

**County:** Humberside

**Site Name:** South Ferriby Chalk Pit

**Status:** Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act, 1981, as amended.

**Local Planning Authority:** Glanford Borough Council

**National Grid Reference:** SE 993204

**Ordnance Survey Sheet 1:50,000:** 112     **1:10,000:** SE 92 SE, TA 02 SW, SE 91 NE,  
TA 01 NW

**Area:** 104.9 (ha)    259.2 (ac)

**First Notified:** 1987

**Description:**

South Ferriby Chalk Pit is of considerable importance in providing good sections of Upper Jurassic and Lower Cretaceous rocks. The lowest beds exposed are the grey clays of the Oxfordian Amphill Clay conformably overlain by Kimmeridgian deposits. Above these Jurassic rocks there is a gap in the geological sequence, with the overlying Carstone and Red Chalk being of Lower Cretaceous age. The sequence is terminated by the Chalk of Upper Cretaceous age.

The Amphill Clay contains a rich and probably complete *Amoeboceras rosenkrantzi* Zone ammonite assemblage, most abundantly in the *Oxytoma* Cementstone, the perisphinctid ammonite fauna of which places it at the Oxfordian/Kimmeridgian boundary. This site is probably the only locality north of Wiltshire and south of the Vale of Pickering where rocks of *A. rosenkrantzi* Zone age occur, and nowhere else are the Upper Oxfordian clays and siltstones seen to persist so close to the Market Weighton Axis without considerable non-sequence or unconformity. This is therefore a key stratigraphic locality of significance in reconstructing Upper Oxfordian palaeogeography.

The Oxfordian Amphill Clay is overlain by Kimmeridgian deposits, and this is the only locality in England where the conformable contact between the Upper Oxfordian rocks and open-marine Kimmeridgian deposits can be seen in entirely argillaceous facies. This exposure is of considerable stratigraphic importance in the elucidation of the Late Jurassic sequences in northern England.

The quarry provides the best and clearest section through the Kimmeridgian *baylei* Zone available between the south coast and Scotland. The stratigraphical succession for this interval is relatively thick when compared with other sites in the country, and it provides one of the best opportunities to study the ammonite faunas of that zone. As well as the *baylei* Zone, the site exposes strata assigned to the overlying *Cymodoce* Zone.

This large quarry provides the finest exposure of Carstone and Red Chalk in South Humberside and Lincolnshire. The thickness of both these formations is of palaeo-environmental significance and their relationship to one another and the Jurassic strata below is well exhibited. South Ferriby is one of only a few localities in this country that have yielded an in situ fauna from the Carstone and a number of rare brachiopods are described from the locality.

**Other Information:**

The site is identified as being of national importance in the Geological Conservation Review.