A NEW SPECIES OF FAT-TAILED MARSUPIAL MOUSE, AND THE STATUS OF *ANTECHINUS* FROGGATTI RAMSAY.

By

ELLIS LE G. TROUGHTON, Zoologist, Australian Museum.

(Figure 1.)

A review of the extensive collection of *Sminthopsis* in the Australian Museum in 1929, revealed a wide range of variation in the structure of the pads of both manus and pes in specimens hitherto allocated to the fat-tailed species, *Sm. crassicaudatus*. These pads become so shrunken and distorted by drying that spirit series are essential, and there is no doubt that lack of such material has resulted in far too great a range being accorded to individual species in the past.

In his remarkable Catalogue of 1888 Thomas gave the range of *crassicaudatus* as the "Whole of Australia (not yet recorded from the extreme north)", and included Ramsay's *Antechinus froggatti* from Derby, N.W. Australia, in the synonymy of that species. Examination of Ramsay's holotype, however, provides characters warranting the distinction of the Derby form, and it is proposed later on to deal with several races occurring in eastern Australia, as indicated by the Museum material.

During the review, a most interesting fat-tailed specimen was discovered amongst the "old collection" from King George's Sound, Western Australia, which possesses characters markedly differentiating it from the true *crassicaudatus*, and warranting description as a new species. The pads of both manus and pes appeared to agree somewhat with those of the unfigured *Sm. hirtipes* from Central Australia, but my recent examination of the holotype in the British Museum showed them to be quite different.

In his "Mammals of South Australia" in 1923, Wood Jones remarked upon the usefulness of these little animals, and that havor by insect pests would be considerably lessened if the *Sminthopsis* were not preyed upon by domestic cats. It is therefore interesting to note that the type of *crassicaudatus*, described by Gould in 1844, and obtained by his collector, Gilbert, while at the military station on the William's River, south Western Australia, "was brought into the station by a domestic cat, which is constantly in the habit of going into the bush and returning several times during the night with a small mammal or bird in her mouth". When the present writer collected in this region in 1921 wild cats were very numerous and it is most regrettable to think of the serious wastage of the fauna which has gone on since the earliest days of settlement. It is hoped that residents in this interesting faunal area may be encouraged to conserve any