

The Bass - 3 sequence will be discussed in the terms of the zonule scheme applied to Bass - 1 by Taylor (1965). Depth comparison of biostratigraphic units is tabulated on page 1 of this report. Distribution of selected species is shown on Fig.1.

UPPER MIOCENE: ? to 1500' - Below 1290' there are sparse assemblages of Elphidiidae with species typical of the Victorian upper Miocene to lower Pliocene. A precise zonule or age cannot be assigned, partially because of sampling and partially because of facies.

MIDDLE MIOCENE: 1500' to 2610' - All 3 zonules of the middle Miocene can be distinguished and most ranges are consistent with those of the other Bass wells. As noted in the other Bass wells, the top of Zonule E is marked by the abundance of Globigerinoides spp., all of which are virtually absent above this unit. It is now considered that the sudden disappearance of Globigerinoides bisphericus and G. ruber is of biostratigraphic value within the Bass Basin, even though these extinctions may be localized and due to decrease in water temperature. The first down-sequence appearance of these species in Bass - 3 is at 2430' and accompanied by the incoming of G. trilobus and Globoquadrina dehiscens. Sampling at 30' intervals confirms this "Globigerinoides level", so that the top of Zonule E is placed at 2430' as only rotary cutting samples were available it is impossible to identify the unit on the absence of Orbulina universa; a ubiquitous mud contaminant. The highest appearance of Globigerina ciperocensis at 2400' is considered as confirmatory evidence for this boundary placement.

LOWER MIOCENE: 2610' - 3700' - There is a marked change in the benthonic assemblages; generally speaking the species are more robust. This especially applies to Cibicides spp. C. opacus is replaced by its probable ancestral form C. perforatus, C. "vortex form A" by C. "vortex form B", C. victoriensis (not noted in Bass - 3) by its probable ancestral form C. novozealandica. The former two "lineage fragmentation points" were picked at 2610'. C. novozealandica extends