streets, starting and finishing at Burlington House and moving down Bond Street, Dover Street and into Berkeley Square. The walk will commence from Burlington House at 10.30am, and the walk will last about an hour and half.

**If you are interested in going on this walk, please contact:**

**Georgina Worrall (Tel: 020 7434 9944)**

**Email: Georgina.worrall@geolsoc.org.uk)**



## To Paradise by way of Kensal Green

A "geological" walk through Kensal Green Cemetery.

**Dates: Wednesday 16 May & Wednesday 20 June 2007**

In 1830, at a meeting in the Freemason's Tavern in Covent Garden, the London Cemetery Company was formed, bidding for the right to create an urban cemetery on 55 acres of open country alongside the Grand Union Canal.

This walk will take in the land geology and rock geology of the gravestones and memorials which have been erected in the last 175 years.

The walk will be held in the afternoon from 2pm - 4.30pm.



**Kensal Green Cemetery from *The Mirror of Literature, Amusement and Instruction*, Saturday 18 November 1843**

Dependent upon the number of people interested in this walk, a coach may be laid on to take people from Burlington House to Kensal Green. There will be a small charge to attendees for this service.



**If you are interested in going on this walk, please contact:**

***Georgina Worrall***  
***(Tel: 020 7434 9944)***

***Email:***  
***Georgina.worrall@geolsoc.org.uk***

**Kensal Green Cemetery 2005. Image from Justinc. Wikimedia**

## For your bookshelf?....

These volumes, although not strictly geological, contain a wealth of information about aspects of early science.

### **“Science and Beliefs”**

Ed: David M. Knight & Matthew D Eddy

*Pub: Ashgate Publishing, Ltd, Hampshire, 2005, pp.272, ISBN 0-7546-3996-7*

The years between 1700 and 1900 witnessed fundamental transition in attitudes towards science, as earlier concepts of natural philosophy were replaced with a more modern conception of science. This process was by no means a simple progression, and the changing attitudes to science were marked by bitter arguments and fundamental differences of opinion, many of which are still not entirely resolved today.

Approaching the subject from a number of cultural angles, the essays in this volume explore the fluid relationship between science and belief during this crucial period, and help to trace the development of science as an independent field of study that did not look to religion to provide answers to the workings of the universe.

Taking a broadly chronological approach, each essay in this book addresses a theme that helps illuminate these concerns and highlights how beliefs - both religious and secular - have impinged and influenced the scientific world. By addressing key issues such as the ongoing debate between Christian fundamentalists and followers of Darwin, and the rise of 'respectable atheism', fascinating insights are provided that help to chart the ever-shifting discourse of science and beliefs.

### **“Seen | Unseen - Art, Science, and Intuition from Leonardo to the Hubble Telescope”**

Martin Kemp

*Pub: OUP, 2006, pp352, ISBN 0-19-929572-7*

This book is not a history of art, or a history of science, or even a history of their interaction. Rather Martin Kemp, the distinguished art historian, traces certain recurring themes in the imagery of art and science that reflect shared 'structural intuitions' about the seen and unseen worlds of nature.

The application of a historical perspective to the visual, Kemp argues, sheds new light on current debates in science and art, such as that between 'reductionists, and 'holists'. Beginning with the Renaissance, and the identification of techniques for representing perspectival space, he pauses at some of the nodal points in the history of the visual - the dynamism and spiritual aspects of nature reflected in imagery of the Romantic era; the abstract forms and organic growth that caught the imagination in the 19th century; and 'our current age of plurality and process', in which images are created in many ways, and our ability to broadcast them has been revolutionised by modern communication technologies.

In an exploration reaching from Leonardo to the Hubble telescope, Kemp considers, among others, the treatment of space and the persistence of spatial coordinates; the relationship between parts and wholes; geometry in nature; systems of order and chaos, and at criticality; the uses of the camera and issues of trust and objectivity in early photography; and the impinging of unseen worlds - particle tracks, Feynman diagrams, medical scans. Drawing out common themes by stepping back from the rigid bounds and taxonomies of art and science, Kemp pleads for the freedom and insight provided by visual history: 'I have a powerful sense that effective art and science both begin at the points where knowledge breaks down. Visual intuitions are one of the most potent tools we possess for feeling our way into the unknown.' (from the flyleaf)

**“Leven en werk van Georg Everhard Rumphius: biografische notities door W. Buijze”**

2006, pp.356. ISBN 90-804527-5-0 (in Dutch)

The natural historian Rumphius (1627-1702) was the greatest scientist, that in the second half of the 17th century was employed in several ranks of the VOC. On the Moluccan island of Ambon he - beside his ordinary work - wrote a 13-volume *Ambons Kruidboek*, concerning the then never examined nor described nature of the Molluccan Islands. Beside his Ambon land writings he also completed a history of Ambon. In his Ambon rarity chamber he not only wrote about shells and animals from the Molucca seas, but also about local minerals and stones. Although the VOC in the first place was a trade organisation, it recognised quite early Rumphius' scientific qualities.



**Rumphius (1627-1702)**

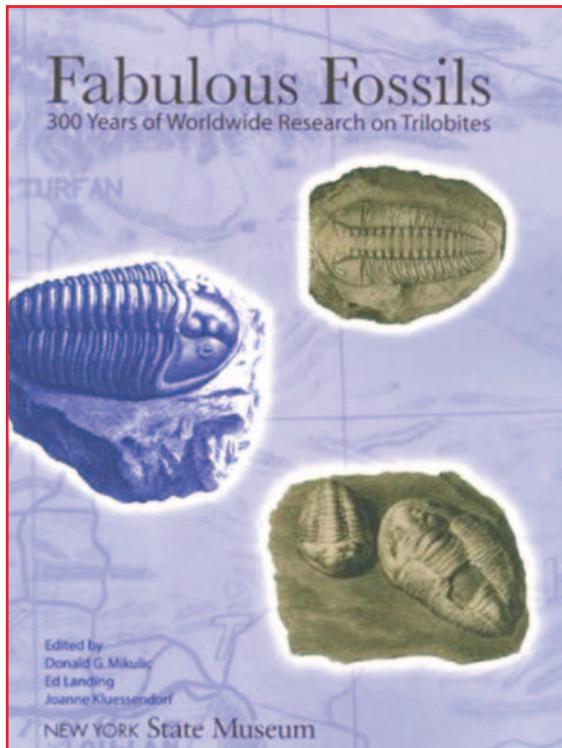
(Text loosely translated from the cover (in Dutch))

The rulers on Batavia always continued to support him with his botanic and other studies. The book gives a description of Rumphius' life and of his work. In this new biography one finds much that has never before been examined concerning Rumphius; this shows Rumphius in another light.

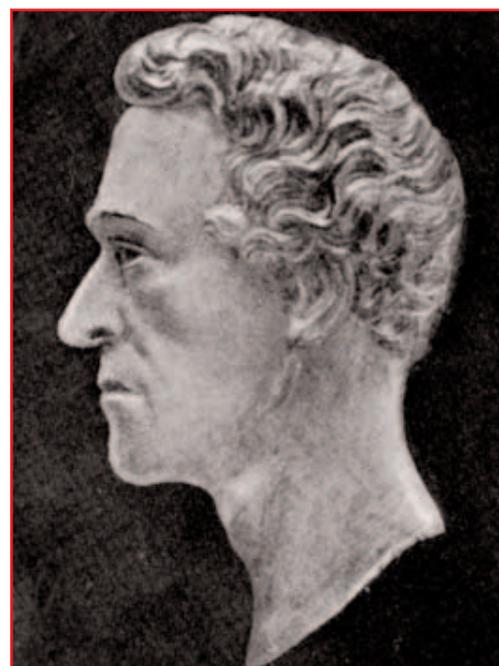
**“Fabulous Fossils - 300 years of Worldwide Research into Trilobites”**

Ed: Donald G. Mikulic, Ed Landing,  
Joanne Kluessendorf

NY State Museum Bull. No,507, 2007. ISBN: 1-55557-235-9



This volume contains a series of about 25 papers detailing historical research into trilobites. Papers are presented on Johan Wilhelm Dalman (1787 - 1828) after whom the genus *Dalmanites* is named, J.E.I Walch (1725-1778) who coined the name 'trilobite', Calymene from Dudley, the earliest trilobite research from antiquity to the 1820s, C.D.Walcott's research, as well as synopses of early research from the Czech Republic, Brazil, Australia, and China.



**Johan Wilhelm Dalman (1787 - 1828)**

# From Oil Shales to Seeps to 'Shaleopolis'

Report of the meeting on The History of On-Shore Hydrocarbon Use in the UK (or From Oil Shales and Seeps to 'Shaleopolis' and 100 Roughnecks!) 21 April 2007, Weymouth, UK

**Anne O'Connor**

(Secretary of the History of Geology Group)

A meeting on The History of On-Shore Hydrocarbon Use in the UK attracted a varied audience to Weymouth on 21 April 2007. This event was co-hosted by the History of Geology Group and the Petroleum Group, convened by Richard Moody and partly funded by the PESGB. Papers ranged from the use of fuels in prehistoric times to the influence of two world wars on twentieth-century hydrocarbon use. Particular attention was given to oil-shale exploitation in the nineteenth and twentieth centuries. These historical explorations did not merely look backwards to the past; they gave a sense of perspective to contemporary concerns about the rapid disappearance of fossil-fuel reserves.

**Richard Moody** (Kingston University)

introduced the meeting with his paper on Oil & Gas Shales, Definitions & Distribution in Time & Space.

To place the day's proceedings in context, Moody skimmed rapidly through the history of fuel use: from prehistoric fires lit 1.5 million years ago, to eighteenth-century extraction of oil shales in the Carpathians, and on to the oil-shale industries of the nineteenth century.

Looking to the future and to new technologies, it seemed likely that oil-shale reserves would be exploited once again, in view of the growing conflict over fossil-fuel resources and the need for resource management.



Setting light to oil shale at Clavels Hard east of Kimmeridge

**Ramues Gallois** spoke next on The Norfolk Oil-Shale Rush, 1916-1923. He noted a correspondence between times of oil crisis and periods of oil-shale exploitation. The First World War stimulated the search for a secure domestic source of oil. In 1916 the Norfolk oil-shales, which had been recognised since the time of William Smith (1819), began to be explored under the direction of William Forbes-Leslie. In 1918, his exaggerated reports of the potential oil-yield led to the launch on the London Stock Exchange of 'English Oilfields Ltd'. A few years later their mine and pits were abandoned when resources proved less productive than Forbes-Leslie and the newspapers had suggested. Small oil syndicates which had sprung up in the area had even less success, and were also disbanded. Recent analysis of the Norfolk oil-shale seams suggest that historical hopes were based largely on wishful thinking, encouraged by an over-enthusiastic press.

Moving southwards to Sussex, **Anthony Brook** examined the history of hydrocarbon exploitation from the late-nineteenth century to the early-twentieth century in his paper on Hydrocarbons in Sussex: A False Quest. After an abortive attempt to find coal in East Sussex during the early-nineteenth century, further borings into the sub-Wealden strata in the 1870s proved equally fruitless. No coal-seams were discovered. Nonetheless, the interest generated by this project was reflected in the names of private subscribers, who included many notable geologists. The search for oil and natural gas in Sussex again attracted attention in the 1890s when an isolated pocket of methane was discovered at Heathfield, but it was only in the late 1930s that serious efforts were made to find petroliferous structures. Deep borings by the D'Arcy Exploration Company produced little of commercial value.

**Hugh S. Torrens** (Keele University) returned to the topic of oil shales for his assessment of *The Search for Oil from Oil-Shales in Pre and Post First World War England, 1910-1924*. Torrens focused on the people involved in this search, complementing the geological approach taken by Gallois (see above). Joseph Day, inventor of the Crankcase-Compression Engine, played an important but little known part in the hunt for Norfolk oil in the years before the First World War. William Forbes-Leslie was more prominent, but quite unqualified for his geological role. By 1907 Forbes-Leslie, a medical doctor from Scotland, was claiming that oil could be extracted from the Kimmeridgian (Jurassic) oil shales of England. Forbes-Leslie may have been stimulated to make these claims by his experience as a civil servant in South Africa, his 1903 project to produce paraffin at King's Lynn, and a favourable (though dubious) Admiralty Report on the oil potential of Norfolk. The suggestion that English oil shales had a rich oil content gained further credence from Edward Howard Cunningham-Craig's criticism of the organic theory of oil.

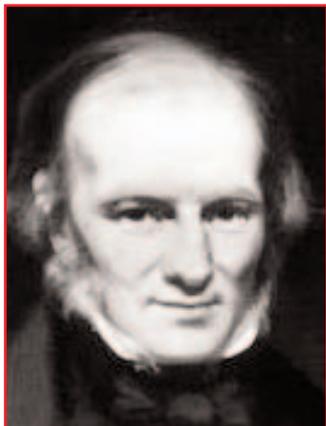
Parliament, eager to find a domestic oil supply as the First World War loomed, wanted to believe these unqualified boasts. The newly founded Ministry of Munitions encouraged Forbes-Leslie; journalists inflated the story further. Despite John Cadnam's doubts about the yield from oil shale, capital was invested in Forbes-Leslie's Norfolk project. When the poverty of the oil shales became apparent, Day resigned, and Forbes-Leslie disappeared. In 1922, the disgraced Forbes-Leslie resurfaced in Somerset, made similar claims for the shales there and experienced similar disappointment. By the late 1920s and 1930s his activities were reported to involve repeated fraud and bankruptcy. He was tried for fraud at the Old Bailey in 1935 and sentenced to two years in prison; he was struck off the medical register, and died in 1944. Over a century before, William Smith had warned that such exploitation was a waste of time. This was ignored through gullibility and a lack of geological knowledge: a warning to the future.

**David J. Evans** (British Geological Survey) examined how the pressures of the Second World War encouraged on-shore oil exploration in Nottinghamshire in his account of Eakring: *An Illustrated History of Exploration and Production*. D'Arcy Exploration Company (forerunners of BP) had been prospecting on-shore in the UK before the war. Their first significant oilfield was Eakring, which produced small amounts of high-grade crude oil, ideal for Spitfires. The advantages of on-shore oil became evident when war broke out and U-boats began sinking tankers in the Atlantic. Sir Peter Southwell, of D'Arcy Exploration, entered discussions with the Petroleum Minister in 1942. It was agreed that 100 more wells would quadruple production. Southwell was authorised to conduct negotiations with American war officials to secure the assistance of American rigs, which were superior to the cumbersome British types. After gaining the assistance of Lloyd Noble, Southwell contracted for American equipment and crews.

Forty-three roughnecks arrived in Britain in March 1943 and immediately, but in great secrecy, began drilling. Locals thought they were extras for a film crew, waiting for John Wayne. By the time they left, a year later, they had drilled the 106 wells required, increasing Britain's oil production ten-fold. Their efforts played a vital part in producing 'the supplies the U-boats would never sink', as Lloyd George put it. The one roughneck who died on site in the course of his work, Herman Douthit, was buried with full military honours and now lies in the American Cemetery at Cambridge.



**Sculpture of Oil Patch Warrior by Jay O'Melia. Photo: Robert Brown**



**Portrait of James Paraffin Young painted C1860.**  
From University of Strathclyde Archives



**Archibald Cochrane**  
Image from Paul Luter  
Article 2005

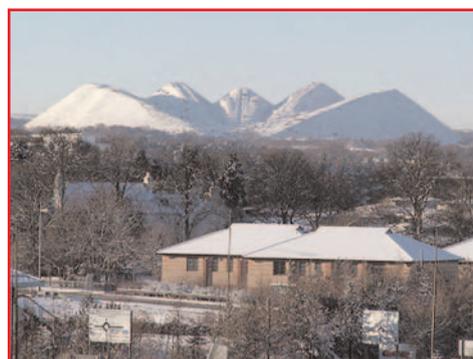
**Barbra Harvie** (University of Edinburgh) considered the history and impact of Scottish oil-shale exploitation in her assessment of *The Legacy of Oil-Shale in West Lothian*. In the 1850s Dr James 'Paraffin' Young, founder of the Scottish oil industry, managed to extract crude oil from shale. The expiry of the patent in the retorting process in 1864 provided the catalyst for a major expansion in oil extraction which changed the physical appearance and social character of West Lothian. Twenty oil companies were established, attracting workers to the area; new villages were built to house them. As the Scottish oil-shale industry evolved, by-products were extracted alongside oil, gas and steam, to produce mothballs, detergent, and even wax for beekeepers. Engineering technology continued to develop in the twentieth century, founded on the basic engineering principles practiced in West Lothian during the 1860s. Today, vast hills of burnt shale waste (or 'bings', as they are known locally) form a striking part of the West Lothian landscape. These monuments to the history of oil exploitation are still used: their materials, for construction; their slopes, for recreation. They have also developed into a unique habitat for fauna and flora (see below).

Stepping back from these case studies, **Richard Moody** took a broader look at Alternative Fuels, Innovation and Entrepreneurialism. The shift in domestic fuel use from wood burning to coal during the early-seventeenth century stimulated extensive changes to society; industry; technology; pollution levels; even architecture. Coal became the major source of energy until the latter half of the twentieth century. Coal gas, first produced by experiment in 1618, was replacing animal fats and plant oils for street lighting by the early-nineteenth century. In the 1830s paraffin (kerosene) was preferred to whale oil as a cleaner and cheaper source of energy for lamps.

Archibald Cochrane, 9th Earl of Dundonald, was one of the great inventors who assisted such developments. A brilliant chemist, he developed a method of distilling tar from coal and in 1782 lit Culross Abbey with gas from his own tar. Dr James 'Paraffin' Young, another notable entrepreneur of the mid-nineteenth century, took the advice of Lyon Playfair to exploit a seepage of naphtha in Derbyshire and set up the first plant to produce paraffin oil for lamps. In the late-nineteenth century, Robert Dunlop conducted experiments on the production of benzol and toluol. For three centuries, entrepreneurs and scientists from different backgrounds have played a pivotal role in the development of the British tar and oil industries.

**Barbra Harvie** returned to the bings of West Lothian in her talk on Bings and Biodiversity. Shale bings - hills of burnt debris, remnants of past oil-shale exploitation - are unique to this area, and are not found anywhere else in Western Europe. The nineteen bings still in existence have been unworked from between eighty-seven and forty-three years. During that time, they have been colonised by a surprising variety of flora and fauna, including more than 350 plant species. Bing spoil is non-toxic, and is physically and chemically different from other industrial spoil types. The bings are notable refuge sites with a high biodiversity. They offer a unique example of primary succession, illuminating the process of ecosystem reconstruction and development. Harvie urged that they be protected for their environmental interest.

**Right: The Five Sisters. Bings from West Lothian.** Sourced from local website.



**Alan Holiday** (Weymouth College) summarised The Evolution of the Wessex Basin from Late Carboniferous to Cretaceous times. Starting in East Devon and moving as far east as Hampshire, Holiday explained the role of organic-rich sediments in creating source rocks, and the significance of porous, permeable sediments in acting as reservoir rocks. Together, their development made this area the most important on-shore oil producer in Western Europe. Subsequent tectonic events destroyed much of the potential petroleum production.

**Ramues Gallois** offered a detailed analysis of Oil Shale Resources in the Kimmeridge Clay, examining why repeated attempts at their commercial exploitation have failed. Peasants burnt these shales as fuel in the eighteenth and nineteenth centuries. Geologists studied the stratigraphy of the Kimmeridge oil-shales for their academic and economic interest. Ammonites and marker bands offer valuable guidance for geological correlation, and borings across the country from Dorset to Yorkshire have revealed that oil-shale seams bunch into distinctive groupings. Nonetheless, there are major economic and environmental restrictions to the successful exploitation of this domestic oil-source. The shales are expensive to process and purify. The seams are thin; vast tracts of arable and populated land would have to be devastated by open-cast mining in order to extract viable quantities; ordinary distillation is not sufficient to rid the shales of sulphur. The energy expended on extraction might be greater than the energy value of the shale oil extracted. Gallois concluded that the oil shales in the Kimmeridge Clay could never make a major contribution to Britain's energy supply.

**Steve Etches** gave a more optimistic assessment of the palaeontological value of these deposits in his talk on The Fossils of the Kimmeridge Clay, illustrated with images from his remarkable collection. Modern techniques, such as the use of air abrasives, have enabled the preparation of very fine specimens from apparently unpromising material. The clays contain a wealth of material: fishes, such as ray, shark and coelacanth; marine reptiles, including the voracious pliosaur whose teeth marked other bones; pterosaurs; and crocodile. One of the most unusual finds were sacs of what appear to be ammonite eggs. These fossils exhibited all levels of preservation, and some rare specimens even retained their soft parts.



**Details of beautifully prepared fish skull from the Steve Etches Collection.** Image: R. Moody



**“Nest “ of ammonites from the Steve Etches Collection.**

Image: R. Moody

The meeting closed with a thought-provoking paper from **Daniel Clark-Lowes** (Nubian Consultants) on The Age of Oil - Past, Present and Future. Whilst coal provided Britain with energy at the beginning of the industrial revolution, the economy later shifted to oil which was cheaper to produce. Oil consumption grew by 2% per annum, and Clark-Lowes identified a significant correlation between the rise in oil exploitation and a rise in carbon-dioxide, temperature and population. Worryingly, he declared that the global quantity of oil remaining in source rocks, which took millions of years to form, is far less than official reports suggest.

Cambridge Energy Research Associates, the main source of information on oil resources, estimate 1127 billion barrels of oil remain (or 1251, depending on definitions). Independent assessment of the figures gives a far lower number, which presages a serious problem for future oil recovery. The quantity of potential Arctic oil is greatly overestimated. More significantly, the figures of proven resources for selected OPEC countries are severely inflated: a tenth of the supposed remaining oil reserves accepted by the government do not exist. It is unfortunate that the policies of governments are guided by big oil companies; who, in turn cannot afford to alienate OPEC countries; who, for their part, have a vested interest in exaggerating their resources.

Conventional oil supplies are nearing the half-way depletion point, according to existing, proven oil reserves data. Potential non-conventional oil sources seem unlikely to save the situation, even according to the numbers advertised by these industries' supporters (as collated by Mike Smith). They can only delay the problem for ten years at most. At the current, expanding rate of consumption, all oil will be gone within the next 100 years, perhaps even in forty-five years. The consequences? A dramatic rise in temperature linked to increased carbon-dioxide levels. An analogy can be drawn to severe volcanic eruption events in the geological past, which led to desertification and sea-level rise, and consequent competition for food and extensive extinctions. In today's world, increased competition for oil has already caused military conflict. Clark-Lowes ended by suggesting an answer to these problems: we must reduce the demand for energy, wean ourselves off oil and replace it with a non fossil-fuel energy resource.

Three posters from **Essie Apenteng**, **Richard Bature** and **Paul Taylor** of the MSc Course at Kingston University provided insights into the future use of Methane Hydrates, Tar Sands and Oil Shales.

The meeting ended with much to ponder. Thereafter, some of the delegates retired to the hotel bar to discuss the issues raised in the course of the day at greater length.



Delegates Relax. **Top Left.** Alan Holliday, David Evans, Andy Rankin, Essie Apenteng, Richard Bature, Dick Moody, Paul Taylor. **Lower Left.** Hugh Torrens and John Mather.

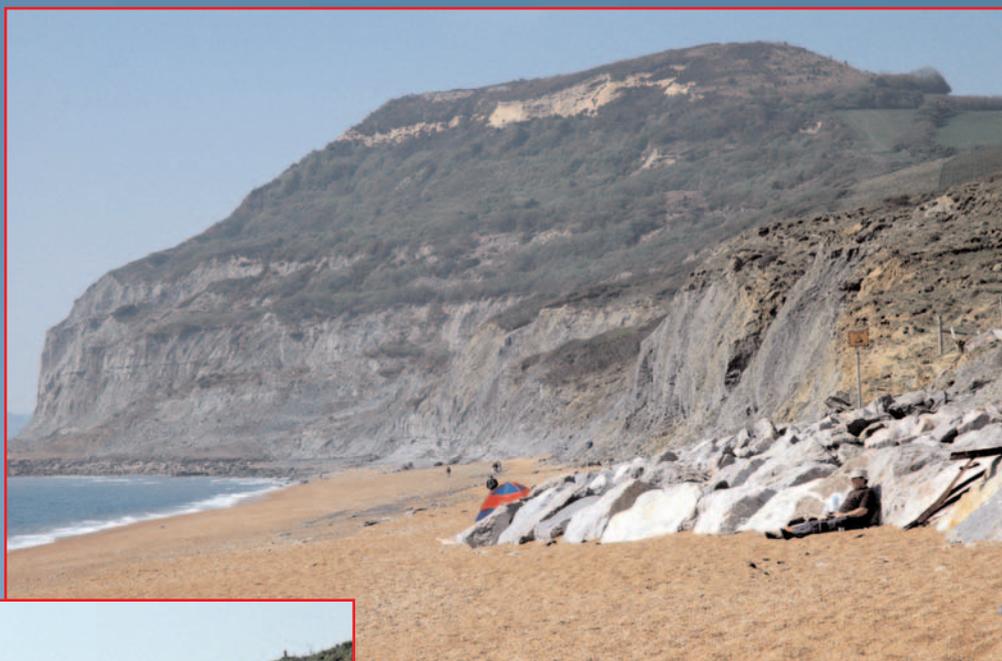


Delegates Relax. **Top Right.** Mrs Hugh Torrens, Alan Lane, Tony Brook, Janet Lane, Richard Bature, Barbra Harvie. **Lower Right.** Cherry Lewis, Essie Apenteng. **Centre.** Steve Etches, Ramues Gallois.

# The History of On-Shore Hydrocarbon Use in the UK

Weymouth, UK

Fieldtrips Album 20th April 2007



Above. Overview west of Charmouth with pale Upper Greensand resting unconformably on Early Jurassic. Image: R.

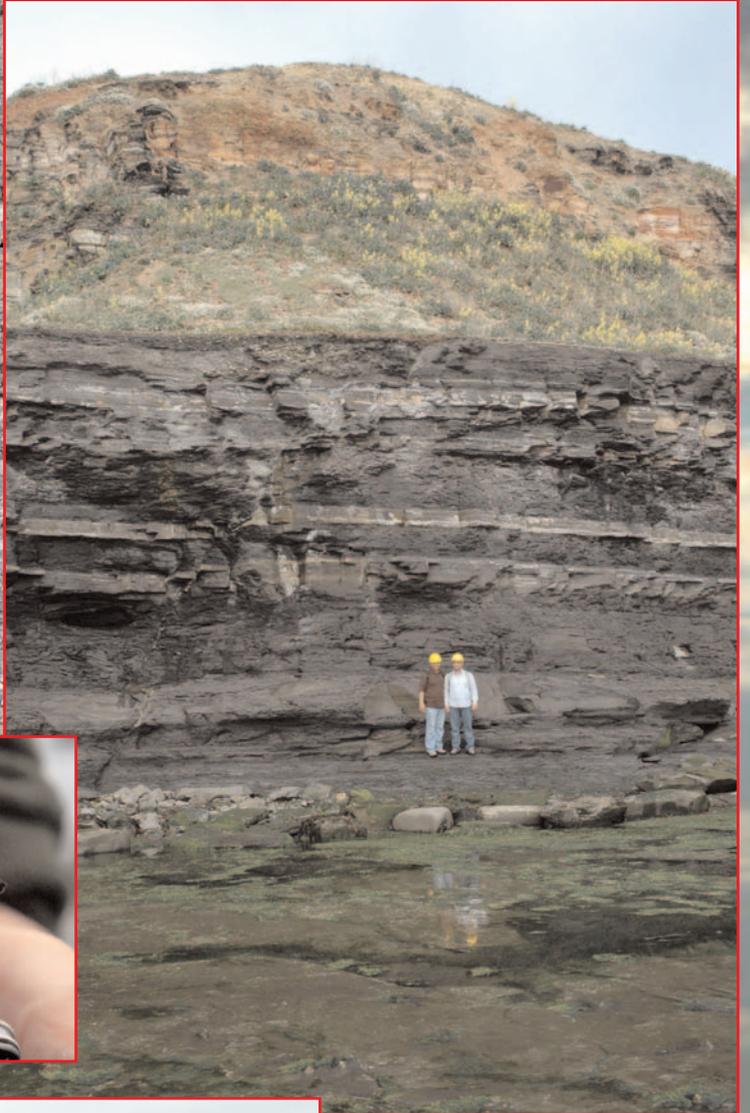


Burton Bradstock cliffs with 1-2 metres of Inferior Oolite resting on Bridport Sands. Image: R Moody



Below. Oil seep from Bencliff Grits at Osmington Mills. Image: R. Moody

April 22nd 2007  
Kimmeridge Bay



**Collapsed Oil Shale workings  
west of Clavell's Hard.**  
Image: R Moody



**Flaming Cliff and  
Kimmeridge Clay at  
Clavell's Hard.**  
Image: R Moody



**Left to Right (Standing)**

**John Henry, Geoff Swann,  
Danny Clark-Lowes, Essie  
Apenteng, Steve Etches, Janet  
Lane, Richard Bature, Ross  
Sandman, Abdulmeneim El-  
Arbi, Alex Williat**

**Squatting:**

**Abdel Eddawi, John Mather,  
Max Sandman, Paul Teylor,  
Abdel Alrabie**

Background: Ian Britton

# In the Footsteps of the Founding Fathers

9-13 November, 2007

*History  
Of  
Geology  
Group*

The Geological Society of London's History of Geology Group will be celebrating the Society's bicentenary of with a five day event comprising field trip, conference and dinner.

## *Walk with the Founding Fathers*

9-11 November 2007

The conference will be preceded by a field trip to the Isle of Wight to visit some of the classic geological localities of historic interest. The trip will be led by Professors Hugh Torrens and Martin Rudwick. Accommodation has been arranged for the nights of Friday 9th and Saturday 10th November at the Wellington Hotel, Ventnor.

## *Talk with the Founding Fathers*

12-13 November 2007

Geological Society of London, Burlington House, Piccadilly, London

*“Endeavour has been made not merely to trace the birth, the development, and influence of the Society, but to indicate something of the manner of men who laid its foundations.”*

**Horace B. Woodward, 1908**

*History of the Geological Society of London*

A two-day international conference will commemorate the lives of the founders, the achievements of the Geological Society of London, and the activities of some of its members over the past 200 years.

**Guest Speaker:** Dr Iain Stewart, presenter of the BBC series *Journeys From The Centre Of The Earth and Ring of Fire*, will talk about his experiences in making the films.

**Keynote Speakers:** Professor Martin Rudwick, Cambridge University, UK  
Professor Simon Knell, University of Leicester, UK

**Theme 1:** The status of geology around 1807, in comparison to other sciences, and to geology in other countries

**Theme 2:** The founders of the Society

**Theme 3:** The foundation of the Society and the first 100 years

## *Dine with the Founding Fathers*

12 November 2007

A bicentenary dinner will be held in the New Connaught Rooms, which now incorporates the Free Mason's Tavern where the Geological Society was founded.

A plaque commemorating the founding of the Society will be unveiled by Professor Richard Fortey, President of the Geological Society of London.

**For any enquiries please contact: Dr Cherry Lewis, Senate House, University of Bristol, Tyndall Ave, Bristol BS8 1TH. Email [hoggchair@aol.com](mailto:hoggchair@aol.com) or visit the HOGG web site: <http://www.geol-soc.org.uk/hogg>**

## Geological Society Bicentenary Meeting: Talk with the Founding Fathers

Speaker	Title
<b>Guest speaker:</b> Dr Iain Stewart, presenter of BBC TV series Journeys from the centre of the Earth	Cultural Geology: modern marketing of an ancient planet
<b>The status of geology in 1807</b>	
<b>Keynote Address:</b> Professor Martin Rudwick - Cambridge University, UK	The status of the earth sciences in 1807, in Britain and the rest of the scientific world, in relation to the other sciences of nature
Professor Phillipe Taquet - Laboratoire de Paleontologie, Paris	Geology beyond the Channel: the beginnings of geohistory in France in the early nineteenth century
Dr Julie Newell - Southern Polytechnic State University, USA	A story of things yet-to-be: the status of geology in the US in 1807
Professor Gian Battista Vai - Universiti di Bologna, Italy	The status of geology in Italy around 1807
Dr Irena G.Malakhova - Russian Academy of Sciences, Russia	Scientific institutions and geosciences in Russia at the beginning of the nineteenth century.
<b>The founders and foundation of the Society</b>	
Dr Martina Kölbl-Ebert - Jura-Museum Eichstätt, Germany	George Bellas Greenough
Professor David Knight - Durham University, UK	Chemists get down to Earth
Dr Cherry Lewis - University of Bristol, UK	The founding doctors: Parkinson, Babington, Frank and Laird
Professor Hugh Torrens - Madeley, UK	Dissenting Science: the Quakers among the founding fathers
Keynote Address: Professor Simon Knell - University of	A society in a nation of geological societies: the Geological
<b>The first 100 years</b>	
Leicester, UK	Society in its early nineteenth century context
Leucha Veneer - University of Leeds, UK	Practical geology in the early years of the Geological Society
Dr Noah Heringman - University of Missouri-Columbia, USA	Thomas Webster, Sir Henry Englefield, and Geological antiquity
Dr Ted Rose - Royal Holloway, University of London, UK	Early fellows of the Geological Society and the dawn of military geology in Europe
Professor David Branagan, University of Sydney, Australia	The Geological Society of London: the Antipodean connection
Professor Patrick Boylan - City University London, UK	The Geological Society and its official recognition
Dr Ralph O'Connor - University of Aberdeen, UK	Experts in search of an audience: the Geological Society and the wider public, 1807-1837
Dr Renee Clary - Mississippi State University and Dr. James H. Wandersee - Louisiana State University, USA	All are worthy to know the Earth: Henry De la Beche and the origin of geological literacy.
Christopher J. Cleal, Helen E. Fraser and Maureen Lazarus, Geoffrey Dannell - National Museum Wales, UK	Edmund Tyrell Artis (1789-1847) - Britain's pioneering Carboniferous palaeobotanist
John R. Smallwood - Amerada Hess Ltd, UK	The first geophysical map - rediscovered: Playfair on Schiehallion 1801-1811
Professor Cynthia Burek - University of Chester, UK	The status of women and the first female Fellows

# History Of Geology Group

## In the Footsteps of the Founding Fathers Registration

9-13 November 2007

Registration form: (this can also be downloaded from the HOGG website:  
(<http://www.geolsoc.org.uk/hogg>)

Name.....  
Address.....  
.....  
.....  
Telephone.....  
Email.....

Please put the number of places you require in the appropriate boxes.

I/we wish to attend the conference Talk with the Founding Fathers on 12-13 November   
The registration fees per person are as follows:  
History of Geology members ..... £55  
Others .....£65  
Students .....£25

**Conference fee enclosed** £.....

I/we wish to attend the field trip Walk with the Founding Fathers on 9-11 November   
Please note this trip is limited to 30 people

Accommodation for two nights, breakfast and dinner is £120 per person for 2 people sharing, or £150 for a single room. A deposit of £50 is required now for accommodation, the remainder being payable direct to the hotel when you leave.

Registration fee per person (to include transport during the excursion) £45  
Deposit for accommodation ..... £50

**Field trip fee enclosed** £.....

I/we wish to attend the dinner Dine with the Founding Fathers on 12 November

Includes reception, dinner, and complimentary wine on the table ..... £55

**Cost of dinner enclosed** £.....

**Total amount enclosed** £.....

Please return the registration form and your cheque, made payable to the History of Geology Group, to: Dr Cherry Lewis, History of Geology Group, Senate House, University of Bristol, Tyndall Ave, Bristol BS8 1TH. Email: [hoggchair@aol.com](mailto:hoggchair@aol.com)

## Local Heroes

Local heroes is the title of a series of locally produced lectures, field trips or other events to commemorate people who have made some notable contribution to geology. The series is administered and part-funded by the Geological Society of London, but organised by local societies. For convenience we publish here abstracts of those events likely to occur before publication of the next HOGG newsletter, plus titles of some further on. The full list of events planned so far can be seen on the GSL website (see below): In the next issue of HOGG we will publish more abstracts for those meetings scheduled for that quarter.

**GSL website:** [http://www.geolsoc.org.uk/template.cfm?name=Local\\_Heroes\\_Initiative](http://www.geolsoc.org.uk/template.cfm?name=Local_Heroes_Initiative)

### John Milne - the man who mapped the shaking Earth

**The Local Studies, Touchstones 19 May 2007 , Time: 1400hrs**

The life and work of John Milne (1850-1913) is not particularly well known in Britain. If you are indeed aware of him, it is most likely through his local connection to Rochdale or through his contribution in developing the seismograph (an instrument for recording earthquakes) during his time in Japan in the late 19th century. This dominated Milne's life to such an extent that he became known as 'Earthquake Milne' as his friends affectionately called him, and 'Father of Modern Seismology' to the scientific community. He was a hero in Japan and lauded around the world. However, today, he's generally remembered only by seismologists'. His work on earthquakes was an essential part of the chain of basic research that led to key insights about plate tectonics and related processes. The illustrated talk will explore the life and work of John Milne beginning with his roots in Rochdale, Lancashire; his amazing overland journey to Tokyo, via Europe, Siberia, Mongolia and China; his major accomplishments during the 20 years in Japan; and finally his legacy to the Isle of Wight where he established the first ever seismological network of stations across the world.

*For further details contact: Paul Kabrna, Tel: 01282 813772, Email: Paul\_Kabrna@msn.com*

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### The Geology of the North Pennines

**University of Durham 18 April - 27 May 2007**

A celebration in Durham and other places nearby of the geology of the North Pennines, and especially of the work of Kingsley Dunham.

The event will be closely linked with the the North Pennines Area of Outstanding Natural Beauty (AONB) 2007 Northern Rocks Festival, running for two weeks between 19 May and 3 June.

#### **May 20:**

Guided walk led by Dr Trevor Morse 10.00am - 4.00pm - The Whin Sill and Upper Teesdale (Durham University and Yorkshire Geological Society). Join Trevor Morse on a journey through upper Teesdale celebrating the Whin Sill's impact on the local landscape, as part of the bicentennial celebrations of the Geological Society of London.

**Meet: Hanging Shaw Car Park, Langdon Beck, Teesdale. (NY867297)** Distance/duration/grade: 6km/6hrs/medium.

Cost: Free. Advance booking only - see below for full details.  
(Part of North Pennines AONB Northern Rocks Festival).

**May 26-27** - Minerals weekend held in **St. Johns Chapel Town Hall**, in association with the Friends of Killhope Lead Mining Museum and the British Geological Survey, including "open house" displays, and a talk by Prof. Martin Bott (Durham University) on Sir Kingsley Dunham and the North Pennines.

**22 May 2007** - Guided walk led by Brian Young 10.30am - 4.00pm - Rookhope: Famous the World Over! (Local Geologist and Durham University). Join Brian Young on a journey around the Weardale village of Rookhope, celebrating the minerals of the North Pennines and the work of Sir Kingsley Dunham. **Meet: The Rookhope Inn, Rookhope, Weardale. (NY938429)** Distance/duration/grade: 10km/5.5hrs/medium. Cost: Free. Advance booking only.

Please note: The guided walks by Brian Young and Trevor Morse are "advance booking" only events. Participants need to bring packed lunch, suitable clothing & strong footwear. No dogs. All participants should be aged 12+. ***To make advance bookings (and also to get copies of the Northern Rocks brochure) people should call the North Pennines AONB Partnership on 01388 528801.***

***For further details contact: Paula Martin, Email: paula.martin@durham.ac.uk***

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## **Bagnold**

### **Royal Military Academy, Sandhurst, 17 June 2007**

A Local Heroes event held as part of the Heritage Day at the Royal Military College, Sandhurst.  
Summary

R.A. Bagnold was a hero in every sense of the word, an extraordinary individual who excelled in two distinguished careers as a military man and as a scientist. He pioneered early exploration of the Libyan desert in the 1920s and 30s, and from this emerged his ground-breaking work on the physics of sand transport. During World War II he set up the Long Range Desert Group which created havoc behind enemy lines disproportionate to its size. After the war he returned to his work on sediment transport at Imperial College, designing and building his own experimental equipment. He moved on to shining the light of quantitative analysis on problems of water transport of sediment and his papers are routinely referenced today as the foundation of current work. A more detailed biography by C.R.Thorne and J.B.Bradley is provided below. Ralph Bagnold was an individual whose character and achievements will be of wide interest to the general public as well as geological and military professionals.

The initial event will be organized by the Thames Valley Regional Group in collaboration with the Royal Military College at Sandhurst on the occasion of their Heritage Day on the 17th June 2007. Alex Carbray (AC) is representing the Thames Valley Group for this event and Michael Welland (MW) is the initiator and a joint organiser.

***For further details contact: Alex Carbray; Email: alex.carbray@egsl.co.uk***

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## **Understanding how volcanoes work**

### **Venue to be arranged, June 2007 (Date to be confirmed)**

Please note that the timing of this event is uncertain. It may also happen in July.

Understanding how volcanoes work, a celebration in Bristol of the life and work of George Walker. Professor George Walker (1926-2005) was one of the outstanding geologists produced by the United Kingdom and pioneered modern understanding of volcanoes and how they work. He worked at Imperial College, University of Auckland and University of Hawaii. He retired to Gloucester in 1996 and was an Emeritus Professor at Bristol in the Department of Earth Sciences. There will be a week-

end event on volcanoes starting with a day of talks on various aspects of volcanism, including one specifically on George Walker and others on how volcanoes work, the Montserrat eruption, supervolcanoes, monitoring, volcanic diamonds, volcanic hazards and environmental effects of volcanism. Coupled with the talks will be demonstrations and activities for the public. This will be followed by a field trip to see the Sand Point Carboniferous volcano at western-super-Mare for up to 45 people. In conjunction with this will be a public exhibition about George Walker's life including some materials from George's scientific life, such as maps, field note-books, minerals and rocks. The exhibition, either in the Bristol Museum or in the University, will be on display for 6 months from May 2007.

*For further details contact: Steve Sparks, Email: [steve.sparks@bris.ac.uk](mailto:steve.sparks@bris.ac.uk)*

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## **Arkell, House and Bradley**

### **Sutton Poyntz Pumping Station 28 - 29 July 2007**

A celebration of Dr William Joscelyn Arkell FRS, 1904-1958, Professor Michael Robert House, 1930-2002 and Professor Peter Sylvester-Bradley, 1914-1978.

Arkell was a world leader in Jurassic biostratigraphy, famous especially for his 'Jurassic Geology of the World', 1956. House is primarily known for his work on the Devonian, particularly the ammonoids, and also published many papers on Dorset and his book 'The Geology of the Dorset Coast' is well known. Sylvester-Bradley started research into the stratigraphy of the Purbeck Beds in Dorset after graduating but was diverted into the study of ostracods which continued through his life together with research on Jurassic oysters.

House was encouraged at the age of 16 to read Arkell's 'Geology of the coast around Weymouth, Swanage, Corfe and Lulworth', 1947 and this stimulated his interest in local and then global geology. The two met and frequently went out on field trips in Dorset. Both men communicated with amateur geologists as well as professionals and their contribution to their fields is immense. Sylvester-Bradley was an early enthusiast for the developing theories of sea floor spreading and plate tectonics.

The events will be aimed at the general public, the amateur and hopefully, the professional geologist. Those attending will be able to see the location of the water source, see and touch some Dorset fossils and minerals and find out more about the Heritage Coast and its famous geologists.

The events will take place during the weekend of July 28th & 29th 2007 at Sutton Poyntz Water Pumping Station, at Sutton Poyntz about 3 miles NE of Weymouth in south Dorset. This station is there because of the geology, it collects the spring water from the stream and supplies it to the Weymouth area. Both Arkell and House wrote papers on the Sutton Poyntz anticline and the structure of the area.

Wessex Water is kindly allowing us to use the Museum and lecture room facilities. Mr John Willows, curator of the Museum, will also give a talk describing the operation of the Station and a tour of the facilities for the public attending on both days.

*For further details contact: Dr Ray Chapman, Email: [raypam.chapman@btinternet.com](mailto:raypam.chapman@btinternet.com)*

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### **Timelords - James Hutton & Arthur Holmes Venue to be arranged September 2007**

(Date to be confirmed)

"Timelords" - A one-day symposium and associated field trips, exhibitions and workshops in Edinburgh celebrating James Hutton and Arthur Holmes.

*For further details contact: Simon Harley, Email: [simon.harley@ed.ac.uk](mailto:simon.harley@ed.ac.uk)*

## **The ground beneath our feet: 200 years of geology in the Marches**

**Ludlow Assembly Rooms 13 September 2007**

*For further details contact: Mike Rosenbaum, Email: [msr@waitrose.com](mailto:msr@waitrose.com)  
Web: <http://www.shropshiregeology.org.uk/festival>*

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### **Local Heroes of Hertfordshire geology**

**Verulamium Museum, St. Albans 22 - 23 September 2007**

This event celebrates four local heroes who worked in Hertfordshire, Thomas Telford, William Smith, G.W.Lamplugh and W.Whitaker.

Meeting: Meet on both days at 10:30 am at Verulamium Museum (indoors on 22nd, outside the entrance on 23rd)

*For further details contact: John Catt, Email: [ucfaja0@ucl.ac.uk](mailto:ucfaja0@ucl.ac.uk)*

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### **Celebrating the Welsh Basin**

**Venue to be arranged 24 - 29 September 2007**

*For further details contact: Colin Humphreys, Email: [pantmaenog@aol.com](mailto:pantmaenog@aol.com)*

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### **Celebrating John Cadman, Lord Cadman of Silverdale**

**Multiple venues for this event 20 October - 22 November 2007**

*For further details visit [www.esci.keele.ac.uk/nsgga](http://www.esci.keele.ac.uk/nsgga). For further details contact: Ian Stimpson, Email: [i.g.stimpson@esci.keele.ac.uk](mailto:i.g.stimpson@esci.keele.ac.uk)*

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### **Quaternary Geology of Yorkshire**

**Venue to be arranged 27 October 2007**

Quaternary Geology of Yorkshire - Percy Fry Kendal - Quaternary local hero, Shephard, Fox Strangeway, Bisset. (lectures and field trip)

October 2007, Hull - Organised by the Yorkshire Geological Society

*For further details contact: Trevor Morse, Email: [tjm@tutor.open.ac.uk](mailto:tjm@tutor.open.ac.uk)*

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### **Frederick Dixon: geological pioneer in West Sussex**

**Worthing Library 4 - 5 April 2008**

*For further details contact: Tony Brook, Email: [anthony.brook27@btinternet.com](mailto:anthony.brook27@btinternet.com)*

# HOGG Diary of Future Meetings

The HOGG Committee has set an ambitious provisional agenda of meetings for the future. More details will be given of each meeting nearer the date, but so far the provisional diary is:

## 2007

HOGG Celebration of the bi-centenary of the Geological Society (12-13th November)

## 2008

William Smith-John Phillips meeting (Scarborough, April-May)

History of Igneous Petrology

Mapping Literary Geology (Summer?)

History of Metaliferous Mining (possibly held in Cornwall)

## 2009

The History of Dinosaurs (Spring)

Field trip to Liverpool (in conjunction with the Geologists' Association ?)

History of Micropalaeontology

History of Military Hydrogeology (June)

History of Gemmology -“Stones of Desire” (November ?)

### Other topics may include:

History of the Philosophy of Geology, the History of Mineralogy, something on Collections Lost and Found, and more on Hydrogeology

If members have any additional ideas for meetings (or field excursions) the Committee would be pleased to hear of them.

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**YORKSHIRE  
GEOLOGICAL SOCIETY**

## PYGS Indexes now online !

### Patrick Boylan

The Proceedings of the Yorkshire Geological Society is one of the country's oldest regional journals, published continuously since 1837.

Its many thousands of pages contain a great deal of original research and other unique material relating to the earth sciences, especially in respect of Yorkshire and the north of England, both also with many national and international papers. There is quite a lot of material of significance in the history of geology - from the days of John Phillips onwards, as well as some important works on the history of geology.

Over the years the Society has published three cumulative indexes to the Proceedings but only that for 1970 - 1995 is still in print. Now, thanks to the sponsorship of Pinpoint Digital Systems, all three have now been scanned and converted to searchable PDF files, in order to help Members and everyone else the possibility of searching and exploring the rich resources available in the Proceedings.

These are now available, on line and free of charge, via the Yorkshire Geological Society website at: <http://www.yorksgeolsoc.org/uk/> as follows:

Index to PYGS volumes 1 to 25 (1837-1946)

Index to PYGS volumes 26 to 37 (1947-1970)

Index to PYGS volumes 38 to 50 (1970-1995)

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## THE HISTORY OF GEOLOGY IN SUSSEX

The West Sussex Archives Society exists to assist in the collection and conservation of archival material relating to West Sussex, in association with the West Sussex Records Office at Chichester. It publishes a triannual Newsletter and a biannual journal, West Sussex History, which will shortly change its focus and format. It will expand its territorial coverage to include East Sussex as well, and change its name to the Journal of Sussex History; and also move, for a while at least, towards a single, larger, annual issue focussed around a theme, rather than the present eclectic mix of historical papers and periods. Aviation in Sussex will be the theme for the first issue of this revamped periodical, appearing in December 2007. The General Editor, Dr Philip MacDougall, indicated that he would welcome proposals for the 2008 thematic issue, so I put forward a proposal for such an issue on the theme of the History of Geology in Sussex, which was approved at the recent AGM of the Society at Amberley Chalkpits Museum. I would act as Guest Editor for the issue, working with Dr MacDougall to maintain quality and house style, and also provide a contextual Introduction. The schedule anticipates submission of final manuscripts, in electronic format, by late summer 2008, for publication in December 2008, to coincide with the sesquicentennial of The Geologists' Association. Apart from a notice informing you that this is pending, I would be very pleased to hear from any HOGG member who might be interested in contributing to such a thematic issue, by email, to [anthony.brook27@btinternet.com](mailto:anthony.brook27@btinternet.com) I am sure a lively, entertaining, even controversial issue of the restyled Journal of Sussex History would ensue, and open up a whole new arena of Sussex history to its readers.

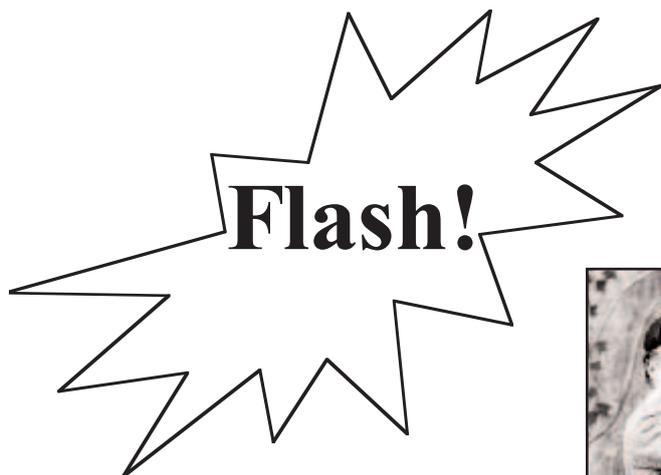
### **William Daniel Conybeare (1787-1857) and the Development of Geology**

This will be a one-day symposium at the University of Leeds, on Friday 19th October, exploring the important but somewhat neglected work of the geologist W.D. Conybeare. Conybeare was part of the highly important Oxford group of geologists in the 1810s, and also an early member of the Geological Society. He is also credited with inspiring and mentoring many of his colleagues and contemporaries, including William Buckland and Adam Sedgwick, and was later an important critic of the work of Charles Lyell. Through the prism of his work we will therefore explore wider themes in the history of the earth sciences in the early nineteenth century.

Please contact Leucha Veneer, by email: [phllv@leeds.ac.uk](mailto:phllv@leeds.ac.uk), or by post:

Division of History and Philosophy of Science, Department of Philosophy, University of Leeds, Leeds, LS2 9JT, United Kingdom

HOGG members are welcome, and this symposium is being supported by HOGG



# Bang!



## *HOGG PHOTO COMPETITION*

**As part of its contribution to the Geological Society bicentennial celebrations, HOGG is running a photo competition**

**We are looking for interesting images which portray geology, especially historical geology**

### **WIN A PRIZE**

**As a prize we are offering a copy of the very recently published book "*Whatever is under the earth: The Geological Society 1807-2007*" by Gordon Herries Davies**

**Entries should be submitted to the HOGG Newsletter Editor to arrive by the closing date of FRIDAY 31<sup>st</sup> AUGUST, 2007**

**Rules of the competition are attached below.**

## Rules:

### 1. Who may enter:

- 1.1 The competition is open to all paid-up ordinary members of the History of Geology Group
- 1.2 Current serving members of the HOGG Committee are not allowed to enter

### 2. What can be submitted:

- 2.1 Entries may be in colour or monochrome, and in landscape or portrait format.
- 2.2 For ease of handling entries should be digital wherever possible, but other formats (35mm, prints) will be acceptable, *Please* try to ensure that digital images are not excessively large, before sending!
- 2.3 All non-digital entries will be scanned for judging purposes, and any loss of colour or other resulting alteration will be deemed to be acceptable by the owner.
- 2.4 For prints, the minimum size should be 5" x 7" and the maximum 10" x 8"
- 2.5 Digital images should not have been enhanced
- 2.6 Each person can submit up to 3 entries
- 2.7 Each entry MUST be accompanied by a completed entry form (digital or photocopies acceptable)
- 2.8 All submitted images should have a title (see 2.10) but be free of any other identification marks especially the owner's name; this information must only be on the entry form
- 2.9 Entries MUST have geology as their **main theme**, and this aspect should be clearly visible in the pictures
- 2.10 Entries should be titled making it clear just what the geological aspect is (i.e Chalk Cliffs at.....; or outcrop of chert at.....; Volcanic dyke in X quarry at .....) etc
- 2.11 There is no time limit on when photographs should have been taken, but a date (year or better) should accompany each entry.

### 3. Ownership of entries:

- 3.1 All entries must be work of the person submitting them.
- 3.2 Copyright in the pictures will remain with the owners, but HOGG will reserve the right to use them (plus any text) and without payment, for promotion of HOGG or for use in the HOGG newsletter (credit will be given)
- 3.3 Entries should not previously have been published or entered into other competitions, and will not be allowed into this competition in the future.

### 4. Judging:

- 4.1 A panel of 2-3 judges will be convened, probably selected from the HOGG committee, with the possible addition of one outside independent member. The Chair of the HOGG committee will not be the Chair of the judging group, but may be part of it.
- 4.2 All entries submitted will be considered carefully by the judges who will make an initial sift.
- 4.3 The best 5 entries, as deemed by the judges, shall be voted on by the membership to decide the overall winner.
- 4.4 In the event of fewer than 5 entries, the judges shall reserve the right not to award a prize
- 4.5 The judge(s) decision(s) will be final and no correspondence will be entered into concerning it/them
- 4.6 Judging will be done on anonymous copies of entries submitted
- 4.7 The winner will be announced in the autumn via e-mail or the HOGG Newsletter

## 5. Other points:

5.1 HOGG reserves the right to cancel the competition at any stage.

5.2 **Entrants will be deemed to have understood the above rules and accepted them and agree to be bound to them when entering the competition.**

5.3 HOGG will accept no responsibility for entries submitted, but lost, delayed or damaged in transit. Proof of posting will not be accepted as proof of delivery. Notification of receipt can be requested but **only** where a SAE or e-mail address is provided by the owner

5.4 Entries will generally be treated as non-returnable, but if a suitable pre-paid & addressed envelope is supplied, entries can be returned

5.5. Entries should be submitted to the Editor of the HOGG newsletter, and marked “Photo Competition”

## Hints for entrants:

1. Judges will be looking for a depiction of an **aspect of geology**; a picture of Auntie Florrie on the beach at Brighton, will *not* be considered geological even if you maintain she is sunbathing on Cretaceous beach pebbles!

2. The geology reflected in the picture’s title should be the **main theme** of the picture; a view of a single outcrop on a distant hill or which is subsumed by vegetation or other things isn’t likely to be judged adequate

3. A (geological) **historical** connection would be an advantage.

4. Quality of picture will be important; quick ‘snapshots’ taken with a simple mobile phone or disposable camera are acceptable, but are perhaps less likely to win; however, it isn’t necessary to have really expensive equipment

5. General composition and overall effect of pictures will be taken into account; judges will be looking also at lighting, focus, originality, presentation, etc

6. Entries would be better as ‘picture quality’ (i.e. that which would make a picture to hang on a wall), rather than of the sort used for scientific paper illustrations (these may be submitted but unless exceptional, are perhaps likely to be judged to be inferior to others).

# HOGG PHOTOGRAPHIC COMPETITION 2007 ENTRY FORM

Please complete both parts but **DO NOT** write your name on part 2  
**DO NOT** write anything below the line on the entry form  
Judges will see only part 2 (below) of the entry form

## Part 1

<b>Name &amp; Address (please PRINT)</b>	
<b>E-mail</b>	
<b>I Enclose a SAE for photo return (prints/35mm only)</b> <b>(delete as necessary) Yes/No</b>	
<b>I understand that making an entry commits me to accept the rules of this competition</b>	
<b>Signed (for prints)</b>	<b>Date</b>
<hr/>	
<b>(Do not write here)</b>	
<b>Competition Entry Number 07/</b>	

.....

## Part 2

<b>Photograph title:</b>
<b>Location:</b>
<b>Date taken:</b>
<b>Further notes, comments, or additional information</b>
<hr/>
<b>(Do not write here)</b>
<b>Competition Entry Number 07/</b>

**HISTORY  
OF  
GEOLOGY  
GROUP**

**MEMBERSHIP FEES**

Dear HOGG Member,

To help us save our scant resources, please complete the standing order form below and send it to the Treasurer:

Alan J. Bowden, Curator of Earth Sciences, World Museum Liverpool, William Brown Street, Liverpool L3 8EN.

**Please do NOT send it to your bank**

.....

**STANDING ORDER FORM**

To the Manager of Bank or Building Society:.....

Branch Address:.....

.....  
.....

Sort Code (number in top right hand corner of cheque book):..... ....

Account Name:.....

Account Number:.....

Please pay the amount of £15 (fifteen pounds) to the History of Geology Group of the Geological Society (Alliance & Leicester Commercial Bank plc. Account No. 14 665 9406, Sort Code 72-00-00) on 1st January, 2008 (or closest date thereto) and annually thereafter until terminated by me in writing. This standing order replaces any other made out in favour of the History of Geology Group of the Geological Society.

Signed:.....Date:.....

Print your name and address.....  
.....  
.....