

**No. 51
November
2006**

Coprolite is compiled and produced by Tom Sharpe, Department of Geology, National Museum of Wales, Cardiff CF10 3NP (tel 029 20 573265, fax 029 20 667332, e-mail Tom.Sharpe@museumwales.ac.uk). It is published three times a year in March, June and November. Any material for inclusion should be sent to Tom Sharpe by the first of the previous month, i.e. by 1 February, 1 May or 1 October.

Notice of Annual General Meeting

Please note that the 33rd AGM of the Geological Curators' Group will be held at the City Museum & Art Gallery, Drake Circus, Plymouth, Devon on Monday 4 December 2006 at 1630. Nominations for the posts of Officers and two Committee Members must be made by two members of the Group and submitted in writing to Matthew A Parkes, Natural History Division, National Museum of Ireland, Merrion Street, Dublin 2, Ireland tel +353 87 122 1967 email mparkes@museum.ie **by Monday 13 November 2005**.

Subscriptions 2007

At a recent meeting of GCG Committee a recommendation was made by the Treasurer, and accepted by Committee, that a proposal to raise subscription rates for 2007 should be placed before the membership at the AGM in Plymouth on 4 December 2006. This is the first increase in four years, and only the second in the last 13 years.

The proposed subscription rates are:

UK personal subscription £15.00 (currently £12.00)

UK institutional subscription £20.00 (currently £16.00)

Overseas personal subscription £18.00/US\$32.00/€25.00 (currently £15.00/
US\$27.00/€22.00)

Overseas institutional subscription £22.00/US\$40.00/€32.00 (currently
£18.00/US\$32.00/€26.00)

Should this proposed increase be approved at the AGM, personal members will receive individual invoices along with a revised standing order form for those who pay by that method.

Helen Kerbey, GCG Treasurer, Department of Geology, National Museum of Wales, Cathays Park, Cardiff CF10 3NP tel 029 20 573367 fax 029 20 667332 email Helen.Kerbey@museumwales.ac.uk

Musical curators

Lorna Steel, formerly Assistant Curator at Dinosaur Isle on the Isle of Wight, has been appointed Curator of Cephalopods and Sponges in the Palaeontology Department at the Natural History Museum and took up her post at the beginning of September; GCG Treasurer **Helen Kerbey** will be leaving her post at the National Museum of Wales in early November and moving to the USA.

Coke Medal awarded to Mike Bassett

Mike Bassett, Keeper of Geology at the National Museum of Wales, has been awarded the Coke Medal of the Geological Society in recognition of his work on Palaeozoic palaeontology and stratigraphy and on museum geology. The full citation can be read at the Geological Society website www.geolsoc.org.uk

Exhibitions 2006-2007

***Dino Jaws* Natural History Museum, Cromwell Road, London 30 June 2006 — 15 April 2007**

Newish publications

Geomaterials in cultural heritage edited by M Maggetti and B Messiga, 2006. Geological Society of London Special Publication 257, 360pp. ISBN 1 86239 195 5, £85.00.

The geology of England and Wales edited by P J Brenchley and P F Rawson, 2006. 2nd edition. Geological

Society of London, 592pp. ISBN 1 86239 199 8 (hardback), £85.00, ISBN 1 86239 200 5 (paperback), £35.00.

Ham Hill: portrait of a building stone by R Durman, 2006. Reading: Spire Books, 241pp. ISBN 1 904965 09 1.

The chronologers' quest. The search for the age of the Earth by Patrick Wyse Jackson, 2006. Cambridge: Cambridge University press, 310pp. ISBN 0 521 81332 7, £19.99.

Managing World Heritage Sites by A Leask and A Fyall, 2006. ISBN 0 75966 546 7, London: Butterworth-Heinemann, £27.99

Fossil, mineral and gem shows

18-19 November 2006 Cheltenham Racecourse, Prestbury Park, Glos

25-26 November 2006 Brighton Racecourse, Freshfield Road, Brighton, East Sussex

For further information contact Rock and Gem Ltd, PO Box 72, Maidenhead SL6 7GB tel 01628 621697 email info@rockngem.co.uk www.rockngem.co.uk

Leeds geological collections

The latest *Circular* of the Yorkshire Geological Society carries a report by Teresa Graham about the current situation of the geological collection of Leeds City Museum. The museum closed in 1999 and the collections are now in a museum store in Sovereign Street in Leeds. Jim Nunney, Keeper of Geology at Leeds for many years, has now retired and the collection is no longer in the care of a specialist geological curator. The collection, of about 25,000 specimens, is to be relocated to a new Discovery Centre currently being built near the Royal Armouries and due to open in 2007. The best display specimens will be used in a new Leeds Museum in Millennium Square in the city in 2008.

Canterbury's Fossil Roadshow

Saturday 10 February 2007 10am-1pm, 2pm-4pm

Royal Museum, High Street, Canterbury, Kent

'Rocking Down in Kent' is the theme of Canterbury Museum's ninth Fossil Roadshow and will feature Kent's amazing variety of rocks, such as ragstone and flint, as well as 'foreign' fossils, rocks and minerals from around the world. Our team of experts will be on hand to identify all manner of geological material brought in by the public, and they expect to be busy throughout the event, which attracts up to 1000 visitors, many of them children. Enthusiasts from local fossil groups, including the Oyster Coast Fossil Society, Medway Fossil and Mineral Society, the Sheppey Fossil Study Group, Kent Regionally Important Geological Sites Group, Kent Geologists Group and the Ravensbourne Geological Society, will be exhibiting their latest and most spectacular finds.

Activities and demonstrations for children (and adults!) will include the making of flint tools with flint knapper Malcolm Keen, discovering 'hollow' fossils, and trying your hand at finding fossil sharks' teeth. Micro-fossils can be viewed through a microscope and a 'touch table' will allow visitors to handle real fossils, including ammonites, dinosaur bones and a mammoth's tooth. Also, Rockwatch, the nationwide geology club for children, are offering four prizes in an easy to enter draw. Top prize is a year's membership of Rockwatch and three runners-up prizes of an illustrated book on dinosaur stamps of the world. Free gifts too!the first 50 children attending the Roadshow will be invited to try a lucky-dip for a fossil, rock or mineral specimen.

We regret that the Museum is not yet accessible to wheelchair users. Details were correct at time of printing but circumstances may cause change without notice. For further details contact Ralph Anderson or Martin Crowther on 01227 452747.

Geological Society Bicentennial Celebrations public lecture series

As part of its Bicentennial celebrations in 2007, the Geological Society will be running a series of public lectures at Burlington House with the aim of bringing home the relevance of modern Earth science to the wider world. These lectures are open to everyone with an interest in science and will be free (although entry will be by ticket only).

10 January 2007 History of Life: Richard Fortey, Natural History Museum, London

19 February 2007 Earthquakes: James Jackson, Cambridge

20 March 2007 change: A geological perspective: Mike, Aberystwyth

11 April 2007 Monitoring the Earth: Tim Wright, Oxford/Leeds

7 May 2007 Fuelling the Future: Glen Cayley, Shell

7 June 2007 that shook the world: Clive Oppenheimer, Cambridge

20 September 2007 Climate change: A fossil plant perspective: Bob Spicer, Open University
16-18 October 2007 Volcanoes: Steve Sparks, Bristol
20 November 2007 Water Resources (to be confirmed)
December 2007 Man's History: Out of Africa and Beyond (to be confirmed)
For further details contact: Alys Johnson, Burlington House, Piccadilly, London,
W1J 0BG tel 020 7434 9944 fax 020 7 439 8975 email bicentenary@geolsoc.org.uk
website: <http://www.geolsoc.org.uk/bicentenary>

GCG Seminar: Dangerous minerals
Department of Earth Sciences, University of Manchester
18 May 2006

The meeting began with coffee and a welcome to the department from GCG Chairman Mandy Edwards. It was also interesting to see that the attendees included members of the health and safety profession as well as geological curators. The first talk was given by Giles Droop from the University of Manchester as an introduction to dangerous minerals and dealt initially with the problem of chemical toxicity. As well as the usual suspects such as arsenic, mercury, cinnabar, realgar and mimetite, we were also introduced to vaughanite (which contains thallium) and some which were regarded as less toxic until they occurred in a particular form, for example orpiment is more hazardous because of its friability and even sphalerite can be toxic if ingested as it is more soluble in acids yielding the toxic products zinc chloride and hydrogen sulphide.

Giles also gave us a brief introduction to radioactive minerals in which the two main issues were identification of radioactive elements and the proportion of unstable isotopes and the different radioactive particles needed to produce alpha, beta and gamma radiation. A particularly interesting point was made as to why some of the minerals containing rare earth elements such as zircon and monazite also contained radioactive elements. This was due to the similar sized ionic radii of the rare earth element and radioactive element which means it could be substituted into the crystal structure.

The third group of dangerous minerals examined in this talk was the asbestiform minerals. Their fibrous structure and useful properties were discussed and the molecular structure of the two groups; chrysotile and amphiboles were shown in detail at very high magnification so the fibres could be seen. There was also some discussion as to why some silicates had an asbestiform structure and others did not.

A talk dealing specifically with radioactive minerals in the Royal Cornwall Museum, Truro was given by curator Sara Chambers. Some useful information was given on looking for suspected radioactive specimens such as the very dark or brightly coloured specimens, and to check localities as some are renowned for their radioactivity and to seek advice locally. It was also emphasised that there is a duty of care to visitors and that displays need to be checked for radioactive species. The steps taken to deal with the problems were then outlined which included help and identification of radioactive minerals by curators from other museums who had experience of dealing with similar collections, removal of specimens from display or inadequate storage and the consultation and appointment of a radiation protection advisor. The importance of complying with the Ionising Radiation Regulations (1999) and the Radioactive Substances Act (1993) was stressed including notification of the Health and Safety Executive if the radioactive collections were extensive. Other areas covered included risk assessments, setting up controlled and supervised areas, appointments of radiation protection supervisors, documentation, storage, monitoring, signage of storage areas and equipment needed to keep exposure as low as reasonably practicable were also discussed in this informative workshop.

The final session of the morning looked at asbestiform minerals in the Museum and was given by Helen Fothergill from Plymouth Museum and Art Gallery. This was concerned with the practical aspects of storing these minerals safely. Initially a survey was made by the local health and safety officer and a firm of contractors who specifically dealt with asbestos. This included readings of the air surrounding the storage areas and in other drawers adjacent to those used for asbestos storage.

A method for safe removal and storage was then described including equipment needed. Each drawer and specimens within it were then treated in a tent with negative air pressure by well equipped workers who specialised in asbestos removal. They were trained to handle geological specimens. A description was then given on how they matched specimens to boxes and then transferred to them within the tent under supervision. The labels were also cleaned and placed on top of the boxes and kept together by a bag placed around the outside. Details were then given on labelling the boxes to comply with the Control of Asbestos at Work guidelines and information on a number of suitable websites.

During lunchtime there was a chance to view displays of current practise, some published information and even some asbestiform minerals on slides whose structure could be examined under a microscope. The afternoon session was more practical involving mineral identification using scanning electron microscopes. David Plant demonstrated a Scanning electron microscope system where asbestos minerals had been coated and his colleague demonstrated a similar system using a micromount mineral sample which did not have to be coated. The analysis of elements present allowed the mineral to be identified. An interesting tour of the mineral storage was given by curator David Green so we were able to see the storage of hazardous minerals. This included the radioactive mineral storage area and its radon gas extraction system.

After a break we had a workshop session on disaster planning and brainstorm session for ideas on improving training for mineralogists and good practice measures. A lively and informative discussion followed and thanks were given to Mandy Edwards and her colleagues at the University of Manchester who organised the meeting.

Wendy Simkiss
National Museums Liverpool

Forthcoming GCG seminars and workshops

4-5 December 2006 City Museum & Art Gallery, Plymouth, Devon GCG Seminar and 33rd AGM: Learning with geology collections

One of the current buzzwords: **Learning** underpins the purpose of geological collections whether we like it or not. It may encompass school children digging up fossils and making plasticine volcanoes, a researcher re-assessing type specimens for a new treatise, an exciting and informative gallery or a systematic collection representing early scientific thought. Education in all its forms can be indirect or formal; traditional or new; exciting and innovative or methodical and personal.

The theme of this meeting will allow us to re-explore some of the old favourites we've been doing for years (but re-branded to fit new and popular directives) plus truly new and innovative approaches that might inspire you to re-examine the potential of your rocks. The meeting will be aimed at geological curators, education officers and non-specialist curators with responsibility for geological material.

Monday 4 December 2006

0900 Registration & coffee/tea

0930 Welcome & housekeeping

1000 Portrait of a World Heritage Site - geological site interpretation: Barry Gamble, Consultant to the World Heritage Site Office (Cornwall & Devon).

1030 Earth science: teaching & learning: Cally Oldershaw, Earth Science Teachers' Association.

1100 Fieldwork with gifted & talented students: David Craven, Collections Assistant (Geology), Bolton Museum, Art Gallery & Aquarium.

1130 Excavating & reconstructing fossils activities: Tim Ewin, Acting Curator of Geology, Bristol City Museum & Art Gallery.

1200 The Bone Trail: Emm Barnes, Chair of the Outreach and Education Committee of the British Society for the History of Science, Centre for the History of Science, Technology and Medicine, University of Manchester.

1230 Lunch

1330 KS3: putting geology back into schools: Annette Shelford, Sedgwick Museum, University of Cambridge & Earth Science Teachers Association (ESTA).

1400 Earth Science Education - ways of working together: Helen King, Assistant Director, The Higher Education Academy Subject Centre for Geography, Earth and Environmental Sciences (GEES).

1430 Adult education as a tool for volunteer recruitment: Julia Sigwart, Programme Director, National Museum of Ireland & University College, Dublin (CoB/D)

1500 Coffee/tea & testing ideas/ trade show

Pliosaur reconstructions: Tim Ewin, Bristol Museum

Match the fossil: Jan Freedman, Plymouth Museum

Digging fossils: Matthew Watkinson, University of Plymouth

Rock Poetry: Annette Shelford, Sedgwick Museum

Making rocks (from Chocolate cake to Epsom salts): Emm Barnes, University of Manchester

Dinosaur teeth: University of Plymouth

Volcanoes: University of Plymouth

Microscopic views: University of Plymouth

Jurassic Coast, Anjama Khatwa
Geological Society, Judy Lakin
Earth Science Teachers Association (ESTA)
Digiblue – microscopes
Geod – fossil replicas

NOTE: If you would like to present, promote or test some activities, ideas or groups of your own, please contact Helen Fothergill at Plymouth Museum – the more the merrier!

1600 Discussion / way forward for geology & museums role
1630 GCG 33rd AGM
1730 Finish
1900 Evening reception/buffet on Marina & Historic Barbican

Tuesday 5th December 2006

0930 Arrive & register
1000 Depart for Morwellham Quay, industrial & mining heritage site including underground walking visit to the George & Charlotte Mine Site visits to Tamar Valley geological industrial landscape (Part of the Cornwall & Tamar Valley Mining World Heritage Site) led by Barry Gamble.
1600 Return to museum & railway station
1600 Opportunity for store visit (Plymouth City Museum & Art Gallery, mineral collection)
1730 Finish

To book a place please return the booking form on page 11 to: Helen Fothergill, Keeper of Natural History, Plymouth City Museum & Art Gallery, Drake Circus, Plymouth, Devon, PL4 8AJ tel 01752 304774 fax 01752 304775 email helen.fothergill@plymouth.gov.uk

15 May 2007, Kelvingrove Museum and Art Gallery, Glasgow GCG Study Visit and Seminar

A chance to have a detailed tour of Kelvingrove Museum and Art Gallery after its £27 million redevelopment and to hear from the management team and curators about the project and the philosophy behinds the new interpretative structure of the Museum, including the natural science galleries and discovery centre. There will also be an opportunity to visit the new offsite collections resource centre to investigate how collections are being managed in this purpose built facility.

For more information contact: Steve McLean, The Hancock Museum, Barras Bridge, Newcastle upon Tyne NE2 4PT tel 0191 222 6765 fax 0191 222 6753 email s.g.mclean@ncl.ac.uk

June 2007 (date and venue to be confirmed) GCG training workshop: Fossil plants

Oct/Nov 2007 (date to be confirmed) Natural History Museum, London

GCG training workshop: Identification, Care and Conservation of Sub Fossil Bone

Sub fossil bones are usually found in mixed geology collections and can be some of the most difficult objects to care for. If you have a geology collection in your care, chances are there are some sub-fossil teeth, bones, tusks or antlers in your collections, and some will probably be incorrectly identified. So, take the chance to find out about them from one of the UK's leading experts on sub fossil bones, Dr Andy Currant of the NHM, and find out how to ensure that they will last in your collections for generations to come with staff from the NHM conservation labs. This is a whole day training session and places are limited so book early to avoid disappointment. Date will be confirmed in the February edition of *Coprolite* and by email as soon as possible so make sure you are registered with the JISC Mail "GeoCurators" mail list.

For more information and to register interest contact: Steve McLean, The Hancock Museum, Barras Bridge, Newcastle upon Tyne, NE2 4PT tel 0191 222 6765 fax 0191 222 6753 email s.g.mclean@ncl.ac.uk

Sept/Oct 2007 (date to be confirmed) Dorset Museums, Attractions and the Jurassic Coast (Dorset and East Devon World Heritage Site)

GCG Study Visit

This year our plans are to visit the Dorset area to look at local museums, fossil shops and the Jurassic Coast World Heritage site. The 95 mile long site starts at Orcombe Point near Exmouth in East Devon and ends at Old Harry Rocks near Swanage in East Dorset. The site consists of Triassic, Jurassic and Cretaceous cliffs, spanning the Mesozoic Era, documenting 180 million years of geological history. The Jurassic coast was the first natural World Heritage Site to be designated in the United Kingdom. Not only does the area contain a

number of unique geological features (Lulworth Cove, Chesil Beach etc.), but it is also famous for its historical figures such as the 19th Century Lyme Regis fossil collector Mary Anning, and as a result, museum collections reflect the richness of the palaeontology within the area. The study visit will be over three days and full details will be published in the next edition of Coprolite.

For more information and to register interest contact: Steve McLean, The Hancock Museum, Barras Bridge, Newcastle upon Tyne, NE2 4PT tel 0191 222 6765 fax 0191 222 6753 email s.g.mclean@ncl.ac.uk

**3-4 December 2007 Natural History Museum, Dublin, Ireland
GCG Seminar and 34th AGM: Local Heroes**

To commemorate the 200th anniversary of the Geological Society of London, the 150th anniversary of the Natural History Museum in Dublin and as a frontrunner event for the International Year of Planet Earth in 2008, the seminar will adopt the theme of Local Heroes which the Geological Society is promoting throughout 2007. We invite members to offer presentations, both oral and posters, on their own geological heroes. Whilst the organisers will address some Irish geological heroes, we encourage offers of contributions on any geological collectors and curators who have made a significant impact on our science. We would anticipate that the focus of any contributions will relate to collections or museums, in keeping with GCG's purpose. It is planned to include a celebratory field visit to Mount Jerome Cemetery, where many important Irish geologists were buried. All contributors will be asked to submit their paper for Geological Curator.

Contact for further information and offers of talks: Matthew Parkes, Natural History Museum, Merrion Street, Dublin 2, Ireland. +353 87 122 1967 or email: mparkes@museum.ie

Other meetings

24-25 November 2006 Dudley

History of Geology Group and GeoConservation Commission: History of Geoconservation

Through presentations and field visits, this conference will explore the themes of :

1. The origin of geoconservation (sites, landscapes, specimens, documents, art) when can it be argued that it first started?
2. The history of more formalised geoconservation in the British Isles (the efforts of government, academia, voluntary groups, societies and associations)
3. the history of international initiatives that have made an impact in the British Isles (World Heritage Sites, Geoparks etc)
4. A brief look at the current and potential role of geoconservation in contributing to social and economic well-being. In other words how will society benefit from geoconservation in the future? It is anticipated that the proceedings of the conference will be published by the Geological Society.

To offer a paper contact Cynthia Burek cburek@chester.ac.uk or Colin Prosser colin.prosser@english-nature.org.uk , or to offer a poster or register interest in receiving further details, please contact Hannah Townley at hannah.townley@english-nature.org.uk or 01733 455304.

20-22 April 2007 Weymouth

**History of Geology Group: From oil shales and seeps to 'Shaleopolis' and imported roughnecks!
The history of on-shore hydrocarbon use in the UK**

Contact: Professor Richard Moody at rtj.moody@virgin.net

10-12 September 2007 Queen Elizabeth II Conference Centre, London

Geological Society Bicentennial Conference: Earth Sciences in the Service of Society

This conference to mark the bicentenary of the Geological Society of London, the world's oldest national geological society will review the current state of the science and demonstrate the relevance of modern-day Earth science to the important issues of our time.

A full list of confirmed speakers to date along with pre- and post-conference field excursions can now be viewed on the website

Registration opens: 8 January 2007, and "early bird" registration ends: 31 May 2007

For more information visit www.geolsoc.org.uk/bicentenaryconference or telephone 020 7434 9944

10-11 November 2007 Isle of Wight

History of Geology Group field excursion

Contact: Cherry Lewis at cherry.lewis@bristol.ac.uk

12-13 November 2007 Geological Society, Burlington House, Piccadilly, London

History of Geology Group: Geological Society Bicentenary conference and dinner

HOGG will be holding a major two-day conference to celebrate the Geological Society’s bicentenary. The conference will focus on the achievements of the Society, the founders, and some of its members and their activities over the past 200 years.

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

Theme 2: The foundation and founders of the Society

Theme 3: The first 100 years

Theme 4: Towards the 21st century.

On the evening of 12 November 2007 a dinner will be held in the Connaught Rooms, which now incorporates the Freemasons’ Tavern where the Geological Society was founded. A plaque commemorating the founding of the Society will be unveiled.

On the evening of 13 November 2007, the Geological Society will be holding a dinner in the Natural History Museum.

Contact: Cherry Lewis at cherry.lewis@bristol.ac.uk

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BOOKING FORM

4 - 5 December 2006

GCG Conference and 33rd AGM and Field Trip

Learning with Geology Collections

- I will be attending the conference and AGM on 4 December
- I will be attending the field trip on 5 December
- I would like details of local accommodation
- I would like to attend a meal on the evening of 4 January

I enclose payment for (tick as appropriate) :

- Registration £10
- Buffet Lunch 4 Dec (£6)
- Evening Meal 4 Dec (£12)
- Field trip with lunch 5 Dec (£10)

Title.....Name.....

Address.....

.....Postcode.....

Telephone.....e-mail.....

Please enclose this booking form with a cheque for total amount, made payable to “Geological Curators’ Group” and send **by 24 November** to: Helen Fothergill, Keeper of Natural History, Plymouth City Museum & Art Gallery, Drake Circus, Plymouth, Devon, PL4 8AJ tel 01752 304774 fax 01752 304775 email helen.fothergill@plymouth.gov.uk

Chairman: Mandy Edwards, Department of Earth Sciences, University of Manchester Manchester M13 9PL
tel 0161 275 3825 fax 0161 275 3947 email mandy.edwards@man.ac.uk

Secretary: Matthew A Parkes, Natural History Division, National Museum of Ireland, Merrion Street, Dublin
2, Ireland tel +353 87 122 1967 email mparkes@museum.ie

Treasurer: Helen Kerbey, Department of Geology, National Museum of Wales, Cathays Park, Cardiff CF10
3NP tel 029 20 573367 fax 029 20 667332 email Helen.Kerbey@museumwales.ac.uk

GCG website: <http://www.geocurator.org>