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A *GLYPTAGNOSTUS STOLIDOTUS* FAUNA FROM NORTHERN VICTORIA LAND, ANTARCTICA

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Numerous Middle and Late Cambrian faunas have been recorded and/or described from Northern Victoria Land, Antarctica (Cooper *et al.*, 1976, 1982, 1983, 1990, 1996; Cooper and Shergold, 1991; Shergold and Cooper, 1985; Shergold *et al.*, 1976; Wolfart, 1994). Almost all of these fossils come from within the NW-SE striking fault-bounded strip of Cambrian sediments and volcanics known as the Bowers Terrane. The Bowers Terrane is bounded to the southwest by a metamorphic igneous complex (Wilson Group, Lanterman Terrane) and to the northeast by a metasedimentary flysch unit (Robertson Bay Group, Robertson Bay Terrane).

In the northern part of the Bowers Terrane, the basal part of the Cambrian succession comprises the sandstones and mudstones of the Molar Formation interfingering with the basic volcanics of the Glasgow Formation. The main fossiliferous unit, with late Middle and early Late Cambrian faunas, is the Spurs Formation that comprises siltstones with intercalated limestones and silty limestones. This is overlain unconformably by the sandstones of the Leap Year Group. In the Helix Pass – Carryer Glacier area, there are several richly fossiliferous horizons (Fig. 1). In calcareous siltstones and dark limestones of the Spurs Formation immediately below the unconformity is a rich trilobite fauna that includes the key zone fossil *Glyptagnostus stolidotus* Öpik 1961.

Agnostoid trilobites from this fauna include *G. stolidotus*, *Idolagnostus* (*Obelagnostus*), *Agnostardis*, *Hadragnostus*, *Aspidagnostus* cf. *A. inquilinus* Öpik 1967, *Ammagnostus*?, *Oncagnostus* (*Oncagnostus*), *Neoagnostus* and *Kormagnostella*. The polymeroid trilobites include *Rhodonaspis longula* Whitehouse 1939, *Henadoparia*, *Catillicephalus*, *Onchopeltis*?, cf. *Leichneyella*, *Liostracina*, *Doremetspis*, *Blountia*, *Meteoraspis*, and *Palaeadotes*.

This fauna clearly has strong affinities with the Mindyallan faunas of Queensland as described by Öpik (1967), with almost all the polymeroids being found in both areas. Affinities with eastern Asia are shown by the presence of *Palaeadotes* and *Liostracina*. *Palaeadotes* is also found in Tasmania, China, Kazakhstan, Iran, Sweden, Siberia, Turkey, and France (Shergold *et al.*, 2000).

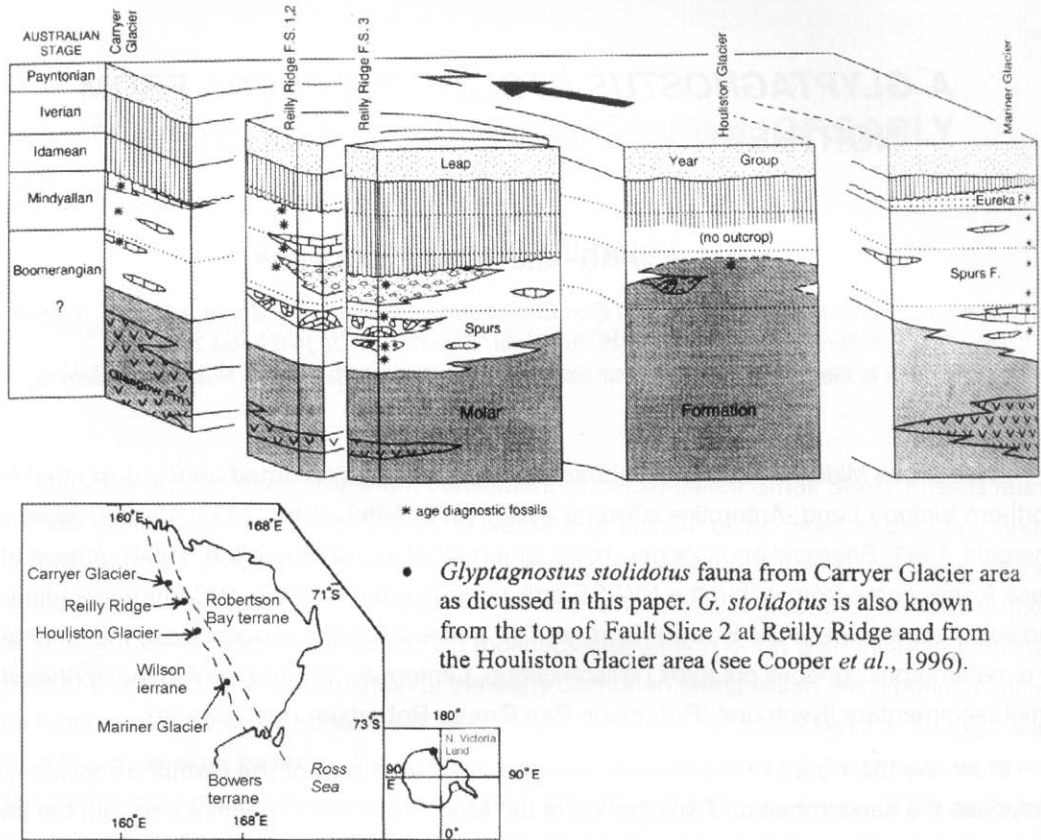


Fig. 1. Diagrammatic representation of stratigraphic relationships and fossil horizons, Bowers Terrane, northern Victoria Land (after Cooper *et al.*, 1996).

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