Red House Farm, Iken, Suffolk

[TM 4352 5473]

Highlights

This pit is representative of former well-known exposures in the Iken area and is important in reconstruction of facies and palaeoenvironments of the Coralline Crag.

Introduction

This pit, approximately 300 m east of Red House Farm, was recorded by the Ordnance Survey in 1881 but apparently not by Harmer's comprehensive survey of Coralline Crag localities in 1898. It was briefly mentioned by Spencer (1971b) in a survey carried out between 1953 and 1959. The pit is located within 250 m of Harmer's locality No. 25, which was described in detail and figured by Boswell (1928) but is now infilled. Since then the pit appears to have received relatively little attention until examined by Balson (1981a).

Description

The Red House Farm Pit now shows a section of about 5.5 m of the cross-bedded Sudbourne Member of the Coralline Crag in a face approximately 90 m wide (Figure 10.21). It therefore represents one of the largest and most northerly localities to expose the Sudbourne Member. The sediment has been leached of aragonitic material but is rich in calcitic skeletal material, roughly 85% of the sediment being carbonate. Near the base of the section, aragonitic shell debris can be found in places.

The fauna at Red House Farm includes fairly well-preserved specimens of the large bryozoan *Meandropora* as well as abundant fragments of other bryozoan types. *Aequipecten* is fairly common and aragonitic molluscs are represented by moulds of various species.

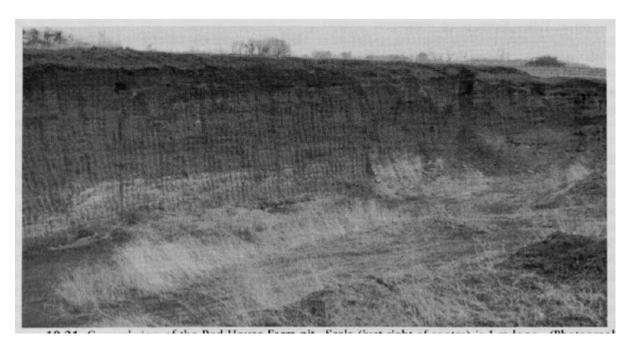
Interpretation and evaluation

The rich, fairly well-preserved fauna is in marked contrast to the fauna from more southerly exposures of the Sudbourne Member in the Gedgrave area, e.g. at 'The Cliff', Gedgrave, Gedgrave Hall, Broom Hill Pit and Richmond Farm. The deposits at Red House Farm are believed to represent the northern end of a linear sandbank in which sediment was being transported towards the south-west. The sediment at this locality is thus closer to the 'source' which is inferred to be to the north-east. Skeletal material is thus coarser and less abraded than at localities in the down-transport direction. Taken together with the other exposures of the Sudbourne Member, Red House Farm is important for the study of the geometry and lateral facies changes in a cross-bedded deposit interpreted as a fossil tidal sandbank.

Conclusions

The pit at Red House Farm exhibits a large exposure of the cross-bedded Sudbourne Member of the Coralline Crag which is unusually fossiliferous compared to other exposures of this Member.

References



(Figure 10.21) General view of the Red House Farm pit. Scale (just right of centre) is 1 m long. (Photograph: P Balson.)