

HOGG

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



**Number 25
September 2005**



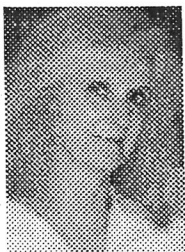
Cover Illustration:

The illustration shows Mary Anning, once described as 'the greatest fossilist the world has ever seen', but still surprisingly relatively little known. Born in 1799 to parents in Lyme Regis, Dorset, she inherited her fossil collecting skills from her father, a cabinet-maker, who died in 1810 and left the family with no-one to provide for them. His wife continued to scrape a meagre living by selling fossils, and was helped by Mary, who took over by 1820. She was instrumental in the first discovery of a specimen of Ichthyosaurus, and more importantly, the first Plesiosaur. Despite these discoveries, Mary and her family were never credited at the time with the finds, and in time their name was almost lost to science. Mary lived very much in a man's world.

Many other women have played parts in the history of geology, and a number will be subjects of talks at the **HOGG meeting on 28th November**.

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pt@nhm.ac.uk)

ANNIVERSARY TIME



This is the 25th edition of the HOGG Newsletter. It represents more than 10 years of unfailing support from the Editor, Peter Tandy, who tirelessly puts each edition together, writes most of the articles, sticks the labels on and puts them in the post to you. We owe him a huge debt of thanks for all his efforts over the years. So, **thank you Peter**. Long may you continue.

Over the past few years I feel that HOGG has gone from strength to strength. Our membership is growing all the time and younger members are starting to join, which is great. The standard of our meetings is going up and the number of books we have published as a result of those meetings must out-strip any of the other societies affiliated to the Geological Society.

More importantly, the Geological Society itself is finally beginning to recognise that the history of geology is a serious academic pursuit, which is why they have invited HOGG to contribute to the big jamboree being held in the QEII conference centre on **10-12 September, 2007**, to celebrate the Bicentenary of the Geological Society.

Public interest in both history and in understanding science has rarely been as high as it is today. If our era is profoundly technological, scientific and future-oriented, so too it is captivated by the past, both recent and distant – in books, films, television and fiction. Science journalism has been a major growth area and it is almost always introduced by an historical perspective.

But it is also a time when scientists face an increasing demand that they be 'publicly accountable' for the vast social resources expended on research. In such a climate there is more need than ever for serious historical and social inquiry into the nature and workings of science – to remind those who fund us of why it is so important to continue pursuing such endeavours.

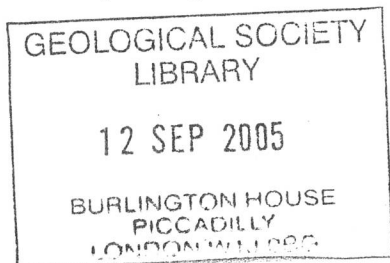
History is massively relevant to understanding today's world, even helping to shape it. Studying history opens possibilities and horizons; it gives you knowledge, critical perspective and analytical tools. And then there is the fun – the stimulation and challenge to your intellect. History is a fundamental human endeavour that defines one's humanity and cultural awareness.

OK, as historians you probably know all this already – so where is it leading? Well, the only thing that slightly disappoints me about HOGG is how few of our members are active in the group. And I don't mean active in terms of publishing papers, but just in small ways – sending items of interest to the Newsletter; giving us your views on, well, *anything*; attending meetings; starting or joining in email discussions; or perhaps just sending a note to thank people occasionally when you feel they have made a special contribution. It really would be nice to hear from you all more often.

The Bicentenary will be a major event for HOGG. Apart from the Geological Society's meeting, HOGG is holding its own event – a two-day meeting on **12-13 November 2007**. On the 12th, the eve of the actual anniversary, there will be a dinner held in the Connaught Rooms, which is the location of the original 1807 meeting room. To help us organise this major undertaking over the next two years, we are looking for **two energetic people to join the HOGG committee**.

You don't need to have a great knowledge of the history of geology, but you do need an enthusiasm for the subject and a willingness to put some time in. If you think you would be interested but would like to discuss it a bit more, do give me a ring or send me an email – my contact details are in the Newsletter. Alternatively, why not just put your name forward? I look forward to hearing from you.

Cherry Lewis
HOGG Chairman



Ever thought about joining the committee?

At the end of this year, two posts will become vacant on the HOGG Committee. These positions will commence in January 2006 and would normally be held for a period of three years.

Committee members meet four times a year at the Geological Society in Burlington House, Piccadilly, London, to discuss our future programme and to ensure the smooth running of the Group. The post-holder will also be expected to convene meetings occasionally.

With the Geological Society's Bicentenary in 2007, next year will be a particularly important one for the group as we gear up towards this significant event. So we are looking for enthusiastic individuals who are keen to support and promote the history of geology at every opportunity. You do not need a vast background knowledge in the subject – just a passion for it.

The History of Geology Group is an active society whose members meet regularly for conferences and field trips. Several of our past events have attracted an international audience. Why not join the Committee and help us raise the profile of the history of geology?

If you would like more information about the vacant positions please contact the Chairman, Dr Cherry Lewis, on 0117 955 1254 or at Cherry.Lewis@bristol.ac.uk; or the Secretary, Dr Anne O'Connor, on 07968 495057 or 0191 3341152, or at hoggsec@hotmail.com.

Anyone wishing to stand or to nominate someone else should contact the Secretary, Dr. Anne O'Connor, at the Department of Archaeology, University of Durham, South Road, Durham, DH1 3LE no later than 14 November 2004. Emails will be accepted at hoggsec@hotmail.com.

We look forward to hearing from you

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:

2005

(November) "The Role of Women in the History of Geology" (see below)

2006

HOGG 'Open Meeting' (13 April)

Field trip to Scotland (Spring)

History of Geoconservation (24-25th November) (in conjunction with the Black Country Geol.Soc.in Dudley)

A 'Buckland' meeting in Oxford (Saturday 12th August)

2007

Mapping Literary Geology (late Spring)

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

2008

History of Igneous Petrology

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

History of Micropalaeontology

History of Metallurgical Mining (possibly held in Cornwall)

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.

HOGG Annual General Meeting, 2005

The Annual General Meeting for 2005 will take place during the meeting on the "Role of Women in Geology" at the Geological Society, Burlington House, London, on Monday 28 November, 2005. All nominations for committee posts and motions must be with the Secretary by Monday 14th November, 2005.

If you wish to make nominations or submit a motion, please send it to the Secretary Dr Anne O'Connor, at hoggsec@hotmail.com or by post to the following address:

Dr. Anne O'Connor
Department of Archaeology
University of Durham
South Road
Durham DH1 3LE
UK

Note that motions should be in writing, and bear the name of the proposer and a seconder, one of whom should be available at the meeting to speak to that motion.

HOGG ANNUAL GENERAL MEETING 2005

AGENDA

- 1) Apologies for absence
- 2) Minutes of the 2004 AGM (see below)
- 3) Matters Arising from the minutes
- 4) Reports of the Officers
 - a) Secretary's Report
 - b) Treasurer's Report
 - c) Newsletter Editor's Report
- 5) Election and ratification of the HOGG Committee
- 6) Motions
- 7) AOB

HOGG ANNUAL GENERAL MEETING 2004

MINUTES

The Annual General Meeting for 2004 was held at 12.50 pm at the Geological Society, Burlington House, London, on Friday 22 October 2004.

Those committee members present:

Cherry Lewis in the Chair, John Mather (Vice Chairman), Anne O'Connor (Secretary), Bill George (Treasurer), Peter Tandy (Newsletter Editor), Cynthia Burek, Tony Brook, John Martin, Richard Howarth

- 1 **Apologies from:** Alan Bowden
- 2 **Minutes:** The minutes of the last AGM were taken as read and approved as a true and correct record of that meeting, with one slight alteration: the wording 'Those members present' ought to have read 'Those committee members present'
- 3 **Matters arising:**

There were no matters arising.
- 4 **Motions**

No motions were raised.
- 5 **Secretary's Report for 2004**

This was taken as read. Copy appended to these minutes.
- 6 **Treasurer's Report for 2004**

This was taken as read. Copy appended to these minutes.

7 **Newsletter Editor's Report for 2004**

This was taken as read. Copy appended to these minutes.

8 **Ratification of HOGG's new constitution**

Cherry Lewis explained the difference between affiliated groups and constituted groups. Last year, the members backed the committee's decision to opt for the status of an affiliated group. The existing constitution for HOGG has now been re-drafted by Cherry Lewis in discussion with the committee and distributed amongst the members. All the members present passed the new constitution by a show of hands.

9 **Election Matters**

Many thanks were given to John Martin and Richard Howarth, who were leaving the committee, for their efforts on behalf of HOGG over the years. John Martin's services span HOGG's lifetime, and he was one of the founders who fought hard to establish the group ten years ago. John Mather will replace Richard Howarth as Vice Chairman, and Patrick Boylan was welcomed to the committee by a show of hands.

10 **Any Other Business**

John Martin congratulated the committee for managing to hold the AGM at the end of the year, and for organizing the elections. He gave his good wishes to the committee.

Cherry Lewis observed that the groundwork had been laid by the previous committee and thanked John Martin, John Fuller, Martin Rudwick and other early supporters of HOGG for all their work. The Geological Society had now finally recognised that there was a great interest in the history of geology.

Peter Tandy was warmly congratulated for his longstanding work on the Newsletter.

Richard Howarth suggested that the editors of a new journal on the history of geology, *GeoClio*, might like to say a few words. Miklós Kázmér reported that *GeoClio* was intended to compliment the *Earth Sciences History* and would include European aspects. Subscriptions were low: 80 Euros for an institution and 30 Euros for an individual. The first issue will appear in Spring 2005.

Martin Rudwick reminded Miklós Kázmér that *Earth Sciences History* was not American-based but was international.

Cherry Lewis thanked John Martin and Richard Howarth for their work on the committee and welcomed Patrick Boylan as a new member of the committee.

The Chairman closed the meeting at 1.05 pm.

The Role of Women in Geology



This meeting will be held at the Geological Society, Burlington House, on **28th November 2005**. It will be followed by a **wine reception and conference dinner**.

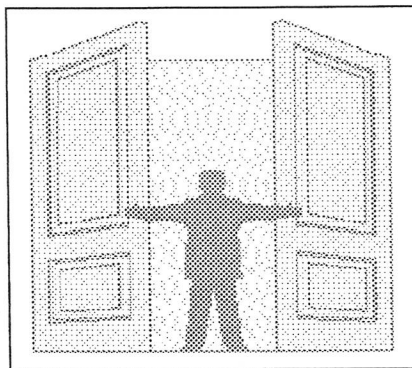
Women have fulfilled many different roles in the history of geology. They have taken roles as illustrators, academics, travellers, collectors or simply 'wives'. This meeting aims to examine these roles and their effect on the development of geology.



For registration, please complete the form with this Newsletter

9.10	Registration and poster erection		
Session 1: Women as helpers		Chair: Prof Cynthia Burek	
9.30	Dr. Patrick Wyse Jackson ¹ & Mary Spencer Jones ²	The quiet workforce: women in geological and natural history museums in the early 1900s	¹ Trinity College, Dublin ² Natural History Museum
9.50	Prof. Mary Orr	Keeping it in the family: the unusual case of Cuvier's daughter	University of Southampton
10.10	Prof. John Mather	Grace Anne Milne (Lady Prestwich) – more than an amanuensis?	Royal Holloway College University of London
10.30	Anthony Brook	Wives and daughters: the geological version Sussex-style	West Sussex Geological Society
10.50	Coffee and posters		
Session 2: Women as geologists		Chair: Dr Bettie Higgs	
11.10	Dr. Jacqueline Malpas ¹ & Prof. Cynthia Burek ²	Rediscovering and conserving the hidden treasures of Ethel Skeat and Margaret Crosfield in NE Wales	¹ NE Wales RIGS ² University of Chester
11.30	Dr. Chris Cleal & Helen Fraser	The role of British Women in palaeobotany during the late 19th and early 20th centuries	National Museums & Galleries of Wales
11.50	Nina Morgan	Anne Phillips	Freelance science writer
12.10	Karolyn Shindler	Dorothea Bates	Freelance science writer
12.30	Lunch and HOGG AGM		
Session 3: Women as geologists overseas		Chair: Dr John Mather	
2.00	Dr. Susan Turner	Invincible but mostly invisible: Australian women's contribution to palaeontology	Geoparks Australia
2.30	Dr. Bettie Higgs ¹ & Dr. Patrick N. Wyse Jackson ²	The role of women in the history of geology in Ireland	¹ University College Cork ² Trinity College Dublin
2.50	Dr. Renee M. Clary ¹ & Dr. James H. Wandersee ²	Florence Bascom's great expectations: the story of an innovative geology educator	¹ Louisiana State University ² Baton Rouge, Louisiana,
3.10	Dr. Martina Kölbl-Ebert	The role of women in early 19th century palaeontology – British and German comparison	Jura-Museum Eichstätt, Germany
3.30	Dr. Howard J. Falcon-Lang	Marie Stopes and fern ledges of New Brunswick	University of Bristol
3.50	Questions and discussion		
4.00	Tea and posters		
Session 4: Women in geological institutions		Chair: Dr Cherry Lewis	
4.20	Dr. Jane Hart	Past women researchers in Quaternary science	University of Southampton
4.40	Prof. Cynthia Burek	Women as educators and role models in higher education - Catherine Raisin & Emily Dix at Bedford College	University of Chester
5.00	Susan Brown	The role of women in the Geologists' Association	Geologists' Association
5.20	Dr. Eric Robinson	The influential Muriel Arber	University College London
5.40	Questions and discussion		
6.00	Wine Reception		
7.30	Conference Dinner		
Poster	Dr. Bettie Higgs ¹ , Prof. Cynthia Burek ² & Dr. Patrick Wyse Jackson ³	Is there gender bias in the geological sciences?	¹ University College Cork ² University of Chester ³ Trinity College, Dublin
Poster	Sarah Leming?	Etheldred Bennet	Museum curator
Poster	Dr Anne O'Connor	Mary Caroline Hughes: a visit to America	University of Durham
Poster	Diana Smith	Gertrude Elles	Open University

...and the next HOGG Meeting



HOGG OPEN MEETING

The next HOGG meeting will be an **Open Meeting**, without a specific theme, ideally for members who have an interest in any aspect of historical geology to share it. The meeting will take place at Burlington House, Piccadilly on **Thursday 13 April 2006**, from 10.00am.

The **Keynote speaker** will be **Professor Leonard Wilson**. Leonard Wilson is professor emeritus of the history of medicine at the University of Minnesota. He is the author of "*Medical Revolution in Minnesota: A History of Minnesota Medical School*" (St. Paul: Midewiwin Press, 1989). In geological circles he is author of many excellent publications on Charles Lyell, including "*Charles Lyell, The Years to 1841: The Revolution in Geology*" (Yale Univ.Press, 1972); "*Lyell in America: Transatlantic Geology 1841-1853* (John Hopkins Univ.Press, 1998); "*Lyell: The Man and His Times*" In "*Lyell: The Past is the Key to the Present*" (Ed: D.J.Blundell & A.C.Scott, Geol.Soc, 1998)

PROVISIONAL PROGRAMME

9.30-10.00 John Mather 'Erasmus Darwin and the principle of the overflowing well'

10.00-10.30 John Morton 'William Smith, Sussex and the Ouse Navigation'

10.30-11.00 **Coffee**

11.00-12.00 **Keynote Address by Professor Leonard Wilson**

12.00-12.30 Gordon Judge 'The poetry of geology: a stratigraphic approach'

12.30-1.30 **Lunch**

1.30-2.00 Melanie Keene 'Gideon Mantell's 'Thoughts on a Pebble''

2.00-2.30 Peter Tandy 'In pursuit of Mantell's Quarry'

2.30-3.30 Nic Bilham 'The Geological Society Oral History Project'

3.30-4.00 **Tea**

4.00-4.30 Chris Duffin 'William Buckland and his Coprolites'

4 30-5 00 Anthony Brook 'Victorian Geologists and Suicide'
5 00-5 30 Cynthia Burek 'Two Scottish Women from Aberdeen'
5 30-6 00 Alan Bowden 'Lord Derby, Agates, Merlins and Spitfires'

Anyone else willing to present a talk should contact Anthony Brook at
Anthony.brook2@btinternet.com AS SOON AS POSSIBLE

Sue Tyler Friedman Medal

Established in 1987 by the gift of a Northeastern Science Foundation Inc. of Troy, New York for distinguished contributions to the recording of the history of geology. The Medal, which is not confined to those with a geological background or to Fellows of the Society, will normally be awarded annually or at such other intervals as Council may determine, on a world-wide basis without regard to nationality. In 2005 it was awarded to Ursula Bailey Marvin.



- Ursula Bailey Marvin

Born in Vermont in 1921, within sight of a spectacular range of mountains, Ursula Bailey Marvin received a BA in history from Tufts College, Massachusetts, which also required her to complete two years of science. An introductory course in geology ultimately determined the direction of her academic career. Unable to major in the subject because the Department Head would not accept women, she fitted in enough geology and math to win a scholarship to Radcliffe to do a Masters in geology. It is this unique combination of trained historian and geologist that sets Marvin apart from historians who 'socially construct' the history of geology, and geologist-historians whose prime commitment is to their science.

Following several years in Brazil and Angola, where she and her husband searched for ore deposits, Marvin was offered a research post at Harvard to study the mineralogy of the meteorites in the Harvard collection. This work developed into a cooperative project with scientists at the Smithsonian Astrophysical Observatory, and in 1961 she was invited to join the SAO staff. There, she became part of a small group of scientists chosen by NASA to study the lunar rocks brought back by the Apollo missions. She obtained a PhD in 1969, based on the many significant papers she had written. In 1978 she was the first woman to join a USA-led expedition to collect meteorites in Antarctica. She returned there for two more field seasons. Due to the breadth of her interests, she has both an Asteroid and an Antarctic Nunatak named after her.

An early convert to continental drift, despite Harvard's stance on the subject, in 1973 she published her seminal book *Continental Drift: the Evolution of a Concept*. Marvin was observing and recording the history of her science, almost as it happened. But her real mark in the history of geology has been made with her work on the history of meteorites and impact structures – a field she has essentially made her own. She has shown how the study of meteorites and other bodies in space has transformed them from astronomical to geological objects, which in turn has changed geology from an Earth-centred science to one that is planetary-wide.

Marvin has done much to popularise her science, as well as advancing the cause of women in science. She cultivated the global community by serving two terms as Secretary-General of the International Commission on the History of Geological Sciences. Over the course of her career she has written or co-authored more than 180 research papers and, although she retired in 1998, she continues to produce major papers on historical subjects every year. She has been a force in the history of geology that few manage to emulate, and is therefore a worthy recipient of this medal and the admiration and gratitude of this Society.

Ursula Marvin replied:

Thank you, very much. Last winter, when I opened the letter informing me I was to receive this medal, I replied that I was astonished and thrilled – in equal proportions. I am more so, today. I am particularly pleased with this honor because, as you have heard, I began serious research on the history of geology rather late in my career.

The period from the 1960s through the 1980s saw two spectacular advances in our knowledge of the Earth, and I was fortunate enough to experience both of them and place them in their historical contexts. In 1966, I was concentrating on meteorites when the Associate Director of the Observatory enlisted me to present a summer seminar reviewing the status of the continental drift hypothesis. Having been educated at Harvard, I knew continental drift was sheer nonsense, but I soon found new materials in the library that said otherwise – particularly the Royal Society's volume from its 1964 symposium on continental drift. In the seminar, I reviewed the pros and cons, but before my written version was due, radiometric dates had been assigned to magnetic stripes on the sea floor and to matching rock formations across the Atlantic from Ghana to Brazil. This hard evidence converted me into a drifter. Later on, the Smithsonian Press asked me for a book on this subject, so I traced the long history of ideas on the distribution of lands and seas while I watched continental drift being transformed into plate tectonics – changing Earth science forever.

Meanwhile, the Space Age was transforming the Earth from an isolated body subject only to intrinsic forces, to a planet subject to all the vicissitudes of orbiting through space along a path gritty with interplanetary debris. Suddenly, meteorites and the Moon became topics of research worldwide. Throughout the 1960s scientists debated whether the Moon, is a cold, primitive planetesimal or a hot, volcanic body, and whether impacting meteorites had been of any importance in cratering the surfaces of the Moon or the Earth. Each hypothesis of lunar origin - earth-fission, lunar capture, simultaneous accretion, a recent accumulation of Earth-orbiting moonlets -- was so unsatisfactory that some observers half-seriously claimed the Moon could not exist.

In the early 1970s, samples from the Apollo Missions and the Russian unmanned Luna Missions, showed that the Moon is as old as the Earth; it started out hot, lost all its water and volatiles, cooled early, and has been the passive target of impacting bodies ever since. Not only did the preponderance of shocked minerals in the surface materials confirm an impact origin of lunar craters, but a new theory of the Moon's origin called for a giant impact between the accreting Earth and a large body orbiting nearby.

Impacting bodies have pock-marked the Earth too, creating shocked rocks and minerals at more than 150 (and counting) sites around the globe. At the 1975 Lyell Centenary Symposium (my first history of geology meeting), I argued that impacts are demanded by the principle of uniformitarianism. But I changed my mind when I read more of what the founding fathers actually wrote. Missiles from space that instantaneously excavate craters, melt and shock the country rocks, blanket the surroundings with piles of rubble, and disrupt the atmosphere and/or biosphere, never were part of our uniformitarian heritage, which was based on gradual changes by internally generated processes that are observed in operation.

One more advance occurred in the 1980s, when primitive meteorites were found to contain minute mineral grains that had formed in stars older than the solar system. This spectacular discovery showed that our primeval solar nebula was not homogeneous after all, and it forged a new link between planetary science and astrophysics.

In 1973, when the news broke that a Japanese field team had found four different species of meteorites close together on an Antarctic ice field, the first American proposal to search for such concentrations was termed: "Ludicrous." Three proposal cycles later, the first U. S.-team located a concentration, and USA-led expeditions have gone there annually ever since. Parties from the UK and other countries also have gone, adding well over 20,000 samples to the world's meteorite collections. Most are fragments of asteroids, but the Antarctic ice fields provided us with the first meteorites from the Moon, and the first from Mars to be recognized on the Earth. One of the Martian stones reportedly contains biologic fossils. I don't believe it, but the existence of microbes on Mars seems perfectly reasonable, so we may yet find them in Martian meteorites.

I had to go to Antarctica, so I arranged to join the teams in 1978 and again in 1981. That time I shared a tent with a friend, Ghislaine Crozaz, who was then a professor of geochemistry at Washington University in St. Louis, where her late husband, Robert Walker, was a professor of physics. I am happy to say that we wound up the season better friends than ever. This morning Ghislaine rode the Chunnel train from Brussels to join us here. I would like to give her a good welcome.

Thank you again for this great honour.



For Your Bookshelf....?

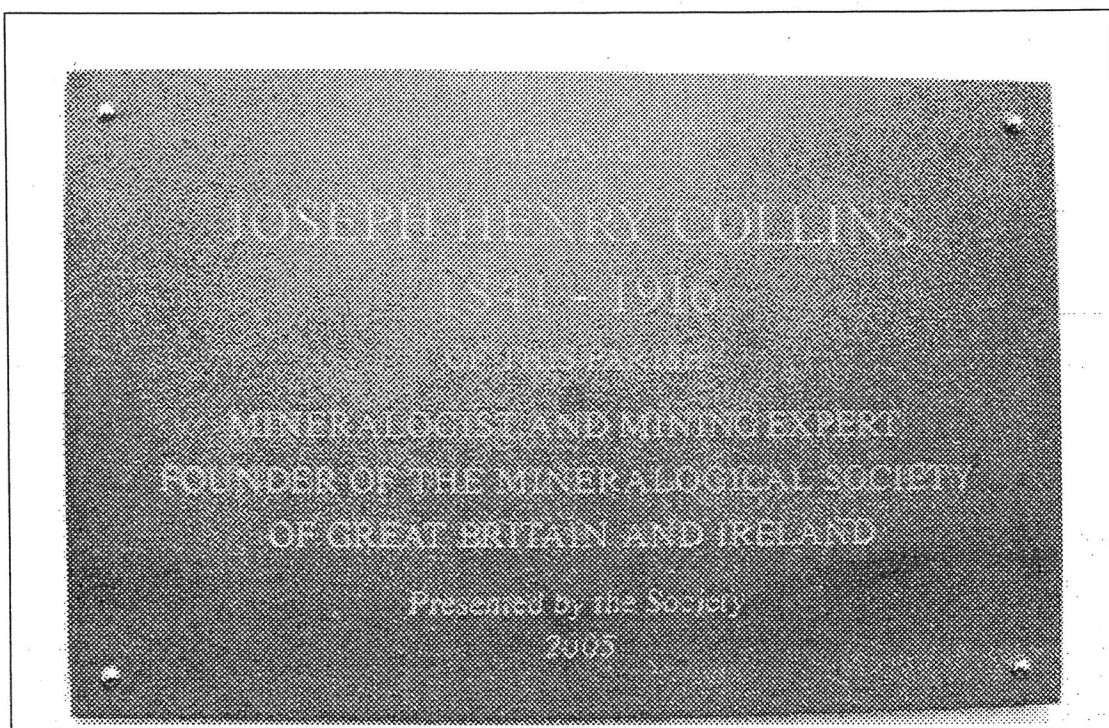
“Earth Time”, by Douglas Palmer, pub: Wiley, 2005; ISBN 0-470-02231-3 (hb); £14.99.

Walk from London to North Wales, as a certain William Smith did, or descend from the top of the Grand Canyon to the river bed and you will walk through history from the present time to the deepest and most secret time in the history of the Earth.

In this fascinating tale Douglas Palmer explores mankind’s quest to understand the history of the planet on which we live. As nineteenth century explorers delved deeper into the hidden parts of the visible world, so students of the time explored the hidden parts of the Earth’s past. Douglas Palmer reveals the story of humankind’s search for a better understanding of the Earth’s story from the biblical view through to the most up-to-date rock sampling methods available to science today.

A Plaque in Memory of J.H.Collins (1841-1916)

(pictures courtesy of Dr Gordon Cressey, of Dept of Mineralogy, The Natural History Museum, London)



Detail of the plaque. The plaque is appropriately made of Delabole Slate, and was sponsored by the Mineralogical Society.

On Friday 10th June 2005, about 45 people gathered at St Paul's Church Charlestown, Cornwall, to witness the unveiling of a plaque by the Mayor of Restormel (Cllr Marilyn Wellman), in memory of John Henry Collins, one of the founders of the Mineralogical Society of Great Britain. Although a Londoner by birth, Collins was of Cornish extraction. After some study at Birkbeck School, and then spending a period with his family in the Derbyshire Peak District, he gained a prize to study at the Royal School of Mines. Alas, an error meant he was not informed and by the time he did know, it was too late to take up the opportunity. But in 1868 he was able to take up an appointment as lecturer and assistant Secretary to the Miners' Association of Cornwall, and two years later moved to become Secretary of the Royal Cornwall Polytechnic Society in Falmouth. It was at this time he wrote his famous 'Handbook to the Mineralogy of Cornwall and Devon', and a little while later published other textbooks for students. He had connections with a number of China Clay works from 1870 onwards, and made the first systematic exploration for China Clay using boreholes. He became Honorary Secretary of the Royal Institution of Cornwall during the 1870s, and in 1876 was instrumental in founding the Mineralogical Society. He remained the founding secretary and Editor until he left England in 1881. He contributed many papers on mineralogy, and also many on palaeontology to the Transactions of the Royal Geological Society of Cornwall. In 1881 he moved to Spain to become chief chemist and metallurgist at Rio Tinto, but was plagued by illness (probably malaria) and returned to England after 3 years. After a period of consultancy work in London, he returned to Cornwall to run the mines at Wheal Kitty and Penhalls (St Agnes). In 1892 he founded the Institution of Mining and

Metallurgy, and was its Vice President. He also held important positions in the Royal Geological Society of Cornwall, the Royal Institution of Cornwall, and the Royal Cornwall Polytechnic Society, receiving the Henwood medal from the RIC, and the Bolitho medal from the RGSC. Other awards also followed. Collins married in 1863 and had 5 sons and 4 daughters; four of the sons became mining engineers. One, sadly was murdered in Colorado in 1902 in an argument with miners over the 'closed shop'. Collins died at Crinnis, and is buried at Campdowns cemetery near Charlestown.

(abstracted from material given out at the plaque ceremony, itself based on an article in Proceedings of the Ussher Society, 1995, pp451-452)



Dr R.F Symes, OBE., and the Rev. Canon M. Warner of St Paul's Church, Charlestown, Cornwall, after the unveiling of the plaque to J.H. Collins.

H. of G. in the P.G.A.

Anthony Brook

As we seem to live our lives these days in an ever-expanding ocean of initials and acronyms, I thought the above title might prove 'un peu amusant'. It translates as History of Geology in the Proceedings of the Geologists' Association, (hereinafter P.G.A.), and refers specifically to the Editorial Comment by Richard Howarth in the April 2005 issue of this periodical, where he reiterates that one of the 4 objectives of The Geologists' Association is 'to promote awareness of our geological heritage'. He also asserts that the Editorial Board strongly supports all 4 objectives.

HISTORY of GEOLOGY in the P. G. A. 2000–2004

Vol. 111 (2000)

1. R. Clark
“Lake District echoes of the Diluvial versus Glacial controversy,” 185–86

Vol. 112 (2001)

1. P. Doyle, et al
“The underground war 1914–18: the geology of the Beecham dugout, Passchendaele, Belgium,” 263–74

Vol. 113 (2002)

1. J. B. Delair & W. A. S. Sarjeant
“The earliest discoveries of dinosaur bones: the records re-examined,” 185–97
2. Edward Rose, et al
“German hydrogeological maps prepared for Operation Sealion: the proposed invasion of England in 1940,” 363–79

Vol. 114 (2003)

Papers derived from ‘The Amateur in British Geology’ GA/HOGG Meeting, 14–15 March 2002, are asterisked.

1. Geoffrey Tresise*
“George Morton, Henry Beasley and Triassic footprint classification,” 129–33
2. David Bone*
“Edmund Martin Venables (1901–1990), amateur geologist and natural historian,” 139–50
3. Ralph O’Connor*
“Thomas Hawkins and geological spectacle,” 227–41
4. R. G. Davidson and M. J. Newman*
“James Powrie, chronicler of the Scottish Lower Devonian,” 243–46
5. M. Kölbl-Ebert*
“George Bellas Greenough (1778–1855): a lawyer in geologist’s clothes,” 247–54
6. Anne O’Connor*
“Geology, archaeology and ‘the raging vortex of the eolith’ controversy,” 255–62
7. Alan Bowden and Wendy Simkiss*
“Henry Hugh Higgins and Frederick Price Marrat: the reluctant palaeobotanists and the Ravenhead collection,” 327–38
8. Patrick Wyse-Jackson, et al*
“Bryozoans and corsetry: the palaeontological work of George Robert Vine (1825–1893) of Sheffield,” 339–44
9. Stephen Donovan*
“Charles Taylor Trechmann and the development of Caribbean geology between the wars,” 345–54
10. R. Alan Smith*
“The amateur in Lake District geology,” 355–61

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1. Michael Bassett and Ellis Yochelson
“Charles D. Walcott in England and Wales (1888): a crucial visit in the resolution of the Taconic–Cambrian–Ordovician questions,” 63–75

In the course of his analysis of material in the P.G.A. since 1950, he presents a Table expressing the various subdivisions of Geology in the published papers as a percentage of the 'technical articles' per decade, from the 1950's to the 1990's, and then for the quinquennium, 2000–04 (see accompanying Table). One of the subdivisions of Geology specified is History of Geology, underlined in the Table. Further numerical analysis of these figures produced some remarkable results, in 3 time-periods:

A. Time –Period: 1950's to 1970's (120 issues)

		<u>Percentage</u>	<u>Total</u>	<u>H. of G.</u>
1.	1950's	1.4	325	4.21
2.	1960's	1.8	356	6.30
3.	1960's	1.8	299	5.40

Range: 4–6.5 H. of G. papers per decade.

B. Time –Period: 1980's to 1990's (80 issues)

		<u>Percentage</u>	<u>Total</u>	<u>H. of G.</u>
1.	1980's	4.9	352	17.3
2.	1990's	5.2	308	16.6

Range: 16.5–17.5 H. of G. papers per decade.

C. Time –Period: 2000 to 2004 (20 issues)

		<u>Percentage</u>	<u>Total</u>	<u>H. of G.</u>
1.	2000–04	9.7	c.350	c.34 (!!)

Beneath Table 1 there is the following Note: 'Significant topics in each paper were counted', which may well account for the inflated figures. Even so, the actual number of articles in the P.G.A. on the History of Geology still seems excessive. It would be awfully nice to believe that Historians of Geology were as productive as these figures purported, but that simply is not the case. Because the figures for the last 5 years seems so anomalous, I have extracted all the articles on this aspect of geological research in the 20 issues of the P.G.A. to create the accompanying list. There were only 17 altogether, and 11 of those were exceptional as they related to the Joint Meeting of the Geologists' Association and the History of Geology Group on 'Amateurs in Geology' in March 2002, which generated a panoply of papers with a dominant historical theme. The other 50% must be papers in which the historical element forms a 'significant topic', in the Editor's estimation, but which they are remains unclear. The long-term average is probably much nearer 2–3 papers per decade in the P.G.A. which are specifically focussed on the History of Geology, with another 2–3 which have some historical content, from minimal to considerable, with, perhaps, some acceleration in the last 15 years – but not on the scale indicated here.

If these figures are to be believed, it would put the History of Geology currently on a par with 'sedimentology and sedimentary petrology', which has been one of the principal arenas in the P.G.A. for many decades. To have rapidly risen to such dizzy heights would be a stupendous achievement for a minor player in the field of geological science. The heritage of Geology is fundamentally important, just as origins and development are to any field of intellectual endeavour, and all geological research should have a contextual element of historical basis and perspective. These data, though, seem aberrant: they paint far too rosy a past, and future, for the History of Geology, at least as far as this mainstream geological periodical is concerned.

2. Peter Tandy*

"William Barlow (1845–1934): speculative builder, man of leisure and inspired crystallographer," 77–84

3. C. P. Green, et al

"Stoke Newington: geoarchaeology of the Palaeolithic floor," 193–207

Table 1. Content of papers appearing in the *Proceedings of the Geologists' Association (PGA)* between 1950 and 2004.

	1950–9	1960–9	1970–9	1980–9	1990–9	2000–4
Quaternary studies	13.0	11.2	7.8	12.3	18.3	17.6
Palaeontology	10.6	9.4	15.5	12.1	19.8	23.1
Regional geology	4.3	4.6	6.0	11.3	5.2	3.8
Igneous/metamorphic	4.3	7.6	8.4	6.9	0.7	1.3
Sedimentology, sedimentary petrology	4.1	12.5	10.7	13.8	10.6	9.7
Mineralogy	2.2	1.2	0.6	3.3	2.2	1.7
Economic geology	0.8	1.2	2.4	0.5	0.2	0.4
Structural/tectonics	4.6	6.7	10.1	11.0	5.2	1.7
Palaeoenvironment, palaeoclimate	0.0	0.3	4.5	2.6	3.2	2.5
Archaeology-related	1.1	0.3	0.6	0.8	1.5	1.3
Museum visits & field meetings	23.0	15.8	10.7	6.7	5.2	5.9
Temporary section	0.5	2.4	0.9	1.5	1.7	0.4
History of geology	1.4	1.8	1.8	4.9	5.4	9.7
Military geology	0.0	0.0	0.0	0.3	1.2	0.8
Obituaries	27.9	21.0	15.5	2.6	5.2	5.0
Book and essay reviews	0.0	0.0	0.0	0.0	11.4	7.6
Other topics	2.2	4.0	4.5	9.5	2.7	7.6
Technical articles per decade	325	356	299	352	308	c.350

Note: Significant topics in each paper were counted; counts across all categories were totaled and converted to percentages of the total count per decade or five years (2000–2004). Percentages exceeding 10 are shown in bold face to emphasize the principal topics.