

1985/15. A new Cambrian fossil locality from Native Track Tier, north-west Tasmania

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Abstract

Cambrian fossils found at Native Track Tier during mapping in the St Valentines Quadrangle occur within a mixed volcanic/sedimentary sequence and indicate a late Middle Cambrian age in either the *Lejopyge laevigata* III Zone or the *Damesella torosa* - *Ascionepea janitrix* Zone.

INTRODUCTION

During completion of mapping in the St Valentines Quadrangle a new Cambrian fossil locality was found in the Native Track Tier area [DQ140218] within a mixed sequence of felsic volcanic and sedimentary rocks.

The volcanic rocks are variable and include agglomerate, crystalline lithic tuff, and fine-grained varieties. It is noteworthy that some of the volcanic rocks are very similar to the Comstock Tuff (Tyndall Group) of the Queenstown area.

The fossils are found as internal and external moulds within a buff or fawn-coloured siltstone which occurs within a conglomerate-sandstone-siltstone sequence. Poor outcrop precludes meaningful facies analysis of the sequence.

PALAEONTOLOGY

The Cambrian fossils from the locality are the best preserved yet found in Tasmania and consist predominantly of a mixed agnostid/polymerid fauna. Many of the specimens are complete.

The agnostids include *Valenagnostus*, *Aspidagnostus*, *Clavagnostus*, *Peronopsis*, *Agnostascus*, *Tasagnostus* and *Innitagnostus*.

Polymerids are represented by abundant *Nepea* and *Amphoton*, together with a pagetiid (possibly *Helepagetia*) and a papyriaspid.

Hyalolithids are common in the fauna, together with possible brachiopods.

AGE AND CORRELATION

The age of the fauna is Late Middle Cambrian in either the *Lejopyge laevigata* III Zone or the *Damesella torosa* - *Ascionepea janitrix* Zone (i.e. latest Middle Cambrian).

The fauna is similar in faunal content and age to the main Cambrian fossil locality in the St Valentines Peak area (Jago et al., 1975) and is an approximate correlate of the Comstock Tuff (Jago, 1979).

This locality provides important new stratigraphic information with respect to the Mt Read Volcanics in north-western Tasmania.

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