

An Interim Guide to Identification of Insectivorous Bats of South-eastern Australia

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ABSTRACT. Species keys using external characters are given for the 33 microchiropteran bat species recorded from south-eastern Australia, except for the five species of the taxonomically chaotic genus *Mormopterus*, and female *Eptesicus*. The key is designed for use by non-specialists. Identification criteria, synonyms and broad distributional limits are summarised in individual species accounts. Substantial taxonomic uncertainty affects two thirds of the species in south-eastern Australia. Field identification of a significant proportion of species remains problematical because reliable external, diagnostic characters are not known. Consequently, easy or accurate field identification is not possible for many species. The need to retain voucher specimens to confirm identifications is emphasised.

PARNABY, H., 1992. An interim guide to identification of insectivorous bats of south-eastern Australia. Technical Reports of the Australian Museum 8: 1-33.

This manual is designed to assist field identification of live bats by people with no prior experience of our bat fauna. Technical terms have been avoided where possible. It is an interim document due to the limitations in our current knowledge of the taxonomy of this group.

The main aim is to assist species identification in the following ways: a) summarise current knowledge of species identification for the 33 insectivorous bat species recorded from south-eastern Australia (see Appendix); b) alert field workers to the fact that although many species can be recognised with experience by their 'overall appearance', actually defining what these differences are is often difficult and reliable field characters have yet to be discovered for such species; c) indicate that species identification of some genera is not possible at present due to taxonomic confusion and/or because species are defined using skull, dental or

biochemical characters; d) encourage a minimum standard of notes to be routinely recorded for each bat during field studies.

The five distinctive megachiropteran bat species known from the region (three species of Fruit Bat *Pteropus* spp, the Tube-nosed Bat, *Nyctimene robinsoni* and the Blossom Bat *Syconycteris australis*) are not covered in this guide. The latter species are discussed by Hall & Richards (1979) and Strahan (1983).

As further versions of this document are planned, difficulties encountered in using the key and suggestions for improvement will be welcome.

Scope

The species key is based on one developed for use