THE PSOCOPTERA OF MUOGAMARRA NATURE RESERVE

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SUMMARY

In a preliminary study Psocoptera were periodically collected from eight habitats in Muogamarra Nature Reserve, near Sydney. Forty-three species were taken of which fifteen are described as new. Rainforest and *Casuarina* habitats yielded the greatest variety of species. Populations were highest in summer on *Casuarina* and showed little seasonal variation in rainforest; dry sclerophyll habitats, on the other hand, yielded greater populations in winter than summer. In each habitat one or two species were dominant. *Acacia floribunda* and *Eucalyptus* spp. were poorest in species and specimens.

INTRODUCTION

During the latter part of 1973 and through most of 1974 collections of Psocoptera were made at intervals from selected habitats in Muogamarra Nature Reserve. Psocoptera had not previously been recorded from the Reserve. The object of the work was to ascertain which species were present and to obtain some indication of any gross habitat preferences or seasonal fluctuations in numbers, if any, as a basis for planning future, more detailed, biological and ecological work. The basic information necessary for rational planning of such work has not been available for Australian species and very little appropriate work which might be applicable to Australian conditions has been done elsewhere.

This paper presents the results of a preliminary survey.

MUOGAMARRA NATURE RESERVE

Muogamarra Nature Reserve is an area of broken Hawkesbury sandstone country covering about 2,300 hectares situated near Cowan, 38 kilometres north of Sydney. It is bounded on the east by the Pacific Highway and on the west by the irregular shores of Berowra Water, a tributary of the Hawkesbury River.

In the north, the curving Hawkesbury River itself forms the boundary and in the south, residential areas adjoin the border of the Reserve.

Most of the Reserve carries vegetation cover of dry sclerophyll forest with some heathlike areas on flatter hilltops. The vegetation of the area has been described by Pidgeon (1938).

In altitude the land rises from virtually sea level to almost 200 metres.