

A Darriwilian (Middle Ordovician) bivalve-dominated molluscan fauna from the Stairway Sandstone, Amadeus Basin, central Australia

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A bivalve-dominated molluscan fauna is described from the Darriwilian (Middle Ordovician) Stairway Sandstone, Amadeus Basin, central Australia. The fauna comprises 16 species of bivalves and rostroconchs plus six gastropod species which are treated under open nomenclature. Two new bivalves, *Sthenodonta paenesymmetrica* sp. nov. and *Modiolopsis pojetai* sp. nov., are described. The relatively low-diverse molluscan fauna constitutes around 62% of the total benthic macrofauna. Approximately 75% of the molluscs comprise bivalves, especially nuculoids, which were biogeographically restricted to low latitudes during the Ordovician. The molluscan assemblage displays a very high degree of endemism at species level, though the bivalve *Sthenodonta eastii* also occurs in the Georgina Basin farther to the northeast. This indicates a possible marine connective seaway between the Georgina and Amadeus basins during the Darriwilian. *Nuculites*, *Cyrtodonta*, and *Modiolopsis* are cosmopolitan and previously reported from North China, Avalonia, and Southern Gondwana.

Key words: Mollusca, Bivalvia, endemism, biodiversity, Ordovician, Darriwilian, Central Australia.

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