

Mid-Week Geology Group Newsletter

June 2018

John Williams Programme planner	Sheila Wilson Communications	Margaret Crawford Treasurer	Barry Tymon Webmaster
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This is an update of the April Newsletter and includes

- Clarification and correction of John's statement about standing down from the Programme Planner role.
- A report on the three events since the last Newsletter,
- Completes and amends information on future events for 2018 and gives outline information only for some events already arranged for 2019.

Our next Newsletter in November will take our full detailed Programme to the May 2019 trip to Northern Ireland.

At the 2018 AGM John will be standing down, and whoever will step into the role to replace John will be confirmed. As our programme will already be organised through until May 2019, the new Programme Planner(s) will have several months to get to grips with the rest of 2019 events.

Members are asked to offer to undertake the Programme Planner role in 2019 and onwards, either individually, or as a small team organizing some events each. Offers and suggestions to Sheila please for confirmation at the next Newsletter and the AGM.

REPORT ON RECENT EVENTS

April 21st Yorkshire Geology Day at Caphouse Mining Museum

This year MWGG – for the first time - had a table alongside all the other geology groups based in West Yorkshire. Whereas other displays were set up to entertain the public (Huddersfield gave short talks and gave away buns!!), the MWGG's table was intended to publicise our existence and demonstrate past walks and trips and our future programme. Several people were interested, and many of these were unaware of the opportunities and learning we offer.

The afternoon consisted of 4 excellent talks on **Quakes and Shakes**.

April 30th – May 4th 2018 – Annual Escapade - Northumberland

19 of us met at 1.30 on Monday 30th April at Beadnell Main Car Park for a half day with our leader for the week, Dr Ian Kille. Ian proved to be an excellent leader with wide knowledge both locally and internationally with added poems to enhance our visit each day.

At Beadnell we walked in sunshine but with a cold wind around the village within the Carboniferous Series seeing field lime kilns and a limestone quarry to prove previous industry. Along the coast there was a series of headlands formed by more resistant limestones of the Yordale Series with one bay intersected by a dolerite dyke being a feeder for the Whin Sill. The end of the walk saw us at the classic Beadnell Industrial Lime Kiln at the harbour.

We then left for our base for the week being the **Waren House Hotel, Waren Mill, Belford NE70 7EE** which we found to be an excellent hotel with lovely rooms and first class meals beautifully presented. Thank you to Sheila for an excellent choice and for arranging the red squirrels to attend.

On **Tuesday** we travelled to Scotland and met at Pease Bay – again sunny but cold walking along a beautiful beach to the red sandstone cliffs of the Upper Devonian looking at well -defined structures and erosion before moving to the adjacent Siccar Point where Hutton highlighted the unconformity of 55my between the vertical

greywacke Silurian rocks and the near horizontal Devonian red sandstone. After lunch at St Abbs we met at the Visitor Centre – not the one on the OS map!!- and took a walk along the cliffs of St Abbs looking first at the Lower Old Red Sandstone and then volcanic tuffs and lava outcrops (400mya) intersected by dykes exposed in the steep cliffs meeting some cars at Pettico Wick which demonstrated steeply dipping and folded sedimentary Silurian greywacke structures which had been affected by the Iapetus Suture. A lift back to St Abbs car park was appreciated.

Wednesday was a half day meeting at Bambrugh below the castle to see the dolerite Whin Sill resting on red sandstones of the Upper Carboniferous setting its intrusion at 295mya. We continued along the beach towards Stag Rocks and the Fog Horn with views out to the Farne Islands and Lindisfarne both being further Whin Sill outcrops. We walked on the top and intermediate surfaces of the Sill calculating flows shown by the remarkable “ropey” lava flows.

Thursday – our only overcast day – saw us travel up the very long single track road up the Coquet Valley as far as Dere Street and the Chew Green Roman Camps to explore the Cheviot Volcano. We worked our way downstream stopping at outcrops as we approached the core of the volcano on the way seeing the base Silurian Wenlock greywacks, mid Devonian volcanic breccia and the large expanse of Andesite lava. We ended the day at Wooler Golf Club where we could view the extent of the 60sq km expanse of the volcano lava which has a core of granodiorite – a sample of which Ian demonstrated to us

Friday – our last morning was at Boulmer on another sunny but now quite warm day on a coast path walk north and return on the beach for some of the way. At the end of the beach were carboniferous formations which happy fossil hunters were shown a trilobite, crinoids and abundant productid brachiopods. A good find was stigmaria with the characteristic pattern of dimples. A good time was had by all and with thanks to Ian Kille for the technical input and Sheila for her organization of the accommodation we departed for home.

JUNE 14th Thursday –South Bay Scarborough with Tony Felski.

11 of us met at the Spa on a windy but fine and sunny day which was much better weather than had been forecast. We walked along a promenade to the semi- circle and on the slippery rocks around the toe of the landslide which was now protected by huge light coloured granite boulders imported from Norway.

The geology south of the landslide was examined first in great detail with excellent explanations by Tony of the complex sequence of Middle /Upper Jurassic marine/ deltaic/ marine exposures. After a nice picnic on the beach with fine views of sunny Scarborough we moved onto the landslide below Holbeck Hall (as was) where Tony explained the mechanics of a landslide and the particular features which had caused the 1million tons of what was glacial deposits in an overflow gully below the Hall to flow into the sea.

The Rest of 2018

JULY 10th Tuesday - Dinantian Igneous Rocks of the Derbyshire Peak District with Adrian Legg.

Meet at 10.30am at the **Peak District National Park car park in Tideswell Dale**, about a mile south of Tideswell village on the road from Tideswell to Miller’s Dale, **at grid ref SK 1540 7422**. This is a pay and display car park, costing £4.50 for all day parking. There are public conveniences on site.

From Castleton in the north to Ashbourne in the south, the central area of the Peak District is known for its classic Carboniferous limestone scenery. Much less well known is that these rocks also contain lots of evidence of igneous and volcanic activity during this period of geological history, with numerous lava flows, ash fall tuffs, sills and dykes.

We will visit a number of outcrops of igneous rocks in Tideswell Dale and Miller's Dale, including two that are Geological Conservation Review sites. These include a substantial dolerite sill at our starting location, and the lateral termination of a lava flow where it flowed into a lagoon. We will walk 6-7 km, mostly on the flat or gentle inclines, on clear paths. There are public conveniences where we will stop for lunch.

AUGUST 7th Tuesday – Greenhow Geology Trail with Shirley Everett.

Meet at 10.30 at the Toft Gate/ Coldstones cut car park just east of Coldstones Quarry off the B6265 Grassington/ Pately Bridge road. **Grid Ref SE129644.**

Shirley will bring copies of the excellent Walk Leaflet (Price 50p) with her for those who did not purchase one at Skipton in February so no further geology notes will be issued with the walk reminder.

The complete walk is 5kms and is described in the leaflet as follows

“The walk begins from Toft Gate car park and will take you on a journey back in time from the present day, to the Ice Age, then to tropical conditions 300-350million years ago where you can discover fossils from the tropical seas and forests. You can look down 100m into the inside of the hill from the Coldstones Cut and then drop right down into the valley where you can see the impact of man's search for lead and flourspar. You can also look for crystals of your own in the material the miners threw away as waste, before climbing back up the hill to the mining village of Greenhow where again the geology has been greatly disturbed by the miners. In fine weather the last section gives good views across Nidderdale and looks at the remnants of the local lime producing industry.”

SEPTEMBER 13th Thursday – Whitby Shore and Cleveland Dyke with Paul Hildreth

Meet at 10.30 in the car park near the railway station (**Harbour Car Park**) In the morning we shall visit sites 3 and 2 as shown on the map below.

After lunch at Whitby we travel to site 1, meeting in a small lay-by at Breckon Howe (**NGR NZ 852029**) which is on the line of the Cleveland Dyke and on our way home.



For October, Jeremy Freeman and David Parkin undertook a recce of the Copper Mines at Scotch Corner but they proved to be unsuitable for a visit so an alternative has been arranged as follows.

OCTOBER Tuesday 16th – Meet at 10.30 at Ure Valley Quarry, North Stainley, Ripon HG4 3HT just north of Ripon where Hanson's Manager Bob Orange will meet us with their principle geologist John Peate. We will be shown the extensive excavations and material that is excavated and crushed for aggregates on the site. Most of the material was brought down by glaciers from the north and north west uplands.

After a picnic lunch we will be shown round the ready mix concrete plant at Ripon which uses the aggregates excavated here as well a sand and cement (clay and chalk/limestone) demonstrating the industrial use of geological materials being used extensively for construction and building. Hard hats, high viz jackets, boots and glasses required. Hanson will provide for those who do not have those facilities.

NOVEMBER Wednesday 14th– Yorkshire Museum and YORK – Meet at 10.30 in front of the Yorkshire Museum.

We recommend you use the Park and Ride or the train services and a short walk

“**Uncovering the Yorkshire Jurassic**” a walk and talk of Yorkshire Museum's major exhibition “Yorkshire's Jurassic World” led by one of the museum staff. **Entry fee is £5.50 if we are more than a group of 10. Please advise Sheila if you intend to attend** so that we are more assured of numbers. The visit should last about 1.5 hours leaving time for lunch in York before –

“**Building Stones of York City Centre**”. A guided circular walk of about 2 hours duration led by **Paul Hildreth**. Meet in front of the entrance to York Art Gallery, Exhibition Square at 1.00pm (in front of the York Art Gallery). The route will include: Museum Gardens, Lendal, High Ousegate, Shambles, Stonegate and York Minster environs. Find out about “shopfrontite”, “three-in-one-rock” and other exotics.

DECEMBER 6th Thursday – Christmas Lecture & AGM

Meet at 10.30 for coffee at Bridge Inn Walshford , Wetherby LS22 5HS

As always, all are welcome

10.45 – Introduction and appointment of Chairperson

11.00 - Christmas Lecture given by

Kevin Read of the LGA and Yorkshire Planetarium who will give an illustrated talk on “ **The Geology of the Solar System**” which should expand our geology scope a little!!

Kevin gives talks on the Solar System to 10,000 children each year so an expansion to his other interest of geology will be rewarding.

This will be followed by an “ Introduction to our events for early 2019 “, Christmas Lunch and at 2.00 the AGM.

Next year's subscriptions of £15 per person will be due at the AGM. Cheques are preferred if possible, rather than cash, (cheques made out to Mid-Week Geology Group). The charge for lunch is £16.00 per person.

Events for 2019 for your diary.

January 17th – Thursday 10.30 - -Deepdale Members Day.

Offers of short talks to Sheila please.

February 14th – Thursday 10.30– Deepdale - Study DayAs both Skipton and Keighley Museums are closed during this period we will meet at Deepdale again and will have a talk by **Bill Fraser** on Formation and types of Igneous rocks and Igneous Rock structures in Britain and time over a lunch break to view igneous rock samples which we hope all members and speakers will bring along and explain to members.

March 13th.Wednesday - Ingleton Quarry with John Peate – Hanson Principle Geologist and either White Scar Caves or a short piece of Ingleton Waterfall walk in the afternoon.

The Hanson Quarry at Ingleton will close in a year or so therefore this could be a last chance to visit it as a working quarry which is removing highly folded Ordovician Rocks and crushing them on the site for use as roadstone.

April 16th – Tuesday - with **Gareth Martin of WYGT** at Woolley Edge Quarry, then Coxley Quarry then Storrs Hill Road Quarry and/or Horbury Quarry to illustrate examples of some of the Middle Carboniferous sandstones and their depositional environments

May 20th - 24th The Geology of Northern Ireland with Ian Enlander of NIGS. Geology visits on Monday, Tuesday, Thursday and Friday

The draft itinerary has been issued when Sheila was seeking commitments from Members and will be reviewed with Ian before finalization. We have 14 Members attending and Sheila has booked accommodation at the Marine Hotel, Ballycastle on the North Coast. **Another 2 to 4 attenders would be most welcome – please apply to Sheila.**

