
MAYLANDSEA

OS Grid Reference: TL908035

Highlights

This site in Essex, though low lying, has been remarkably productive. Amongst the 20 or more taxa present are some unique to Maylandsea and may include open-water or deep-water species.

Introduction

The site is situated on Lawling Creek in the Blackwater Estuary; lying in the intertidal zone and the low banks, it forms part of the Blackwater Estuary SSSI. Access is easy, but the intertidal area is given over to thick mud banks. The London Clay Member in this area has been subdivided into lithological units on borehole evidence (Bristow, 1985). These are, however, not distinguishable at the surface. Vertebrate fossils are commonly limited to teeth or other rare hard parts washed free from matrix.

Description

The (Ypresian) London Clay Member outcrops on the banks of the creek, but exposures are small and tend to become masked rapidly with vegetation, soil and other debris. The London Clay here is of Division C fine grained and relatively sand free.

Fauna

Twenty-one taxa have been described from here, mainly based on teeth or otoliths (Stinton, 1966, 1971–1980), but also including a skull and 'gaping jaws' of *Rhinocephalus planiceps*.

Chondrichthyes: Elasmobranchii: Neoselachii: Squalomorphii

Squalus minor (Leriche, 1902)

Chondrichthyes: Elasmobranchi: Neoselachi: Galeomorphi

Scyliorhinus gilberti Casier, 1946

Galeorhinus minor (Agassiz, 1843)

Osteichthyes: Euteleostii: Gadiformes: Gadoidei

Rhinocephalus planiceps Casier, 1946

Interpretation

The London Clay facies at Maylandsea is said to represent the time of maximum transgression of the sea and to include the deposits of the deepest water. The faunal assemblage may well reflect this, with (deeper-water) species that are not seen at Sheppey (q.v.) or any of the other sites.

In common with many of the other Palaeogene sites described in this volume, this one yields a fauna similar to those known in the Paris Basin, north Belgium–south Holland and north Germany.

Conclusions

This locality provides a small continuing flow of teeth, otoliths and other hard remains of fish, including species not common elsewhere. Local conditions for collecting are not good, but over a long period of time a significant fauna has been recorded.

Reference list

- Bristow, C.R. (1985) The Geology of the country around Chelmsford. *Memoirs of the Geological Survey of Great Britain* (Sheet 241), HMSO, London, 100 pp.
- Stinton, F.C. (1966) Otoliths des poissons du London Clay. In *Faune ichthyologique du London Clay*. (ed. E. Casier) British Museum (Natural History), London, 2 vols, 496 pp.
- Stinton, F.C. (1971) *Fish otoliths from the English Eocene. Part 1*. Palaeontological Society (Monographs) **129**, 56 pp.