



Bulletin of the North Staffordshire Group of the Geologists' Association Number 107 : October 2013



LAST CHANCE TO ENTER THE NSGGA/GCSTAFFS PHOTOGRAPHIC COMPETITION

Closing Date : October 31 – See Page 11 For Details

WINTER LECTURE PROGRAMME 2013/2014

Lectures are held in room WS0.06 William Smith Building, Keele University

The committee invites you to join them for a meal at 6pm in the COMUS restaurant (01782 734121) to entertain the speaker before each lecture (except the AGM and Christmas Social). Please make your own booking with the restaurant mentioning that you wish to join the NSGGA party. The cost is approximately £10 for a two-course meal not including wine or coffee.

Thursday 10 October 2013 at 19:30

"Skeiðarárjökull"

Dr Richard Waller (Keele)

(Image Andrew Grandison /
Wikimedia Commons)



Thursday 14 November 2013 at
19:30

The Thirteenth Wolverson Cope
Lecture

**"Where the woolly rhinos roam:
vertebrate faunal and
environmental change during the
last ice age"**

Prof. Danielle Schreve (Royal
Holloway)

(Image: Schreve et al. 2013
JQS 28, 118-130)



Thursday 12 December 2013 at 19:00

The Christmas Social at The Keele Sustainability Hub

with the judging of the NSGGA/GCStaffs Photographic Competition, bring you own geology displays (rocks /minerals / fossils / books / maps etc.) and a short talk "*John Milne (1850-1913), Father of Modern Seismology*"
Dr Ian Stimpson (Keele)

The buffet for NSGGA Members / GCStaffs Volunteers and their families will be £11 per person including wine, please book using the booking form on page 10 on this Bulletin, enclosing payment, by Friday 15th November or at the October / November Lectures.

Special offer for new members only : Join the NSGGA as a full member for 2014 on the night and get you Buffet Fee refunded!

The Christmas Social this year will be held in the Earth Observatory at the Keele Sustainability Hub, Home Farm by the main Keele entrance.

There is limited parking outside the Hub itself but ample parking is available in car park A2 behind the MedIC4 building which will be free of charge at that time of the evening.

Tours of the Hub will be available during the evening.

2014 Lectures

Thursday 9 January 2014 at 19:30

Keith Nicholls (Chester)

The Big Chill.....Life, death, and destruction, a story from the end of the Ordovician

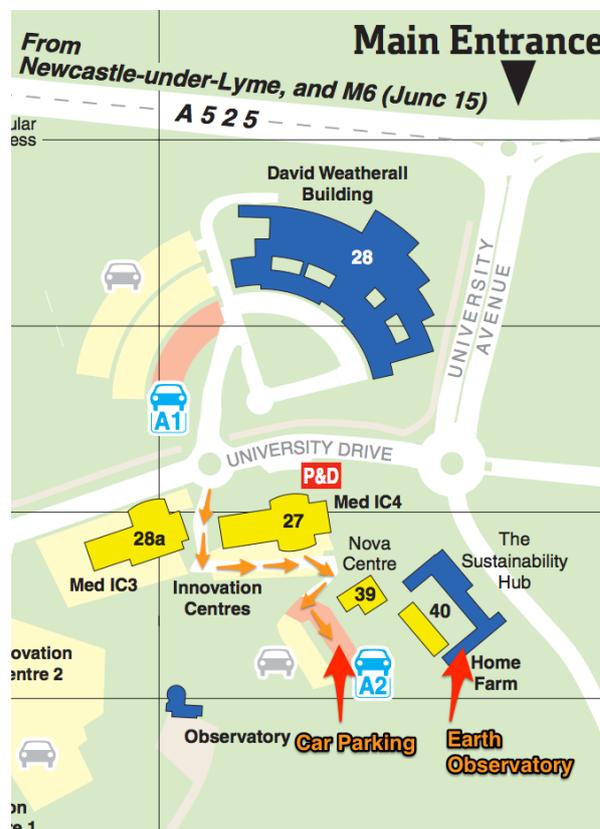
Thursday 13 February 2014 at 19:30

Prof. Sarah Davies (Leicester)

Rebuilding terrestrial ecosystems after the end-Devonian mass extinction: a major turning point in terrestrial evolution.

Thursday 13 March 2013 at 19:00

Dr Patrick Cossey



Annual General Meeting followed by
The Chairman's Address

A Word From the NSGGA Chairman

As the summer field season comes to an end we look forward to our action-packed programme of winter lectures with on topics ranging from Icelandic ice caps and the fate of at least one woolly rhinoceros roaming southern Staffordshire towards the end of the recent Ice Age, to planetary changes associated with major Phanerozoic extinction events at the end of the Ordovician and the end of the Devonian - no doubt all to do with climate change and other factors besides. It looks like an excellent programme so we look forward to seeing as many of you there as possible (please bring your friends too).

The Christmas Social

An additional excitement this year is that we plan to hold the Christmas Social in the plush Earth Observatory room at 'The Hub' - Keele University's new sustainability building at Home Farm just inside the University grounds close to the main entrance (see map on page 2 and the booking form on page 10). A great opportunity to see and learn more about this exceptional facility powered, at least in part, by innovative 'green' technologies and again we welcome all members to attend. Among the range of 'Social' activities planned are: a Tour of the Sustainability Hub by a member of the Keele staff; the results of our new Photographic Competition (those attending vote for the winner) and a short illustrated talk by Dr Ian G. Stimpson on "John Milne – The Father of Modern Seismology" to mark the centenary of Milne's death. All this and some fine food and drink to wash it all down.

At this event we actively encourage small geological displays from some of our members so if anyone has anything interesting they would like to show (perhaps small collections of rocks / minerals / fossils, old photographs, documents, books or maps - that sort of thing) please do bring them along as we have been assured plenty of bench space to display them. However, if you have do plan to bring something along please contact me first (patrick.j.cossey@gmail.com) and let me know how much space you require so that I can organise bench space accordingly.

The Photographic Competition

The competition deadline approaches - more entries please!!! Now we know that many of you have been away on your travels, or maybe you have put this matter to one side until the holiday period is over, but the deadline for the submission of entries (October 31) is now fast approaching and we need your snaps!!! While entries are now beginning to come in we could always do with some more. So please submit your pictures along with a competition entry form now before it's too late. We'd hate you to miss out. You know you have got some good pictures. Some great prizes on offer too!! Competition rules and completion entry form are supplied on page 11. As with all new ventures the success of this enterprise really does hang on the number of entries we receive from our members so we would really welcome your contribution(s) now. So, don't delay - do it today.

Patrick J. Cossey

David Thompson

It is with great sadness that the NSGGA learns of the death of one of its founder members and honorary executive committee member, David Thompson.

David studied as an undergraduate in the Geology Department at Keele. He returned to Keele in 1972 as a lecturer in the Education Department with responsibility for geology teacher training. He became a Senior Lecturer and remained in the Department until his retirement in 1996.

David was a catalyst for geoscience education in the UK, a founder member of the Association of Teachers of Geology, later the Earth Science Teachers' Association and later becoming ESTA President. He also had widely-recognised research expertise in the Triassic rocks of the region.

The NSGGA sends its condolences to his widow Doreen, an ex-member of the Keele support staff, and his two children.

A full obituary written by Prof. Chris King will published in conjunction with the ESTA Teaching Earth Sciences magazine in the next Bulletin.

As a tribute to the life and work of David Thompson, NSGGA and ESTA hope to publish many of the fieldwork notes and field teaching exercises he produced during his time in North Staffs.

Most were evening visits under the auspices of the Keele Science and Technology Teachers' Centre – Geology Section. Some are parts of a series entitled "Geology in the Field - Fieldwork near the Potteries". Others were for the NSGGA or other groups.

John Reynolds has made an initial list and is seeking additional items from members. If you think you may be able to help please contact John at jr.reynolds1@virginmedia.com

Field Excursion Report

British Geological Survey, Keyworth
Tuesday 23 July
Leader: Dr Joanne Thomas

Ten members of the NSGGA were met, in the BGS reception, by our guide for the day Dr Joanne Thomas.



Our first port of call was to the library which hosts a myriad of publications, most of which are available in digital form, and are accessible, to both scientists and the general public (subject of course to prior arrangements being made). We were invited to peruse a selection of maps and publications, some historical, relevant to our local area.

Although the library is not a museum, it does hold an archive of interesting information, including correspondence with the famous geologist Archibald Geikie the then Director of the Geological Survey in, asking him to justify the cost of 'cosmetic surgery' and

replacement by a fig leaf to the (now restored) Statue of 'The labours of Hercules', which was undertaken in response to the sense of 'disgust' felt by his wife at its existing form. (Further details are available in the form of a leaflet from the BGS).

We were informed that the work of the BGS is part funded by directly by central government regarding the work and stores available to the public, and part by projects sponsored by individual government departments, foreign governments, and private interests.

We were then escorted to the extensive, national repository of onshore geological bore-hole cores, to which, more recently, has been added to by the repository for offshore and hydrocarbon cores. In all, a wealth of stored, available material.

Here we were met by Dr Mike Howe, Head of the National Geological Repository – Collections, who, as well as giving us some statistical data on the extent of the repository, demonstrated a representative samples of the usefulness of borehole information. Cores are halved vertically, one being retained intact while the other is available for further investigation, such as to establish porosity and permeability, important factors in assessing the source rocks for reservoirs of gas or oil or for establishing water availability from aquifers. Other cores might be used to establish the depth and abundance of economically important resources such as sulphate rich deposits or coal, while macro- and micro-fossils can be used in dating strata.

Specifically mentioned was the Cardigan Bay Basin Mochras Borehole, which, beneath Quaternary, and Tertiary cover, revealed one of the most complete Lower Jurassic successions so far discovered, and we were later to meet a group from Cambridge University who were using this material to gain insights into the environmental and structural changes which are preserved.

We next visited the store of over 3000 standard reference macrofossils used for comparative purposes and were able observe some of the contents.

To complete the indoor part of the visit we went to the cataloguing centre where the field notebooks field observation, maps, borehole logs and other information are collated, based on the grid reference coordinate squares of the Geological Survey maps. Present day surveys are conducted using a sturdy digital tablet, which can, in the field, directly access information from the central data-base at Nottingham and which can relay data collected directly back to this base. The BGS is currently designing apps which can be downloaded to smart phones and tablets, one of which will allow geological information to be superimposed onto digital photo images!

After thanking our hosts, we explored the BGS Geological Walk, which is overlooked by the James Hutton Building, clad with Silurian wacke overlain, upwards, by Devonian sandstones stylised to represent the famous Siccar Point Unconformity. The Geological walk is a journey through time from the Present to the Precambrian represented by classic, monolithic rocks laid out chronographic order showing different processes together with paving materials of ascending ages, all of which are numbered and accompanied by a useful guide.

Our final point of call was to Reception and the shop which sold rock and mineral specimens as well as jewellery and a variety of publications and maps.



John Parton

Other Societies

Black Country Geological Society

Indoor meetings are held at Dudley Museum & Art Gallery, St James's Road, Dudley

Sunday 20 October @ 10:00

Charnwood Forest Part II [field meeting] – Mike Allen

Monday 28 October @ 20:00

Of fossils and fracking - a palaeontologist's guide to shale gas – Dr Liam Herringshaw (York)

Saturday 2 November @ 10:00

Geoconservation clearance at Himley railway cutting. – Steve Gallis

Monday 18 November @ 20:00

The Herefordshire Lagerstätte: Silurian Soft-Bodied Sensations – Professor David Siveter (Leicester).

Monday 9 December @ 19:30

BCGS Members' Evening and Christmas Social.

More details at www.bcgs.info

East Midlands Geological Society

Indoor meetings are held at lecture theatre B3, Biology building at the University of Nottingham

Saturday 12 October @ 18:00

The Geology and Palaeontology of the Black Country in the late Silurian Period – Graham Worton

Saturday 9 November @ 18:00

The Geology of Svalbard and Jan Mayen – James Cresswell (GeoWorld Travel)

Saturday 7 December @ 18:00

Landslides – Helen Reeves and Claire Dashwood

More details at www.emgs.org.uk

East Midlands Regional Group of the Geological Society

Indoor meetings are held at BGS, Keyworth

Monday 18 November @ 19:00

Gypsum geohazards and road construction – Dr Tony Cooper

More details at [www.geolsoc.org.uk/en/Groups and Networks/Regional Groups/East Midlands](http://www.geolsoc.org.uk/en/Groups%20and%20Networks/Regional%20Groups/East%20Midlands)

Liverpool Geological Society

Indoor meetings are held at James Parsons Building, Liverpool JMU, Byrom Street, Liverpool, L3 3AF

More details at liverpoolgeologicalsociety.org.uk

Manchester Geological Association

Saturday/Sunday 19/20 October

Mineralization and Fluid Flow in the Peak District
Joint meeting with Yorkshire Geology Society and the University of Derby. At Buxton Museum, The Devonshire Dome, Buxton Campus, University of Derby & field trip to Castleton

Indoor meetings are held at the Williamson Building, University of Manchester

Wednesday 11 December @ 19:00

Mining the Yard Seam in New Mills in the 18th and 19th Centuries - Dr Derek Brumhead MBE
(Manchester Geological Association)

More Details at www.mangeolassoc.org.uk

North West Regional Group of the Geological Society

Indoor meeting held at Williamson Lecture Theatre, Manchester University, Oxford Road, Manchester

Wednesday 16 October @ 18:30 Reflections on the Residual Strength of Clay Soils – Dr Edward Bromhead (Kingston) [Renolds Lecture Theatre, Manchester University]

Thursday 21 November Assessment and Design Mitigation for Rockfalls in Quarries – Thomas Clifford (Senior Geotechnical Engineer, Atkins)

Thursday 5 December Underground Bridgewater Canal System in the Northwest – Glen Atkinson

More details at [www.geolsoc.org.uk/en/Groups and Networks/Regional Groups/North West](http://www.geolsoc.org.uk/en/Groups%20and%20Networks/Regional%20Groups/North%20West)

Shropshire Geological Society

Indoor meetings are held at The Shire Hall, Shrewsbury

Wednesday 9 October @ 19:30 Impact of volcanic eruptions in Iceland 2010 - Prof Andy Russell (Newcastle)

Wednesday 13 November @ 19:30 Through the lens of the Geologists Association - Dr Jonathan Larwood) (Natural England)

Wednesday 11 December @ 19:00 AGM followed by reports on the Society's field trips, rock hops and field work projects

More details at www.shropshiregeology.org.uk/SGS/SGSintro.html

Warwickshire Geological Conservation Group

Indoor meetings are held at St Francis Church Hall, Warwick Road, Kenilworth CV8 1HL

Wednesday 16 October @ 19:30 Rocks under the Spotlight – Frank Wells

Wednesday 20 November @ 19:30 Greats of Midlands Geology "Fred Shotton" – Prof Peter Worsley & "Leonard (Jack) Wills – Dr Jon Clatworthy

Wednesday 11 December @ 19:30 Christmas Social and Geological Conservation Review of the Wealden of Southern England - Dr Jon Radley (Warwickshire Museum)

More details at www.wgcg.co.uk

West Midlands Regional Group of the Geological Society

Indoor Meetings at Lapworth Museum of Geology, Birmingham & University of Wolverhampton, Telford Campus, Shifnal Road, Priorslee, Telford, Shropshire, TF2 9NT

Tuesday 15 October @ 18:30 The use of Quarried stone as Leachate Drainage Media on a Landfill Site in the Middle East - Keiron Finney (Exea Associates Ltd) [Birmingham]

Tuesday 12 October @ 18:30 Helpston Groundwater Remediation Project - Prof Leon Warrington (Hydrock Consultants) [Wolverhampton]

Tuesday 10 December @ 18:30 New Developments in Ground Gas Risk Assessment – Steve Wilson (EPG) [Birmingham]

More details at [www.geolsoc.org.uk/en/Groups and Networks/Regional Groups/West Midlands](http://www.geolsoc.org.uk/en/Groups%20and%20Networks/Regional%20Groups/West%20Midlands)

Western Institute of Mining and Minerals

Indoor meetings are held at the William Smith Building, Keele University

Monday 4 November @ 19:00

Solvents: Past, Present and Future - Daniel Hassall
(Wardell Armstrong International)

Monday 2 December @ 19:00

Dynamics Of Rock, Gas and Water in
Underground Coal Excavations: Principles and
Applications - Dr Peter Gaskell (Parsons
Brinkerhoff) and Dr Dave Creedy (Sindicatum
Sustainable Resources)

More details at www.iom3.org/wimm

NSGGA - Next Committee Meeting:**Wednesday 20 November @ 19:00**

In room WS1.44, the William Smith Building, Keele University

Contacts List: NSGGA Committee 2013-14**Chairman: Dr Patrick Cossey**

22 Heath End Road, Alsager, Cheshire, ST7 2SQ. Tel. 01270 872002

e-mail: patrick.j.cossey@gmail.com**Vice-Chairman: David Osborn**

Stretton, 2 Croyde Place, Meir Park, Stoke-on-Trent, ST3 7XD. Tel 01782 396692

email: david.d.osborn@talktalk.net**General Secretary: Eileen Fraser,**

47 Longdown Road, Congleton, Cheshire CW12 4QH Tel. 01260 271505

email: fraser@fraserco.co.uk**Treasurer: Brenda Kay,**

9 Copthorne Drive, Audlem, Crewe, Cheshire, CW3 0EQ Tel. 01270 811650

email: r.peter.k@gmail.com**Membership Sec.: Gerald Ford,**

Woodville, Tower Road, Ashley Heath, Market Drayton, Shropshire TF9 4PU Tel.

01630 673409e-mail: gford@btinternet.com**Speakers Sec.: Diane Lawrence,**

9 Brickfield Close, Hixon, Stafford, ST18 0NY Tel. 01889 207195

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Longfields, Park Lane, Cheddleton, near Leek ST13 7J

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e-mail: steves261@aol.com**GeoConservation Staffordshire Liaison Officer: Dr Ian Stimpson,**

Geography, Geology & the Environment, Keele University Tel. 01782 733182

e-mail: i.g.stimpson@keele.ac.uk**Bulletin Sec.: Dr Ian Stimpson,**

Geography, Geology & the Environment, Keele University Tel. 01782 733182

e-mail: i.g.stimpson@keele.ac.uk**Executive Committee** (honorary):

Dr. Colin Exley; Terry Jones; Ted Watkin.

Honorary Life Member: Ann Myatt**Executive Committee** (elected):

Dr Lloyd Boardman; Dr Stuart Egan; Janet Osborn (Minutes Secretary)

Executive Committee (co-opted):

Don Steward, John Reynolds; Sophia Hunt (Keele GeoSoc).

NSGGA web pages: www.esci.keele.ac.uk/nsgga

Christmas Social Booking Form

This year the Christmas Social for NSGGA Members, GCStaffs Volunteers and their friends is being held at

Keele Sustainability Hub

on:

Thursday, 12th December 2013

A buffet meal is provided and Ian Stimpson will be giving a talk on '**John Milne (1850-1913), Father of Modern Seismology**'. There will also be the judging of the NSGGA/GCStaffs Photographic Competition and 'Bring Your Own Geology' displays.

The social will start at **7.00pm** in the **Keele Sustainability Hub** and will cost **£11** per person including a free glass of wine.

If you would like to attend, please return the booking form below **with payment** (which needs to arrive before **Friday 15th November**)

to:

Brenda Kay,
9 Copthorne Drive, Audlem, Crewe, Cheshire, CW3 0EQ
Tel. 01270 811650

Early booking is essential, as numbers have to be pre-booked with the caterer

To book a meal, please enclose a cheque (payable to NSGGA) for the full amount

I/We would like to book places for the Christmas Social on Thursday, 12th
December, 2013

I/We enclose a cheque for £ payable to NSGGA

Name/s

Address

Telephone

Please Tick: I am a member of NSGGA

I am a GCStaffs Volunteer



NSGGA PHOTOGRAPHIC COMPETITION 2013

Theme: Geological Features and/or Landscapes – Deadline: 31st October 2013

COMPETITION RULES

1. Entry restrictions: This year the competition is only open to NSGGA members and GeoConservation Staffordshire volunteers. The competition is not open to professional photographers. Entries cannot have either won a previous competition or been previously sold. Members of judging panel are excluded from the competition.
2. Electronic editing: Images may be cropped, enlarged and digitally enhanced to remove spots and scratches only but any further digital manipulation of images will be regarded as unacceptable.
3. Entry format: Digital images in jpg/jpeg format only. Images should have a minimum dimension of at least 500 pixels in either height or width but there is no maximum size.
4. Number of entries: Three maximum.
5. Entry submission: Images should be sent as email attachments to Ian Stimpson at i.g.stimpson@keele.ac.uk with the body of the email containing your details and your image details as set out below.
6. Judging: A judging panel of three (the NSGGA chairman, a representative from GCStaffs and one other invited person) will select the '12 best photographs' from anonymised entries. The competition winner(s) will be determined by participants (members, GCS volunteers and guests) voting at the Christmas Social. All attending the 'Social' will be eligible to vote at this meeting. Entrants (and family members of entrants) whose images have been 'shortlisted' as a potential winning entry will be barred from voting for their own entries (or those of family members). In the event of a draw the Chairman (or the Chairman's nominee) will have a casting vote. The judging panel reserves the right to exclude any entry they consider in breach of the competition rules. The judges' decision will be final.
7. Copyright matters. Entrants will retain copyright to their images but by entering them into the competition they grant permission for the NSGGA and GCStaffs to reproduce the photographs free of charge in/on any NSGGA/GCStaffs bulletin, website, calendar, geotrail or other publicity material. Due acknowledgement of the copyright holder (photographer 's name) will appear alongside any images used in this way.

COMPETITION ENTRY

Please copy the following text into the body of your email entry and complete with your details, your photograph details and send, attaching up to three photographs, to i.g.stimpson@keele.ac.uk with the subject "NSGGA Photographic Competition 2013" by 31st October 2013

Name:

NSGGA Member / GCStaffs Volunteer [state which]:

I understand that by entering this competition I retain copyright to the images but grant permission for NSSGA / GCStaffs to publish any photograph, with due attribution, free of charge.

Entry 1 : Title

Entry 1 : Location

Entry 2 : Title

Entry 2 : Location

Entry 3 : Title

Entry 3 : Location

Join NSGGA now and get free membership for the remainder of 2013

NSGGA Membership Form 2014



Fossils, Rocks & Minerals
Summer Field-Trips
Winter Talks
Site Conservation
Regular Newsletters

Name.....

Address.....

.....

.....

Postcode..... **Telephone**.....

e-mail address

Would you be willing to receive your Bulletins by e-mail yes no

- | | | |
|--------------------|--------|--------------------------|
| Ordinary (Full) | £13.00 | <input type="checkbox"/> |
| Family * | £15.00 | <input type="checkbox"/> |
| Retired/Unemployed | £10.00 | <input type="checkbox"/> |
| Student ** | £ 3.00 | <input type="checkbox"/> |

John Myers Award Fund*** contribution of £.....

* For insurance purposes, please list the names of all members of the household to be included:

** Students please name your **full-time** course:

Cheques should be made payable to the: "**NSGGA**" and sent to:
Gerald Ford, NSGGA Membership Secretary,
Woodville, Tower Road, Ashley Heath, Market Drayton, Shropshire TF9 4PU
Telephone 01630-673409 **e-mail** gford@btinternet.com

For our records, are you currently a member of the national GA ? yes no

*** Two John Myers Awards (together with runners up) are presented annually to students at Keele University who produce the best piece of coursework in the view of the independent NSGGA awards committee.