

AUSTRALIAN BRACKISH WATER SERPULIDS (ANNELIDA : POLYCHAETA)

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FIGURES 1-3

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SYNOPSIS

Evidence is presented to show that in the estuaries between Sydney and Brisbane there is a gradation from typical *Mercierella* to typical *Neopomatus* forms. On this evidence it is suggested that *Neopomatus* is synonymous with *Mercierella*, and *M. enigmatica* becomes the only brackish water serpulid known from Australia.

INTRODUCTION

Dew (1959) recorded only one species of brackish water serpulid (*M. enigmatica* Fauvel, 1922) from Australia, ranging from Townsville, Queensland, round the south of the continent to Carnarvon, Western Australia (fig. 1). She also states, "This species was first noted in Cooks River, Botany Bay, during 1910, when it was observed to have formed dense coral-like masses". Watson, McNeill, Johnson and Iredale (1936) commented on the presence of serpulids in the upper brackish reaches of the Brisbane River in 1929, but this material was neither identified nor preserved. Monro (1938) recorded *M. enigmatica* from the Swan River, Western Australia.

In Australia, *Mercierella* forms isolated populations in the brackish water regions of creeks and rivers. However, the species may be excluded from these areas by lack of a suitable substrate. A suitable substrate is one that provides a firm surface. Rocks, shells, vegetation, concrete, wood and glass are suitable while mud and sand are unsuitable. As many of the coastal creeks and rivers are very muddy, and lack rocks in their brackish areas, it is not surprising that distributional data gives a sparse and scattered picture.

Localities recorded by Dew (1959) are shown in fig. 1, though all her material has not been examined by the present author. The Australian Museum registered numbers and localities of Dew's material that has been examined are listed. Representative specimens from the author's collection have been placed in the Australian Museum, Sydney. The Australian Museum registered number is listed for each of these.

The material is listed commencing with the most northern locality, Ross River, Queensland, working south around the continent to Carnarvon, Western Australia. Material collected by others is acknowledged in the text. Where no acknowledgement is made, the material was collected by the author. The following abbreviations are used: R—river; Ck—creek; LWS—low water spring tide.

Rec. Aust. Mus. 27, page 139.

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