



**NORTH EASTERN GEOLOGICAL SOCIETY**  
**Newsletter November 2011**

Dear Member,

- 1. NEGS AUTUMN/WINTER LECTURE PROGRAMME.**
- 2. OTHER NEWS.**

**Residential Field Course – Please let John Waring our field trip organiser know if you would be interested in a residential weekend away – please see below.**

**Yorkshire Rock Mineral & Fossil Day.**

**Foundations of the Northern Pennines: Rookhope – 50 years on.**

- 3. ADMINISTRATION**

- 1. NEGS AUTUMN/WINTER LECTURE PROGRAMME**

Our programme kicked off last month with in my view a very interesting talk by Dr Phil Manning on research into dinosaurs. He took us to many sites around the world and introduced us to how palaeontology research is now influencing many fields including; climate research, the burial of waste and long term storage of radio-active waste.

He introduced us to Graveyard site Hell Creek Montana – the shore of an internal sea 65-67 mya. Badlands – S Dakota/Montana – late Cretaceous. Plant material -leaves – they can work out the time of year when the leaves fell. Amber – analysis of air bubbles give the level of O<sub>2</sub>

Within 4% of an exposed bed 12 skulls have been found.

China – Zhucheng – a bone bed of several square miles, 2 to 3 meters in depth.

Patagonia - Auca Mahuevo – 80 mya – nests and egg shells and baby dinosaurs skin – analysed using x ray microtomography.

I would recommend Dr Mannings blog at [www.dinosaursabbatical.blogspot.com](http://www.dinosaursabbatical.blogspot.com)

Other sites I have found.

Auca Mahuevo

<http://h2g2.com/dna/h2g2/A678954>

China Zhucheng

<http://www.guardian.co.uk/science/2011/may/13/chinese-dinosaur-city-prehistoric-era>

Hell Creek – Badlands USA

<http://www.dailymail.co.uk/news/article-486768/Worlds-Tyrannosaurus-rex-footprint-British-dinosaur-hunter.html>

If you don't have a computer, go and check it out at your local library.

(All errors are entirely mine!)

## OUR NEXT LECTURE IS

**18th November, 2011 Dr. Rachel Wood, Univ. Edinburgh: The dawn of biomineralisation.**

16th December, 2011 Prof. Richard Davies, Univ. Durham: The Lusi mud volcano disaster, Indonesia: Why and what next?

20th January, 2012 Dr Lisa Baldini. Univ. Durham, *to be announced*

17th February, 2012 Prof. Philip Gibbard, Univ. Cambridge: The last glacial cycle in lowland England

16th March, 2012 Dr. Mike Norry, Univ. Leicester: Shetland; the evolution of geology, language and people

Please remember Professor Gillian Foulger, our Lecture Coordinator, has a website which gives details about the lectures, lecturers and their websites. To access it, [click here](#). She also has her own website which members might like to view: [click here](#).

## 2. OTHER NEWS

### **Residential Weekend Field Trip**

It has been suggested that N.E.G.S. have a residential field trip, 3-5 days next year sometime in May, June or July.

Before any action is taken it is important to gauge the level of interest. Could you therefore inform the Field Trip organiser as to whether you are interested. This, of course, involves no commitment at this time.

A similar note went out in the October Newsletter. So far, there has been only one reply.

It is important to let the field trip organiser know by 16th December deadline as to whether you are either interested or are not interested.

You might also wish to state your preference as to area/locality and any experts who could lead us. Please email John Waring at [ne.geolsoc@ntlworld.com](mailto:ne.geolsoc@ntlworld.com)

or post your reply to

12, Epping Close, Marske by the Sea, Redcar, Cleveland, TS11 6DP

## **FOUNDATIONS OF THE NORTHERN PENNINES: ROOKHOPE – 50 YEARS ON**

### ***‘THE SIR KINGSLEY DUNHAM MEETING’\****

**Joint meeting of the Natural History Society of Northumbria, the Yorkshire Geological Society and Friends of Killhope**

**Saturday 28<sup>th</sup> January 2012.**

**2.00pm -5.00pm Great North Museum:Hancock**

It is now fifty years since the Weardale Granite, the existence of which was first predicted in the 1930s by Kingsley Dunham, then a Durham University post-graduate student, was finally proved by drilling the Rookhope Borehole.

The varied lines of reasoning that first suggested that a granite may lie beneath the Northern Pennines, and the detailed results of the drilling, including the unexpected age of the granite, soon become established as one of the classical stories of British geology. The project was a geological

adventure that radically changed perceptions, not just of northern England geology, but which led to major advances in the understanding of ore-forming and related processes worldwide.

Fifty years on, the scientific legacies of the borehole are as relevant as ever, underpinning research into new areas of understanding, some of which may have the potential for economic benefits undreamt of when the granite was first predicted.

To mark this significant anniversary, the **Natural History Society of Northumbria** has joined with the **Yorkshire Geological Society** and the **Friends of Killhope** to hold a joint meeting at the Great North Museum:Hancock on the afternoon of Saturday 28<sup>th</sup> January 2012.

In addition to reviewing the ongoing significance of the borehole, each of the afternoon's four talks will focus on an aspect of northern England geology which arises from insights provided by the borehole. Topics will include new interpretations and models for the origins of mineralisation, the possibilities for economically viable geothermal resources and a review of the potential for future mineral exploration and working.

Speakers will include Professor Martin Bott, Professor Jon Gluyas, Professor Joe Cann and others currently involved in research in this varied field.

More details, including details of the talks and speakers will appear in the next issue of the Bulletin.

- ★ *In recognition of Sir Kingsley Dunham's distinguished contributions to geological science, particularly in respect of his seminal work on Pennine ore deposits and his former Presidency of the Society, the Yorkshire Geological Society occasionally dedicates one of its scientific meetings as **The Sir Kingsley Dunham Meeting**. There can be no more fitting a topic for this dedication than the theme of this meeting*

### 3. ADMINISTRATION

If you receive this newsletter by post and have an email address, then please let me have it.

[negssecretary@btinternet.com](mailto:negssecretary@btinternet.com)

Best Wishes,

Judy Harrison  
NEGS Secretary