LATE PRECAMBRIAN GEOLOGY OF THE WARREN-BUCKARINGA GORGE AREA, FLINDERS RANGES, SOUTH AUSTRALIA.

by

HELENA JABLONSKI, BSc.

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ABSTRACT

Geological mapping of a Late Precambrian sequence ranging from the Angepena Formation (Umberatana Group) to the ABC Range Quartzite (Wilpena Group), in the Warren-Buckaringa Gorge Area has been completed. The Wilmington and Elatina Formations have been subdivided into 7 and 4 mappable units respectively, while the Angepena, Nuccaleena and Brachina Formations were unable to be further subdivided. The sequence is located on the eastern side of a shallow southerly plunging monocline.

Facies and petrological changes along strike were examined and these can be summarized as consisting of increasing amounts of carbonate, both as carbonate facies rocks and in the pore spaces of detritals towards the north map area.

Stratigraphic Comparison of Warren-Buckaringa Gorge Area Sections with Wyacca Bluff-Buckaringa Gorge Area (Miller 1975) indicate an almost identical sequence while a section through Waterfall Creek (Hallett Cove Area) reveals a similar succession which can be correlated.

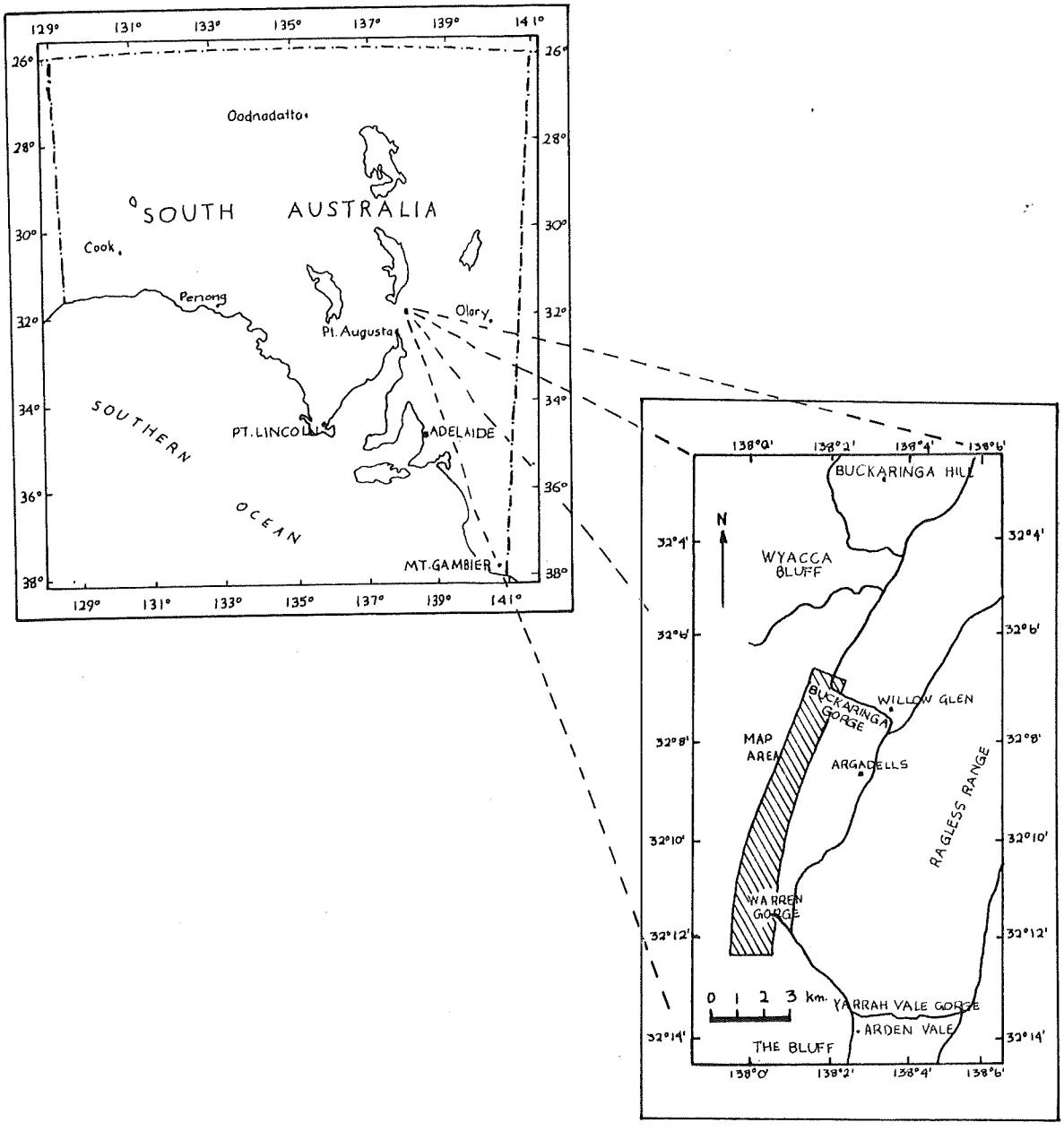
The sequence mapped represents sediments of deep water subtidal to tidal flat environments, controlled by a pattern of transgressions and regressions related to glacial and deglacial effects within the geosyncline.

LOCALITY MAP

WARREN BUCKARINGA GORGE AREA.

FLINDERS RANGES.

S.A.



H.J. FIG. 1.