

STRATIGRAPHIC INVESTIGATIONS OF TERTIARY SEQUENCES, WESTERN MURRAY BASIN, SOUTH AUSTRALIA.

S.D. Giles

Honours Thesis

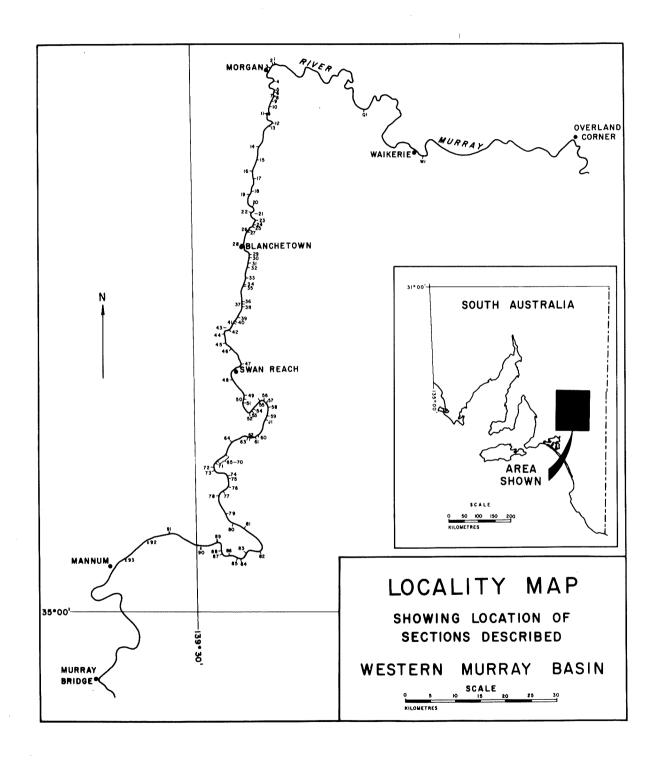
STRATIGRAPHIC INVESTIGATIONS OF TERTIARY SEQUENCES,

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Stephen D. Giles

Submitted to the Department of Geology and Mineralogy, University of Adelaide, as partial fulfilment of the requirements of the course in Honours Geology.



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ABSTRACT

In an attempt to improve the understanding of the biostratigraphy, sedimentology and palaeoecology of Tertiary sequences in the western Murray Basin, sections are described from cliff outcrop surrounding the lower River Murray. The relation of the upper boundary of Finniss Clay (Miocene) at its stratotype, to the overlying Morgan Limestone (Miocene), examined with respect to other occurrences in the basin, is questioned. The significance of the Batesfordian Stage, as known in the Murray Basin, is examined biostratigraphically. The Cadell Marl is reinterpreted as a shallow water deposit, and a cross-bedded member of the Morgan Limestone. representing tidal sediments, is described for the first time. Certain sedimentary cycles inferred from Tertiary strata are correlated with the Otway Basin.