

SOME SARCOPHAGID FLIES FROM LORD HOWE ISLAND.

By

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(Figures 1-3.)

Mr. A. Musgrave, Entomologist, Australian Museum, collected insects during December, 1921, on Lord Howe Island, an isolated spot consisting of a seven-mile stretch of land, over three, seven, and eight hundred miles from Australia, New Caledonia, and New Zealand respectively. Amongst them are some species of Diptera that are of interest owing to the similarity they bear to those of Australia.

Of the Sarcophagid flies described herein, two cannot be separated specifically from Australian forms, whilst the third is so similar to a continental species that the difference may possibly be considered to be of subspecific value only. It is possible that two of these species may have reached Lord Howe Island by natural means, such as by wind, or may have been transported by shipping, but we have reason to suppose that such an explanation is open to serious doubt.

Amongst the Diptera Brachycera collected, are two species of the genus *Anthrax* (used in the sense given by Hardy, 1921, *nec* Bezzi) that are apparently identical with two common forms known to us from Sydney. These species are selected for comment because in each case the larvæ are subterranean and predaceous, the fly occurring only where the native flora exists and not breeding in gardens; the imagos are apparently capable of only short flights, about fifty yards at the most, and do not fly during windy weather. Under these circumstances it seems impossible for these Bombyliids to have reached the island by natural agencies, and it is very unlikely that they should have been introduced. Moreover, the majority of the collection consists of Australian species or related flies. These facts suggest that Lord Howe Island may have obtained its dipterous fauna during a time when it was not so isolated as it is to-day.

A. S. Olliff, in his account of the insect fauna of the island,¹ makes no mention of any Diptera, but his study of the Coleoptera led him to state that the more conspicuous genera were peculiarly Australian, though the island possessed a number of highly modified endemic forms. He recorded the presence of quite a number of widely distributed beetles which had evidently been introduced.

¹ Olliff—Austr. Mus. Mem. ii, 1889, p. 77.