Chapel Corner

ISZ 553 9361

Introduction

Chapel Corner is the only site now known to yield fossil plant remains from the late Eocene Fishbourne Member of the upper Headon Hill Formation. Although in an essentially non-marine facies, the Fishbourne Member (the 'Osborne Beds' of earlier authors) has yielded very little in the way of palaeobotanical material. To date, rare plants have only been found at Colwell Bay (exposure not accessible) and on the coast near Osborne, both on the Isle of Wight (Chandler, 1963a). Colenutt (1888) recorded plant remains from Chapel Corner but the only detailed description of fossils from here is by Chandler (1963a).

Description

Stratigraphy

White (1921) has described the geology of this site. The plant remains occur in deposits that are now assigned to the Fishbourne Member in the upper part of the Headon Hill Formation. The exposures occur in the foreshore (Figure 9.24) and can only be studied at low tide.

Palaeobotany

Colenutt (1888) recorded plant remains from Chapel Corner, and there are specimens of *Limnocarpus* and *Sabrenia* housed in the Natural History Museum, London. However, the only published description of plant remains from here are of poorly preserved, immature seeds that were tentatively assigned by Chandler (1963a) to *Stratiotes neglectus* Chandler. From former exposures of the Fishbourne Member in Colwell Bay (at Cliff End) on the Isle of Wight, Chandler also described fragments of the nymphaeacean rhizome *Nelumbium buchii* Ettingshausen, fragments of the fern *Acrostichum lanzaeanum* (Visiani) Chandler, and the enigmatic leaf *Dicotylophyllum pinnatifidum* Reid and Chandler. Pallot (1961) also recovered pollen and spores from here indicating the presence of *Rhus.P* and the floating fern *Azolla*.

The potential of the Chapel Corner site is shown by rare specimens of *Rubus* (collected by E.A. Jarzembowski; (Figure 9.25)), undetermined conifer leafy shoots (collected by J. Quayle) and specimens of *Stratiotes*, *Sabrenia*, *Sambucus*, *Typha* and *Catpolithes bamsteadensis* Collinson 1983a (recorded by Collinson from various beds in the foreshore exposures over the last 20 years).

Interpretation

The Fishbourne Member represents a lacuna in the sequence of floras through the Palaeogene deposits of southern Britain — very little is known about the flora during this part of the Eocene Epoch. The only site where some fossil plant material can still be obtained from this member is at Chapel Corner, near Osborne.

Conclusions

Chapel Corner is the only site known to yield plant fossils from the Osborne Marls, about 35 Ma old.

References



(Figure 9.24) Foreshore exposures of the Fishbourne Member at Chapel Corner, as seen in 1982. (Photo: M.E. Collinson.)



(Figure 9.25) Endocarp of Rubus sp. in carbonaceous preservation, × 54. Collected from Chapel Corner and donated by E. A. Jarzembowski. (Photo: M.E. Collinson.)