Fossil Avian Assemblage of Pitfall Origin from Holocene Sediments in Amphitheatre Cave (G-2), South-western Victoria, Australia

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ABSTRACT. The fossil avian assemblage from Amphitheatre Cave (6 km north of the township of Nelson, Victoria, Australia) consists of 27 species of birds. Three dominate the assemblage with 63% of the total minimum number of individuals (i.e., Gallinula mortierii, Dasyornis broadbenti and Dasyornis brachypterus). Most of the material originated from a pitfall accumulation, based upon the large percentage of individuals belonging to terrestrial species with elements lacking the damage characteristic of vertebrate accumulators. Geographic range extensions are noted for three species (i.e., Gallinula mortierii, D. brachypterus and Ptilonorhynchus violaceus). Assuming the assemblage is intra-contemporaneous, the reconstruction of vegetation at the time of deposition would include; wetlands with some areas of short cropped grass, bordered by wet heathland, which subsequently gave way to Eucalyptus open forest formation away from the water source and Eucalyptus tall open forest formation in the gullies. The age of the deposit (4,670 \pm 90 y.B.P.: NZA 700) is based upon a single radiocarbon date on bone.

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Amphitheatre Cave (G-2: Matthews, 1985) is located approximately 6 km north of the township of Nelson, south-western Victoria (38°03'S 141°01'E) and occurs in the central part of an easterly facing cliff, approximately 15 m above the Glenelg River.

The exact location of the cave from which this material came, was unknown for a number of years, and it was therefore referred to by the name of the collector

of the fossil material, F.S. Colliver (i.e., Colliver's Cave: Rich & Baird, 1986; Baird, 1986). Recently a foray was organised, through the help of the Department of Conservation Forests and Lands, where the author was able to view cave entrances from the river. At this time the cave was confirmed as being the southern entrance of Amphitheatre Cave (G-2), matching a photo of the cave entrance provided in Colliver's (1938) article on