A NEW TERRESTRIAL AMPHIPOD FROM LORD HOWE ISLAND

E. L. BOUSFIELD
National Museum of Natural Sciences
Ottawa, Canada

SUMMARY

Parorchestia gowerensis (Amphipoda: Talitridae) is newly described from the summit of Mt. Gower, Lord Howe Islands, Australia, and supports Stebbing's original concept of the genus *Parorchestia*.

INTRODUCTION

In the course of studies on the terrestrial amphipod fauna of the Australian region, a small collection from the Lord Howe Islands was kindly made available by Dr. J. W. Evans and Miss Elizabeth Pope, of the Australian Museum, Sydney. The material contained a distinctive species, previously undescribed, that is tentatively assigned to the genus *Parorchestia* Stebbing. Although nearly all known species of this group are members of the cryptozoic "leaf-litter" fauna and primarily terrestrial, some occur in association with the nests of marine birds, and in other habitats in close proximity to the sea shore. Smithers *et al* (1974) have commented on the value of small cryptozoic invertebrates in answering scientific questions, especially pertaining to the origin and evolution of isolated biotas. To be of value in this respect, however, much more careful collecting and study of these remarkable crustaceans in their native habitat is needed.

SYSTEMATICS

Genus *Parorchestia* Stebbing 1899; emend Bousfield 1964

Stebbing's original definition of the genus was based on characteristics of the New Zealand leaf-mould species *P. tenuis* (Dana) and *P. sylvicola* (Dana). Several, more recent workers such as Shoemaker (1942), Hurley (1957), Bulycheva (1957), and Barnard (1969) have expanded the definition of *Orchestia* to include the distinctive features used by Stebbing in demarcating *Parorchestia*. However, cognizant of the pressing need for taxonomic refinement of the now unwieldy and unrealistic generic concept of *Orchestia*, containing well over 100 species, the writer (1961, 1964, 1971) has outlined further systematic bases upon which Stebbing's original generic distinction may be upheld. Further revisionary work will be required as new material from the vast complex of Indo Pacific islands comes to hand, and significance of coxal gill and brood plate structure at higher taxonomic levels is ascertained. In the writer's view, the *Parorchestia* complex of leaf-litter hoppers is basically distinct from the true littoral marine facies represented by the generic

Records of The Australian Museum, 1976, **30,** 118–122, Figures 1–2.