

# Manchester Geological Association

## Newsletter ~ September 2010



President : Tony Adams PhD

[www.mangeolassoc.org.uk](http://www.mangeolassoc.org.uk)

Dear Member,

After a super summer in the field, (thanks Jane) autumn has arrived and our lecture programme is about to "kick off" in style on October 13th with lecture on **Meteorites** by Professor Jamie Gilmour. This will be preceded by our annual **Conversazione** with wine and nibbles at 6.00 pm.

(see pp 6 & 7 for notes and full lecture programme, thanks Jim)

We expect a big turnout for the **Broadhurst lectures** on November 13th, so you will need to book a place with Jim Spencer beforehand, ring him on 0161 434 7977 or email [lectures@mangeolassoc.org.uk](mailto:lectures@mangeolassoc.org.uk) in plenty of time. Please be aware of the various start times this season.

From time to time we **appeal** for members to join and work with the **Council** to ensure the continued smooth running of the Association. There will be some changes next year so we are looking for members to volunteer as ordinary Council members now and others to help with a refreshment rota. Please speak to any council member if you can offer the MGA a little of your time.

Those of you who get this **newsletter** by post will be aware of the different format. Maureen Abrahams and Marjorie Mosley have kindly taken over the printing and distribution of the paper copies of the newsletter, and although the new printer prefers this layout, and I have to work in multiples of 4, it's cheaper! Enclosed is your copy of the North West Geologist, our "house " magazine..... Enjoy! E-mailers will receive their NWG very shortly.

There are lots of field reports this time and more to follow in the December newsletter. My thanks to all contributors, do keep them coming, but PLEASE send photos separately and individually, it takes a while to unpick them from Word documents to go into Publisher.

Remember, you can have your newsletter by email in full colour, just let me or Fred Owen know.

With very best wishes to all Mary Howie MGA newsletter editor

### Quick Diary 2010 ~

#### Last Field Trip

Sun 17 Oct Farndon ~ Cynthia Burek

#### Autumn/Winter Lectures ~ 2010 ~ 2011

Wednesday 13 Oct - Meteorites

Saturday 13 Nov - The Broadhurst Lectures: -  
Jurassic Seas, Jurassic Skies

Saturday 11 Dec - The Quaternary of the North West

Saturday 15 Jan - To be announced

Wednesday 16 Feb - AGM and Presidential Address

Wednesday 9 Mar - Geohazards

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## Greater Manchester RIGS Group

Thanks to Chris Arkwright's and Fred Owen's contribution to GMRIGS, a number of sites in the Bolton and Trafford area have been successfully assessed, and will be designated. This completes the target for Summer 2010.

Following a meeting at Rochdale Cemetery with stonemason, Mr. Roger Gregson, restoration of the 19<sup>th</sup> Century Geological Trail is in hand. It was agreed, following advice from Mr. Derek Mack, Cemetery Organiser at Rochdale, that the restoration should be low key so as not to draw too much attention to these valuable specimens. Briefly, the Start Stone will be removed from the ditch and placed near the beginning of the trail, and obstructive vegetation will be cut back from the Mountain Limestone, Finish Stone and Glacial Stones. Some missing specimens will be replaced, and all specimens will have small discrete areas cleaned to allow closer examination. It was decided that the leaning specimens were quite safe and best left undisturbed.

On Monday, 12<sup>th</sup> July, I attended a meeting of the North West Geodiversity Partnership (NWGP) at Natural England's Manchester Office. Attending were members from GeoLancashire, Cheshire RIGS, Cumbria RIGS and Mandy Jewell from Natural England. The Greater Manchester Local Geodiversity Action Plan is making steady progress and is almost ready for printing.

The Resource Centre at the Manchester Museum, and John Rylands University Library Map Room, are proving to be excellent working areas. Thank you to the staff for their help. Thank you also to Manchester Geological Association and Natural England for their continuing support.

Marjorie E. Mosley, Secretary, GMRIGS Group, September 2010.

### **Marjorie asks for your help re this mystery stone**

Near to the Halebank site in Trafford, NGR SJ 7930 8440, close the car park entrance to Sunbank Wood, a large glacial erratic can be seen on the footpath. It has a greenish hue and is cut by mineral veins. Does anyone have any information about this erratic; if so, please contact me on [marjoriemosley@talktalk.net](mailto:marjoriemosley@talktalk.net) or 0161 432 4343.



### **\*IMPORTANT NOTICE: MGA INSURANCE\***

Each person attending a field meeting does so on the understanding that he/she attends at his/her own risk. The MGA has Public Liability Insurance cover (including member to member cover), for field and indoor meetings and an element of Personal Accident cover.

However, members should always ensure that they have Personal Liability cover (normally part of the standard householder's insurance policy - please check your policy) and comprehensive Personal Accident cover. These are *\*/your/\** responsibility. Overseas trips are not covered.

The next newsletter will be in December. Copy to me by **November 15th** please.  
Mary Howie - [newsletter@mangeolassoc.org.uk](mailto:newsletter@mangeolassoc.org.uk) or Snail Mail to Kinder View,  
118 Glossop Road, Marple Bridge, Stockport SK6 5EL. Tel: 0161 427 2965

Views expressed in the Newsletter are not necessarily those of the Association or its Council.

Dr. Jacqui Malpas chose the best day of the year to lead ten MGA members on a trip to Llangollen. Strata of Silurian and Carboniferous age were examined. This account selects just three localities that presented particular difficulties of interpretation. The localities are among those described by Somerville et alii, in the 1986 guide, 'Geology around the University towns: Liverpool'.

**Locality 3, NGR SJ230434**

This locality was described as a palaeokarstic hollow in the limestone filled with mudstone and pebbles, the pebbles showing imbricate structure and cross bedding.

The group found that the pebbles ranged in size up to about 50mm in the longest dimension. Most were red in colour with pale zones interpreted as reduction spots. The fine grained mudstone was colour banded, presumably for the same reason. The pebbles were tabular and sub-rounded rather than well-rounded. A test with hydrochloric acid demonstrated that the cement was not calcareous. Rather disconcertingly many of the pebbles looked more like nodules than clasts, although that may be a feature of the way they weather. A larger clast was broken and the dark purple fracture surface revealed dark fine grained minerals with a high proportion of muscovite. Superficially all the clasts appeared to have the same mineralogy and no carbonate clasts, for instance, were identified.

Whatever the origin of the pebbles, there is no doubt that they now form part of the infill of some palaeokarstic feature and are therefore evidence of a significant event when relative sea level fell and exposed the limestone to subaerial erosion. There are many subaerial erosion surfaces in the Dinantian of North Wales, not many as unequivocal as this one.



Limestone with mudstone and pebble beds above.



Close up of pebble beds.

The mudstone and pebbles are exposed only in two dimensions, so it was not clear what the shape of the hollow was; nor was it possible to trace the top surface laterally to confirm that the top of the pebble beds coincided with the original ground surface

**Locality 5, NGR SJ233433**

This small quarry, with faces about 15m high, is in the Cefn Mawr Limestone Formation.

Lunch was taken while we watched a man belaying in turn two very young children as each abseiled down the face.

The lowest two metres of the face displayed limestone units of approximately half a metre thick separated by calcareous mudstones up to about 50mm thick. Several colonial corals were observed, all in the base of the

limestone units and all upside down. It was agreed that these units were probably storm beds. That interpretation was reinforced by the finding of load casts, which also imply rapid emplacement.



Load cast from overlying limestone unit through calcareous mudstone

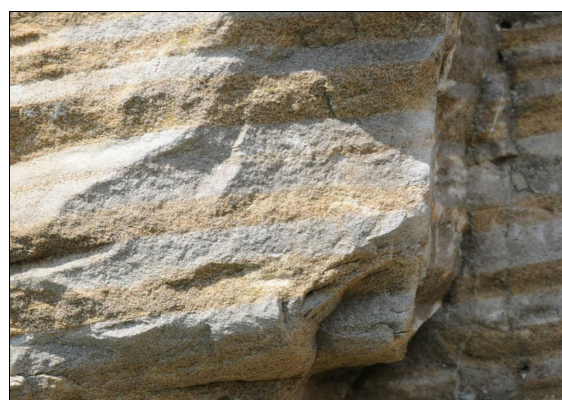


Unit (A) overlying massive limestone unit (B).

The top surface of one unit was puzzling ('B' in photograph). It was undulatory and was immediately overlain by a unit ('A' in photograph) that appeared to be bioturbated. The 'bioturbation' stopped abruptly at the boundary between the units. One possibility is that the lower unit was cemented prior to the emplacement of the unit that became 'bioturbated'. If so then what processes were responsible for the cementation? Another is that the undulation is hummocky cross stratification; the unit above certainly contains clasts, as can be seen in the photograph. Perhaps what appears to be bioturbation is a chaotic mixture of relatively soft rip up clasts that have deformed after emplacement. The question will have to be answered on another day.



The group examining the Minera Formation at locality 6.



Close up of Minera Formation, thickness of brown horizons about 10mm

### Location 6, NGR SJ241429

Somerville described these beds as Morton's Sandy Limestone. They form part of what is now called the Minera Formation.

The bedding appeared to be on a centimetre scale; however, closer inspection showed that the pale and brown horizons both consisted of well sorted quartz grains. The brown horizons are lightly calcite cemented; in the pale horizons the interstitial space is completely filled with calcite cement. Superficial ooliths are found the pale horizons but none were seen with a hand lens. This facies crops out over about 50m laterally, truncated above by a major cross set. The author of these notes has seen a facies of similar appearance at the base of the Middle Jurassic Lincolnshire Limestone Formation. This rock type, called the Collyweston

facies, also consists of quartz sand strongly and weakly calcite cemented in layers; a photograph of a cut section is shown below. At Collyweston the rock was mined and split for roofing slate. Its mode of emplacement is not known.

Finally the group walked back to Llangollen along the canal tow path, pausing occasionally to see shoals of fish just below the surface and an abundance of wild flowers along the banks.

Jacqui was thanked for leading us on a stimulating day out and for arranging wall-to-wall sunshine.

Rarely can the skies above Llangollen have been so blue.



Collyweston facies of Middle Jurassic Lincolnshire limestone Formation.

Peter del Strother

#### **In Memoriam ~ JAMES SIDDELLEY**

Jim, although he never served on Council, was a member of the Association for very many years and died earlier this summer aged 64 after a brief battle with cancer. He held BSc and MA degrees, as well as a professional qualification in accountancy. He spent most of the first part of his life teaching geography and geology, finally at Stockport School. He showed great skill and enthusiasm for his subjects and many of his students went on to academic careers. He was a Darwinist and this came through when he spoke eloquently to the Association (at a members' evening) on a visit to the Galapagos islands. In the autumn of 1987 he organised a truly memorable visit to Israel for the Association. With our wives we always shared a table at the Association's annual dinner. Our condolences go out to Christine.

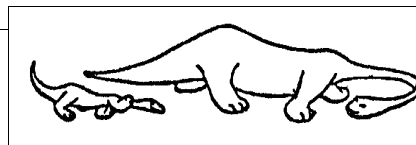
He had an enormous number of interests and commitments, which included being a well known active member of the Co-operative Society, a local councillor in Stockport, a Parliamentary candidate, member of the European Movement, Chair of several school governing bodies, a voracious reader, a compulsive talker, played the violin and spoke adequate French. He truly cared about people and this was evident in the 150 persons who turned up at the celebration of his life and who spoke about him as a person and achiever.

Jim did not have a funeral but donated his body to scientific research.

We were great friends although that did not stop me from signing off my letters 'blue skies', in return to his 'red skies'. The 'Red Flag' was sung at his celebration.

Derek Brumhead MGA Archivist

## MGA LECTURE PROGRAMME 2010 ~2011



**Wednesday 13 October 2010 - Meteorites ~ 7.00 pm ~ refreshments from 6.00 pm**  
Professor Jamie Gilmour, University of Manchester

This is our annual “**Conversazione**” . Wine and nibbles will be served before the talk at 6.00 pm

**Saturday 13 November 2010 - 10.30 am Booking essential for these lectures**

### **The Broadhurst Lectures: Jurassic Seas, Jurassic Skies**

The Blue Lias -	Dr. Peter Hardy,	University of Bristol
Plesiosaurs -	Dr. Leslie Noè, Thinktank,	Birmingham Science Museum
Ichthyosaurs -	Dr. John Pollard,	University of Manchester
Archaeopteryx -	Dr. Derek Yalden,	University of Manchester

**Saturday 11 December 2010 - The Quaternary of the North West 1.30 pm**

**New Insights into the pre Late Devensian Succession of East Cheshire -**  
Professor Peter Worsley, University of Reading

### **The last Ice Sheet and later Glaciers in Wales:**

Timings, Extents and associated Palaeoclimates –  
Dr. Phil Hughes, University of Manchester

**Moraines and Outwash Plains –** A Re-assessment of the late Devensian in South Lancashire, Merseyside and Greater Manchester –

Dr. Dick Crofts, British Geological Survey

### **Glacial Lake Deposits and Reconstructing Deglaciation in Northwest England -**

Dr. Cathy Delaney, Manchester Metropolitan University

**Saturday 15 January 2011 - To be announced**

**Wednesday 16 February 2011 - 7.00 pm MGA AGM**

**followed by the Presidential Address by**

**Dr. Tony Adams, University of Manchester**

**Wednesday 9 March 2011 - Geohazards ~ Dr. Jeff Blackford, University of Manchester**

**A Joint Meeting with the Manchester Geographical Association at 6.30 pm**

Meetings are held in the Williamson Building, Oxford Road, opposite The Manchester Museum.  
Further information about indoor meetings: email Jim Spencer [lectures@mangeolassoc.org.uk](mailto:lectures@mangeolassoc.org.uk)  
Further information about the MGA from the Hon. Gen. Sec. Sue Plumb, email [secretary@mangeolassoc.org.uk](mailto:secretary@mangeolassoc.org.uk)

**VISITORS ARE ALWAYS WELCOME**

## Notes for MGA Autumn Lectures 2010

### Wednesday 13<sup>th</sup> October 2010 – Meteorites, Stardust and the Early Solar System

Professor Jamie Gilmour, University of Manchester

The formation of stars and solar systems is a hot topic in astronomy, where new insights are continuously emerging from observations of star forming regions such as the Orion molecular cloud.

Another line of evidence comes from meteorites. Rather than looking out into space, these allow us to look back through time and study the formation of our own solar system. Meteorites provide us with evidence of geological processes on the first asteroids to form - the bodies from which terrestrial planets like the Earth eventually grew. They also provide insights into the environment of solar system formation and the formation of the chemical elements in previous generations of stars.

In this talk Jamie Gilmour, a planetary scientist in the School of Earth, Atmospheric and Environmental Science at the University of Manchester, will introduce the field of meteorite research, present some findings about the formation of our solar system, and discuss how they relate to the picture being developed from astronomical observation.

### Saturday 13<sup>th</sup> November 2010 – The Broadhurst Lectures ~ Jurassic Seas, Jurassic Skies

Many MGA members will remember Dr. Fred Broadhurst, a former member of staff in the Geology Department (as then was) of Manchester University, with great affection. Fred, a past-President and honorary member of the MGA, who died in October last year, gave great encouragement and support to the MGA and its members over many decades. In this day of talks, the MGA celebrates the life and work of Fred, by looking at some topics that he himself was interested in, given by people who knew and worked with him.

**Burrowing Bivalves and Shuffling Shrimps:** What can trace fossils tell us about the sediments in the Jurassic? – Dr. Peter Hardy, University of Bristol

**Feeding Habits of Jurassic Ichthyosaurs and Sharks** – Dr. John Pollard, University of Manchester

**Breathing New Life into Old Bones** – bringing plesiosaurs to life - Dr. Leslie Noè, Universities of Birmingham and Cambridge

**Airborne in the Jurassic: Pterosaurs diversify** – Dr. Dave Martill, University of Portsmouth

**The Life of Archaeopteryx** – Dr. Derek Yalden, University of Manchester

In the Jurassic Britain lay about twenty degrees north of the Equator, enjoying a warm Caribbean climate. The sea level was much higher than today, so that most of lowland Britain was submerged. Forests of cycads, ferns and pines covered the land.

Marine life thrived in the warm seas – crinoids, corals, ammonites, belemnites and fish. A variety of predators, such as ichthyosaurs and plesiosaurs, hunted them. Ichthyosaurs, dolphin-shaped reptiles with long, tooth-lined jaws, extremely large eyes and flipper-like limbs, fed on fish and belemnites. Another group of predators, the plesiosaurs, had very long necks and two pairs of flippers used for swimming. Some species of ichthyosaur and plesiosaur grew to a very large size and would have been formidable hunters.

Pterosaurs also hunted fish – from the air! They were flying reptiles (in fact, the earliest known flying vertebrates) possessing long jaws lined with teeth, the front ones of which were usually longer than the others and ideal for impaling fish. The fourth digit of the forelimb had become greatly elongated, strengthened and covered by a membrane to form a wing. Also flying in the late Jurassic were the first birds, Archaeopteryx, which had wings and tail covered by feathers, whilst retaining some reptilian features, such as teeth-lined jaws and a bony tail.

## FIELD TRIP TO PARK BRIDGE – 17 JULY

Intermittent heavy rain failed to deter 18 hardened geologists from attending a field trip to Park Bridge, near Ashton-under-Lyne, lead by Chantal Johnson. This part of the Medlock valley is now a haven of peace tucked away from the surrounding urban area, but is the site of a once-thriving industrial community. Coal had already been mined here for many years when the Lees family set up an ironworks, using the local coal as fuel and supplying machine parts to the mills of the surrounding towns.

We began by examining an exposed bank showing a coal layer – part of the Foxhole seam – with a grey clay layer below. Chantal treated us to a vivid description of conditions in the equatorial swamp of 300Ma, with 20m horsetails, giant dragonflies and dog-sized millipedes. Indeed, a few minutes fossil hunting revealed a beautiful surface impression of *Lepidodendron*, a giant clubmoss.



Exposed bank showing coal and clay layers.

We then walked through part of the village, built for the workers when the ironworks were in their heyday, employing 800 people, and into Rocher Vale. Here we looked at the river Medlock, an example of a ‘young’ river, with angular blocks of sandstone on its bed as well as areas of silt deposition where the flow is slower. Chantal used this to compare with the conditions existing when the sandstone of the nearby quarry was laid down. Here she demonstrated

bedding planes in a medium grained sandstone, deposited in a dynamic river delta – a mature river system. Above the sandstone (exposed in the quarry) was a layer of buff coloured rippled siltstone more obvious a short distance away. We discussed possible reasons for the change in conditions which lead to silt deposition rather than medium sand. Chantal also described to us an area further along the rock face with evidence of marine incursion, sadly inaccessible currently as the severe winter had left the rock face unstable.



Chantal describes the conditions in which the sandstone was laid down.

Next we returned to the river and walked a little up the valley, looking at evidence of coal mining and talking about the fossils the miners had found, some of which are now kept in Manchester Museum (as part of the George Wild collection). We also looked at the differing profiles of the two valley sides and discussed possible reasons why one side is so much more prone to landslips than the other.

Finally we returned along the valley to the ironworks, Chantal pointing out evidence of the industrial past as we went. We closed back at the Heritage Centre which has interesting displays about the ironworks, the geology and the wildlife which has made the site its home.

Many thanks must go to Chantal for putting on such an enthusiastic and interesting trip following the cancellation of the previously arranged trip, and to Jane as ever for organising the event.

Linda Jones

My 3 year old grandson was quizzing his mother recently:-

<b>Question</b>	Mum, do fossils sleep in the dark?
<b>Answer</b>	Ask grandma, she knows all about fossils.....



“Some dream, ... long curled in the ammonite’s deep slumber...W H Auden”



## Behind the Scenes in Several Museums ~ Even More Amazing Fossils

MGA field trip to Germany 28th May - 3rd June 2010

Led by Dr John Nudds (Manchester University) and Dr Cindy Howells (Cardiff Museum)

Archaeopteryx number one? The first bird feather? The first horses? Huge dinosaurs bones? How many of us have ever seen these? Or looked down on the Brandenburg Gate, or gone up the Brocken on a steam train... all in 6 days?

At the end of May nine MGA members and 2 palaeontologists set out to do just this. We flew to Frankfurt and, after getting lost in Darmstadt trying to find the Waldspiral, a funky house designed by Friedrich Hundertwasser, we reached our hotel, the delightfully named Schneckenschröder and prepared for the next day's geology. A visit to the Grube Messel and it's fossils in the Senckenberg Museum.



Our leader in the Senckenberg Museum ~ MDH

The Messel Pit is an Eocene Maar volcano which contain a superb 50 million year old fossil assemblage ... early horses, birds, reptiles, insects spiders .... all found in the pit's oilshale sediments. After careful preservation in resin, these are housed in the Senckenberg Museum. We peered down into the pit, a Unesco World heritage site, from the observation platform and then drove off to Frankfurt

to the Senckenberg. Here the huge dinosaurs in the entrance hall immediately took our

attention.... John Nudds, our leader told us how to sex a dinosaur.. yes, you can do it by looking at its bones! Downstairs were the Messel fossils: the lovely little horses, the snakes, the beetles .....amazing preservation!



*Propalaeotherium* MDH  
"The Dawn Horse"

Sunday morning saw us driving across into former East Germany on our way to Halle-an- der-Saale. We had a rather damp lunch time stop at the medieval town of Erfurt with it's twin catherdrals and then drove on to the Geiseltal, where the enormous brown coal excavations have left a huge lake. Halle was also rather damp, very wet in fact! The town was getting ready for a Handel week but we were looking forward to



*Psiloptera acroptera*  
photo from Geiseltal Museum Website

our visit to delightful Geiseltal Museum housed in one of Halle's medieval buildings. On Monday morning we met up with Dr. Meinolf Hellmund, the museum director. He gave us a very warm welcome and spent two hours telling us all about the history and preservation of the finds. A similar Eocene biota to that of Messel was preserved in the brown coal deposits, and first discovered in 1908. But whereas the Messel biota had fallen into a watery grave, these creatures were living in a swampy environment, so as well as the early horses (*Propalaeotherium*) there are tapirs (*Lophiodon*), crocodiles, remains of creodonts, extinct carnivores and beautifully preserved beetles.

My old German pal told me that a trip up The Brocken on a steam train was "*sehr romantisch*". This was to be an afternoon of tourism to relieve our diet of museums, and a look, we thought, at some hard rock. The Brocken, the highest peak in the Harz, (1.141m) was certainly dramatic, wreathed in swirling cloud and drizzle. We had a very jolly train ride: half the party climbed to the summit and brought back bits of granite, while the rest of us drank coffee and ate cakes in the café. Back in Halle we had a super evening meal in the medieval Mönchhof Restaurant and on Tuesday morning we were ready for the drive to Berlin. Good timing and improving weather got us to the Pergamon museum at midday to look at the Ishtar Gate of Babylon and other marvels brought back from the Middle East by the early archaeologists.



The Brocken Bahn in the clouds.  
Photo MDH



The Berlin Archaeopteryx  
Photo MDH

Wednesday was the highlight of our brief tour of Germany. We were taken behind the scenes in the Humboldt Museum to see the Berlin Archaeopteryx. It was the second one found and the best preserved. Along with the only known feather, it is too fragile to be displayed but, because of Dr Nudds contacts, we had a private view of these specimens. We were also lucky to be taken on a tour of the cellars..... catacombs full of huge stacks of dinosaur bones and artefacts from exotic expeditions.



The Feather!  
Photo MDH

After lunch (more sausages) we did the rest of the tourist bit. We walked through the Brandenburg Gate and went to the Reichstag. There was a huge

queue to get in, but because of my walking stick and apparent decrepitude, a nice young man asked us if we were group.. ..I said we were the MGA (and mostly old) and we were taken to the side door and whisked up to the glass copula with it's amazing light-well. Here you could look down on the Brandenburg Gate and have a panoramic view of Berlin. Next a walk to Check-Point Charlie and a view of the



The Light-well on the Reichstag ,  
designed by Norman Foster. MDH

Wall and we were ready for a hearty Teutonic supper at the delightful Max and Moritz café and then bed.



The Brandenburger Tor, Berlin

Most of the group flew back to Manchester on Thursday morning: three of us stayed on a couple of days to do some more tourism (and museums)... it stopped raining and the sun came out!

Many thanks to John and Cindy for another superb trip!  
Mary Howie

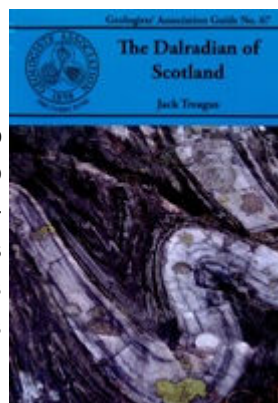
PS No space to tell of how we got the mini bus released from a locked underground car park on a Saturday afternoon!

New Books ~ Jack Treagus has produced another super GA field guide, this time to the Dalradian of Scotland,

**The Dalradian of Scotland** offers the greatest variety of metamorphic rocks to be found in the British Isles, ranging from slates through garnet schists to gneisses. The emphasis is on the folding and refolding these rocks have undergone, their relation to the metamorphism and to the Caledonian mountain-belt as a whole. The original sedimentary rocks range from mudstones to sandstones and conglomerates in which sedimentary structures are beautifully preserved, as well as a wide range of calcareous rocks and volcanics.

This is a Geologists' Association Guide, pocket-size, 200 laminated pages, containing descriptions of 22 locations in 3 traverses across the SW, Central and NE Grampians in easily accessed roadside and shore outcrops. Containing 39 photographs, 31 maps and diagrams (many in colour) and a Glossary, it costs £19 (inc p&p).

Go to the Publications page of the Geologists Association web site to pay by PayPal or write, quoting Guide No. 67, with cheque to: The Geologists' Association, Burlington House, Piccadilly, London, W1J 0DU.



Jack will bring copies to our MGA meetings this winter .

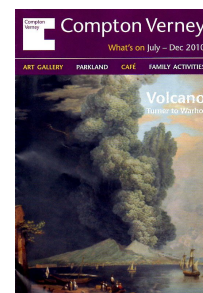
#### EXHIBITION Art and Geology

If you are travelling south or returning north before the end of October, then take a break at Compton Verney and visit the exhibition...

#### Volcano ~ Turner to Warhole .

Stuart Halsall tells me that it is very good! It's just 9 miles south of Stratford-on-Avon and not far from the M40.

Details on their website [www.comptonverney.org.uk](http://www.comptonverney.org.uk) or phone 01926 645 500.



#### MGA members are invited to attend these Geological Society meetings in Manchester and Warrington this autumn:-

Thursday 4 November at 6.30 pm ,

#### Coal Bed Methane Extraction ~ Warrington and the Wirral ,

Speaker ~ Brent Cheshire, (Technical Director - Igas Energy plc)

The Centre Lecture Theatre, Birchwood Park, Warrington. Tea/Coffee/Biscuits 6 to 6.30 pm.

Thursday 25 November 2010 at 6.30 pm

#### Discovery of the Reko Diq porphyry copper – gold system in Pakistan

Speaker ~ Tim Livesey (Director, Drilling Support & Technology; Exploration Manager, Eurasia - Barrick Gold)

in the Williamson Lecture Theatre, Williamson Building, University of Manchester

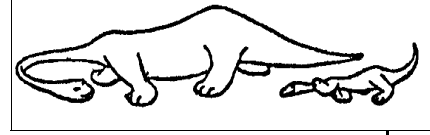
Thursday 9 December at 6. 30 pm

#### The use of Electrokinetics in ground improvement and slope stabilisation

Speaker John Lamont-Black (Operations Director – Electrokinetic Ltd) In the Williamson Lecture Theatre,, Williamson Building, University of Manchester.

More information from :- GS NW Chairman : Andy Moore, [andrew.moore@wspgroup.com](mailto:andrew.moore@wspgroup.com)  
Secretary : Chris Berryman [chrisberryman@terraconsult.co.uk](mailto:chrisberryman@terraconsult.co.uk)

## Who's Who in the MGA Council 2010 ~ 2011



President	Dr Tony Adams	SEAES University of Manchester
Past President	Dr Christine Arkwright	
Vice President	Peter del Strother, MBE	
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RIGS Group	Marjorie Mosley	
Minutes Secretary	Chantal Johnson	
Archivist	Dr Derek Brumhead, MBE	
Other Council Members	Lisa Abbott, James Jepson.	
President Manchester University Geol. Society (ex officio)		

**MGA email addresses :-** To contact our President or Membership Secretary email [info@mangeolassoc.org.uk](mailto:info@mangeolassoc.org.uk)  
for Jane Michael and field visits - [outdoors@mangeolassoc.org.uk](mailto:outdoors@mangeolassoc.org.uk)  
for Jim Spencer and indoor meetings - [lectures@mangeolassoc.org.uk](mailto:lectures@mangeolassoc.org.uk)  
for Mary Howie and the newsletter - [newsletter@mangeolassoc.org.uk](mailto:newsletter@mangeolassoc.org.uk)

**Our officers may be contacted via the MGA website**

### Other Societies

**MGA members are welcome guests at other Geological Societies' events, some of their events are below.**

#### Black Country Geological Society

Monday 25th October (Indoor Meeting) Is Man's role in  
Climate Change significant? Speaker: Colin Knipe  
Monday 29th November (Indoor Meeting starting at 7.00pm)  
BCGS Members' Evening and Christmas Social.  
**Contact** [andrew\\_harrison@urscorp.com](mailto:andrew_harrison@urscorp.com)

#### Leeds Geological Society

14 - Oct - Volcano - Ice Interactions in Iceland ,  
Dr Dave McGarvie OUGS  
11 - Nov The Dynamics and Deposits of Braid Bars in the  
World's Largest Rivers, Dr Dan Parsons  
09 - Dec - 10 AGM and Conversazione –  
Short Talks and Displays by Members  
**Contact** [anthea.brigstocke@zen.co.uk](mailto:anthea.brigstocke@zen.co.uk)

#### Liverpool Geological Society

12 Oct - Presidential Address.  
26 Oct - Lecture Meeting.  
16 Nov - Geology and Scenery of NW Scotland Joe Crossley.  
30 Nov - Do It Yourself Geological Quiz and  
CHEESE & WINE.  
**Contact** [Joe Crossley](mailto:Joe Crossley) 0151 426 1324

#### North Staffs GA

Thursday 14th October  
The genesis and evolution of sulphate evaporites in the  
Midlands by M. Noel Worley (Saint-Gobain)  
Thursday 18th November

The Tenth Wolverson Cope Lecture: 'Age of extinctions'. A  
comparison of the four mid Phanerozoic mass extinctions,  
including the end-Permian and end-Triassic events by  
Professor Paul Wignall (University of Leeds)

**Contact** [Eileen Fraser](mailto:Eileen Fraser) [frasers@netfraser.me](mailto:frasers@netfraser.me)

#### Oldham Geological Society

No details at present ~ monthly meetings in Oldham  
**Contact** [Jo Holt](mailto:Jo Holt) 01457 874095

#### Open University Geological Society NW Branch

19-21 November Shap Wells Hotel, Cumbria  
A weekend of lectures, field trips and indoor practical  
sessions, highlighting the rocks and minerals of the  
Lake District.  
Sun 11th Dec - Lecture afternoon at Rainhill village hall  
**Contact** [Jane Schollick](mailto:Jane Schollick) 01704 565 751

#### Russell Society (mineralogy)

Sat 2nd October Field trip to Buckden Gravel mine  
**Contact** [Alan Dyer](mailto:Alan Dyer) on [Aldilp@aol.com](mailto:Aldilp@aol.com) or Harry Critchley,  
Tel: 01204 694345

**Ring the contact given for further details, or link to their websites and others via ours.**