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**No. 58**  
**March**  
**2009**

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### **Subscriptions reminder**

Subscriptions were due on 1 January 2009. You should have received your personal subscription invoices by now. Please send your payments back to me as soon as you can as it makes my life a lot easier if I don't have to send out further reminders.

If you pay by Standing Order, please check that you are paying the new amount (£15 UK or £18 overseas). There are still several people who have not done this - you will be invoiced for the difference - and for the amount you owe from last year as well. Subscriptions unpaid by 1 April 2009 will be deemed to have lapsed.

Cindy Howells, Department of Geology, National Museum of Wales, Cathays Park, Cardiff, CF10 3NP email cindy.howells@museumwales.ac.uk

### **Musical curators**

**Stig Walsh**, previously at the Natural History Museum, is now Curator of Vertebrate Palaeontology at the National Museum of Scotland.

### **New members**

GCG is pleased to welcome the following new members: **Michael Batty**, Poynton, Cheshire; **Claire Sturnam**, Portsmouth City Museum; **Karen Bell**, Dronagan, Ayrshire; **Simon Harris**, Barnt Green, Birmingham; and Weiss Earth Science Museum, Menasha, Wisconsin.

### **Mike Curtis and John Essame**

Members will be saddened to hear of the deaths of Mike Curtis, formerly Keeper of Geology at Bristol City Museum, and of John Essame from Gloucestershire, a long-standing member who joined in 1974.

### **Exhibitions 2009**

*Darwin: a revolutionary scientist* National Museum of Wales, Cathays Park, Cardiff

*Darwin: big idea big exhibition* Natural History Museum, Cromwell Road, London until 19 April

*Darwin's voyage of discovery* Plymouth City Museum, Drake Circus, Plymouth until 18 April

*Darwin the geologist* Sedgwick Museum, Downing Street, Cambridge opens July

*From coal to carnations*: Wrexham County Borough Museum, County Buildings, Regent Street, Wrexham until 18 April

*Dinosaurs in your garden* Wrexham County Borough Museum, County Buildings, Regent Street, Wrexham 1 May– 5 July

### **Fossil, mineral and gem shows 2009**

**14-15 March Kempton Park Racecourse**, Staines Road East (A308) Sunbury on Thames, West London

**28-29 March Cheltenham Racecourse**, Prestbury Park, Cheltenham, Gloucester

**4-5 April Brighton Racecourse**, Freshfield Road, Brighton

**25-26 April Newark Showground**, Winthorpe, Newark, Notts

**16-17 May Alexandra Palace**, Wood Green, London

**30-31 May Newcastle Racecourse**, High Gosforth Park, Newcastle-upon-Tyne

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

### **Petrified birds nest stolen from Portsmouth**

During December 2008, a petrified birds nest was stolen from Portsmouth Natural History Museum. It was taken from a case which had to be forced open. The nest is 6 inches (15 cm) in diameter and contains eggs. If your museum is offered such a specimen or if you see one for sale, please contact Claire Sturman, Natural Science Officer, Portsmouth City Museum and Records Service, Museum Road, Portsmouth PO1 2LJ tel 023 9282 7261 email claire.sturman@portsmouthcc.gov.uk

## GCG Committee 2009

**Chairman: Helen Fothergill**, Keeper of Natural History, Plymouth City Museum & Art Gallery, Drake Circus, Plymouth, Devon, PL4 8AJ tel 01752 304774 fax 01752 304775 email helen.fothergill@plymouth.gov.uk

**Secretary: David Gelsthorpe**, Manchester Museum, Oxford Road, Manchester, M13 9PL tel 0161 2752660 fax 0161 2752676 email david.gelsthorpe@manchester.ac.uk

**Treasurer/Membership Secretary: John Nudds**, Senior Lecturer in Palaeontology, School of Earth, Atmospheric and Environmental Sciences, The University of Manchester, Oxford Road, Manchester, M13 9PL tel 0161 275 7861 email john.nudds@manchester.ac.uk

**Programme Secretary: Steve McLean**, Hancock Museum, Barras Bridge, Newcastle upon Tyne, NE2 4PT tel 0191 222 6765 fax 0191 222 6753 email s.g.mclean@ncl.ac.uk

**Minutes secretary: Tony Morgan**, Geologist, Clore Natural History Centre, World Museum Liverpool, William Brown Street, Liverpool, L3 8EN tel 0151 478 4286 fax 0151 478 4390 email tony.morgan@liverpoolmuseums.org.uk

**Recorder: Mike Howe**, British Geological Survey, Kingsley Dunham Centre, Keyworth, Nottingham NG12 5GG tel 0115 936 3105 fax 0115 936 3200 email mhowe@bgs.ac.uk

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### **Committee Members:**

**David Craven**, Curator of Geology, Bolton Museums, Art Gallery and Aquarium, Le Mans Crescent, Bolton, Greater Manchester, BL1 1SE tel 01204 338764/557661 fax 01204 332241 email david.craven@bolton.gov.uk

**Lyall Anderson**, Department of Earth Sciences, Downing Street, Cambridge CB2 3EQ tel 01223 333417 email land07@esc.cam.ac.uk

### **Co-opted Members:**

**Will Watts**, Scarborough Museums & Gallery, Town Hall, St Nicholas Street Scarborough, YO11 2HG tel 01723 232572 fax 01723 376941 email will.watts@scarborough.gov.uk

**Hannah Chalk**, School of Earth, Atmospheric and Environmental Sciences, University of Manchester, Manchester M13 9PL tel 0795 6208704 email hannah-lee.chalk@manchester.ac.uk

**Cindy Howells**, Department of Geology, National Museum of Wales, Cathays Park, Cardiff, CF10 3NP tel 02920 573354 fax 029 20 667332 email cindy.howells@museumwales.ac.uk

**Leslie Noè**, Curator of Natural Science, Thinktank, Birmingham Science Museum, Millennium Point, Curzon Street, Birmingham B4 7XG tel 0121 202 2327 fax 0121 202 2337 email leslie.noè@thinktank.ac

**Jeff Liston**, Hunterian Museum Store, 13 Thurso Street, Partick, Glasgow, G11 6PE email j.liston@museum.gla.ac.uk

## **Mineralogical medals for David Green and Andy Tindle**

The Russell Society has awarded its Russell Medal to David Green and Andy Tindle. The Russell Medal is one of the highest awards that the Society can make to an individual who has made a significant contribution to mineralogy and the to the true spirit of the Society in its aims to promote mineralogical science and minerals. This year the RS Council decided to award the medal to two well-deserved members of the Society. The citations from Council highlighted the following individual contributions that the recipients have made.

David Green's various contributions to UK topographical mineralogy, in particular the articles he has written for a variety of different publications and as Editor of the UK Journal of Mines & Minerals; his willingness to assist amateur (and professional) mineralogists with their mineral identifications; his articles and other publications on practical mineralogy and mineral photography that have been a source of useful information to many amateur (and, no doubt, a number of professional) mineralogists; finally, his encouragement for amateur mineralogists to become involved with their local museums, in particular, his willingness to organise visits to the Manchester University Museum. Dave was presented with his medal by the Society General Secretary, Frank Ince at the BMS Symposium in Leicester. Andy Tindle has made significant contributions to UK topographical mineralogy, in particular his dedication over a considerable period of time to the completion of *Minerals of Britain and Ireland*, a publication that will be of immense value to both amateur and professional mineralogists; his contributions to geochemistry, mineral chemistry and microprobe science; finally, his willingness to assist amateur (and professional) mineralogists with their mineral identifications. Andy will be presented with his medal at a suitable opportunity in the near future.

GCG members will wish to extend their congratulations to Dave and Andy.

## **Matching Minerals – News from the St. Aubyn Project**

In July 2008, Helen Fothergill and Jess Shepherd from Plymouth City Museum and Art Gallery visited Saffron Walden Museum in Essex. Sarah Kenyon, the Natural Sciences Officer at the Saffron Walden Museum, had been in touch with Plymouth because they had 37 minerals that were donated to them by Sir John St. Aubyn in 1834. Whilst at Saffron Walden, Helen and Jess examined the minerals before taking them away on a loan and packing them ready for transportation to Plymouth.

Back in Devon, Jess has been looking through the loaned specimens, trying to match them up with the catalogues. Whilst studying the specimens, she noticed that some of the minerals looked very similar to other ones in the Plymouth collection. After going through the draws in the geology store, she managed to match two minerals from each museum so that they linked together. This has been a really exciting find, and the existence of labels along the joining line that date from roughly 1794–1815 show that these mineral halves may not have been placed next to each other for almost 200 years!

**GCG Seminar, AGM & field trip  
Scarborough  
1-2 December 2008**

**Part one: A new look at old collections**

On a somewhat chilly December morning in Scarborough, 23 delegates were welcomed to the Woodend Creative Workspace by Helen Fothergill, Chairman of GCG, and Will Watts, Head of Learning Partnerships and curator at the new Rotunda Museum.

The first speaker, David Craven of Bolton Museum, showed how, Indiana Jones-like, he took on the task of reorganizing the 'Temple of Doom', otherwise known as the geology stores, in 2003. There had not been a geologist working in these stores for many years, and David found that he had to deal with over 25,000 specimens which had been put away without any organization, mostly uncatalogued, unsorted and dirty. The stores consisted of an assortment of old and new cabinets, with and without drawers, some of which were too stiff to open. None of the cupboards were labelled and there was barely space between the rows of cupboards to open the drawers fully or to put up a set of stepladders. Plus there were around 150 boxes of unlabelled, unsorted and uncatalogued specimens. Initially David was optimistic and during the first three months formulated a plan to reorganize the stores over five years, even though he was only on a two-year contract! However, as he wasn't given a computer for the first year, and had no space to move anything round in the stores, he resorted to removing some of the older cabinets simply to make space in which to move. Initially he sorted the palaeontology collection into the newer cabinets, arranged stratigraphically. Then in 2004 he managed to get some councillors on his side and secured a £400,000 bid for matching cabinets to hold the petrology and mineralogy collections, as well as shelving for large specimens.

During the reorganization, several radioactive minerals were found in unmarked boxes! David's pride and joy is the palaeobotanical slide collection, and he says his 'folly' is perhaps the set of large fossil tree casts which he rescued from Manchester Museum. He has already found about a dozen type and figured specimens in his collection and thinks there may be more. Now the collection is actually usable it has been visited by various researchers. David is currently working on collection's management policies and has started to acquire a few new specimens. The store now has plenty of desk space, including room for 5 volunteers. His conclusions were: to get an overview and plan ahead; be flexible and ask for opinions but adapt these to suit your needs; think about your collection users; don't believe everything you are told; get to know your local councillors; and above all stay positive.

Jess Shepherd from Plymouth Museum then spoke about her two year project, funded by the Esmée Fairbairn Foundation and Renaissance South West, for the conservation of the St. Aubyn Collection, to research its historical associations. The collection is an 18th century collection of minerals and a herbarium once owned by John St. Aubyn (1758-1839) and has a complicated history. St. Aubyn was active as a Fellow in many geological societies and bought in minerals to add to his collection, including the collections of the 3<sup>rd</sup> Earl of Bute and Richard Green. Unfortunately he also sold some of his minerals, and after his death the collection was divided up and parts of it have had several moves since then before some ended up in Plymouth Museum. The historic collection was catalogued in French between 1794 and 1815, and this is now being translated by Margaret Morgan of Truro Museum. Initially the minerals were all repackaged, and will ultimately be cleaned as well. Jess has created a database of the collection and is trying to track down all the dispersed specimens, many of which are now in private hands. She has so far tracked down around 2,000 specimens, although some are owned by individuals who are reluctant to identify themselves.

Research into St Aubyn's family and friends has produced more insight into the original provenance of some minerals, and the whereabouts of others today. Jess stressed that it is important to visit as many other museums as possible to check on specimens and their labels. The original labels have been an interesting study, and show the evolution of various styles, as well as being a key to identifying other specimens. This research has improved access to the collection and is documented on the museum website, as well as being the subject of a touring exhibition to promote the project. The project was largely funded by the Esmée Fairbairn Foundation who aim to improve the quality of life throughout the UK, and who take pride in supporting work that might otherwise be considered difficult to fund. It is well worth considering applying to them for funding if you have been turned down by other organisations. Details of Jess' research can be found at [www.plymouth.gov.uk/museumstaubyncollection](http://www.plymouth.gov.uk/museumstaubyncollection).

The next talk was given by committee member David Gelsthorpe of Manchester Museum, who spoke about his pilot scheme for an A-level geology workshop. The museum has at least 120,000 fossils with around 1,000 on display, and there is a drive to get the collection used more, and to create greater access opportunities. There is already an established learning programme for all ages including a 'meet the experts' session for 14-19 year olds, and currently 1,500 A-level student visits per year (across all subjects). David explained that the standard of school practical lessons is often not up to the standard that could be provided by a specialist museum department. Museums can provide better handling specimens, facilities and exhibition tours, as well as the added thrill of an 'out of school' visit.

The scheme was initiated by one of the local colleges who had clear ideas about what they wanted to achieve. Part of the curriculum is to identify various major fossil groups and students are asked to draw them, adding a scale, and labelling distinguishing features. The museum was able to provide good quality complete specimens, which showed clear features, for a drawing masterclass, with a specialist on hand to answer questions. The students also have to suggest life environment and age, and plot the fossils on a range chart. Preservation styles, eg. pyritisation and silicification are also compared, and they discuss the problems palaeontologists have in identifying fossils. Students also got to handle a few 'wow' specimens (along with a fake Moroccan trilobite by the look of the pictures!), and six insects in copal have been purchased to enhance the

collection specifically for this project. Session details were put on the internet so that colleges could prepare in advance and check details afterwards. Student evaluation gave good feedback and teachers felt it had a positive effect on results. Future plans include a more detailed course for 2<sup>nd</sup> year A-level students as well as covering more aspects of the syllabus. So far 3-4 sessions have been held this year but time is an important consideration and the courses may have to be charged for once the trial period is over. The initiative is part of the Real World Science project in partnership with the Natural History Museum (NMH), the Oxford University Museum of Natural History (OUMNH) and the Hancock Museum (HM).

Finally before lunch, Leslie Noè from Thinktank, Birmingham spoke about the dinosaurs in the Alfred Leeds collection. Although this collection was started in 1860 by Charles Edward Leeds, his younger brother Alfred Nicholson soon took over from him, and acquired the majority of the specimens. Later he roped in his 5 sons to help with cleaning the bones. The collection is famous for its marine reptiles, all found in the Oxford Clay brick pits around Peterborough, and extracted by the pit workers. The Natural History Museum acquired the first part of the collection, as it stood in 1890, but what is less well known is that there are also a number of dinosaurs included in this. Leslie gave details of this dinosaur material which included brachiosaur, stegosaur, diplodocid, iguanodontid, and ankylosaurid, as well as a possible dinosaur egg. Probably the most famous dinosaur material is the partial skeleton, comprising 1½ limbs, partial pelvis and tail of a diplodocid which was sold to the NHM in the 1890s for £250, and mounted in the main hall. This is still the second most complete British sauropod (after the Rutland dinosaur). Alfred Leeds gave various talks about his collection and was most amazed that people were so interested in his work. Henry Woodward visited the collection in the 1880s and catalogued it. After Leeds' death, his son wrote to many museums advertising the remainder of the material. The National Museum of Wales took a number of bones, and most of the rest went to the Hunterian Museum in Glasgow. Details of the dinosaur material are to be published soon.

After a light lunch in local hostelrys, Jon Radley (Warwickshire Museum) took the next slot with his talk about how much information can be revealed by looking at old fossil collections. Warwickshire Museum has a geology collection which initially came from the 19th century collecting activities of the WNHAS (Warwickshire Natural History and Archaeology Society). It is a typical systematic collection of about 17,000 specimens comprising local, regional, national, and international vouchers, fossils, rocks and minerals, and includes the collections of the Reverend Peter Bellinger Brodie. Jon's talk emphasised the importance of holding on to collections because of the new information which can be extracted from them with innovative technologies. This can include palaeoenvironmental detail preserved in isotopes and growth patterns. Banks of bivalves and brachiopods preserved in life position reveal many details about their mode of life, as do the death assemblages of many other fossils. The preservation style of each and every fossil and its surrounding sediment may give information about burial rate, water depth, chemistry etc. Studies can be quite low-tech and reveal much information to enhance the knowledge of old collections. Many molluscs and brachiopods show imperfections which reveal attempts at predation by crustaceans, or natural shell breakage and repair, or pitting formed by anchorage of another brachiopod. Whether a crinoid is whole or disarticulated can reveal the depositional environment, and fossils should not be discarded just because they are not complete or perfect – for this very reason. We should beware of having a bias towards pretty or complete specimens, and Jon warned firstly that over-preparation can mask or remove information, and secondly that we should dispose of collections with extreme caution. To quote Jon, 'This unrealised potential is a robust justification for retaining old collections'. We should collect the unusual and the imperfect because these can yield interesting information, and we should think 'processes', not filling gaps.

Nigel Monaghan (National Museum of Ireland) spoke next about Irish Ice Age faunas. During the 1920s, cabinets were built under the display cases in the galleries to accommodate the huge quantities of bone material in the museum. Workmen constructing roads in the late 1800s frequently broke into caves filled with vertebrate material. These were usually taken to the local pub, but eventually most came to the attention of the museum, and by the end of that century, cave excavation really took off. Early excavators were fairly systematic and kept notebooks and catalogues, although they didn't understand cave stratigraphy and tended just to strip out caves completely without leaving anything *in situ* for future generations, as is common today. Revisiting these remains has meant carbon-dating the old bones and re-drawing the caves with recourse to the original notebooks. A recent discovery of an untouched cave still full of bone has given a fresh opportunity to study these faunas. Despite difficult access (at the top of a steep U-shaped valley side), a trench has been excavated and many bear bones (*Ursos arctos*) removed. Initial studies show a good range of juvenile bones sizes indicating a high infant mortality rate within the cave. The Genetics Department at Trinity College, Dublin are now trying to reconstruct the genetic fingerprint of these bears, and have found three genetically distinct populations that lived around 42,500-31,000 BP, 12,000-10,500 BP and 10,000-3,000 BP, indicating non-continuous phases of inhabitation with several breaks corresponding to ice-advances. For more information on the natural history department see [www.rte.ie/radio1/choppedpickledandstuffed](http://www.rte.ie/radio1/choppedpickledandstuffed).

The final talk of the day was the host, Will Watts, who told us about the £4.5 million redevelopment of Scarborough's Rotunda Museum. The Rotunda is one of the oldest purpose-built museums in the country, designed by William Smith, who lived in Scarborough in the mid 1820s. After several years in the making, the Rotunda was opened on 31<sup>st</sup> August 1829, and was originally known as The Drum. Its first collections were purely geology, but were then quickly followed by natural history, archaeology and local history. The interior was designed initially by Smith to display geological specimens as they are found in the ground. Above the top of the cases Smith's nephew John Philips (first Keeper of the Yorkshire Museum) drew a geological section of the local dipping strata, which mirrored the local fossils displayed stratigraphically on similarly sloping shelves below. When the HLF-funded refit began two years ago, and the fittings were stripped out, it was found that the original shelves had initially been put up sloping the wrong way to the strata illustrated above! The redisplayed cases now show a blend of social history along with the geological specimens, and each case tells several stories. Specimens from Smith's own collection have been borrowed from the NHM in order to display them here for the first time.

As the main display floor is above ground level a lift had to be installed somehow, and this has been achieved at great expense, but sympathetically to the feel of the gallery, by powering it pneumatically from below, thus still allowing a fairly good view up at the central domed ceiling. The excavation of the shaft below discovered a layer of loose sand, and at one point it looked as if most of Scarborough would subside down into it! There are two additional wings on the floor below which have also been totally refitted. One, sponsored by Shell, tells various stories of the local coast in more detail and includes larger specimens such as the huge theropod dinosaur footprints discovered locally by a member of the public. Also displayed in this gallery is the plesiosaur discovered at Speeton in 2003 which was disarticulated but fairly complete, and as yet unnamed. A skeleton from a local bog burial (Gristhorpe Man) is in another case. The east wing, which was the main geology gallery until the refit, is currently an interactive fun area, but there is still work to be done on this space in order to engage the casual visitor, although it works well for school visits.

Following these interesting talks, the AGM was uneventful, and unfortunately poorly attended. It is a great shame that no more than 20 members had been able to come to this meeting in such a wonderful setting. The Chairman's address is published separately, and there were only a few minor committee changes. Lyall Anderson and David Craven were welcomed as elected committee members and David Gelsthorpe bravely took over the role of Secretary.

Later in the evening we were invited to a reception at the Rotunda, which gave us a wonderful chance to view these new galleries. Will laid on refreshment, and armed with cameras we eagerly headed upstairs. My initial impression was that it was beautifully coloured and lit. The multi-paned curved glass cases, with pastel backgrounds matching the strata illustrated above gave a wonderfully old-fashioned look, whilst the glass at the top of the lift only just impinged on the view of the dome. Unfortunately there is no access to the top balcony any more, as this was reached via a very steep winding staircase, and we were not allowed to climb on the antique curved library steps either. However, we were all very impressed with the galleries and spent a happy two hours poring over cases and specimens, as geological curators tend to do!

Finally, after thanking Will, we departed from the museum in search of the long anticipated curry we had been promised. Angela Smith, Gloucester Museum Service and Cindy Howells, National Museum of Wales

### **Part two: The Speeton Clay, or is it?**

After the post AGM revelry, during which those staying overnight partook of several games of "roll-the-dice" (ask at the Scholars pub on Somerset Terrace!), a large Indian meal and for some, a late night pool competition (Republic of Ireland vs. Northwest England), it is a wonder anyone turned up for the fieldtrip to see the Speeton Clay. Snow early that morning had covered Scarborough and most of North Yorkshire in a thick blanket of white, so a well wrapped up group of around twelve delegates assembled at the Rotunda Museum to meet Peter Rawson (Chairman of Scarborough Museums Trust).

The trip was to be to the Speeton Sands area for a look at the Speeton Clay of the Lower Cretaceous, or so we thought. Due to the weather, Peter decided that vehicle access to the coast would be too risky so we set off on foot to Scarborough's South Bay to look at something Jurassic instead.

Our first stop was the foreshore near the Valley Bridge. From here, Peter explained how the scenery has been influenced by a combination of the solid and drift geology. The high cliffs from Ravenscar north of Scarborough, down to Scalby Mills in the south run roughly NNW to SSE and have been formed by a series of fault lines running in the same direction. The headland of Castle Hill, which separates the two bays at Scarborough, is cut by a "Y"-shaped fault which downthrows Oxfordian rocks to the east. These are mainly resistant sandstones, grits and oolitic limestones. The resulting headland forming a natural shelter in which Scarborough and its harbour developed. Looking to the South, Peter described the glacial deposits that cover the solid geology here and how their composition causes problems due to instability - the centre of the bay being the cliff-top site of the former Holbeck Hotel, which became a waterside hotel due to a landslide in 1993.

We continued southwards along the beach, passing the Spa Complex where the mineral rich waters were exploited in the Seventeenth century and starting the development of Scarborough as a resort. The beach here is a platform formed by an ironstone member of the Scarborough Formation (Ravenscar Group). These deposits show extensive bioturbation with networks of horizontal, or near horizontal, *Thalassinoides* burrows attributed to the activity of crustaceans. The burrows themselves are infilled with shell debris derived from the rich bivalve fauna of the White Nab Ironstone.

At the end of the sea defences we came to a series of exposed cliffs. The lower section, immediately above the Scarborough formation, is a sequence of cross-bedded sandstones deposited in a large river channel that was migrating towards the South. Further along the bay these rocks are succeeded by a series of channel features that suggest a less stable environment with a number of crevasse splay features, abandoned channels and thin deposits of silts and clays. Plant material is abundant in this section, although it is heavily carbonised and difficult to identify. This sequence belongs to the Moor Grit member of the Scalby Formation (U Bajocian). We ended our visit to South Bay after about three hours examining the cliff face and the fallen blocks and returned to Scarborough by way of the sea-wall path, avoiding the seaweed covered beach that we had walked along earlier. Before we finally dispersed, we thanked Peter Rawson for giving up his time to lead the field trip, and for giving us an interesting explanation of the geology of the area around Scarborough.

Tony Morgan, Liverpool Museum.

### **Part three: Snowy Speeton – what we could have seen....**

*When it was decided that we weren't going to the Speeton Clay, one intrepid member took the brave decision to 'go it alone' and set off to see for himself. This is his report....*

Following a treacherously muddy, snowy and icy descent down the landslipped path at Reighton Gap, spectacular views opened up as I reached Reighton Sands; the cliffs of Oxfordian sandstones around Filey to the north (with waves breaking

over Filey Brigg), and the high Chalk cliffs to the south. Walking south along the base of the slumped, snow-covered Speeton Cliffs, exposures of pebbly Boulder Clay were evident; rich in Scandinavian erratics, coral-bearing Carboniferous Limestone, and local Jurassic rocks and fossils. Within about a kilometre, patches of disturbed, grey Speeton Clay appeared from beneath the till, forming small, slippery foreshore exposures and low cliffs displaying spectacular slumping. The cliff sections were largely inaccessible due to the sheer quantity of icy mud, but I found a few characteristic belemnites, serpulid worm tubes and crushed bivalves - enough to convince me that this really was marine Early Cretaceous! Beyond, before turning back, I saw an interesting slipped section in Red Chalk overlain by nodular grey Lower Chalk, which I guess must straddle the Albian-Cenomanian boundary. For me, the highlight was the walk back to Reighton Gap across the wide sweep of sands in brilliant winter sunshine, at low tide. Wave ripples, current ripples, tool-marks, burrows, bird footprints and a variety of shells including giant whelks and razor shells. Some of the whelks showed nice examples of repaired breaks (remember my talk?). Geology in the making!

Jon Radley, Warwickshire Museum

## Forthcoming GCG seminars and workshops

*Check our website [www.geocurator.org](http://www.geocurator.org) for updates to our seminar programme*

### **12-13 May 2009 British Geological Survey, Keyworth, Nottingham**

#### **GCG Workshop: Moulding and Casting plus Field Trip.**

A two day practical workshop to include moulding and casting of geological material, presentations and a field trip to Charnwood Forest to consider the practical problems of moulding in the field. An evening 'pub meal' is planned for delegates. The workshop will be beneficial to curators, display technicians and conservators. The course will be lead by Sue Martin (BGS), Caroline Buttler (NMW), Annette Townsend (NMW) & Mike Howe (BGS).

Cost £10 per day per person (£20 for the workshop) – includes, tea/coffee, lunches, all materials, information pack and field trip. Limited places available.

#### **Provisional Programme**

##### **Tuesday 12 May**

10:30 Coffee & welcome

11:00 Presentation: Ethics of moulding and casting [MH]

11:15 Presentation: Moulding & casting, choice of media [CJB, AT]

11:45 Practical session 1: Single sided moulding - preparation & 1<sup>st</sup> layer - including H&S and COSHH

13:00 Lunch (provided)

14:00 Questions & answers from session

14:15 Presentation: Moulding 'in the field', site access etc [MH]

14:40 Presentation: Case study 1 [SM]

14:50 Presentation: Case study 2 [CJB]

15:00 Afternoon refreshments

15:15 Practical Session 2, moulding - 2<sup>nd</sup> layer

16:30 Presentation: Replicas [CJB, AT]

17:00 Questions & answers from today's programme

17:30 Day ends

##### **Wednesday 13 May**

09:00 Coffee

09:30 Practical Session 3 - casting

11:00 Field trip (packed lunch provided)

14:30 Presentation: Considerations for the loan of specimens, casts, replicas [MH]

15:00 Practical Session 4 - finishing of cast

15:30 Coffee, discussion, final questions

16:00 Day ends.

To attend, please complete the booking form on page 16 and return it, with payment

### **22 September 2009 Bristol University, Queen's Road, Bristol**

#### **GCG Seminar in conjunction with the Society for Vertebrate Palaeontology (SVP)**

Contact: Steve McLean, The Hancock Museum, Barras Bridge, Newcastle upon Tyne NE2 4PT tel 0191 222 6765 fax 0191 222 6753 email [s.g.mclean@ncl.ac.uk](mailto:s.g.mclean@ncl.ac.uk)

### **October 2009 Venue to be confirmed**

#### **GCG study trip**

Contact: Steve McLean, The Hancock Museum, Barras Bridge, Newcastle upon Tyne NE2 4PT tel 0191 222 6765 fax 0191 222 6753 email [s.g.mclean@ncl.ac.uk](mailto:s.g.mclean@ncl.ac.uk)

### **30 November– 1 December 2009 Leeds City Museum & Art Gallery**

#### **GCG AGM and seminar: Storage, sorting & documentation: good practice & practical solutions.**

Contact: Steve McLean, The Hancock Museum, Barras Bridge, Newcastle upon Tyne NE2 4PT tel 0191 222 6765 fax 0191 222 6753 email [s.g.mclean@ncl.ac.uk](mailto:s.g.mclean@ncl.ac.uk)

## Other meetings

### **8 April 2009 Geological Society, Burlington House, Piccadilly, London**

#### **History of Geology Group: Open meeting**

09:10 Registration  
09:30 Allison Ksiazkiewicz: Some intersections of geology and Ancient Egypt  
10:00 Thomas Hose: Sea-air, geology and tourism  
10:30 Coffee  
11:00 Keynote: David Norman: Charles Darwin as geologist  
12:00 Anthony Brook: Agnes Crane: the Brighton Brachiopod Lady  
12:30 Lunch  
13:30 David Bate: Evolution of an erroneous idea: glaciation of the South Downs  
14:00 Chris Duffin: Herbert Toms and geological folklore  
14:30 Keynote: Laurance Donnelly: Sherlock Holmes, rocks, soils and murder  
15:30 Tea  
16:00 Ted Rose: Credit to the Few: British field force geologists of World War II  
16:30 Alan Bowden: Lord Derby, agates, Merlins and Spitfires  
17:00 David Greenwood: The wartime work of Professor Kirkaldy, with particular reference to 1944-46

Contact: Anthony Brook email [anthony.brook27@btinternet.com](mailto:anthony.brook27@btinternet.com)

### **7-8 May 2009 Leeds City Museum, Leeds**

#### **NatSCA symposium: Collections use: past, present and future**

Contact: Gerard McGowan email [gerard.mcgowan@bradford.gov.uk](mailto:gerard.mcgowan@bradford.gov.uk)

### **12-15 June 2009 Penventon Park Hotel, Redruth, Cornwall**

#### **8th International Mining History Congress**

For further information: [www.huss.ex.ac.uk/history/imhc/index.php](http://www.huss.ex.ac.uk/history/imhc/index.php) or contact: Dr Peter Claughton at [p.f.claughton@ex.ac.uk](mailto:p.f.claughton@ex.ac.uk)

### **11-12 July 2009 Sedgwick Museum, Cambridge**

#### **Darwin in the field: collecting, observation and experiment**

This multi-disciplinary conference will focus on Charles Darwin's (1809–1882) practical work in the field and examine the geological, zoological and anthropological data, observations and experiments upon which he built his subsequent theorizing. It will take place at the Sedgwick Museum of Earth Sciences in Cambridge as part of the programme of events to mark Darwin's 200<sup>th</sup> birthday and the 150<sup>th</sup> anniversary of the publication of *On the Origin of Species*. Associated events include a major new HLF-funded exhibition and original research on Darwin's work as a geologist based on the rocks and minerals that he collected on the Voyage of the *Beagle* (1831–1836) now held in the collections of the Sedgwick.

Contact: Lyall Anderson email [land07@esc.cam.ac.uk](mailto:land07@esc.cam.ac.uk)

### **18 November 2009 Geological Society, Burlington House, Piccadilly, London**

#### **History of Geology Group: Military uses of hydrogeology: past and present**

Contact: Ted Rose tel 01494 728776 email [ted.rose@virgin.net](mailto:ted.rose@virgin.net) or John Mather email [mather@jjgeology.demon.co.uk](mailto:mather@jjgeology.demon.co.uk)

**Chairman:** Helen Fothergill, Keeper of Natural History, Plymouth City Museum & Art Gallery, Drake Circus, Plymouth, Devon, PL4 8AJ tel 01752 304774 fax 01752 304775 email [Helen.fothergill@plymouth.gov.uk](mailto:Helen.fothergill@plymouth.gov.uk)

**Secretary:** David Gelsthorpe, Manchester Museum, Oxford Road, Manchester, M13 9PL tel 0161 2752660 fax 0161 2752676 email [david.gelsthorpe@manchester.ac.uk](mailto:david.gelsthorpe@manchester.ac.uk)

**Treasurer:** John Nudds, School of Earth, Atmospheric and Environmental Sciences, The University of Manchester, Oxford Road, Manchester, M13 9PL tel 0161 275 7861 email: [john.nudds@manchester.ac.uk](mailto:john.nudds@manchester.ac.uk)

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