



Bulletin of the North Staffordshire Group of the Geologists' Association Number 113 : ~~April~~ June 2015



Summer Field Programme 2015

Each person attending field meetings does so at their own risk. The NSGGA has public liability insurance through a GA insurance policy that also carries limited personal accident cover for members attending meetings or field trips. Non-members pay £2 to cover temporary membership giving them insurance cover. A field fee of £2 per head is normally charged for members and non-members to cover the leader's expenses.

July 2, 2015: Bonsall (Evening Walk – 18:00 start) Leader: Colin Bagshaw (EMGS)

Meet at 6pm in the lane immediately above Bonsall church(G.R. SK280583).
No car park but places to park.

The Bonsall area offers a wonderful opportunity to examine the geology of the Lower Carboniferous strata of Derbyshire. On the visit we will be able to inspect features of the limestone and volcanic rocks, the hydrothermal mineral veins and quite possibly the recent formation of tufa. We will be walking towards Matlock Bath. Please bring waterproofs and sensible footwear. Attractive village pub available after walk. Mainly footpath walking, a few steeper slopes. Booking form at end of bulletin.

Sunday July 12, 2015: Geology from the Severn Valley Railway (10:30 start) Leader: Peter Worsley

Note that this is a GA field trip and should be booked through the GA not NSGGA

For some 27 km, today's Severn Valley Railway (SVR), follows a particularly scenic route from Kidderminster (Worcestershire) to Bridgnorth (Shropshire). This year it celebrates the Golden Jubilee of its foundation as a heritage railway. For most of the route the line runs close to the river giving splendid landscape views which cannot be obtained from any road. The three main



Bridgnorth Sandstone, Bewdley quarried for Severn Valley Railway Bridge -
Image Ian G. Stimpson

elements of the geology to be examined are :-

Carboniferous Coal Measures, Permo-Triassic sandstones and Quaternary fluvial sediments and landforms.

The visit will commence with the 10.30 departure from Kidderminster arriving at Bridgnorth at 11.38. A walking tour of the town centre geology will follow with time for a quick lunch prior to taking the 13.40 train to Hampton Loade (20 mins).

Hopefully the ferry across the river will be operative and it will be possible to follow the east bank footpath southwards to the site of the former Alveley Colliery. After examining the Country Park Visitor Centre on the reclaimed colliery tip, the path then crosses to the west bank and leads down to Highley station. There should be time to visit the adjacent 'Engine House' Museum (admission included in the fare) before catching the 16.42 back to Kidderminster, arriving at 17.20. Both Bridgnorth and Kidderminster stations have real ale pubs on the platform.

Participants will need to walk 6-7 km on paved and unpaved public footpaths and be able to board and alight a small ferry. The SVR Kidderminster station is adjacent to the eponymous National Rail station. Be warned! – besides being a geologist, the leader is a railway enthusiast.

Further details will be available from the GA office. Total cost will depend on numbers but should be c £25 to include a pre booked group discount ticket. Register with Sarah Stafford sarah@geologistsassociation.org.uk to confirm your place.

Other Field Days for your Diary September 13, 2015: Teme Valley

Field Trip Reports Hillend, South Shropshire: March 30, 2014 Leader: Joe Crossley

On a very sunny morning 12 members met Joe Crossley and Hazel Clarke in the Hillend Farm layby(SO396876) on the very busy A489. There was a slight delay to the start as most of us were waiting in the wrong layby, but no worries as Joe found us and showed the group the correct starting point. At Hillend a small roadside cutting of the *Pentamerus* beds of the Aymestry Limestone is exposed. After a safety



Joe Crossley indicates the interbedded mudstones /limestones of the *Pentamerus* Beds (Telchian, U. Llandovery, Silurian) of the Welsh Basin. Quarry section Hillend Farm, Plowden Gorge, Shropshire. Image: Pat Cossey.

warning by Joe - the A489 becomes a motorbike Grand Prix track, the assembled Geologists examined the outcrop and collected fossils before meeting back to discuss our findings.



A storm deposit of the Welsh basin showing the distinctive 'arrow head' shells of the brachiopod *Pentamerus oblongus* (Telchian, U. Llandovery, Silurian). Roadside section Hillend Farm, Plowden Gorge, Shropshire. Image: Pat Cossey

After putting our fossil collection on display Joe and Hazel collated our thoughts on the sediments and fossils seen and then extrapolated them into possibly palaeoenvironments. The *Pentamerus* Limestone seen in the road cutting consists of grey limestones and mudstones. The limestone beds are very fossiliferous with fragments of corals, brachiopods, trilobites and crinoids. The majority of the brachiopods are *Pentamerus Oblangus*. These are disarticulated with only the thicker umbo preserved as internal casts. This leaves the

fossils looking like an arrow, hence the common name of Government Rock. Whole specimens are rare. The brachiopods were bottom dwellers that were broken up by storms. Every few years muds were swept over the environment killing the animals living there so they became a death assemblage. The thin mudstone layers contain only a few small fossils. The group then walked along the farm track leading from the layby to see another outcrop of the *Pentamerus* Beds. Here the irregular nature of the limestone beds could be clearly seen possibly as a result of erosion before the deposition of the mudstones.

Lunch was taken slightly up the hillside on an Onny river terrace with views along the Plowden Gorge to the west. Walking up the slope above the farm track small outcrops of the basal Kenley Grit were found on the grassy slope. Continuing uphill to the stock fence purple slates with quartz veins are exposed, These are the 600Ma Longmyndian Precambrian. The group then tracked the junction between the Longmyndian and the basal Silurian grits, this is the Silurian shore where the Silurian seas reached a Precambrian Headland. The 'shoreline' was traced from rabbit holes and post holes walking towards the west. We returned to the cars to drive to View Edge Quarry via a comfort stop at Craven Arms.

View Edge Quarry (SO.426806) is an old quarry worked in the Aymestry Limestone. The quarry face is pictured in the British Regional Geology Welsh Borderland showing the *Kirkidium*(*Conchidium*) *Knightii* shell bed. This large ribbed brachiopod is found in large groups of broken fragments. The shell bed has weathered since the NSGGA last visited in 1996 but is still an impressive death assemblage of the Ludlow Series shelf limestone. Time was spent examining the quarry face. Several large colonial corals were seen, up to 50cm across, some of which are upside down and show evidence of being transported and eroded. The honey coloured limestone is well bedded, with beds up to 1m across. A few thin silty layers are seen in the quarry

face. Faint cross bedding can be seen indicating current direction to the West. The depositional environment was a well washed sea floor, with pure clean water away from the shoreline.



Massive, nodular bedded and fossiliferous limestones of the 'Aymestry Limestone', Upper Bringewood Formation (Gorstian, Ludlovian, Silurian) of the Midland Platform. View Edge Quarry, Craven Arms. Image: Pat Cossey

The group then walked around the quarry, past the farm to the top (310m) of the View Edge at (SO428810), walking past the scarp of Stoke Wood. Here excellent views over Wenlock Edge (to the N.E.) and the Longmynd (to the N.) were enjoyed. Before the group departed for Staffordshire Steve warmly thanked Joe and Hazel for leading an enjoyable, well organised and interesting fieldtrip.

Steve Alcock

Membership News

There are about 20 members who have not yet renewed their membership for this year. They will be removed from the membership list at the end of June if they have not paid by then. There is a membership renewal form at the end of the bulletin.

David Osborn

NSGGA - Next Committee Meeting:

Thursday June 18, 2015 @ 19:00

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

Contacts List: NSGGA Committee 2015-16

Chairman: Dr Ian Stimpson,

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Vice-Chairman: Dr Patrick Cossey

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General Secretary: Barbara Kleiser,

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Treasurer: Tony Marks,

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Membership Sec.: David Osborn,

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GeoConservation Staffordshire Liaison Officer: Dr Ian Stimpson,

e-mail: i.g.stimpson@keele.ac.uk

Bulletin Sec.: Dr Ian Stimpson,

e-mail: i.g.stimpson@keele.ac.uk

Honorary Life Member: Ann Myatt

Executive Committee (honorary):

Dr. Colin Exley; Terry Jones.

Executive Committee (elected):

Dr Lloyd Boardman; Dr Stuart Egan; Janet Osborn (Minutes Secretary); John Reynolds; Christina Bourne

Executive Committee (co-opted):

Don Steward, Diane Lawrence (John Myers Awards); Becca Wiltshire (Keele GeoSoc).

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

Field Trip Booking Form

Thursday 2 July 2015 at 18:00

Bonsall

Leader: Colin Bagshaw (EMGS)



If you would like to attend, please return the booking form below

to:

Steve Alcock(fieldsecretary)

by either e-mail(steves261@aol.com) or by post to Steve Alcock, Longfields, Park Lane, Cheddleton, leek, ST137JS)

Any enquires please contact Steve on 07711501028 or 01538360431.

I/We would like to book ____ places for the Bonsall Excursion on **Thursday 2nd July 2015.**

Name/s

Address

Telephone

Name and address of person to be contacted in case of emergency during the trip

Name

Contact Number

NSGGA MEMBERSHIP RENEWAL NOW DUE FOR 2015 – LAST CALL



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

Name

Address

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:
 David Osborn (NSGGA Membership Secretary),
 Stretton, 2 Croyde Place, Meir Park, Stoke-on-Trent, ST3 7XD.
 Tel: 01782 396692. e-mail: david.d.osborn@talktalk.net

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

*** Two John Myers Awards are presented annually to students at Keele University. John Myers gave a 60-year contribution to the understanding of Geology in North Staffordshire and beyond. From 1927 he taught at Wolstanton Grammar School for 40 years and began evening classes at "Stoke Tech" [now Staffordshire University], encouraging members to join the Geologists' Association of London. Thus was born the NSGGA in 1948. In the 1950s and 60s he helped Keele University Postgraduate Certificate of Education students with a teaching methods course, joining the staff of the Education Department in 1967 on his retirement from teaching. Also in 1967, he was a Founding Father of the Association of Teachers of Geology that had its inaugural meeting at Keele, at which he was elected Treasurer, a post he held for 10 years. His daughter Ann has generously funded the John Myers Awards in his memory.