

and sp.C with a possible Inoceramus prism. Taylor (1964) has commented that there is always a "barren interval" between the lowest Tertiary fauna and the highest Cretaceous one, in the Otway Basin. This interval varies from 200 feet to upwards of 2000 feet. Taylor explains the disappearance of Cretaceous foraminifera as being due to the inundation by terrestrial detritus and dilution of marginal marine environments.

Sparse Haplophragmoides faunas were noted in cuttings samples around 5800 feet, 6200 feet and 7220 feet. It was not until 7250 feet that a more diverse Upper Cretaceous arenaceous fauna was isolated. Cutting samples were picked every 10 feet from 7250 feet to 7320 feet. Side wall cores were taken at 7310, 7298, 7278, 7253, 7340 and 7220 feet. Only those at 7310 feet and 7278 feet contained a fauna. It appears that there is a Cretaceous micro-fauna present between 7253 and 7310 feet. The combined fauna from this interval is as follows:-

Haplophragmoides sp. A, H. sp.B, H. sp.C (50 spec. in all)
Dorothia filiformis (2 spec.)
Marssonella oxycona (2 spec.)
Textularia semicomplanata, T. anceps. (2 spec. each)
Bathysiphon sp. (2 spec.)
Inoceramus prisms.

This fauna would be placed within Taylor's (l.c.) Upper Cretaceous Zonule A of Senonian Age. No calcareous species were noted. The fauna is indeed a sparse one and from Taylor's diagnosis one would regard it as either representing marginal marine facies or a marine environment of restricted water circulation. The faunal elements are too sparse and not specifically diverse enough to state conclusively, yet this is the best developed Upper Cretaceous fauna in the entire section.

No fauna was found in cores or side wall cores below 7310 feet and no new species were reported in cuttings below this level.