



DROPPINGS
FROM THE
GEOLOGICAL
CURATORS
GROUP

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From GCG Chairman

This has been a mixed year for GCG. We have had some wonderful successes, but also some disappointments. As GCG Chairman I have evolved a double agenda; my first desire is to strengthen the links between GCG and its parent body, the Geological Society, and to this end I was delighted when asked in March to sit on a Geological Society Working Party to review Specialist Groups and Joint Associations. The outcome of this was very positive with a clear message from the Geol. Soc. that it values very highly its Specialist Groups and nowadays regards our meetings as its main business, since the demise of their more general meetings at Burlington House. The Society were very keen to improve relationships and made various suggestions, such as the issue of "starter packs" to incoming officers, and the provision of free facilities at Burlington House for meetings.

My disappointment here has been the handling of *Geoscience '98* - the Geological Society conference to be held at Keele next April - designed to reunite the disparate specialisms under an umbrella conference. GCG's initial inclusion in one of the main symposia, on "Geology and Society - getting the message across",

later transpired to be a passive one, and the high registration fees further guaranteed our exclusion. The latter would not have been such a problem, however, if more GCG members were also members of Geol. Soc. and I encourage all of you to ask whether you should be a member of our national professional body. As we currently stand, with so few Fellows amongst our membership, we hardly deserve to be affiliated to the Society.

My second aim has this year been fulfilled with tremendous success and that has been to take the Group "into Europe". I must say straight away that in this respect I am totally indebted to Steve McLean, who masterminded the visit. On 13 October, 19 members were woken at 5.15am by Steve, ready to board the *Eurostar* Express from Ashford International bound for Brussels. A truly memorable day included a visit to the Belgian Royal Institute of Natural Sciences where we saw the incredible Bernissart iguanodons, followed by a tour of the collections with the Head of Fossil Invertebrates, Dr Annie Dhondt, who was later enrolled as a member of the Group. After a good meal and a sampling of strange Belgian beers, we caught the train back to Ashford. GCG's tradition of sinking pints at the local pub was, however, thwarted by our accommodation at a Carmelite priory, and instead we sat round a room with mugs of hot chocolate, in Tom's words, "like residents of an old people's home"! The following day comprised a fascinating seminar at Maidstone Museum on *Lost Worlds and the European Perspective*, organised by Ed Jarzembowski and his team. I truly hope that this European adventure will continue and I encourage all of you to be a part of it. We have a lot to learn from Europe, but also a huge amount to give and collaboration can only be beneficial.

In this respect I must record my gratitude to GCG and the Geological Society for contributing towards my attendance at a European Science Foundation Workshop on Systematics, held in Hersonissos, Crete during October. The Workshop was held to formulate a programme for future funding by ESF for collaborative work on systematics and taxonomy. My role here for GCG was a dual one: first as the champion of the "Value and Valuation" cause, subsequent to the International Conference organised by GCG/BCG at The University of Manchester in 1995, I was emphasising the role of collections in future initiatives. My second objective was to investigate possible funding for collaborative projects to involve GCG and other European partners. A co-ordinating committee is developing a proposal for an ESF funded programme, and I have suggested to that committee that GCG is suitably placed to assist, for example, in surveying European palaeontological collections. [I should mention here that during 1997 the proceedings of the Manchester Conference were published by The Geological Society (*The value and valuation of natural science collections* (1997), edited by John Nudds & Charles Pettitt, 276pp.). Copies may be obtained by writing to me at Manchester University Museum.]

Apart from the European initiative, our other successful seminar during 1997 was

the visit in April to Torquay where Mike Bishop hosted our meeting on Quaternary collections. Speakers were mostly drawn from Quaternary research and it was gratifying to see how our curatorial efforts on these collections had paid rich dividends in terms of research output. Our second day at the seaside included a fascinating tour of the well-known Kents Cavern by Professor Alan Straw and a trip to Berry Head led by Chris Proctor of Bristol University.

The disappointments on this front were first the poor GCG attendance at the BCG/GCG/SMA session during the MA Conference at Cardiff in September, which examined the role of the specialist curator. Only a handful of GCG members were present, which perhaps testified that we truly are an endangered species? Thanks to Steve Thompson for organising this meeting. An even greater disappointment was the cancellation of the seminar on disability, scheduled to take place in Hull in June, due again to lack of interest. Steve McLean has asked, in the last *Coprolite*, why this seminar was not successful. Please let Steve have your comments so that we can avoid a similar problem again. Thanks to Heather Rayfield, who had put a lot of hard work into this meeting, only to see it not come to fruition.

Support for museums and collections under threat saw satisfactory outcomes at Nottingham and Leicester, while the outcome at Bristol was nothing short of disastrous resulting in the loss of a geological curator's post and the redundancy of a GCG member. As a result of this your committee decided to review the way in which it responds to threats to collections. It is likely that in the future we will make representations to the Area Museum Councils and to the MGC as well as to the governing bodies of the collections under threat. This was reported in the recent edition of *Coprolite*.

I am indebted to numerous people for their efforts during the past year - to our secretaries, Mandy Edwards and John Crossling, for substantially reducing the paperwork that crosses the Chairman's desk; to Treasurer, Andy Newman, for keeping our accounts so healthy; to our editors, Patrick Wyse Jackson and Tom Sharpe, for another year of unbroken production of Journal and Newsletter, and to Tom also for his persistence and diplomacy in providing the Group with excellent new display boards, sponsored by Haley Sharpe Associates. I should also thank here Clinton Burhouse Ltd., for continued sponsorship of *Coprolite*. Our outgoing Recorder, John Faithfull, should be thanked again for initially setting up the Group's Web pages, shortly to be updated by the new committee; we are also indebted to Tony Morgan and Wendy Simkiss who act as GCG's representatives on the Geological Society's Geoconservation Commission and the Natural Science Conservation Group respectively. Steve McLean I have already mentioned, but he deserves thanks also for the huge amount of time dedicated to organising all of our meetings this year, and finally I thank members of the committee, including cooptees and corresponding members, all of whom played vital roles.

John Nudds, The Manchester Museum.

Officers and Committee 1998

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Recorder: Glenys Wass, Palaeontology Laboratory, Natural History Museum, Cromwell Road, London SW7 5BD tel 0171 938 9269, fax 0171 938 9277, e-mail g.wass@nhm.ac.uk

Minutes Secretary: John Crossling, Warwickshire Museum, Market Place, Warwick CV34 4SA tel 01926 412481, fax 01926 419840

Committee members: Alistair Bowden, Clitheroe Castle Museum, Clitheroe, Lancashire BB7 1BA tel/fax 01200 24635. Dale Johnston, Woodspring Museum, Burlington Street, Weston-super-Mare, Somerset BS23 1PR tel 01934 621028 fax 01934 612526

Coopted members: Steve Thompson, Scunthorpe Museum, (BCG rep)

Corresponding members reporting to Committee: Monica Price (Co-editor, Coprolite), Oxford University Museum of Natural History; Tony Morgan (Geoconservation Commission), National Museums and Galleries on Merseyside; Sue Sladen (Archivist), Ayschoughee Hall, Lincolnshire; Wendy Simkiss (NHCG), National Museums and Galleries on Merseyside

Musical curators

Paul Davis, formerly an Honorary Research Fellow at the Lapworth Museum, University of Birmingham, has moved to a brace of jobs in Surrey. The first is as Geology Project Officer for Surrey Museums Consultative Committee, a post supported by the Heritage Lottery Fund to provide geological expertise for 16 of Surrey's museums. The second position is as part-time curator of the Sir Archibald Geikie archive at Haslemere Educational Museum. Paul would like to make contact with anyone interested in the geology of Surrey or in Geikie, and can be contacted on 0181 541 9231 or geology@surreycc.gov.uk. **Heather Rayfield** has left her post as Assistant Keeper of Natural History at Hull Museums, to complete her MA

thesis at Leicester and to travel in the Middle East. **Vicenta Carrio Lluesma** has been appointed geology conservator and preparator at the Royal Museum of Scotland and took up post on 1 November. **Kate Hawkins**, formerly Keeper of Biology and Geology at Buckinghamshire County Museum, has been appointed Assistant Keeper of Natural History at the *Manx Museum*. **Dale Johnston**, Exhibitions Coordinator at Woodhorn Colliery Museum, has been appointed Exhibition and Outreach Officer at North Somerset Museums Service in Weston-super-Mare and takes up his post in early March. **Kate Andrew**, Curator of Natural History at Ludlow Museum, has begun a period of maternity leave and will return to her post in November. **Keith Thomson**, a fossil fish worker who is currently at the *New School for Social Research in New York* and who is also Adjunct Professor of Geology at the University of Pennsylvania, has been appointed Director of Oxford University Museum of Natural History. He takes up his post in July. **Steve Donovan**, Reader in Palaeozoology at the University of the West Indies, has been appointed Keeper of Palaeontology at the Natural History Museum where he will succeed **Robin Cox** who is retiring.

Congratulations to **Liz-Anne Bawden**, Curator of Lyme Regis Museum, on being awarded the MBE in the New Year Honours List.

Newish publications

Treatise on Invertebrate Palaeontology. Part O. Arthropoda 1 Trilobita, Revised. Volume 1: Introduction, Order Agnostida, Order Redlichiida by H B Whittington et al, 1997. Geological Society of America and University of Kansas, xxiv + 530pp. ISBN 0 8137 3115 1.

Treatise on Invertebrate Palaeontology. Part H. Brachiopoda, Revised. Volume 1: Introduction by A Williams et al, 1997. Geological Society of America and University of Kansas, xx + 539pp. ISBN 0 8137 3108 9.

Gemstones of the World by Walter Schumann, 1997. London: NAG Press, 271pp. ISBN 0 7198 8271 7, £18.50.

Catalogue of the type, figured and cited fossils in the Geological Survey of Ireland by M A Parkes and A G Sleeman, 1997. Dublin: Geological Survey of Ireland, x + 124pp. **Special offer to GCG members** at £5 (a 50% discount - full price is £10) plus £1 postage (Sterling or Irish pounds) from: Geological Survey of Ireland, Beggars Bush, Haddington Road, Dublin 4, Ireland.

1998 subscriptions and membership list

1998 subscriptions are now due. These remain at last year's levels: £10.00 for a UK Personal Subscription, £12.00 for Overseas. Please complete and sign the form on the centre pages to ensure your place on the membership list and send it with your payment **by 1 April 1998** to the Treasurer at the address on the form.

Exhibitions 1998

Tracking dinosaurs Hull and East Riding Museum, 36 High Street, Hull until 19 April; Museum of North Devon, The Square, Barnstaple 7 June - 13 September; Bristol City Museum, Queen's Road, Bristol 19 September - 22 November.

Dinosaurs alive! Hancock Museum, Newcastle upon Tyne until 26 April.

Dinosaurs then and now Museum of St Albans, Hatfield Road, St Albans until 6 June.

Myths and monsters Natural History Museum, Cromwell Road, London 5 April - 13 September

Claws! From sabretooth to Siamese Bolton Museum, Le Mans Crescent, Bolton until 28 March.

New Members

GCG is pleased to welcome the following new members: **Annie Dhondt**, Royal Institute of Natural Sciences, Brussels; **John Clatworthy**, Lapworth Museum, University of Birmingham; **Tiffany Fisher**, Department of Palaeontology, Natural History Museum, London; and **Mary Owen**, Horsham.

Forthcoming meetings and seminars

14-18 April 1998 University of Keele

Geological Society, UK Geophysical Assembly, British Geological Survey and Geologists' Association: Geoscience 98

Contact: The Conference Department, The Geological Society, Burlington House, Piccadilly, London W1V 0JU tel 0171 434 9944 fax 0171 439 8975 e-mail lakinj@geolsoc.org.uk

23-26 April 1998 Ulster Museum, Botanic Gardens, Belfast

Tourism in geological landscapes: a conference on geotourism, sponsored by GCG and The Geoconservation Commission of the Geological Society of London; supported by The Ulster Museum, The Geological Survey of Northern Ireland and the Environment and Heritage Service (Northern Ireland)

Whether curators like it or not, they are part of the tourist industry. Museums are recognised as centres of visitor attraction and curators are increasingly involved with other agencies in interpreting the natural world to the public. And the smart curator knows that success as a tourist attraction secures funding. This two-day conference will look at a range of topics in geotourism, including the making of a World Heritage Site; landscape tourism; urban geology; and communication. There are also two all-day coach excursions to geological sites of tourist importance.

Thursday 23 April

10.00 The building stones of Belfast: a street tour for early arrivals to the conference, led by Alan Bell, consultant geologist. Meet at the front of the

City Hall.

13.30 Registration at the Ulster Museum.

14.00 Welcome to delegates.

14.15 Session 1. Theme: Geological landscapes: major case studies - The Giant's Causeway.

"Connecting earth and hell ..." - the making of a World Heritage Site: Philip Doughty, Head of the Sciences Division, Ulster Museum.

"Worth seeing - but not worth going to see!" - the management challenges of a World Heritage Site: Ian McQuiston, Director for Northern Ireland, The National Trust.

Early illustrations of the Giant's Causeway: Martyn Anglesea, Keeper of Fine Art, Ulster Museum.

16.00 Session 2. Theme: Geological landscapes: major case studies (continued)
The Jurassic Coast Project, Dorset.

Tourism in Dorset: resorts, seaside towns and classic landforms: Malcolm Turnbull, Coastal Policy Officer, Dorset County Council.

The Jurassic Coast Project: Richard Edmonds, Project Officer.

Geotourism: the future of conservation? Jonathan Larwood and Colin Prosser, English Nature.

The past is the key to the future - geotourism and urban regeneration in Dudley, England: Colin Reid, Keeper of Geology, Dudley Museum and Art Gallery, and Graham Worton, Vice Chairman, Black Country Geological Society.

18.00 End of session.

19.30-21.00 Cold buffet reception in the Ulster Museum.

Friday 24 April

09.00 Session 3. Theme: Landscape tourism and Ireland.

Keynote Address: British geology - exploring the hidden landscape: Richard Fortey FRS, The Natural History Museum, London.

Landscapes from stone: Patrick McKeever, Geological Survey of Northern Ireland.

Landscape tourism opportunities in the Antrim Basalt area: Paul Lyle, University of Ulster.

The Carleton Trail in Co.Tyrone: Daphne Purdy, Countryside Officer, Dungannon District Council.

11.00 Session 4. Theme: Landscape tourism and Ireland (continued).

Keynote Address: Is it any fossicking good? Or behind the signs - a critique of current geotourism interpretative media: Tom Hose, Buckinghamshire University College.

Mining heritage and tourism: John Morris, Geological Survey of Ireland.

Geotourism as a private enterprise - recent experiences in Ireland: Matthew Parkes, Geoscapes, Dublin,

Conservation and geotourism in the Cullcagh Mountain Park: John Gunn, Limestone Research Group, University of Huddersfield.

12.30 Lunch - delegates forage for themselves.

14.00 Session 5. Theme: From quarry to streetscape.

Keynote Address: Between a rock and a hard place - earth heritage interpretation for the public: Robert Threadgould and Alan McKirdy, Scottish Natural Heritage.

If you can't hide it, flaunt it: the quarrying industry laid bare: Ian Thomas, The National Stone Centre, Derbyshire.

Clinging to the necessary monument: Eric Robinson, Geologists' Association Librarian.

Well-worn tracks? - promoting geology in the urban setting in Dublin: Patrick Wyse Jackson, Trinity College Dublin.

Tourism and the built environment: raising geological awareness: Peter Doyle and Matthew Bennett, University of Greenwich.

16.30 Session 6. Theme: Getting the message across.

Dynamic Earth - education through entertainment: Stuart Monroe, Director of *Dynamic Earth*.

Rocks on box and radio - getting the message across: Anne Grayson, writer and broadcaster.

It's geology, it's interesting - but will it sell?: Chris Darmon, Editor, *Down To Earth*.

18.00 End to formal proceedings of Conference.

19.30 for 20.00 Conference Dinner - to be arranged.

Saturday 25 April Coach excursion, to the limestone country of Counties Cavan and Fermanagh. The trip will visit the Marble Arch Caves which have recently been developed as a tourist attraction and are, arguably, the finest system open to the public in Ireland. Other places of interest include the karst scenery of the Marlbank and the Cavan Burren, and a visit will also be made to the legendary Shannon Pot, the source of the longest river in these islands. The excursion will be led by Patrick McKeever who, as a geologist at the Geological Survey of Northern Ireland, has recently produced a series of popular geological products aimed at the general public. Timings: 09.00-18.00hrs.

Sunday 26 April Coach excursion along the Antrim Coast Road, to the Giant's Causeway, This coastline, famed for its Chalk and basalt scenery, is an open-air geological textbook. The Giant's Causeway, a tourist attraction since the 17th century, has played a fundamental role in the historical development of geological interpretation. The excursion will be led by Philip Doughty, former Keeper of Geology at the Ulster Museum, who helped prepare the submission for the inclusion of The Giant's Causeway in UNESCO's World Heritage Site listing. Timings: 09.00-16.00hrs.

Conference fee: £17.50. This includes attendance at lecture sessions, buffet reception in Ulster Museum and the two coach excursions. Please complete the form on the centre pages and return it, with payment, **by 10 April** to: Michelle

Keenan, Sciences Division, Ulster Museum, Botanic Gardens, Belfast, BT9 5AB tel 01232 383131.

30 April - 2 May 1998 Royal Museum of Scotland, Chambers Street, Edinburgh

BCG Seminar and AGM: Legal eagles? Wildlife collections and the law.

This meeting will examine the legal issues surrounding the acquisition, holding and use of biological material, and the use of DNA. There will also be visits to the RMS stores and labs, as well as trips to natural history venues in the area.

Contact: Steve Thompson, Scunthorpe Museum, Oswald Road, North Lincolnshire DN15 6NU tel 01724 843533.

28-30 June 1998 Camborne School of Mines, Redruth, Cornwall.

GCG Seminar and field trip: A Cornish Extravaganza!!

A chance to look at some of the sites and collections of Cornwall. This meeting will include visits to various museums in the area and an opportunity to get underground and really explore the geology.

Sunday 28 June (afternoon only). For those who wish to make a weekend of it there will be the opportunity to visit Lizard with Alan Bromley (geological consultant, Petrolab). Meet at 13.00 in rear car park at Camborne School of Mines.

Monday 29 June

09.30 Arrive Truro Museum: Rashleigh collection of minerals with Roger Penhalurick (RIC curator).

Tour of collection and coffee.

11.30 Depart.

12.00 Arrive Wheal Martyn China Clay Museum: local minerals with (possibly) Courtney Smale (ex-manager Goonvean and Rostowrack China Clay).

13.00 Lunch (at China Clay Museum).

14.00 Bus tour of China Clay pit with Ivor Bowditch (ECCI geologist).

16.00 Depart.

18.00 Reception and buffet Camborne School of Mines Museum.

19.30 Short talks and poster displays. Please contact Lesley Atkinson if you wish to present a paper or poster.

Tuesday 30 June

09.30 Visit Royal Geological Society of Cornwall Museum, Penzance.

11.00 Field trip to Land's End granite.

13.00 Pub lunch.

14.30 Optional underground tour of King Edward Mine.

16.30 Meeting ends.

Meeting fee: £3.00 (includes lunch on Monday), plus £6.00 evening buffet.

Please complete the form on the centre pages and return it, with your payment,

by 14 June to: Lesley Atkinson, Camborne School of Mines Geological Museum and Art Gallery, Pool, Redruth, Cornwall TR15 3SE tel 01209 714866, e-mail L.Atkinson@csm.ex.ac.uk

23-27 June 1998 St Petersburg University, St Petersburg, Russia
International symposium on the history of mineralogy, mineralogical museums, gemmology, crystal chemistry and classification of minerals.

Contact: Gallna G Anastasenko or Vladimir G Krivovichev, Faculty of Geology, St Petersburg University, Universitetskaya Emb, 7/9, St Petersburg 199034, Russia tel 812 218 94 81; e-mail mm_98@mineral.geol.pu.ru

6-11 September 1998 University of Wales, Cardiff
British Association for the Advancement of Science Annual Meeting.

Contact: British Association for the Advancement of Science, 23 Savile Row, London W1X 2NB.

21-25 September 1998 Portsmouth
Museums Association Annual Conference.

Contact: Sue Robinson, Museums Association, 42 Clerkenwell Close, London EC1R 0PA tel 0171 608 2933, fax 0171 250 1929.

24 September 1998 Geological Society, Burlington House, Piccadilly, London

GCG/History of Geology Group/Geoconservation Commission meeting.

Papers are sought for this meeting which will deal with site, specimen and archive conservation.

Contact: John Thackray, Natural History Museum, Cromwell Road, London SW7 5BD tel 0171 938 9238, fax 0171 938 9280 e-mail j.thackray@nhm.ac.uk

14-15 October 1998 National Museum of Wales and University of Wales, Cardiff

English Nature and the Geologists' Association: A future for fossils - the sustainable management of our heritage.

Contact: Jonathan Larwood, English Nature, Northminster House, Peterborough PE1 1UA tel 01733 455115.

17 October 1998 Lapworth Museum, University of Birmingham
Geologists' Association and the Dinosaur Society UK: British dinosaurs - their life and times.

Contact: The Dinosaur Society UK, PO Box 329, Canterbury, Kent CT4 5GB.

November 1998 Leiden, The Netherlands
GCG Study visit: A European Adventure.

This year it is hoped that a GCG study visit can be arranged to the National Natural History Museum in Leiden, Netherlands. This visit will be in the form of a

2 or 3 day trip, the first day to explore the museum and its collections and the second to do some field work. There should also be some time to do a little sight seeing as well. Full details including costs and booking information will be included in the June edition of *Coprolite*.

Contact: Steve McLean, The Hancock Museum, Barras Bridge, Newcastle upon Tyne, NE2 4PT tel 0191 222 6765, e-mail s.g.mclean@ncl.ac.uk

2-3 December 1998 Nottingham Natural History Museum, Wollaton Hall, Nottingham and British Geological Survey, Keyworth.

GCG Seminar and AGM: Little and large

A two-day seminar looking at the similarities, differences and historical links between the smaller geology collections of the Nottingham Natural History Museum and the large national collections at the headquarters of the British Geological Survey. The first day will look at the history of the geology collections at Wollaton Hall and how research and documentation of the collections over the last ten years has increased their significance. There will be talks on aspects of the collections, including details of the Victorian palaeontologists who collected parts of them, followed by a tour of the displays and collections. The day's proceedings will conclude with the 24th GCG AGM. On the second day there will be a visit to BGS headquarters at Keyworth where there will be a tour of the collections and a chance to see geological maps being created.

Contact: Neil Turner, Natural History Museum, Wollaton Park, Nottingham NG8 2AE, tel 0115 915 39000, e-mail nnhm@notmusnathist.demon.co.uk or Steve Tunnicliff, British Geological Survey, Keyworth, Nottingham NG12 5GG, tel 0115 936 3100.

18-21 March 1999 Braintree, Essex

A joint conference of the Institute of Biology's History Committee, the John Ray Trust and the Society for the History of Natural History: John Ray and his successors: the clergyman as biologist.

John Ray (1627-1705) was one of the most important biologists in the history of the subject and this conference will celebrate all aspects of his life and work. He was ordained and his religious beliefs informed his work and were widely influential. The conference will go on to consider the British clergy (or their families) who were biologists and their distinctive contributions to both church and science. This would include theology, social roles and individual biographies. The third focus of the conference will be the current experience of people who are both clerics and biologists. Keynote addresses will be given on each of these three themes.

Contact: Rev Nigel Cooper, The Rectory, 40 Church Road, Rivenhall, Witham, Essex CM8 3PQ tel 01376 511161.

Mineral, fossil and gem shows 1998

7-8 March York Rock & Gem Show, York Racecourse, 10.00-17.00 Contact: The Exhibition Team Ltd, tel 01628 621697 or 01494 450504.

- 15 March Oxford Spring Mineral and Fossil Show**, Oxford Centre, 333 Banbury Road, Oxford. 10.00-16.30 with guest lecture by Dr Bob Symes and special Sunday opening of the Oxford University Museum of Natural History 12.00-16.00 (free bus service between venues). Contact: Tony Brittain, tel 01953 788169.
- 21-22 March Cheltenham Rock & Gem Show**, Cheltenham Racecourse, off Evesham Road, Prestbury, Gloucestershire 10.00-17.00. Contact: The Exhibition Team Ltd, tel 01628 621697.
- 4-5 April BLMDA Gem and Mineral Fair**, Regents Park Marriott Hotel, Swiss Cottage, London.NW3 10.00-17.00.
- 18-19 April Rock & Gem Show, Kempton Park Racecourse**, Staines Road East (A308, J1, M3), Sunbury, Middlesex 10.00-17.00. Contact: The Exhibition Team Ltd, tel 01628 621697.
- 2 May BLMDA Gem and Mineral Fair**, The Winter Gardens, Ilkley, North Yorkshire.
- 30 May Norfolk Mineral & Lapidary Society Gem Fair**, Dussindale Community Centre, Pound Lane, Thorpe St Andrew, Norwich 10.00-16.00.

BBC Fossil Roadshow

The BBC and the Natural History Museum have arranged a Fossil Roadshow at the Natural History Museum in London on Friday 27 March (10.00- 20.00) and Saturday 28 March (10.00-18.00). The Roadshow will be televised, with programmes going out on Friday 27, Saturday 28, and Sunday 29 March as part of BBC 2's Evolution weekend.

As well as offering an opportunity to get specimens identified by NHM staff, the Museum are also hoping to hold lectures during the Roadshow, to exhibit specimens not normally on display, and to offer practical advice on collection and conservation techniques. The aim is to bring palaeontology to a wider audience and to encourage responsible collecting. Please tell your local geologists about this event. Entrance to the Fossil Roadshow is free and the museum is offering a special concessionary rate to anyone who wishes to look around the rest of the Natural History Museum.

The BBC would be interested to know if anyone is interested in attending and on which day. They also want to hear from anyone with unusual fossils or interesting stories before the event. If you intend to go along, or have an interesting story to tell, contact Sarah Fisher at Room 4150, BBC White City, 201 Wood Lane, London W12 7TS, tel 0181 752 4915.

Earthworks, a new geology gallery at the Hancock Museum

Over the last 5 years, the Hancock Museum in Newcastle has undergone several new gallery developments. The first, in 1993 was the re-display of the Egyptology collections in the new *Land of the Pharaohs* gallery. In 1995 the old geology gallery *Yesterday's World* was dismantled after 15 years of service and partly

replaced with the first phase of the new Earth Galleries project the *Living Planet* in 1996, an exploration of the living world. In January 1998 the second phase, *Earthworks* the geological component of this project, was completed.

Earthworks is divided into 6 main sections. After viewing a revolving scale model of the Earth which forms the focal point between *Earthworks* and the *Living Planet*, visitors enter *Earthworks* at *Our Place in Space*. This first section sets the Earth in a universal context as a means of introducing the story of the Earth and our place on it. The second section *The Shifting Surface* discusses the dynamic nature of the physical Earth and introduces subjects such as erosion and weathering and plate tectonics. Some of the main themes of this section are the "rock discovery stations" which allow visitors to explore the three main rock types. There are also several drawers full of various rock samples for visitors to examine. Overhead is a large video projection of the processes at work on the surface of the Earth today, from trickling streams to violent volcanic eruptions. This section is completed by a collage of images demonstrating the enormous forces, for good and bad, which the Earth can release, such as earthquakes and tidal waves.

The third section entitled *The Great Debate* examines some of the history of thought on the origins of the Earth and the life upon it. Subjects include religious and cultural beliefs throughout the world, the origins of folklore surrounding various fossils and of course the scientific theories that have been proposed in the past and are proposed today. A centrepiece of this display is a large *Sigillaria* trunk which was dismantled and then re-erected for the new gallery, an enormous task undertaken very successfully by conservation staff at Tyne and Wear Museums.

The fourth section, *Life Adapts* utilises spectacular images generously provided by John Sibbick (the well-known palaeontological illustrator) to tell the story of the fossil record. Traditional case displays are used here together with more cabinets of drawers each displaying fossils from the main geological periods. There are also numerous open-display fossils purchased specially for visitors to handle. In this section is also a specially designed secure and environmentally controlled case which uses fibre-optics to display some of the Hancock's rarer and more scientifically valuable fossils, many of which are on display for the first time.

The fifth section, entitled *From the Earth* considers how human beings have exploited the physical resources of our planet and not only looks at how these resources are used today, but also how they have been used in the past.

Finally, the sixth section is a spectacular display of minerals from the Hancock collections, organised purely by colour with various open display specimens for handling purposes. It is hoped that *Earthworks* will be a major visitor attraction for the Hancock Museum, particularly for schools. It is intended to be used both

by people who have no prior knowledge of geology as well as those who have a greater interest in the subject. In the future, as this gallery does not discuss local geology to any great extent, it is hoped that another part of the museum can be devoted to local geology and mineralogy, exploiting even more of the museum's strengths in Carboniferous and Permian fossils and Northern Pennine minerals. The new Earth galleries at the Hancock Museum were part-financed by the European Community through the European Regional Development Fund.

Steve McLean, Senior Keeper Natural Sciences, Hancock Museum.

Earth Alert

The Geologists' Association is planning a major three day conference to mark the Millennium at the Brighton Centre, Brighton, Sussex on 26-30 May 2000. The conference aims to draw together the major strands of earth and environmental sciences to examine many of the developments that will affect the future of the planet but which have explanations in the geological record - adaptation, extinction, the atmosphere, geohazards, resources and resource management, land fill, pollution, and planetary geology and colonisation. For further information, contact the Geologists' Association, Burlington House, Piccadilly, London W1V 9AG.

Minerals 98

Minerals 98 is an initiative by the UK extractive industries to explain their work to a wider audience. Activities will centre around a week in June with a major conference in London to launch the initiative on 22 June, a Focus on Education day at the Natural History Museum on 23 June, and open days at sites throughout the country on 26 and 27 June. The open days and educational initiatives will continue throughout the summer of 1998. The organisers are looking for support for activities at a local level. For further information, contact: Barrie Hedges, Minerals 98, 31 Market Place, Henley, Oxfordshire RG9 2AA tel 01491 411798, fax 01491 410912, e-mail minerals98@frenchjones.co.uk

Yorkshire journals for sale

The Yorkshire Geological Society has a number of offprints and parts of its *Proceedings* for sale, along with some parts of the journals of its predecessors, the Geological Polytechnic Society of the West Riding of Yorkshire, and the Yorkshire Geological and Polytechnic Society. All enquiries and orders should be addressed to The Yorkshire Museum Shop, Yorkshire Museum, Museum Gardens, York YO1 2DR.

Museum of the Year in trouble

At its meeting on 29 January, GCG Committee discussed the parlous state of Buckinghamshire County Museum Service where nine out of eleven curators have received redundancy notices as part of a 33% budget cut totalling £250,000. The cuts are being borne by the curatorial and records staff, with the Keeper of Natural History, Keeper of Art, Keeper of Archaeology, Conservator, Environmen-

tal Records Officer, County Archaeologist, Sites and Monuments Officer and the two field archaeologists being made redundant. No cuts are being made to the front of house or administrative staff. The two remaining curatorial posts are the Keepers of Social History and Documentation. There will now be no expertise in, or remit for, biological or geological collections care or the Biological Records Centre. Aylesbury Museum has about 12,000 geological specimens, including some type and figured material, as well as a large collection of Pleistocene material.

Following closure of the Museum and removal of the collections in 1989 due to the building having become unsafe, Aylesbury Museum was completely renovated with £3.9 million of public and private money. It reopened in 1995, and was joint winner of the Museum of the Year Award in 1996. Ironically, the December 1997 issue of *Museums Journal* reported that Aylesbury Museum had just reached its a full complement of staff, just a month before news of the cuts reached GCG.

GCG has written to the leader of Buckinghamshire County Council, local MPs, the Museums Association, and Museums and Galleries Commission to express our concern for the care and future of the collections and for the jobs of the curatorial staff involved.

Fossil collecting on the West Dorset coast

Following a meeting held in Charmouth in November 1997, a Fossil Collecting Working Group has been formed to look at a Code of Conduct for collectors. Members of the Working Group are: Richard Edmonds, Jurassic Coast Project; Adrian Brokenshire, West Dorset Heritage Coast and Dorset Geologists' Association; Andy King, *English Nature*; Patrick Woodsford, National Trust; Brian Meloy, Dorset Museum Service; Peter Press and Chris Pamplin, Charmouth Heritage Coast Centre; David Sole, fossil collector; Mike Hendrick, Charmouth Parish Council; Ramus Gallois, British Geological Survey.

The Working Group had its first meeting in January when Richard Edmonds was given the task of drafting a Code of Conduct that will incorporate a voluntary recording scheme for scientifically important specimens. It is anticipated that this scheme will bring benefits to all with an interest, in that recording will lead to a clarification of ownership for the benefit of collectors in return for collectors signing up to an accepted Code of Conduct.

The recording scheme will be a two-way process allowing researchers to see what is being found and to communicate their interests to collectors in order to help define scientifically important specimens, and assist collectors in the identification of the more obscure specimens that may be important to researchers. The Code of Conduct will identify the 'mining' or 'prospecting' for fossils *in situ* as unacceptable with the exception of vertebrates and crinoids. The scheme will provide details of landowners in order that collectors can contact them when

lengthy excavations are required for the larger specimens. The collection of specimens not *in situ* should continue, but collectors must take full responsibility for their own safety and be considerate for the safety of others.

The Working Group also recognised that some tourists are still placing themselves at risk by collecting from the cliffs, and therefore a reevaluation of warning information signs will be carried out as part of the work of the Jurassic Coast Project together with the Heritage Coast and Charmouth Heritage Coast Centre.

If you have any comments which you feel should be considered by the group, please contact Richard Edmonds, Jurassic Coast Project. Environmental Services Directorate, Planning Department, County Hall, Dorchester, Dorset DT1 1XJ.

Is this a record for roaming dinosaurs?

The Ulster Museum's travelling exhibition about dinosaurs, The Dinosaur Roadshow, first opened to the public in November 1989 at the Hancock Museum, Newcastle upon Tyne. It has then shown in museums in Matlock, Scunthorpe, Doncaster, Middlesborough, Leeds, Keighley, Manchester, Carlisle, Perth, Inverness, Preston, Stoke-on-Trent, Downpatrick, Letterkenny, Tralee, Enniskillen, Dundalk, Taunton, Cirencester, Salisbury, High Wycombe, Wrexham, Bideford, Mansfield, Oxford, Chepstow, Dorchester, Ipswich, Worcester, Peterborough, Dudley, Paisley and Stranraer (where it closes in March). Is 8 years on the road, showing at 34 venues throughout the British Isles, a record for an object-based, travelling natural history exhibition? Can anyone beat this?

Kenneth James, Ulster Museum

NHM marine reptiles conserved

The Palaeontology Conservation Unit at the Natural History Museum has begun the final phase of a three-year project of conservation and restoration work on the ichthyosaurs and plesiosaurs in the Museum's Gallery 30. The work, which began in January, will continue until June.

Directory of ore mineralogists

Though many people working in the earth and materials sciences are involved in aspects of ore mineralogy, communication is limited to established routes such as journals or conferences. The Commission on Ore Mineralogy (COM), one of the working commissions of the International Mineralogical Association, has set up a COM server at Eötvös University, Budapest, in order to facilitate communications. If you are interested in joining the mailing list, please contact Gyorgy Lovas in Budapest at lovas@ulixes.geobio.elte.hu

COM is also compiling an International Directory of Ore Mineralogists. Anyone wishing to be included is asked to complete a questionnaire which is available via the internet at <http://www.ruhr-uni-bochum.de/mineralogie/mineral/zem/ima/form.htm>

BGS boreholes on World Wide Web

The British Geological Survey and GeoMedia Services have launched a new service which allows access to details of over 500,000 borehole records over the Internet. Using a simple name search, the service allows you to identify the borehole records in the area of interest to you, and to place an order for the records to be sent by post. A forthcoming upgrade to the service will allow purchase of the information and the relevant Ordnance Survey map by credit card via Secure Electronic Transaction and to receive a scanned image of the borehole record electronically. The website can be viewed at www.geomediaserv.co.uk. There is no charge for viewing the summary details. For further information, contact GeoMedia Services at gmserv-uk@ingr.com or telephone Steve Anderson or Chris Marshall on 01793 619999.

SEMS University Collections Survey

The South Eastern Museums Service is undertaking a survey of university collections in Berkshire, Buckinghamshire, Oxfordshire and Hampshire. The aim of the survey is to identify existing collections, to assess their importance or significance, and to raise awareness of them within the higher education sector. The survey will result in the publication of a gazetteer of collections as well as individual reports, and in the long term, SEMS hopes to establish a support network for university and college collections to help with specialist or curatorial advice, and to encourage cooperative projects. The survey is being carried out by Kate Arnold-Forster, and SEMS would be interested to hear of any geology collections held at universities or colleges in the area. GCG has asked several members in the south east if they can offer assistance, but if you can help with information, please contact Sophia Mirchandani or Helen Jackson, SEMS Western Region, Chilcomb House, Chilcomb Lane, Winchester, Hampshire SO23 8RD tel 01962 844909, fax 01962 878439.

Smithsonian opens new geology gallery

Following two years of renovation, the National Museum of Natural History in Washington DC has reopened its old geology hall. Named the *Janet Annenberg Hooker Hall of Geology, Gems and Minerals*, after a donor who provided \$5 million, the 1900 square metre gallery contains exhibits on gems, minerals, rocks, plate tectonics, the Moon, and meteorites. Over 3,500 specimens are on display, including the Hope Diamond and the Allan Hills 84001 Martian meteorite.

GCG study visit: Belgian Royal Institute of Natural Sciences, Brussels 13 October 1997

Slick organisation by Steve McLean ensured that all nineteen of us arrived on time for the 7am check-in at Ashford in Kent for the *Eurostar* to Brussels. The group had a slight hold up at the station security check when the editor of *Coprolite* managed to set off the alarms with what turned out to be an amazing array of gadgets concealed about his person. The 300 metre long train, with its two

engines and eighteen carriages quickly reached the tunnel, and once through and into France, we accelerated up to 300 km per hour. Just over 2 hours after leaving Ashford, a grey day greeted our arrival in Brussels. Stella Bellam (Kent County Council) led us through the underground system and shepherded us past the beer shops (with over 400 different types of beer!) to the Belgian Royal Institute of Natural Sciences. The museum has a modern tower-block frontage with an impressive wooden *Iguanodon* sculpture at the entrance. There we were met by our guide for the day Annie Dhondt, Head of Fossil Invertebrates, who spoke fluent English, as well as French, Flemish and Russian. As in most of the museums I have visited there was that first impression of lots and lots of corridors with interesting-looking offices and store rooms leading off from them. The palaeontology departments are housed in the older part of the museum, which dates from the 1890s, and were added onto a building which was originally a convent. Annie explained that there was a scientific staff complement of 45 and a total of 400 staff in the museum. The loss of technician posts had been a problem but the Federal Government was very supportive of the museum. The museum has very, very large collections, equivalent in size to those of the Natural History Museum in London. We were then taken for a very agreeable lunch in the Museum's cafe, where along with the raw beef sandwiches, there was a whole range of different types of beer to try.

Generously refreshed, we set off for the galleries to see the famous Bernissart iguanodonts, 39 specimens discovered in a coal mine in southern Belgium in 1878. Seeing 11 mounted *Iguanodon* together is a memorable sight. The skeletons are totally enclosed in a floor-to-ceiling glass case so that lighting, temperature and humidity can be controlled. The light levels were very low, but visitors are given the opportunity to view the mounted iguanodonts from both human eye level and from a viewing gallery at *Iguanodon* eye level - wonderful! I have seen lots of pictures of these mounted specimens, looking unnaturally stiff in their wicket-keeper stance. Tucked away in a corner of the viewing gallery was a cast of one of the iguanodonts which caused a great deal of picture-taking and animated discussion. This cast had been repositioned in a quadrupedal stance and it gave an impression of energy and movement combined with strength. I am sure that if several of the curators on our visit had their way copies of this specimen would be appearing in Manchester, Newcastle, Maidstone..... ! It is highly unlikely that any of the original specimens will be repositioned, but after seeing the modern interpretation, the original specimens do look very stiff in their upright pose (for a description and discussion of the posture and gait of *Iguanodon bernissartensis* see the paper by Pierre Bultynk in the *Bulletin Institut Royal des Sciences Naturelles de Belgique: Sciences de la Terre*, 1993, vol 63 pp. 5-11). Also on display in the top gallery were the associated fauna and flora found at Bernissart. I particularly liked two crocodile specimens, complete with preserved skin.

Next to the huge glass case housing the 11 mounted specimens, there is another large area enclosed by glass with a further 20 iguanodonts positioned as they were

found in the mine. Again the light levels are very low and yet again the quality and number of the specimens are incredible.

In front of the Bernissart iguanodons, there was an animatronic dinosaur display, which was switched off as the museum was closed to the public. However, there was a lovely reflection of a *T. rex* in the glass of the *Iguanodon* case which gave the slightly unnerving impression of the *T. rex* standing on top of the fallen iguanodons. The museum was in the final stages of preparing a new exhibition on the evolution of man and there was also another new gallery featuring marine reptiles. We were then rounded up and taken to see some of the storage areas and the palaeontology preparation lab. There, a conservator showed us some of the finds brought back from a joint Sino-Belgian expedition to Inner Mongolia. The skeletons included an impressive *Protoceratops* skull and a near-complete ankylosaur, which the conservators were in the middle of preparing. This work mostly involved the time-consuming task of removing the hard matrix surrounding the fossil and then strengthening and consolidating the bones. Eventually these specimens will be returned to China.

The storage areas for palaeontology had been set out by the first director of the museum when the building was completed. The cabinets are made of oak, with oak drawers and lids. Over the years the problems associated with this wood had come to light as acids had attacked specimens. The huge task of opening all of the cabinets and drawers within them to stop any further build up of acid vapour was now complete and the problem was under control. The rooms and rooms full of high cabinets and stacks of wooden boxes were very impressive. The documentation of such a large collection imposes its own problems. Many of the specimens in the collections do not have unique accession numbers, but rely on drawer inventories instead. Computer databases of the collections tended to be restricted to the type collections and those items that were worked on by the scientific staff. A problem that is the same the world over, so it seems.

The museum kindly opened the shop for us and we bought most of their English language version of the guidebook to the iguanodons. As a thank-you for being an excellent guide and for being so open and helpful in showing us around the museum, we decided to give Annie two years' subscription to the journal and membership of the group. We just had time to go to a café-bar for dinner and a little bit more beer, not forgetting to buy some Belgian chocolates, before catching the *Eurostar* back to Ashford. Oh, what a perfect day!

Amanda Edwards, Department of Geology, University of Manchester

GCG Seminar: Lost worlds, iguanodons and the European perspective

Maidstone 14 October 1997

There was a heady atmosphere generated by a small audience of members fresh from their visit to the Royal Institute in Brussels the day before. We assembled

first for coffee in the Maidstone Museum and were greeted by the Head of the Museum and Art Gallery, prior to a short walk to the Bishop's Palace where Ed Jarzembowski, Keeper of Natural History at Maidstone and fellow traveller interpreted the Anglo-Belgian Wealden environment for us. Discussions on board *Eurostar* had focussed on the K/T event and we were treated to a fleshing out of the insect fauna of the times, which had apparently been far more disturbed by the arrival of the flowering plants than any cometary body. The former caused widespread devastation to insect taxa during the Lower Cretaceous whilst the latter was ignored, certainly at family and generic levels, surviving more or less intact, possibly by a combination of pupation, aestivation and probably sheer good luck.

Speaking of good luck, several recent finds of dinosaur footprints in the UK (Dorset, Yorkshire), the USA, and elsewhere, have contributed to the renaissance of footprint studies, fathered perhaps by Martin Lockley of the University of Colorado at Denver. Cashing in on the fashion, Tom Sharpe described with his usual aplomb the new *Tracking Dinosaurs* exhibition which the National Museum of Wales has produced and which is now on show in Hull. For £82,000 Cardiff benefited from what appeared to be a splendid show to fill the available 612 sq. metres of exhibition space. Just to add a note of reality, this is the equivalent of my entire museum display space and curatorial salary bill. Ah well, *c'est la vie* as they said in Brussels. Tom went on to reveal the extensive fieldwork which had preceded the exhibition, some going back twenty years, and described the various methods used, including collecting and casting, by which 88 trackways at 10 stratigraphic levels had been documented in the Triassic of South Wales.

Finding the beasts which contribute the footprints is the speciality of Steve Hutt from the Isle of Wight Museum, Sandown. He told an at times sad, amusing and cautionary tale of finding, excavating, preparing and naming the remains of what became known as *Neovenator salerii*, a new theropod from the Lower Cretaceous. Space does not permit the re-telling of a plot which involved site raiders, verbal agreements, broken promises, greed, divorce and revenge; enough to say that lessons have been learnt and that ultimately, we have a new dinosaur in the right hands. But if you find a dinosaur skeleton, do ring Steve first for advice!

The sad loss of Alan Charig in July last year robbed the meeting of an outstanding speaker. His inimitable style would have left a huge gap in the programme but at the last minute, the similarly stylish Dave Martill (University of Portsmouth) was persuaded to come and provide a mystery guest lecture. We were hugely entertained by the verbal unfolding of a story which led to the identification of *Arambourgiania*, the biggest pterosaur yet recognised and the literal unfolding of a life-size replica outlined on rolls of paper. Dave went on to describe, how, with the help of student labour, a three-dimensional replica was produced, which now inhabits a museum in Germany.

Last on the Cretaceous menu was Jeremy Knight, Curator of Horsham Museum in West Sussex, deep in dinosaur country. With a budget of £200 (*cf.* Cardiff) Jeremy described how he set about creating an exhibition about dinosaurs, based on the Museum's possession of a recently discovered and identified *Polacanthus* and the 19th century history of a local collector George Bax Holmes whose collection is in my care in Brighton. This exhibition: *The Terrible Lizards of Horsham*, was preceded by an exhibition in 1989 with the intriguing title *Did dinosaurs get toothache?* Multum in parvo.

GCG thrives on meetings like this. Whilst the audience size was healthy and probably typical of most GCG meetings, it was a pity that the hard work of Steve McLean and Ed Jarzembowski in organising this meeting was not better rewarded with greater numbers. A worthy footnote on this point was the swelling of numbers for the afternoon lecture by members of the public, invited by local publicity and, I hope, an idea to be admired and copied in the future. Local geological societies have done much in the past to contribute to museum collections and continue to do so. This is a useful way of recognising their significance.

John A. Cooper, Booth Museum, Brighton

GCG Seminar: New developments in Earth Science exhibitions Natural History Museum 27 November 1997

Some 60 members squeezed into the Mineralogy Department Seminar Room at the Natural History Museum for this meeting which focused particularly on the new Earth Galleries at the NHM, but also included a look at developments at Leiden in the Netherlands.

Following a welcome to the Natural History Museum and a brief history of the Earth Galleries by Dr Robin Cocks, Keeper of Palaeontology and President-elect of the Geological Society, the first contribution from NHM staff described *From the Beginning*, the first of four new galleries due to open in June. Brian Rosen, from the Palaeontology Department, explained how the concept of the gallery, which will tell the story of the Earth through time, was developed. He described how the team had tackled the difficulties of explaining time and the evolution of the Earth in what is quite a small space. The gallery will make use of lots of fossils, including the Aveyel elephants.

Bob Symes, recently retired as Keeper of Mineralogy at the NHM then spoke on the *Earth's Treasury*, part of the next phase of the new galleries. Bob has returned to the NHM as Scientific Adviser for this project, which will look at the Earth's mineral wealth. With the designers, David Bentheim Studios, the project team's design ideas have been subjected to an intense period of internal review. The Director had indicated that he wanted the gallery to be pleasing to the eye, and the Director of Science wanted a strong scientific storyline, so it is intended that lots of specimens will be displayed.

The gallery will emphasize what Bob called the "3 Ps" - Process, Product, and Properties, and will have "a strong start and a stunning finish". An introductory panel with spectacular specimens will draw visitors into the gallery where a curved wall will separate the route through the gallery from a series of bays. These will deal with gems (concentrating on beryl, corundum and diamond), gold, energy, and building stones. There will also be a display of British minerals, particularly those from Devon and Cornwall and northern England. Along one wall of the gallery will be one huge continuous display case - what may well be the largest in the World - of gems, picking up on themes in the bays. The stunning finish will be a wall of silica showing the technology dependent on material as simple as a grain of sand, along with a large monolith carved with the names of all known mineral species.

Bob indicated a few of the problems the project team has had to consider such as the need to work in a secure area when dealing with gems and minerals; the need to acquire new material for touchable exhibits (they cannot use registered specimens); and having to ensure that no specimens will have to be removed from display for research. From this very informative lecture, delivered in Bob's usual entertaining style, all the indications are that this will be a gallery that will set a new standard when it opens in June.

The afternoon session began with Dirk Houtgraaf, Head of Exhibitions and Education at Nationaal Natuurhistorisch Museum in Leiden in the Netherlands. He described his new museum building with its entrance through a 17th century building, leading across a road on a covered bridge to the exhibits, offices and collections which will be housed in a tower block. This new building will bring all of the Dutch natural history collections and curators together for the first time. One of the main features of the galleries dealing with the diversity of life will be a tree of life which will link the different floors of the exhibition area. There were interesting parallels between his aim and that of Bob Symes and the NHM, as both emphasised that the message they wanted the visitor to take away was that of process and product.

The final presentation of the day was by Bill Clark of the NHM's Department of Exhibitions and Education, who spoke on *Earth for today and tomorrow*. This is the working title of the last phase of the new Earth Galleries. It aims to highlight our need for and use of our understanding of the Earth's resources and also to show the role of earth scientists in "a dynamic and positive light". This will be done using large and small scale examples of projects and will draw on both UK and foreign examples.

The outline plans at this stage are for a series of four bays, each with a large and spectacular focal point, and linked by a connecting walkway. The bays will deal with water extraction and distribution; with the search for and extraction of

minerals and with waste disposal; with superquarrying, coastal erosion, river flooding, and large geotechnical projects like the Karakoram Highway; and with energy search for and extraction of fossil oil and gas, and global climate change. While tacking environmental issues, the exhibition will not advocate any one political stance. The walkway through the gallery will show the amounts of materials consumed by one person in a year. It sounds like an exciting and challenging exhibition to design.

He also outlined the Museum's plans for a resource centre, whose working title is *Earthlab*. This project is being coordinated by Alan Timms of the Museum's Education Department and in its first phase will be aimed at keen and interested amateurs as well as A-level students. It will concentrate on British geology and include 2,000 specimens, an enquiry service, databases, and internet access. It will go some way to compensate for the loss of the old regional geology displays in the Geological Museum.

At the end of the meeting, Andy Fleet, Keeper of Mineralogy gave us a belated welcome to his department, outlined the work of his staff and suggested further scope for collaboration. Following the meeting, I felt excited by the new display developments at the NHM and encouraged by the return of specimen-rich displays. Thanks are due to Andy Fleet, Cally Hall, and their colleagues for looking after us so well.

Tom Sharpe, National Museum of Wales

Recent collection management at Clitheroe Castle Museum

Over the past three years, considerable resources have been concentrated on the geology collections of Lancashire Museum Service housed at Clitheroe Castle Museum. Initially, a new documentation system was produced using written 'Standard Operating Procedures' noting the methods of each process (entry, accessioning, cataloguing, storing and later movement). These have acted as a quality standard, which is essential in any system reliant on modern IT techniques, and also as a management tool when introducing new work experience and volunteer staff to relatively intricate tasks.

A computer database has been produced. This is fundamental to the improved accessibility which was a primary aim of the documentation project. As with all such IT systems, this is a compromise and uses a relatively simple 2-dimensional flat file format which has some disadvantages (only realistically problematic for 'hardcore' computer buffs); however, it is easy for technophobes to operate and is able to handle all the complex geological criteria that has been demanded thus far. All the data are held on a single file however there are five different forms (mineral, igneous, sedimentary, metamorphic and fossil) on which data input and editing takes place. This allows stratigraphic or locality searches to find all specimens fulfilling the criteria. The most important fields for indexing have menus from which a choice has to be made which cuts down on mistakes, and as

each choice is prefixed by a number, the computer can order esoteric geological data such as stratigraphy. The five specimen types are stored separately and within each group they are arranged in a complex order produced by the computer. This makes each collection highly accessible with all intimately associated material in close proximity (though it is a long and tedious process to arrange initially).

To date we have completely documented, labelled, indexed, and efficiently stored over 5000 specimens. This includes the majority of the mineral and petrology collections. A start has been made on the fossils, but it may well be some years before they are finished. If anyone wishes to access these collections, or if you would like a printout of specific parts, please feel free to get in touch.

Alistair Bowden, Clitheroe Castle Museum, Clitheroe, Lancashire BB7 1BA.

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