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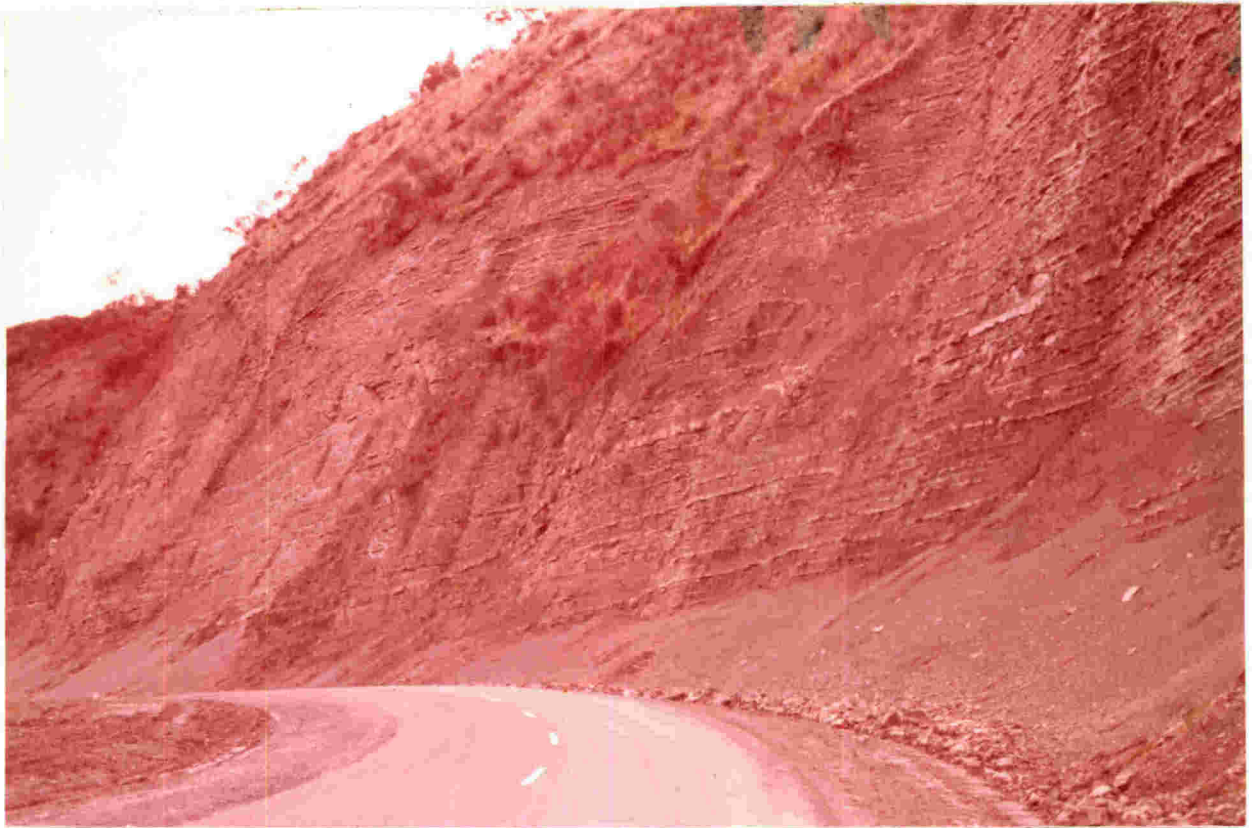
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FORAMINIFERA FROM THE MAHOENUI GROUP

NORTH WANGANUI BASIN



Te Maire Bluff

S19/995484

Thesis presented in fulfilment
of the requirements for the
Degree of Doctor of Philosophy.

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University of Auckland
December, 1978.

FORAMINIFERA FROM THE MAHOENUI GROUP NORTH WANGANUI BASINABSTRACT

The Mahoenui Group is a body of Oligocene and early Miocene marine clastic sedimentary rock in which two formations are recognised. The first, the Taumatamaire Formation (Happy, 1971) consists of up to 1000m of blue grey calcareous mudstone together with two minor limestones, the Awakino Limestone Member (Hay, 1967) and the Black Creek Limestone Member (new name). The second Formation, the Taumarunui Formation (Nelson & Hume, 1977) is made up of 1000m of flysch. Two facies types are seen in the flysch, the proximal and distal flysch facies.

350 species of Foraminifera are recorded in 167 samples from 47 sections. Their systematics are discussed and many are illustrated using scanning electron photomicrographs.

11 new species are recognised in the genera, Almaena, Anomalina, Epistominella, Gavelinopsis, Globocassidulina, Guttulina, Lamarckina, Lenticulina, Melonis and Verneuilina. One new subspecies of Bolivina reticulata is also recognised. These are not formally named here but will be described in papers to be published later.

An appraisal of numerical techniques in taxonomy is made while considering the Globigerina woodi "group" from the Mahoenui. This supports the validity of 5 species of planktonic Foraminifera from New Zealand and illustrates the advantages and disadvantages of numerical classification.

The paleoecology and paleobathymetry of the samples is investigated using both conventional and numerical methods. These two approaches are compared, contrasted and then integrated to form a paleogeographic reconstruction.

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Mr. Collier provided some of the data at Victoria University. Mr. B.P. and Todd kindly provided some of the data from a number of the sites drilled off wells, both onshore and offshore in Tarras.

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