

Editorial

It has been a busy summer and the enthusiasts on the committee have been getting out to look at West Yorkshire's significant geological sites, as you can see from some of the reports. They would like you to take part in this activity, by visiting a nearby Local Geological Site and filling in a monitoring form for us. Please get in touch using the email address sites@wyorksgeologytrust.org. We also try to ensure that we are notified about any planning applications which might threaten any of our sites, so that we can suggest work with various authorities to find ways in which they can be protected, so let us know if you become aware of any misuse of geological sites.

Thanks to Gareth Martin for producing a full and interesting newsletter and we hope that we will be able to publicise guided walks around some of our best sites during next spring and summer.

Frickley Country Park visit

On 13th February Tony Felski of WYGT led a very well attended guided walk to Frickley Country Park in South Elmsall. While there are no geological exposures this magnificent country park, the site of the old Frickley Colliery, has been developed to incorporate geological features into the landscape as well as indications of its past coal mining heritage. One such example are the large mounds on the hill at eastern end representing the stromatolites which formed in the tropical seas which covered West Yorkshire during the late Permian when the Cadeby Formation limestone was deposited (right hand photo below). Despite a wet start, the weather improved and a good day was had by all with Tony giving an enlightening and very erudite discussion of the local geology and mining heritage of the site and the area. If you can, take a trip to Frickley Country Park as it's a wonderful place!



Fryston Colliery Groundwork Trust

Following on from the success of the Frickley Country Park walk, WYGT members Tony Felski and Gillian Lindsay have been establishing links with the Groundwork Trust who manage Frickley and also Fryston Country Trails. The latter site is located next to the River Aire at Fryston, Castleford on the site of the former Fryston Colliery (see map). The trust is looking into assisting Groundwork Trust by contributing to open days at the site as well as setting up a geological walk around the site. We'll keep you posted on the progress, though, in the meantime, Fryston Country Trails is well worth a visit at <http://thelandtrust.org.uk/space/fryston-country-trails>.



Derby Delph Quarry

As part of a site assessment several members of WYGT visited one of our most windswept and wet LGS (particularly on the day of the visit!), Derby Delph Quarry on 20th February. The quarry is located above Booth Wood Reservoir, just east of Junction 22 on the M62 and can be clearly seen from the motorway. The site is of special interest as it displays huge and beautiful undulating bedforms in the Lower Kinderscout Grit. These bedforms are several tens of meters high and their formation has been associated with large monsoonal flooding events which transported sands to the front of the delta system where the Lower Kinderscout Grit was being deposited. The WYGT members found the site to be in good condition, although access to the site was difficult. The site is also home to important breeding populations of Peregrine falcon and Twite. As such the site is actively monitored and protected and should not be accessed, so please enjoy these photos instead!



Local Geological Sites new and old

New Local Geological Sites in the pipeline

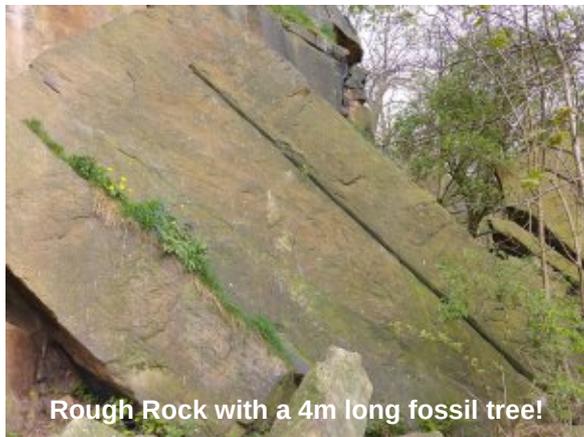
As mentioned in the last newsletter (No. 20, Winter 2016) we have identified several sites which we feel are suitable for designation as LGS. Back in April we submitted two of these sites, Coxley Quarry and the Barnsley Canal Oaks Rock, to the Local Sites Partnership for consideration. Hopefully the submission will be successful. We'll keep you posted with progress over the coming newsletters.

Monitoring Local Geological Sites

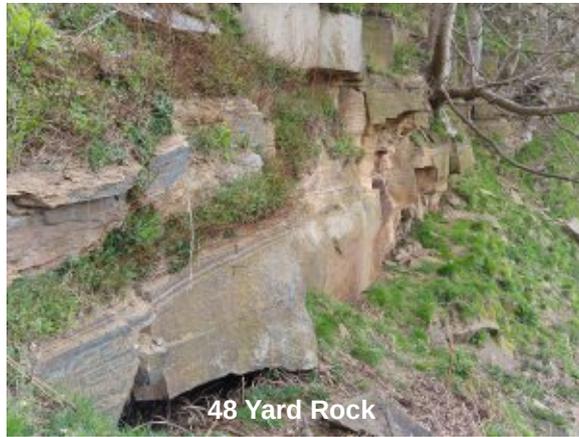
As part of the improvement in the way WYGT catalogues and manages its information on LGS we are looking for new information on the condition of all of our 83 LGS sites throughout West Yorkshire. We don't have the resources to send our members round to assess all the sites however we thought that crowdsourcing may help us to keep an eye on our sites. The key thing is you don't have to be a geology expert to take part. A little knowledge of geology, a keen eye and a camera is all that's needed. We've developed a simple paper form which you can take with you whenever you visit one of our LGS and you can answer the questions as you go along. It should only take five minutes to complete. So, if you're planning on visiting one of our LGS any time and fancy making a huge contribution towards the geodiversity of West Yorkshire please drop us a line at sites@wyorksgeologytrust.org.

Baldon Moor and Bracken Hall Countryside Centre

As noted in the last newsletter (No. 20, Winter 2016) Bracken Hall Countryside Centre (<http://www.friendsofbrackenhall.org.uk>) was reopening in September 2015. In April several WYGT members paid a visit to Baldon Moor and the centre. The centre itself is still in the process of being upgraded however, it's a charming building which seems to have a plethora of space and educational resources and is well worth a visit. During the trip the group walked up Baldon Moor and looked at the impressive Rough Rock and Rough Rock Flags exposures, a very nice exposure of the 48 Yard Rock, a richly fossiliferous marine band as well as numerous bell pits and beautiful views of the surrounding landscape.



Rough Rock with a 4m long fossil tree!



48 Yard Rock

The group discussed the potential for a geology talk followed by a walk on Baldon Moor with the centre manager and there was great interest. A provisional date has been agreed and this will be published in due course when finalised. Hopefully this will lead on to a regular series of talks and walks at, and starting from, the centre to look at the fascinating geology and history of the surrounding landscape.



Bakevillia fossils from the marine band



A bell pit on Baldon Moor

Throstle's Nest site development

You may remember that the Throstle's Nest site in Silsden was subject to a planning application over a year ago. The plan would have culverted much of the site, leading to the near destruction of the LGS. As such WYGT (along with many local residents) objected to the application and it was subsequently dropped. However, at the start of the year another application was submitted to build houses on the site of the adjacent waste transfer station. Tipping of waste into the adjacent stream where the LGS lies has been a key factor in the degradation of the LGS. The planning application would lead to the cessation of tipping and therefore greatly improve the LGS. WYGT was very supportive of the application and are currently in discussion with planning officers regarding the removal of the tipped waste. As such the unique geology of Throstle's Nest site is now likely to see all round improvements!



Yorkshire Geology Day 2016 review

Yorkshire Geology Day 2016 was launched at the National Coal Mining Museum on Saturday 9th April. The day promised some interesting lectures on Yorkshire geology, hands on activities for all ages, a mineral and fossil identification session as well as a whole host of exhibitor's stands. In a change to previous years, many of the stands were located in the same hall as the lectures, which helped with the number of visitors to the stands and meant we chatted with some really interesting people and saw some really interesting rocks. Attendances seemed to be



increased compared



to previous years, with more families present, which was pleasing to see. Some of the highlights of the day for the WYGT stand was the visit by a stonemason who brought numerous fossil samples (top picture), mostly from the Thornhill Rock, which he collected during his day job and the stunning collection of rare copper minerals brought by an ex-technician which he collected from a spoil heaps at a Tanzanian copper mine (left picture). Roll on Yorkshire Geology Day 2017!

Thorner Quarry - update

Some very interesting developments are underway at Thorner Quarry (<http://thornerquarry.jimdo.com>). Readers may recall this project is looking to develop the Thorner Quarry LGS, an exposure of the Rough Rock Flags, to turn it into an open space for the village and to showcase its historical and geological heritage.

The quarry development team required money to undertake a geotechnical survey of the site and applied for funding from a local village grant scheme but were unfortunately turned down. They then adopted a crowdfunding approach to raise £3000. However this fell short, only raising (an impressive!) £840 when the crowdfunding stopped in late March. However, luck was on their side and a local company kindly offered to undertake the geotechnical survey for free. With the survey near completion the development team have altered their plans slightly to remove less spoil from the quarry in order to fit into the available budget they have. They have also applied for Heritage Lottery Funding and the outcome looks promising.



While the search for funding was on-going the development team were given permission from the landowners to clear much of the brush, scrub and small trees from the site. Over the course of several weekends a small team made significant inroads with the site now being very visible where previously it was dark and obscured by vegetation. The fruits of the team's labour was clearly on show during a guided tour of the site

given by Bill Fraser and Gareth Martin on 8 July for the people who contributed to the crowdfunding.

Despite the initial concerns of not being able to obtain the necessary funding a dose of goodwill and excellent planning looks to have secured the future of the project. Fingers crossed that this superb project comes to fruition soon. Keep an eye out for more information in future editions of the newsletter.

Todmorden Moor Natural England visit

On 11 April Alison Tymon, Barry Tymon and Gareth Martin from WYGT, along with Nettie Morris and Wal Soltys from the Woodlands View outdoor centre met Jonathan Larwood from Natural England for a trip to Todmorden Moor. This trip was to assess the potential to designate Todmorden Moor as a Site of Special Scientific Interest (SSSI) to protect its great scientific importance, particularly given the number of recent developments which threatened to destroy the site, but were successfully rejected.

The visit involved a walk up to the top of the moor, stopping to discuss the relevant features of interest along the way and the impact of the wind turbine development on the surrounding land. The most notable part of the trip was the Sandy Road Colliery site and hunting for coal balls, of which several were found. The final conclusion was that the site seemed to be very appropriate for designation and protection as an SSSI given its scientific importance and we will keep you abreast of developments in forthcoming newsletters.

Thanks are to be extended to Nettie and Wal for their excellent hospitality, enthusiasm and commitment to preserving Todmorden Moor and educating people about the natural world and to Jonathon Larwood for his time and enthusiasm for the site.

Fossils in Stoneycliffe Wood

Just south west of Coxley Wood, Netherton lies the very picturesque nature reserve of Stoneycliffe Wood (<http://www.ywt.org.uk/reserves/stoneycliffe-wood-nature-reserve>). One of WYGT's youngest members, Daniel Wilby, has identified several exposures of mudstones of the Middle Coal Measures in the stream bed. Daniel is a very keen and knowledgeable fossil hunter and has been extremely successful in finding an array of terrestrial and marine fossils within these rocks, including plant leaves (*Neuropteris*) fish scales, bivalves and even a millipede (*Xyloius*), all of which give us an impression of what the environment was like when the rocks were deposited. He has sent through some excellent pictures of the fossils he's found, some of which are shown below. Congratulations to Daniel on some great finds! Keep up the good work!



Fossil fish scale



Fossil leaves and stem of *Neuropteris*

Events

As regular readers know we commonly put forthcoming events last in the newsletter. However, as of this edition, we are going to make a few changes to keep us at the forefront of the digital age! When there is a new event to publicise we will inform all WYGT subscribers via the mailing list as well as publicise these events on WYGT's Facebook (<https://www.facebook.com/westyorkshire.geologytrust.7>) and Twitter (<https://twitter.com/@WYorksGeolTrust>) pages, so please subscribe to these or keep an eye on your inbox.