

**No. 26**  
**June 1998**

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**New Members**

GCG is pleased to welcome the following new members: A J Rundle, Richmond; Neville Pledge, South Australian Museum; John Aram, Grantham; David Fowler, Southampton.

**Exhibitions 1998**

Tracking dinosaurs Museum of North Devon, The Square, Barnstaple 7 June - 13 September; Bristol City Museum, Queen's Road, Bristol 19 September - 22 November.

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

Myths and monsters Natural History Museum, Cromwell Road, London until 13 September

Missing Links - alive! City Art Centre, 2 Market Street, Edinburgh until 12 July.

**Newish publications**

Fossils of the Upper Ordovician edited by David Harper and Alan Owen, 1996. Palaeontological Association, 312pp. ISBN 0 90170 257 9, £16.00.

Evolution BBC Learning Support, 1998. 32pp, ISBN 1 86000 114 9, £4.95. Available from Evolution, PO Box 7, London W12 8UD (cheques should be made payable to BBC Education).

A guide to the official archives of the Natural History Museum, London by John Thackray, 1998. London: The Natural History Museum, 173pp. £25.00.

Whisky on the rocks by Stephen and Julie Cribb, 1998. Keyworth: British Geological Survey, 72pp. ISBN 0 85272 290 7, £6.50.

**BBC Fossil Roadshow 1: the couch curator's view**

On the weekend of 27-28 March, BBC2 ran a number of geology and natural history programmes on the theme of evolution. These included three visits to the Fossil Roadshow at the Natural History Museum, introduced by Peter Snow and Michaela Strachan from *Tomorrow's World*. Of particular interest to the watching curator were the performances of the experts. Paul Ensom drew the first short straw with the unidentifiable oddity that curators always dread. Tentatively identified as a rudist and taken away for collegial consultation, it was later returned to its owner with that useful phrase, "one for the mantelpiece". The second short straw came to Simone Wells, who got the kid who refused to believe that his dinosaur claw was, in fact, a *Caninia*. Other highlights included Neale Monks recommending Araldite to repair a broken belemnite: no doubt William Lindsay of the NHM Palaeo Lab will wreak his revenge. The best part, though, was when Peter Snow dropped and broke a kid's prize belemnite on the ground outside.

Viewers saw a wide range of material being dealt with by the experts: mammoth bones, ammonites, Brazilian fish, crinoids, Devonian trilobites, a Purbeck turtle, and insects in amber. We even saw a cuttlefish from Taunton Museum's collection. It was informative to see a few fakes and 'enhanced' specimens as well, to make people aware that they should take care when they buy material.

With a few interspersed films about collectors and collecting, the three programmes gave valuable airtime to fossils and geology in museums.  
Tom Sharpe, National Museum of Wales

### **BBC Fossil Roadshow 2: a view from the stalls**

The general public were invited to bring their fossils to the Museum for identification by staff of the Department of Palaeontology, and perhaps be filmed by the BBC actually having items of particular interest examined. The format was similar to that of the popular Antiques Roadshow.

Visitors were directed with their specimens to the appropriate experts who were seated behind rows of tables laden with a selection of suitable reference books, comparative specimens, microscopes and hand lenses. My own stall dealt with echinoderms, and I saw many good specimens. The most spectacular of these were two large slabs with ophiuroids and crinoids prepared out on the surface.

But most specimens I examined were echinoids preserved in flint - Echinocorys, Micraster and Conulus in their various guises. Explaining what fossils were, how they came to be preserved in flint and what happened to them afterwards was repeated many, many times.

Some 6,000 people visited the Museum on the Saturday, with about 1,000 bringing fossils for identification. The event was deemed highly successful, both for the BBC and for the Museum, and although tiring for those who had to talk ceaselessly at high volume all day in a warm, humid environment, was generally thought very worthwhile. Perhaps the BBC should repeat the exercise here in London and regionally?

Dave Lewis, Invertebrates and Plants Division, Natural History Museum

### **BBC Fossil Roadshow 3: Uncut**

The main thrust of the action took place along Gallery 30 with the ichthyosaurs looking on. Scientific staff dutifully manned tables reflecting their own speciality, although throughout the day many specialists were recruited to generalise as the flow of micro-fossils and bryozoa were understandably less than the cephalopods and other molluscs.

The more curious staff (or, in fact, anyone caught walking down Gallery 30) were instantly transformed into 'sifters' who spent their time rummaging through people's bags and guiding them to the appropriate expert; or if spectacular enough, on to fame and fortune in the Main Hall for filming.

In addition to the mainstay palaeontologists, members of staff from both Mineralogy and Library Services were on hand to help with any tricky enquiries. A fossil casting workshop was also run for children in the discovery centre.

Advice was also on hand from the Palaeontology Conservation Unit. We were located in the Main Hall, which meant we were in prime position to see the stars of the programme in action. Advice was available on all aspects of preparation, conservation and replication with a large selection of tools and materials displayed for the public to examine. Luckily, being out of Gallery 30 meant we were less fraught than many of the scientists. Nevertheless, over the two days a large range of people came for advice, from small children wanting to know how to look after their special fossil ammonite, art students enquiring about casting methods; to more enthusiastic amateurs with beautifully prepared specimens, wanting to know about air-abrasive techniques.

At the end of the two days, a good time was said to be had by all, with an excellent opportunity to see some wonderful and varied specimens and, of course, Michaela Strachan in those leather trousers!  
Glenys Wass, Palaeontology Conservation Unit, Natural History Museum

GCG Training Course: New techniques for long-term storage of oxidising pyrite - a solution  
Cambridge 1 October 1998.

GCG Seminar and study visit  
Leiden and Maastricht, The Netherlands  
29 October-1/2 November 1998

### **Forthcoming meetings and seminars**

*15-19 June 1998 University of Leicester*

Department of Museum Studies, University of Leicester, Leicester City Museums and Leicestershire Museums, and supported by BCG and GCG: Natural Science Curatorial Course

A practical introduction to working with natural science collections including collecting, recording, identification and enquiries, systematics, preservation, collection care and management.

Contact: Simon Knell, Department of Museum Studies, 105 Princess Road East, University of Leicester, Leicester LE1 7LG tel 0116 2523963, fax 0116 2523960, e-mail [sjk8@le.ac.uk](mailto:sjk8@le.ac.uk)

*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.

See Coprolite 25, March 1998, for full programme and booking form.

Contact: 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](mailto: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: Galina 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](mailto:mm_98@mineral.geol.pu.ru)

*13-14 July 1998 University of Luton*

Geotechniques '98

The programme for this meeting includes Lorraine Cornish (Natural History Museum) on fossil facsimiles; Owen Green (University of Oxford) on new approaches to palaeobiological techniques; Andrew Newman (University of Newcastle) on pyrite oxidation in museum collections; and Steve Laurie (Sedgwick Museum).

Conference fee: £45.00 (both days); £25 (one day).

Contact: Brian Hunt, Faculty of Science, Technology and Design, University of Luton, Park Square, Luton LU1 3JU tel 01582 489298, fax 01582 489212, e-mail [brian.hunt@luton.ac.uk](mailto:brian.hunt@luton.ac.uk)

*1-3 September 1998 University College, Worcester*

1st UK RIGS Conference

With the RIGS initiative forging ahead, there are many issues that are the subject of debate, and there is clearly a need for those making policy and those implementing it at local level to have a forum. It is hoped that this conference may give rise to an improved structure for the movement.

Contact: Dr Peter Oliver, Director, Hereford and Worcester RIGS Group, Department of Geography, University College Worcester, Henwick Grove, Worcester WR2 6AJ tel 01905 855184, fax 01905 855132, e-mail rigs@worc.ac.uk

*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.

*7-8 September 1998 Bournemouth University*

8th Symposium of palaeontological preparation and conservation

Contact: Mrs Jane B Clarke, 65 Oakmount Road, Chandler's Ford, Hampshire SO53 2LJ tel 01703 252309, fax 01703 904364, e-mail jane@geoden.demon.co.uk

*9-12 September 1998 Bournemouth University*

46th Symposium of vertebrate palaeontology and comparative anatomy

Contact: Mrs Jane B Clarke, 65 Oakmount Road, Chandler's Ford, Hampshire SO53 2LJ tel 01703 252309, fax 01703 904364, e-mail jane@geoden.demon.co.uk

*9-11 September 1998 Chancellors Conference Centre, University of Manchester*

MDA 1998 Conference: The cultural grid: content and connections

Contact: Katherine Futers, MDA, Jupiter House, Station Road, Cambridge CB1 2JD tel 01223 315760, fax 01223 362521, e-mail kfuters@mdocassn.demon.co.uk

*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: Has the past a future?

11.00 until 5.00, preceded by coffee and followed by wine and savouries.

Speakers include

David Oldroyd: J E Marr and the Lake District

Matthew Parkes: Site protection in Ireland

Philip Doughty: Survey of progress in conservation of specimen collections

Steve McLean: Rescuing an orphan mineral collection - the Newcastle University Mineral Collection at the Hancock Museum

John Martin: A task of dinosaur proportions: collecting, conserving and exhibiting the Rutland dinosaur

John Thackray: The problems of preservation of today's electronic records

Michael Collie: The George Gordon archive in Elgin.

The final programme will be published in Geoscientist. There is no need to register in advance, but a charge of £5.00 will be made on the door to cover the expenses of the meeting.

Contact: John Thackray, The Natural History Museum, Cromwell Road, London

SW7 5BD tel 0171 938 9238, e-mail j.thackray@nhm.ac.uk

*1 October 1998 Geological Conservation Unit, Sedgwick Museum, Cambridge*  
GCG training course: New technologies for long-term storage of oxidising pyrite - a solution? Chris Collins, Geological Conservation Unit, Cambridge.

A one-day (1000-1730) practical workshop looking at the problems associated with pyrite decay and possible cost-effective solutions. To book please complete the form on page 19, and return it to Chris Collins, Conservator, Geological Conservation Unit, Bullard Labs, Madingley Rise, Madingley Road, Cambridge, CB3 0EZ. Please enclose a cheque for £30.00 made payable to University of Cambridge by 1 September 1998.

*14-15 October 1998 University of Wales, Cardiff*

English Nature, National Museum of Wales and University of Wales Cardiff: A future for fossils - the sustainable management of our heritage.

Much work has been done on developing and promoting the 'responsible collecting' ethic as essential to the conservation of our fossil heritage. This symposium intends to take the next step and bring together those with experience of putting palaeontological site conservation into practice. Where, how and why has palaeontological site conservation worked and similarly, what have been the problems and failures. Experts and practitioners from the UK and Europe will be involved in what will be an historical and exciting symposium. The presentations, findings and results of the symposium will guide and inform future palaeontological conservation policy and initiatives and the proceedings will be an indispensable guide to palaeontological site conservation into the new millennium. Keynote speech: The palaeontological resource of Great Britain - our fossil heritage: Dr Euan Clarkson, President, Palaeontological Association.

Sessions include: Using the fossil resource; managing the fossil resource - problems and best practice

Special debate: 'Is current legislation adequate to protect our fossil heritage?'

Papers and presentations on any aspect of fossil site conservation and management are invited.

Registration fee: £20.00 for two days (£10.00 per day). Registration after 10 July £30.00 for two days (£15.00 per day)

Contact: Mrs Liesbeth Diaz, Department of Earth Sciences, University of Wales Cardiff, PO Box 914, Cardiff CF1 3YE tel 01222 874830, fax 01222 874326, e-mail Diaz@cardiff.ac.uk

*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.

*29 October - 1 / 2 November 1998 Leiden, The Netherlands*

GCG Study visit: A European adventure (continued).

This trip will comprise three full days in the Netherlands. We will spend Friday 30 October at the National Natural History Museum, Leiden, looking at the new developments the museum has undertaken recently, and exploring the geology collections. Dr. Winkler Prins and his staff will be showing us around. Our group will then travel to Maastricht (Limburg, SE Netherlands) for the second day to look at the Maastrichtian exposures in St. Pietersberg Quarry with John Jagt, and then onwards to the Maastricht Natural History Museum. The third day will be spent looking at the enormous engineering project of the Delta werken, the large dyke constructed in Zeeland to protect the coast after the flood disaster in 1953. The itinerary at this stage is still fluid and there may be other possibilities such as visiting the coast of Zeeuwsch Vlaanderen (part of Zeeland bordering Belgium)

where Tertiary fossils are washed ashore. Outward travel will take place on the Thursday and return travel on the Sunday evening/overnight or on Monday morning. These details have yet to be finalised. There will also be plenty of opportunities to sample the native ales and foods!

For full details (including final costs, itinerary and travel arrangements) please complete the form on page 19, and return it to: Steve McLean, The Hancock Museum, Barras Bridge, Newcastle upon Tyne, NE2 4PT tel 0191 222 6765, fax 0191 222 6753, 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.

*19-22 March 1999 Dorset County Museum, Dorchester, Dorset*

Palaeontological Association: Life and environments in Purbeck times

The type Purbeck is represented by sediments deposited in freshwater, brackish, hypersaline and rarely marine/quasi-marine environments. Purbeck is now recognised as one of the world's most important mid-Mesozoic tetrapod sites. The history of research dates back over 150 years and with much new data from many fields of study, is ripe for review. This symposium aims to cover the stratigraphy, sedimentology, palaeontology and palaeogeography of the type Purbeckian (Upper Jurassic-Lower Cretaceous) in both European and world contexts.

Contact: Dr Andrew Milner, Department of Biology, Birkbeck College, Malet

Street, London WC1E 7HX, fax 0171 631 6246, e-mail  
a.milner@biology.bbk.ac.uk

*20 May 1999 Geological Society, Burlington House, Piccadilly, London.*

GCG Seminar: 25 Years of GCG!

May 1999 is GCG's 25th anniversary. This seminar will examine the original aims and objectives of GCG, review the work of the Group over the last 25 years, and set the agenda for the future, with the focus of the meeting on collections. It is hoped to include speakers who were associated with the Group from its foundation. If you would like to give a talk please 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

### **Musical curators**

At Warwickshire Museums, the Curator, Bill Allen, has retired; John Crossling, formerly Keeper of Geology and Deputy Curator has been appointed Divisional Manager for Warwickshire Libraries based at Stratford upon Avon Library, and took up his post on 1 May; Mike Bishop, Curator at Torquay Museum has been appointed Museums Officer at Wight Heritage on the Isle of Wight and takes up his post on 8 June. Louise Smith, Acting Director of the Museum Documentation Association, has been formally appointed Director.

### **GCG Committee**

At its meeting on 7 May, GCG Committee appointed Tiffany Foster of the Department of Palaeontology at the Natural History Museum as a Committee Member. John Crossling, GCG Minutes Secretary, resigned as he has taken up a new job in Warwickshire. Committee Member Alistair Bowden of Clitheroe Castle Museum agreed to act as Minutes Secretary until the AGM in December.

### **Sheffield Museums**

The advisory group set up by Sheffield City Council, which is establishing a charitable trust to run the city's museums, has met for the first time. The advisory group includes GCG Chairman John Nudds and Derek Lott, representing the Biology Curators' Group. The new trust will have a base grant of £1.2 million from the city council, along with an Arts Lottery Stabilisation Grant of £1.15 million. The trustees have yet to be appointed, but the city will retain ownership of the buildings and collections.

### **Buckinghamshire Museums**

Following representations made by GCG to Buckinghamshire County Council, the Museums and Galleries Commission, and the area museum service about the loss of curatorial posts at Aylesbury Museum (see Coprolite 25), GCG has learnt that sufficient funding has been found to retain three curatorial staff, including the Keeper of Natural History, for one year. It seems the council is looking to set up a trust to run the museums service.

### **Guidelines for the curation of geological materials**

Copies of the Guidelines (without binders) are still available, price £8.50, from the Geological Society Publishing House, Unit 7, Brassmill Enterprise Centre, Brassmill Lane, Bath BA1 3JN, tel 01225 445046, fax 01225 442836.

### **Edinburgh Geological Society**

Bill Baird, recently retired from the Royal Museum of Scotland and current President of the Edinburgh Geological Society, is keen to foster closer links between the Society and GCG. GCG members are invited to the Edinburgh society's lectures and field excursions, which this year include visits to Hexham,

Dunkeld and Lochmaben. For further information about the excursions, contact A D McAdam, 39 Clermiston Road, Edinburgh EH12 6XD, tel 0131 539 1060.

### **Join the Geol Soc**

Since its foundation, GCG has been an Affiliated Group of the Geological Society of London. This brings the Group certain benefits, and the Society sees the Specialist Groups' meetings programmes as the core of Geol Soc's activities. Museum geologists are the public face of the science and we have a special role to play in the Society. GCG would encourage all geology curators to consider membership of their national professional body. The main categories of membership are Fellow, Chartered Geologist, and Associate Member. For further information about the Geological Society, contact Jackie Maggs, Membership Manager, Geological Society, Burlington House, Piccadilly, London W1V 0JU, tel 0171 434 9944, fax 0171 439 8975, e-mail maggsj@geolsoc.org.uk

### **Planes, automobiles, and Shank's mare: the circuitous travels of one copy of The Geological Curator**

As a copyright library, Trinity College Dublin receives, by law, a free copy of The Geological Curator. Its movement from the point of production (the computer in my office) to its final home (on shelves in my office) makes interesting reading and illustrates an apparently ludicrous situation. Trinity and the other copyright libraries use an agent to collect copyright material and any change in practice (however sensible) by GCG would probably cause major administrative problems, and so the status quo will be maintained.

The Geological Curator emerges as camera ready copy from my PC, then travels 5 miles across Dublin to the printers, and 5 miles back again to Trinity College Geology Department for packing and distribution; then it goes 322 miles to the copyright agent in London, and 322 miles back to Dublin to the Main Library at Trinity College where I collect it and bring it back to my office, where the copyright issues reside, on shelves just 50 inches from the printer where it first appeared!

Patrick Wyse Jackson, Editor, The Geological Curator

### **Launch of Touch Time**

Warwickshire Libraries and Heritage has launched a new computer-based information, Touch Time at Southam Library. Developed in collaboration with Warwickshire College, Touch Time will bring to life the diverse range of social, historical and environmental materials and information Libraries and Heritage hold. This provides an interesting and interactive opportunity for the public to experience them.

Based on touch screen technology, Touch Time will be continuously expanded over the coming years with new elements being added. Starting with geology, then natural history, followed by archaeology and social history. The high quality computer display will include photographs, maps and animation. The Geology of Warwickshire will include erupting volcanoes, photographs of fossils such as Dasyceps, artists' impressions of ancient environments, and aerial photographs of quarry sites.

The work on Touch Time has been carried out by the lecturers and students at Warwickshire College, Leamington Spa, and is part of the B.Tec Course and Professional Development Diploma in Design. For the students it will be their first opportunity to work on a real commission.

John Crossling, Warwickshire Museums



### **Dinosaurs in space**

A skull of the Late Triassic dinosaur, *Coelophysis*, from the collections of the Carnegie Museum of Natural History in Pittsburgh was taken on the Space Shuttle Endeavour to the Mir Space Station in January. The museum's Director, Dr Jay Apt, a former astronaut, said, "This remarkable opportunity to marry Earth's history with humankind's future is what the Museum of Natural History is all about." How's that for a mission statement?

### **NHM policies and procedures**

The Natural History Museum has published its Curatorial Policies and Collections Management Procedures for the Life and Earth Sciences Collections. The 35 page document describes the scope of the collections, and policies on acquisitions and disposal, destructive and invasive sampling, audit, documentation, loans and risk management. Appendices include current priority areas for collecting; a code for collecting biological and geological material; bioprospecting; the use of specimens for DNA sampling; and contract terms for the protection of museum objects.

### **Tourism in geological landscapes**

Ulster Museum, Belfast 23-26 April 1998

The increasing importance of geotourism was reflected by the large attendance (nearly 100 delegates) at this conference sponsored by GCG and the Geoconservation Commission of the Geological Society and supported by the Ulster Museum, the Geological Survey of Northern Ireland, and the Environment and Heritage Service (Northern Ireland). Early arrivals were treated to a tour of Belfast's building stones by Alan Bell, a consultant geologist, but the main conference programme began with welcomes from Peter Crowther, Keeper of Geology at the Ulster Museum and from Michael Houlihan, Director of the newly-established National Museums and Galleries of Northern Ireland, who had taken up his post just ten days before this meeting.

As we were in Northern Ireland, it was very appropriate that the first session should concentrate on one of the world's great geotourism sites, and the most recognised image of the island of Ireland, the Giant's Causeway. Phil Doughty, Head of the Sciences Division at the Ulster Museum, outlined the geology of this part of the Antrim coast and the history of the Causeway's fame, from the first widely circulated engraving in 1743 to the successful bid for World Heritage status. The Causeway is now in the ownership of the National Trust which acquired the land in 1961. Ian McQuiston, the National Trust's Director for Northern Ireland, described the management challenges of the site which receives around half a million visitors a year. With such numbers, visitor pressure and the erosion it causes are clearly problems of which the Trust is aware. Added to this are the difficulties of managing a hazardous site with its natural rockfalls and landslips. A recent geomorphological study has led to the production of hazard maps which identified an increase in hazard eastwards and this has helped with management decisions concerning public access to certain parts of the coast.

Tourists and scientists were first attracted to the Causeway by engravings and woodcuts which first appeared in 1694, and became more widely available in the early part of the 18th century. Martin Anglesea, Keeper of Art at the Ulster Museum, explained how woodcuts and engravings were produced, and reviewed the fascinating history of the illustration of the Giant's Causeway. These images played an important part in the great neptunist-plutonist debate of the late 18th century, and established the Giant's Causeway as a key geological site.

The second session, chaired by Colin Prosser of English Nature, began with Jonathan Larwood, also of English Nature, who discussed how, for example, GCR sites could relate to geotourism and the diverse nature of the geotourism audience. He also highlighted the need for sustainable development of geotourism sites and gave the (in)famous Ludford Lane Ludlow Bone Bed section as an example of geotourism conflict. He stressed the need for an holistic approach to geotourism and the interpretation of sites, and this was to become a recurring theme of the conference.

The meeting then turned to another key geological site, the Jurassic of the Dorset coast, currently bidding for World Heritage status. Malcolm Turnbull, Coastal Policy Officer of Dorset County Council illustrated the range of coastal landscapes in Dorset and explained how tourism is impinging upon it. He focused particularly on the changing patterns of tourism, with fewer long annual holidays, and an increasing number of short breaks and special interest holidays. There is a need for integrated policies to consider the variety of needs and interests of an area like the Dorset coast, and to this end the Dorset Coast Forum was established in 1995 to encourage cooperation. The Jurassic Coast Project, a feasibility study for the development of geotourism along the Dorset coast, was described by Richard Edmonds, the Project Officer. One aim of the project is to use geotourism to regenerate the Isle of Portland, following the departure of the Royal Navy, and to ease pressure on the more popular Dorset coastal sections by encouraging the use of sites on Portland, especially the Portland Stone Quarries.

Geotourism developments in Dudley, another potential World Heritage site, were described by Colin Reid of Dudley Museum and Graham Worton of the Black Country Geological Society. The area includes the Wren's Nest, the first geological National Nature Reserve in the UK, and the nearby Castle Hill along with Dudley Zoo and the Black Country Museum which would be linked by reopening long-disused canal tunnels and caverns beneath the hills. Geotourism would here play a major role in urban regeneration. Graham outlined an exciting plan for a new geological visitor centre adjacent to the zoo, which would redress the balance between the historical significance of the area, which is local, and the geological significance which is national or international. The centre, built to resemble a trilobite, would use the morphology of the animal as exhibition space with, for example, a planetarium inside the glabella.

The second day of the conference opened with a keynote lecture by Richard Fortey FRS of the Natural History Museum. He emphasised the wonderful geodiversity of the British landscape, and some of the remarkable connections one can make, for example, between Iapetus Ocean and the roofs of South London (Cambrian slate, of course). Quoting Thomas Hardy, he suggested the potential for links between literature and geotourism and the possibilities for geotours to link with art, history, vernacular architecture, and the native flora.

This session, chaired by Tony Bazley, formerly Director of the Geological Survey of Northern Ireland, continued with an Irish theme, looking at several developments in Ulster. The first of these, presented by Patrick McKeever of the Geological Survey of Northern Ireland, described the joint initiative of the two Irish geological surveys, Landscapes from Stone. Following a pilot study in 1994, and partially funded by the EU Special Support Programme for Peace and Reconciliation, the project was launched in 1997 with the aim of promoting geotourism in the twelve northern counties of the island. The project will integrate all aspects of the natural environment with the existing tourism infrastructure, and all products will be aimed at the general public. Local authorities, councils and local groups have also been involved to ensure input at

community level. The surveys have been working closely with the Northern Ireland Tourist Board and Bord Failte in the Republic and their overseas offices, and establishing links with tour operators at home and abroad. The project is also intended to market the region as a field destination to the geological community, through the medium of trade stands at major European and North American geological meetings. Scenic drive leaflets have already been produced and associated maps and guides are also planned for the future.

Paul Lyle of the University of Ulster, and author of the new excursion guide to the Causeway coast, in his talk on landscape tourism opportunities in the Antrim Basalt area, contrasted the overexploitation of the Giant's Causeway with the remoteness of Staffa, at the other end of the mythical causeway. He went on to describe some alternative sites in the Antrim Basalt Field which could help ease visitor pressure on some of the most heavily visited localities.

The link of literature and landscape, suggested by Richard Fortey, was continued in the theme of a talk by Daphne Purdy, Countryside Officer of Dungannon District Council. She spoke on the development of the Carleton Trail in the Clogher Valley of County Tyrone. This area was home to the Irish novelist William Carleton (1794-1869) who also set some of his writings here, describing peasant life before the Famine. In discussing the idea of 'destination branding', she emphasised that the label must be an identity with which local people are comfortable. The 65-mile Carleton Trail, taking in landscapes and places with Carleton connections, cost £20,000 for signposting, waymarking, leaflets and interpretative panels.

The fourth conference session began with a keynote address by Tom Hose of Buckinghamshire University College. Taking a number of examples of current geotourism interpretative media, he criticised the language and style they used, amusing the audience with quotes from panels, guides, and displays. However, curators who have agonised long and hard over exhibition texts and who know how difficult the production of good, readable, simple, clear, scientifically accurate text is, would be less amused. We all find it easy to criticise other people's exhibitions.

John Morris (Geological Survey of Ireland) focused on mining heritage and tourism, describing sites where work is being done or where there is potential for restoration and geotourism. He pointed out that even polluted waste sites are worth preserving as they can form unique ecosystems, and he criticised sites where the buildings had been preserved and restored, but the surrounding waste tips had been removed or landscaped, losing the context and atmosphere of the site. He showed several videos of former mining towns and sites in British Columbia, and their contrasting styles of interpretation. Some of the most successful being gold rush towns where the original buildings survive, and there are interpretative programmes involving the town's 'inhabitants' and recreated events.

Matthew Parkes, also of the Geological Survey of Ireland, spoke about the GSI's Irish Geological Heritage Programme, which is similar to and parallel with the Geological Conservation Review in the UK. Although site selection is still in its early stages, the initial two projects will deal with karst sites and Cambrian to Devonian palaeontological sites. He illustrated potential geotourism sites, and stressed the need for involving the local community. Giving them a sense of pride in their important local site provides a means of protecting and policing of the site. Promotion and pride goes hand-in-hand with designation.

He was followed by John Gunn of the Limestone Research Group at the University of Huddersfield who described the landscape of Cuilcagh Natural History Park in County Fermanagh. Set in a karst area with peat overlay on the slopes, Cuilcagh Mountain has a very bleak, almost periglacial, summit, with dynamic, overhanging rock faces and scree fields. Sinks and caves are also developed, unusually, within the blanket peat. Geotourism in this area was fairly informal, with visits mainly by cavers, until 1985 when the Marble Arch Caves were opened to the public. Since then, several National Nature Reserves and a long-distance footpath, the Ulster Way, have been established in the area. To enable access off the Ulster Way to the summit of Cuilcagh Mountain, a 99-year lease has been obtained for a large strip of land. At present, the route down has to be along the same path, so the plan is to apply for a lease on another area of land to create a circular route to the summit.

The fifth session started after lunch with Robert Theadgould of Scottish Natural Heritage who spoke about the responsibilities of SNH to promote earth heritage and conservation, and reminded us again of the need to package it for a wider audience than just the specialist. SNH interpretative policy, based on Freeman Tilden, is to provoke curiosity, to relate to people's experience, and to reveal a memorable message. Their largest current interpretative project is the £600,000 redevelopment of Knockan Visitor Centre in Assynt. The present centre is now 25 years old and receives 15,000 visitors a year. The new development could increase this to 25,000, and is part of an interpretative programme throughout Assynt at ten satellite sites with panels and trails. He also described interpretative panels SNH has installed on the Caledonian Macbrayne ferry to Rum, and at the spectacular roadcut in the Lewisian at Laxford Brae.

Ian Thomas of the National Stone Centre, in the first paper on this session's theme, From quarry to streetscape, outlined how closely the quarrying and mining industries relate to our everyday lives, but suggested that their image needs to be changed and promoted. He pointed out that with 8 million pupils in the country, the ideal focus was on school groups. The National Stone Centre has recently revised and improved its handouts, including information in cartoon form, in order to try and get messages across to children in a manner to which they can relate.

Eric Robinson of the Geologists' Association spoke on the GA's role in geotourism, with its early field excursions by train and charabanc, and its tradition of publishing field guides. The title of his talk, 'Clinging to the necessary monument', reflected the variety of geology available in the urban landscape where most of us live. He praised the wide range of building stone trails being produced by local organisations. As any participant on one of Eric's building stone tours can testify, he is passionate about the use of stone in our cities and the immense teaching potential there.

The author of one of those building stones trails, Patrick Wyse Jackson of Trinity College, Dublin then spoke on his work promoting geology through the building stones of Dublin. His achievements include posters in cafes describing the marble tabletops, and building stones on calendars, indicating the need to be imaginative in promoting geology.

The built environment theme continued with Peter Doyle (University of Greenwich) who referred to the potential of stone labelling for interpretation. He gave examples of stone benches labelled with lithology, age and origin, and explained that this offers benefits of product placement for the stone industry as well as opportunities for geologists. Other urban examples are the use of rock reconstructions of the type pioneered in the grounds of the Crystal Palace.

The final conference session, on the theme of getting the message across, opened with Stuart Monro, Director of Dynamic Earth, a new geological attraction due to open in Edinburgh in the May 1999. Situated in classic Hutton country at the foot of Salisbury Crags, and funded by £15 million of Millennium money, the centre will take a process-oriented approach to earth science. Taking the visitor back in time to view the Big Bang from the bridge of a spaceship (what space?), the exhibition continues with the volcanoes and earthquakes of The Restless Earth. Through Shaping the surface, and Casualties and survivors (the story of life), the visitor is then led through a series of environments such as the oceans, the polar regions and tropical rainforests (where it will really rain!). With no actual geological specimens on display, Dynamic Earth is intended to be complementary to the geology galleries at the Royal Museum of Scotland, and should be an exciting and spectacular showcase for the science.

In the final contribution to the conference, Chris Darmon, Editor of *Down to Earth*, reviewed a wide range of geological field guides, and commented on the success or otherwise of the various formats adopted. He gave a series of common sense guidelines to consider when preparing such guides, and distributed a few among the audience for instant review.

The main conference proceedings were followed by two field excursions to look at geotourism developments in Ireland. The first was to Marble Arch Cave, recently opened to the public, and the limestone country of County Fermanagh. This excursion was led by Patrick McKeever of the Geological Survey of Northern Ireland who has produced several landscape and geology guides of the area aimed as part of the Landscapes from Stone Project. Following the spectacular underground tour of the cave, where the guides coped admirably with straggles of geologists who photographed anything that didn't move, we examined a number of karst features on the way to, and at, the nearby Killykeegan National Nature Reserve. We had the opportunity to contrast the styles of interpretative panels here with those at our next stop, Shannon Pot in County Cavan in the Republic.

The second day's excursion, led by Phil Doughty, was along the Antrim Coast Road to the Giant's Causeway, the highlight of the conference for those who had not previously seen this famous site. The construction of the road itself, between 1832 and 1842 is an impressive achievement, as are the recent engineering works to cope with mudflows and rockfalls where Chalk and basalt overlie Lias clays. The Giant's Causeway lived up to expectations; not only was it worth seeing, but it was most certainly worth going to see. Where better could such an enjoyable, stimulating and inspiring conference on geotourism be brought to a close than the Giant's Causeway, a geological World Heritage Site?

Whether curators like it or not, museums are part of the geotourism industry, and as collection and information resource centres, museums are ideally placed to play a major role. Many museums have curators who are experienced interpreters and communicators, and should be taking the lead in geotourism provision. This was an exceptional meeting, and will surely set geotourism in the right direction. Ken James, Phil Doughty, Pete Crowther, Michelle Keenan and their colleagues at the Ulster Museum, along with all the contributors to the conference, deserve thanks.

### **Commission commissions survey of surveys**

The Museums and Galleries Commission has commissioned the Scottish Institute of Maritime Studies to undertake a survey of UK museum collections surveys

since 1983. GCG Chairman has been in touch with Ann Gunn, research assistant on the project, to tell her of the work GCG, such as the 1981 Doughty Report, CING, and the Directory, as well as the current work of GCG Recorder Glenys Wass to update the Doughty survey.

### **Wales yearbook**

The National Museum of Wales has published the first issue of a new yearbook describing the work of the Museum's Collection and Research Division during 1997. Entitled *Amgueddfa*, it is the fourth NMW publication to bear that name, and includes articles by Mike Bassett on his research in the Middle East; Richard Bevins on a review of the mineralogy of Welsh mine sites; and Steve Howe on the Tracking Dinosaurs exhibition. The yearbook is available from the Bookshop, National Museum of Wales, Cathays Park, Cardiff CF1 3NP, price £4.95 plus 80p postage and packing.

### **Inside the British Library**

The British Library has launched inside, a fully integrated online information service which provides access to over 250,000 journals held by the library, 20,000 current journals that can be searched to article title level, and 16,000 conference proceedings searchable to paper title level. Available on the World Wide Web or on CD-ROM, the software allows online ordering of documents with a variety of options for delivery, including a 2 hour fax service, overnight fax, post or courier services. A one year subscription to inside web starts at £500.00 for a single password licence, or £600 for a subscription to the inside science CD-ROM. For further information, contact inside, The British Library, Boston Spa, Wetherby, West Yorkshire LS23 7BQ or visit the British Library Web site: <http://www.bl.uk/inside/>

### **Mineral, fossil and gem shows 1998**

12-13 June 14th Iver Heath Show, Village Hall, Iver Heath, near Uxbridge, Middlesex 1530-1900 12 June, 0900-1500 13 June. Contact: Paul Lowe tel 01872 223227.

11 July Medway Mineral and Fossil Fair, Community Hall, Hampstead Valley Shopping Centre, Gillingham, Kent 1000-1700.

12 July Oxford Summer Show, Oxford Conference Centre, 333 Banbury Road, Oxford 1000-1630. Contact: Endsleigh Book Company, tel 01953 788169.

29-30 August BLMDA International Gem and Mineral Fair, Old Swan Hotel, Swan Road, Harrogate, Yorkshire 1000-1700.

12 September Southampton Mineral and Fossil Fair, The Avenue Hall, The Avenue, Southampton 1000-1630.

3-4 October Rock 'n' Gem Show, Cheltenham Racecourse, off Evesham Road, Prestbury, Gloucester 1000-1700 Contact: 01628 621697.

10-11 October 16th Annual Rock Exchange, Lady Manners School, Shutts Lane, Bakewell, Derbyshire 1030-1730.

24-25 October BLMDA Gem and Mineral Fair, Regents Park Marriott Hotel, Swiss Cottage, London NW3 1000-1700.

31 October-1 November Rock 'n' Gem Show, Kempton Park Racecourse, Staines Road East (A308, J1 M3), Sunbury, Middlesex 1000-1700. Contact: 01628 621697.