

ation is suggested.

Event 4 - At the top of the Lower Miocene (Zonule F) there is a sudden appearance and disappearance of Group B benthonics, including members of the family Victoriellidae, such genera as Oerculina and Amphistegina and bryozoa, suggesting very shallow water, at or above the sea weed zone. Above this facies conditions revert to that of Event 3 (inner shelf). Thus there was a sudden regression. This biofacies is common in on-shore Otway Basin sections. At this time there is a hiatus in some Gippsland sequences and volcanic activity in the Bass Basin (e.g. Bass-1). Once again, the apparent regression may be linked with structural adjustment.

PART B - LOWER TERTIARY SEQUENCE

Throughout the Otway Basin, this clastic sequence cannot be described as a marine one, although it contained marine ingressive horizons. My analysis of the continuously cored La Trobe-1 (at Princetown) shows that the 1000 feet of this sequence (i.e. below the Clifton Formation) contained only 80 feet of sediment where the foraminiferal counts were greater than 100 specimens per 200 gms, and that the maximum thickness of a foraminiferal interval was 20 feet. Only in 2 samples was the count above 1000 specimens and these were in a 5 foot interval of the Rivernook beds. Thus statistics are against random coring or side wall coring in any sub-surface section and chances of picking up a fauna in rotary cuttings are remote.

The above statement applies to Prawn. No fauna was obtained in side wall cores or conventional cores between 3020 feet and 4263 feet (core-3). No new fauna was noted in cutting samples till 3890 feet, where the following species were isolated:- Cibicides spiropunctatus, C. umbonifer, C. praecursorius and Stilostomella plummerae. These species are present in the Rivernook fauna described by McGowran (1965) and the former two are not recorded above the Rivernook level in the La Trobe bore. The Paleocene planktonic species Globorotalia chapmani and