The Chinchilla Local Fauna: An exceptionally rich and well-preserved Pliocene vertebrate assemblage from fluvial deposits of south-eastern Queensland, Australia

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The Chinchilla Sand is a formally defined stratigraphic sequence of Pliocene fluvial deposits that comprise interbedded clay, sand, and conglomerate located in the western Darling Downs, south-east Queensland, Australia. Vertebrate fossils from the deposits are referred to as the Chinchilla Local Fauna. Despite over a century and a half of collection and study, uncertainties concerning the taxa in the Chinchilla Local Fauna continue, largely from the absence of stratigraphically controlled excavations, lost or destroyed specimens, and poorly documented provenance data. Here we present a detailed and updated study of the vertebrate fauna from this site. The Pliocene vertebrate assemblage is represented by at least 63 taxa in 31 families. The Chinchilla Local Fauna is Australia's largest, richest and best preserved Pliocene vertebrate locality, and is eminently suited for palaeoecological and palaeoenvironmental investigations of the late Pliocene.

Key words: Mammalia, Marsupialia, Pliocene, Australia, Queensland, Darling Downs.

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