

**Joint Excursion to Trearne Quarry**  
**Saturday 5<sup>th</sup> September 2015**

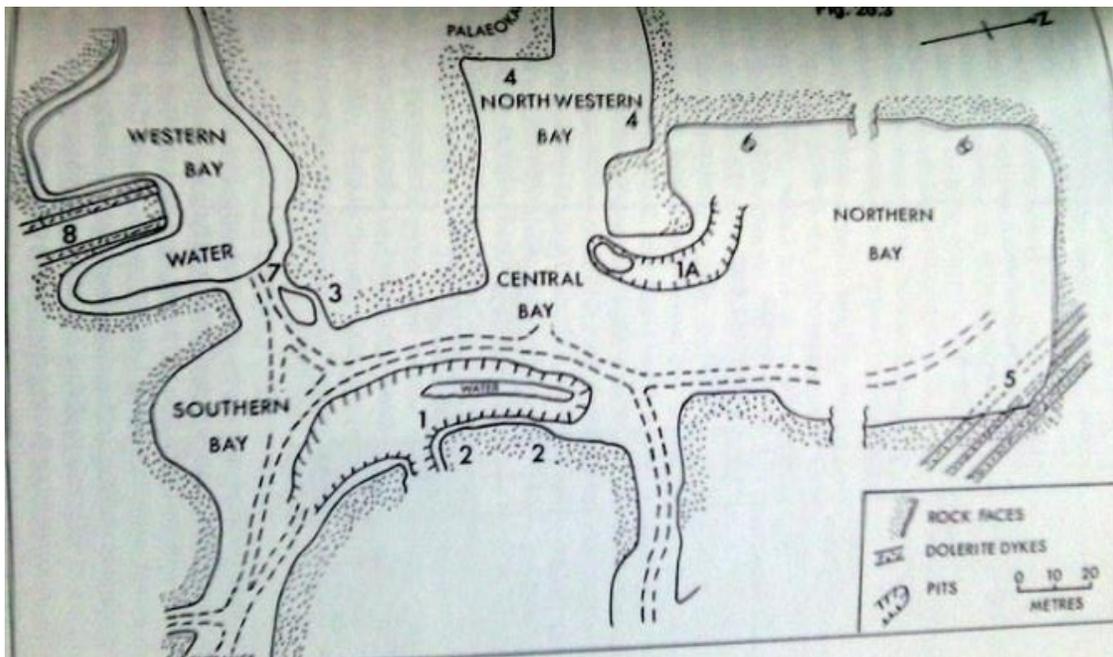
**Leader:** - Dr. Al McGowan  
**Report by** M. Cummings

**Participant..**

from Glasgow.....14

from Edinburgh.....18

The members of the two societies met at 11 am at Trearne Quarry in fine sunny weather for a fascinating day of fossil finding and identification, as well as interpreting the landforms of the site. At the gate we met our guide Dr. Al McGowan together with Gary Hoare, a very knowledgeable amateur enthusiast with considerable expertise on the fossil fauna of Trearne Quarry. The visit began with Al distributing handouts covering a brief history of the quarry together with diagrams of the kind of fossils which may be found. Gary, meanwhile, had brought a selection from his fossil collection for examination which proved a great help in identification of items found in the rubble and the rock faces of the site. These samples included a fossil jellyfish, a rare find. He told us that Trearne has proved to be a very valuable source of these fossils which have been collected and are being studied at Glasgow University and at University College in Dublin. The site is also a designated SSSI for the three dimensional exposure of a Paleozoic reef. This ancient reef was composed of sponges, algae, solitary and colonial corals together with bryozoans, brachiopods and other invertebrates. Some evidence of Paleozoic fish has also been found.



We entered the site, with high hope of interesting finds, from the Southern Bay and first looked at the remains of the Lower Carboniferous coal seam at locality 1 before going to the other side of the water ( locality 2) to examine some very large blocks of rock. These proved to be packed with the fossil remains of crinoids, brachiopods and other fauna indicating a rich fertile environment in this area while it was still at the southern edge of Laurussia.



Examining the large rock .locality 1

From this locality we had a clear view of the Limestone sequence shown in the diagram provided by Al which indicated the type of fossils to be found at each level of the column.

Unfortunately the exposure of coral in the Western Bay could no longer be easily seen as the area has become very overgrown. Al suggested that we leave that until we were leaving so that small groups could be taken round safely.

Looking toward the  
Western Bay from  
Locality 1



Having spent some time scouring the ground and turning over many pieces of rock, some of which contained small fossils and several examples of *Productus* spines we headed up the path toward the Looking toward the Western Ba Northern Bay. Here we found an extensive area which had been totally cleared. In the main body of the bay there was nothing to see but the quarry walls contain fossils still in their original chronological order. Here we stopped for lunch before making our way to the limestone faces to continue our searches. The remains of a Dolerite dyke were easily spotted but the stars of day were the fossils found at this locality. These included a *Goniatite*, brachiopods including an excellent *Productus* fossil with spines still in place, a jellyfish and a solitary coral still embedded in rock. (see photo below)

We were taking photos mostly with our phones and, being well prepared, Al had brought with him a few phone camera magnifiers one of which was used to photograph this coral..



Magnified photo of solitary coral

As we had to be at 'The Canny Man' in time for high tea the fossil hunt had to be brought to a close. On the way back to the entrance Al took groups into the Western Bay to search for exposures of coral to complete the visit. Most of the group took advantage of this opportunity. A vote of thanks for a wonderful excursion was given on behalf of the Edinburgh society before the members of both societies headed back to their respective mini buses to travel the short distance to the restaurant. As always on these joint excursions the groups mixed and socialized over an excellent high tea. The group from the Glasgow Society included two new junior members who were very welcome and knowledgeable. We hope to see more of them at future lectures or excursions.

After the meal our organiser, Roy, gave the customary vote of thanks to Al, Gary unfortunately could not join us for the meal but many thanks are also due to him for his patience and enthusiasm during the day. On returning to the Gregory Building we were all agreed, that it had been a very satisfying day out.

*References: - Geological Excursions around Glasgow and Girvan. Edited by J.D.Lawson and D.S.Weedon*