

Day Excursion to Barns Ness and the Scottish Lime Centre

Joint field trip arranged by the Geological Society of Edinburgh

Leader : Al McGowan 9 June 2012

Report : *S Leishman*

The stretch of coastline east of Dunbar between White Sands and Skateraw Harbour is not only an SSSI, but a Local Geological Site (LGS) designated by Lothian and Borders Geoconservation. Al McGowan is an enthusiastic promoter of geoconservation and this site gave him an opportunity to introduce us to excellent examples of

- **cyclothems**. This extensive outcrop of Carboniferous limestone, sandstone, mudstone and coal indicates a long period of changing sea levels.
- **faulting and folding**, including lithified slickenfibres formed by precipitation of calcite along the plane of movement during contemporaneous seismic activity.
- **body and trace fossils** such as corals, crinoids and burrows of *zoophytes*, the latter being called “coal miner worm” as it was often seen in adits and galleries.



Cyclothems on White Sand



limestone Infilled hollows

There are ruins of a 19th century limekiln and in the background, the Dunbar Cement Works.

We then discussed the unusual regularly-spaced basin-shaped hollows in the exposed limestone, one metre in diameter and infilled by sea-earth. Al's current theory is that this represents a weathered karstic surface where hollows were infilled then colonised by plants. Or could it represent the root traces of a very tidy forest. At this point I dropped my camera into one of salt-water pools so no more photos from me that day!

But all is not lost, you can download the Lothian and Borders Geoconservation leaflet on www.edinburghgeolsoc.org, go to geoconservation then Lothian & Borders publications.

The story of Scotland's limestone continued in the planned village of Charlestown at the Scottish Lime Centre in the appropriately named Rocks Road. Very few GSG members were able to take part in this visit (many being on the DACE trip to the Pyrenees) and I do hope it will be possible to arrange another opportunity. The highlights were

- an explanation of the importance of the work of the Centre to Scotland's historic buildings
 - a tour by members of the local Gellet Society of the village, including the harbour and well-preserved limekilns
 - a walk up to the Gellet Stone which stands alone in the middle of the massive old limestone quarries, full of fossils
- The day was completed by an excellent high tea at the Elgin Arms, named for the original Lord Elgin who developed the limestone industry in this area. Al McGowan and the Edinburgh Society members were thanked for organising such an interesting day and for their company.