
Sudbourne Park, Sudbourne, Suffolk

[TM 4070 5135]

Highlights

This section dates from the early part of the 19th century and was one of the sites used in the original definition of the Coralline Crag in 1835 (Charlesworth, 1835). The abundance of fossils led historically to its renown as a collecting locality and it remains important for the study of Coralline Crag faunas and environmental interpretation.

Introduction

Sudbourne Park has been known as a locality for the Coralline Crag since at least 1835 when Charlesworth described an exposure here as part of his definitive work on the subdivision of the East Anglian Crag, and it therefore represents a parastratotype section for the Coralline Crag Formation. A large exposure was mentioned by Prestwich (1849), Reid (1890), Burrows (1895a,b) and Harmer (1898). The pit remained a popular locality for subsequent studies due mostly to the rich fauna of molluscs obtainable from this locality. This locality represents a section in the Ramsholt Member of the Coralline Crag.

Description

Although Boswell (1928) was able to record an exposure of 12 feet (3.66 m) of shelly sands, the pit is now obscured by a conifer plantation and there is little exposure at present. Harmer was able to auger down to the London Clay at this locality at a depth of 31 feet (9.45 m), or 27 feet (8.23 m) below OD.

In sections shown in temporary excavations, the sediments exhibit few sedimentary structures, probably as the result of intense bioturbation which is characteristic of the Ramsholt Member. Occasionally, large solution pipes filled with dark red-brown sand and clay can be seen penetrating the Coralline Crag. This is the only Coralline Crag locality where solution pipes have been observed in sediments otherwise apparently unaffected by diagenetic solution.

The fauna at Sudbourne Park is abundant and well preserved. Large aragonitic molluscs are particularly notable, including *Venericardia aculeata scaldensis*, *Arctica islandica*, *Glycymeris glycymeris* and *Astarte* sp. This locality is also notable for the occasional occurrence of articulated specimens of the giant brachiopod *Terebratula maxima* and is the type site for *Terebratula orfordensis* (Muir-Wood, 1938). Also notable is the occasional occurrence of very large specimens of the bryozoan *Meandropora aurantium*. Encrusting epifauna on the large shells is much less common than in the coarser-grained Aldeburgh Member (e.g. at Aldeburgh Hall). This may be evidence of a more rapid rate of deposition here or may indicate that the fine sediment was deleterious to the delicate encrusting filter feeders.

Interpretation and evaluation

The importance of the site at Sudbourne Park lies mainly in the rich, well-preserved fauna of the Ramsholt Member. This locality is the furthest north that this facies can be seen and is important in helping to define its geographical extent and geometry

Conclusions

The pit in Sudbourne Park is one of the localities which formed the basis of the original definition of the Coralline Crag as a distinct formation in 1835. It has been one of the best localities for the collection of fossils from the silty facies now referred to the Ramsholt Member and is important for the study of fauna and facies relationships within the Coralline Crag.

References