

# Bulletin

## Number 53

### April 2000



## NSGGA Golden Jubilee Celebration Events

**Weekend 29 April - 1 May**

**Geology around Tenby, Pembrokeshire**

Leader: Professor Gilbert Kelling

Details of this trip have been circulated to Members by separate post so we hope that those interested will already have contact our Field Secretary for a list of hotels and Guest houses in the area (several Members have booked at the Pen Mar Hotel, Tenby).

The trip will start on Saturday at 1.00pm

For late booking or further details contact Bill Fone on 01782 294284 or 01952 596656  
email: [W.Fone@staffs.ac.uk](mailto:W.Fone@staffs.ac.uk)



**Saturday 13 May**

**Open Field Meeting at Park Hall Country Park**

Meet at **2.00pm** at the Park Hall Country Park **Visitor Centre**

John Reynolds will act as guide to the geology of **Park Hall Country Park** - the Triassic sandstone and conglomerate Site of Special Scientific Interest in Stoke-on-Trent - where the canyons that remained after quarrying ceased are a haven for a great variety of wildlife.

Suitable for all your family and friends.

**Sunday 21 May**

**Castleton and Mam Tor**

Leader: Bob Billing (Buxton WEA)

**10.00am** start at the Blue John Cavern car park (SK133835)

A walk where we will look at the bituminous deposits, limestone and reef exposures, a volcanic vent, and finish back at the car park. It may be possible (time permitting) to visit the Cavern, however they are commercially operated and there will be a charge for entry.

Directions: Follow A6 out of Buxton, towards Chapel-en-le-Frith. Turn right onto the A6023. Take the B6061 and follow signs for the Blue John Cavern.

## Saturday 10 June

### Ecton Hill and Ecton Copper Mine, Manifold Valley, Staffs

Start at 10.00am

The copper mines of Ecton Hill date back over 3500 years, and the geology and archaeology combine to make this a fascinating area to explore. The site is about a mile from Warslow and just over a mile from Hulme End (SK097583). Park in the lay-by in the valley, and walk up the track to the Ecton Educational Centre beside the folly with the green spire. Bring a packed lunch (coffee/tea provided), good walking boots and a warm sweater for underground. Helmets and lamps provided.

There will be a field fee of **£5.00** each to cover use of the equipment and the centre. A maximum of 30 places are available (two groups of 15) for adults (over 16) for an underground visit into Salt's Level (300 metres long, 1.6 metres high, 1.6 metres wide, level walk, not challenging) - these should be booked in advance (see below). There will also be surface visits during the day open to all, including a walk over the hill to collect mineral specimens.

Please book directly with Zoe and Alastair Fleming:

☎ 01785 816862 or by post to: 1 Vicars Close, Oulton. Stone, ST15 8UQ.

## Thursday (evening) 27 July

### British Geological Survey Headquarters, Keyworth

An evening meeting, you need to be at Keyworth (near Nottingham) at **7.00pm** for a 7.30pm tour start.

For directions and further details contact Bill Fone on 01782 294284 or 01952 596656, email:

[W.Fone@staffs.ac.uk](mailto:W.Fone@staffs.ac.uk)

## Field Trip Report-back: The Darwin Trail, Sunday 26 March 2000

On Sunday morning 26 March eighteen people plus leader David Thompson gathered at Keele University for a field trip in order to follow the footsteps of Charles Darwin in North Staffordshire. David was ably assisted by Pat Callaghan, chairperson of the Staffordshire Wildlife Trust, who presented ecological viewpoints whilst David talked about the historical and geological aspects. John Reynolds NSGGA rendered further most valuable assistance. The day was organised by NSGGA as part of National Science Week and participants had travelled from as far as Birmingham and Holmes Chapel.

After a brief introduction to the Darwin/Wedgwood family history we piled into the SWT minibus and two cars and set off to Baldwins Gate and Maer village, where we noted the "Danger Toads Crossing" signs. Then we drove past Slymansdale and the effects of the Madeley fault to inspect a small quarry in the Kidderminster Formation where David demonstrated cross bedding in the exposed sandstone and the concept of palaeocurrent direction. We then walked further up Camp Hill and examined three different ecologies of the area, in particular features of the acid heathland and the influence of the geology. Near the entrance to Camp Hill House we compared the ecology of the unmanaged woodland (well on the way to an oak forest climax) on one side of the road with that of the landscaped gardens of the House, originally built for Sarah Elizabeth the unmarried daughter of Josiah Wedgwood II.

The party then moved off along the foot of the scarp of the Kidderminster Pebble Beds until it terminated in the Sidway fault and on to Willoughbridge Quarry. With the kind assistance of Melvin Stanier the site foreman of Hanson Aggregates (formerly ARC), who had given up his Sunday for us, we were able to visit the quarry site and study its geological, ecological, operational and economic aspects.

William Dabb's cottage, close to the Boggs, a glacial overflow channel, was the next port of call. Here Josiah Wedgwood II presented a scientific puzzle to Charles Darwin which resulted to his devising observations which led to his proposing a new *Theory of the Nature and Origin of Soil* as a result of the actions of earthworms. Then on towards Maer village and up the lane to near Bates Farm, stopping to view the landscape over the Maer Hills and the effects of the Madeley and Sidway faults. From the

scarp of the Bromsgrove Sandstone (of Middle Triassic Age) we were introduced to the palaeogeographics of Lower (246 Million years ago) and Middle (242 Million years ago) Triassic times. From this point we had a splendid view of Maer pool, which is a biological SSSI. On the way back towards Maer village and church, we paused to enjoy the view of Maer Hall and the Grade I historic landscape from the roadside. We briefly visited St Peter's church to see the grave of Josiah Wedgwood I and his family and the altar where Charles Darwin married his cousin Emma Wedgwood on 29 January 1839 and a copy of the marriage certificate.



view of Maer Hills from near Bates Farm, Maer



David Thompson speaking to the party near Maer

The final part of the day was spent visiting the Hanchurch Hills and the lane near Butterton where two parts of a 60 - 52 Million-year-old basic dyke, a dolerite intrusion, were examined.

The weather had been kind and it only started raining after we had returned to the vehicles to travel back to Keele. We had had a fascinating day out and the opportunity was taken to recruit some new members to the NSGGA.

Our thanks go out to David, Pat and John for making the day so interesting. The detailed handout compiled by David was a valuable supplement on the day and will be an indispensable reference to future reading.

NSGGA Member Mike Fereday (text and photos)

## Articles & Publications

Cowan, G., Burley, S.D., Hoey, N., Holloway, P., Bermingham, P., Beveridge, N., Hamborg, M. & Sylta, O. 1999

Oil and gas migration in the Sherwood Sandstone of the East Irish Sea Basin  
pp.1383-1398 in

Fleet, A. & Boldy, S.A.R. (Eds.)

*Petroleum Geology of Northwest Europe*

Proceedings of the 5<sup>th</sup> Conference, London, Geological Society

Jeuda, B.S. 1999 \*\*

The limestone quarries at Caldron Low 1769-1939, part 1

*Tarmac Papers* 3, pp.193-217.

A fascinating early history of the quarries which concentrates less on the geology and more everything else.

Thomas, I.A. 1999 \*\*

Tarmac's Derbyshire Heritage

*Tarmac Papers* 3, pp.325-355.

A fairly detailed 'brief review' of the involvement of Tarmac in mineral extraction in Derbyshire.

Thompson, D.B. 2000 \*\*

NSGGA and the maps and memoir for the area around Stoke-on-Trent: The mirror-image campaign of the North Staffs. Field Club in 1893 - an addendum.

*Bull. of the North Staffs. Group of the Geologists' Association* 52, Appendix 11, page 9 (addendum).

The addendum contains some updates to the captions and the acknowledgements. Although being issued with BNSGGA 53, it should be treated as an extra page of Appendix 11 as issued in the previous Bulletin.

\*\* items are available for reference (by prior appointment) at the Geological Records Centre,  
Natural History, The Potteries Museum & Art Gallery, Hanley, Stoke-on-Trent ST1 3DW ☎ 01782 232323

## From the Local Papers

The footpath up to Thor's Cave in the Manifold Valley near Wetton has been greatly improved. 200 steps, fencing and a viewing platform at the mouth of the cave have been installed. The work is part of a £63,000 project funded by the National Park Authority, Staffs. Environment Fund, Staffs. County Council and the landowner, Chatsworth Estate. Stone for the steps was brought in from a quarry at Bakewell, and locally coppiced hazel was used for the fences. - Leek Post & Times, 1.3 2000

Hargreaves Roadstone of Sheffield have submitted a plan to restore Hardwick Quarry near Caverswall to an equestrian centre. There is local opposition to the move as the predicted 25 to 30 lorries daily travelling to the former gravel pit will be a major problem on the narrow roads in the area. - The Sentinel, 3.3.2000

Vandals have desecrated the war memorial outside the magistrate's court in Albert Square, Fenton. Both hands have been ripped of a stone statue of a rifle-carrying soldier. - The Sentinel, 15.3.2000. Note: The statue is carved out of Portland Limestone.

## Extractive Industries

In late February 2000, as expected, Independent Energy UK announced an appeal against Staffs. County Council's decision to refuse permission to drill for gas at Three Nooks Farm near Biddulph Moor (SJ915578).

Near Cheadle, Hanson Aggregates are in the process of re-opening Freehay Quarry (which closed 20 years ago) as they are running out of workable Triassic Sherwood Sandstone rock in their nearby Huntley Quarry.

## The University of Liverpool, Centre for Continuing Education

**29 April - 1 May** The geology of the Lleyn Peninsula led by Dr. Ros Todhunter

**23 - 25 June** The geology and landscape of North Yorkshire led by Hazel Clark

Both are residential courses and cost about £125.00 (Lleyn) and £105.00 (N. Yorks.) per person.

For further details contact: Mrs. Lesley Crombie, Centre for Continuing Education, The University of Liverpool, 19 Abercromby Square, Liverpool L69 7ZG ☎ 01517 942 550

## NSGGA Subscriptions 2000

Thank-you to all those that have paid, we hope you enjoy reading the free copy of the article written by David Thompson that should be with this mailing.

## Manchester Geological Association Field Excursions

For details contact: Jane Michael, MGA Field Secretary

22 St. Giles Drive, Godley, Hyde SK14 2S, e-mail [jammyjane@aol.com](mailto:jammyjane@aol.com) or ☎ 01613 660595

Saturday 13 May - The Adam Sedgwick Trail, Sedburgh

Saturday 18 June - The Landscape of north-west Shropshire

Sunday 6 August - Meander around the Medlock, Park Bridge near Oldham

Saturday 16 September - Derbyshire ore field

## Manchester Museum

The revamped geology galleries at the Manchester Museum, Oxford Road, Manchester are due to re-open on 30 June. It is part of a £20 million pound refurbishment of the whole Manchester University Museum. There is some concern from the curatorial staff that the text has been 'dumbed-down' to accommodate the understanding of the lottery ticket-buying public, who effectively paid the funding. There should however still be great interest in some of the wonderful specimens on display.

## Shropshire Geological Society Field Excursions

For further details about the field meetings contact: Gordon Hillier, SGS Field Secretary

☎ 01691 682484 email: [gr-hillier@micro-plus-web.net](mailto:gr-hillier@micro-plus-web.net)

Saturday 21 May - An introduction to Black Country Geology (part 2)

Sunday 18 June - The landscape of north-west Shropshire

Saturday 24 June - New light on the Severn Valley - Holocene rivers in a Devensian landscape

Wednesday (evening) 5 July - Mid-Shropshire mystery tour

Weekend 18-20 August - A weekend with the Shropshire Geological Society (with the national GA)

For general details of SGS activities contact: Susan Beale, SGS Secretary

☎ 01694 723679 email: [beales@church-stretton.freeserve.co.uk](mailto:beales@church-stretton.freeserve.co.uk)

## NSGGA Committee 2000-01

### Chairman: Alastair Fleming,

1 Vicars Close, Oulton, Stone, Staffs ST15 8UQ ☎ 01785 816862

email: [alastair\\_fleming@talk21.com](mailto:alastair_fleming@talk21.com)

### Vice-chairman: Bill Fone,

23 Mill Farm Drive, Randlay, Telford TF3 2NA ☎ 01782 294284 (work) ☎ 01952 596656 (home)

email: [w.fone@staffs.ac.uk](mailto:w.fone@staffs.ac.uk)

### Secretary: Dorothy Wright,

24 Elm Tree Lane, Bignall End, Stoke-on-Trent ST7 8NG ☎ 01782 721576

### Treasurer: Carol Burnett,

28 Brookside Close, Newcastle-under-Lyme ST5 2HX ☎ 01782 713227

email: [carol@burnett40.freeserve.co.uk](mailto:carol@burnett40.freeserve.co.uk)

### Membership Sec.: Mike Brown,

6 Spring Close, Rode Heath, Stoke-on-Trent ST7 3TQ ☎ 01270 878130

email: [michael.a.brown@lineone.net](mailto:michael.a.brown@lineone.net)

### Field Sec.: Steve Alcock

Longfields, Park Lane, Cheddleton, near Leek ST13 7JS ☎ 01538 360431

**Conservation Sec.: Keith Harrison,**

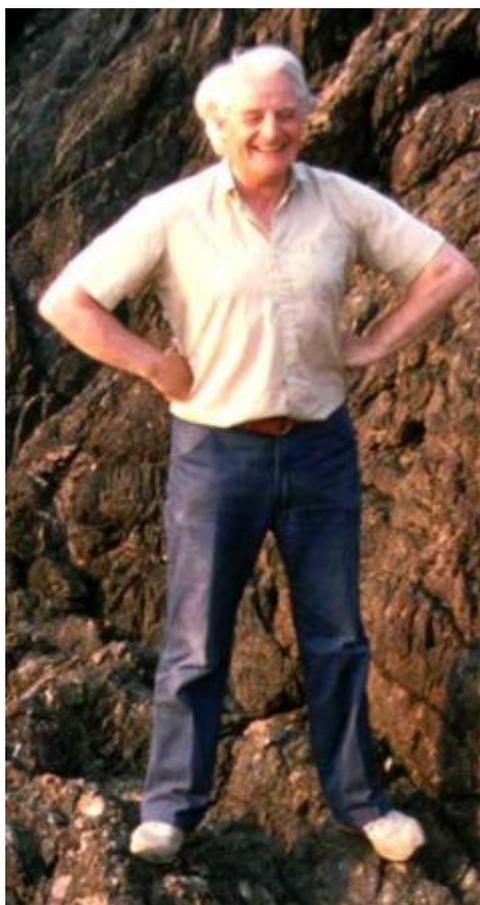
21 Grove Avenue, Heron Cross, Stoke-on-Trent ST4 3BA ☎ 01782 331699

**Bulletin Sec.: Don Steward,**

Natural History, The Potteries Museum & Art Gallery,

Bethesda Street, Hanley, Stoke-on-Trent ST1 3DE ☎ 01782 232323 (work)

email: don.steward@stoke.gov.uk



Chairman 2000-01: Alastair Fleming  
(on a NSSGA trip to Pembrokeshire,  
photo Ken Rout)



Vice-chairman 2000-01: Bill Fone  
(the older one, making plaster casts of fossils)

**Executive Committee (elected):**

**Prof. F. Wolverson Cope** (Emeritus); **Dr. Colin Exley** (Honorary); **Terry Jones** (Honorary); **David Thompson** (Honorary); **Ted Watkin** (Honorary); **Janet Fairclough** (to shadow the Secretary), **Peter Hulme**; **Gilbert Kelling**; **Dave Roberts**; **Ken Rout**; **John Winchester**.

**Executive Committee (co-opted):**

**Phil Burkinshaw**, **Mike Fereday**, **Zoe Fleming**, **Chris King**, **John Reynolds**; in addition a representative from the Staffs. University Geol. Soc. and the Keele Geol. Soc. is invited to attend committee meetings

**NSGGA Committee - next meeting**

- **Thursday, 11 May 2000 at 7.30pm**

in Room CBA1.077, Chancellor's Building, Education Department, Keele University