

MWGG OUTING TO the FLAMBOROUGH AREA

With MIKE HORNE September 10th 2013

Eight hardy souls met on a very wet and windy day at Thornwick Bay and made our way down to the beach.

The chalk here is the most Northerly outcrop of Cretaceous Chalk in England. There is a 400metre succession of chalk between Sewerby and Bempton Cliffs. The chalk represents a slow deposition of carbonate material in a clear tropical ocean

At Thorwick Bay the chalk is massive bedded and flinty.



The flint and marl bands form easily traced marker horizons around the bay. Some of the flints are ferruginous and red in colour due to the presence of iron. Erosion features excavated along the faults and joints are seen in the bay. Fossils are scarce in the hard, recrystallized chalk but include echinoids, brachiopods and bivalves.



Due to the strength of the wind we were unable to venture round the cliff path so took a longer route round to North Landing. Here the bay is probably fault controlled and the back of the bay is choked with till. There is massive and flinty chalk again here with a prominent marl band dipping into the bay and into the fault line cave on the North side. A fossiliferous band lies above the marl.



The flints are very prominent in the bay, especially the Paramoudra Flints which are large masses which appear to be original burrows expanded by overfilling with flint.

After retreating to the cars to eat our lunch we then drove to South Landing. The ravine here was probably formed along a fault line. The bay is cut in massive bedded flintless chalk.. Some echinoids, belemnites and sponges can be found.

Due to the poor weather it was decided to leave Dane's Dyke until another visit.

Full details of the geological background and geology trail can be found on page 192 of the Yorkshire Geological Society's publication **Yorkshire Rocks and Landscape** excursion no. **21 The Chalk of Flamborough Head**