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The Molluscan Genera *Lutraria*, *Resania* and *Zenatia* in
New Zealand

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Abstract

THE family Mactridae and the Subfamilies Lutrariinae, Resaniinae and Zenatiinae are defined, and the New Zealand Recent and Fossil members of the three subfamilies are described. These comprise two species of *Lutraria*, three species of *Resania*, five species of *Zenatia* s.s. and two species of a new subgenus of *Zenatia*. One new species of *Resania* and four new species of *Zenatia* are described. In the Upper Miocene and Lower Pliocene two species of *Resania* inhabited separate basins in New Zealand. The species of *Zenatia* belong to three lineages, two of which are known only from the Pliocene and Lower Pleistocene. The lineage of *Zenatia acinaces* is an example of recapitulation. The ecology of these groups is discussed.

INTRODUCTION

TYPICAL Mactrid Lamellibranchs (Subfamily Mactrinae) are approximately equilateral, with short siphons and a medium-sized foot, and are found all over the world burrowing to a depth of a few inches in the sand or mud of beaches and harbours. Three other subfamilies, the Lutrariinae, Resaniinae and Zenatiinae, have become adapted for other modes of life by enlargement of the foot or siphons, with consequent elongation of part of the shell.

The Australian Zenatiinae were recently reviewed by Gill and Darragh (1963). No revision of the New Zealand members of any of these groups has ever appeared, and Dr Marwick's (1948) description of *Zenatia flemingi* and comments on the undescribed Awamoan species were the first indications that more than one species of this genus occurred in New Zealand. The present paper is a review of all the members of these subfamilies previously described from New Zealand, and also contains descriptions of 5 new species.

The Subfamily Lutrariinae is represented in New Zealand by two Cenozoic fossil species only, being much more common overseas. The Resaniinae consist of only two genera, one of which lives around southern South America and the other of which lives in New Zealand and has quite a long fossil history in this country. The Zenatiinae are known from New Zealand and southern Australia only, and include five fossil lineages and two living species.

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