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1980/47. Fossil faunas in Eldon Group correlates within the Huskisson Syncline

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Abstract

Lists of the faunas present at five localities within shallow water sequences of sandstone and mudstone formed during the Silurian Period are presented. Correlations with similar sequences elsewhere in Tasmania are suggested.

INTRODUCTION

Road cuttings along the Hydro-electric Commission's Lower Pieman Dam road between the 40.5 km [CP729792] and 35.9 km [CP696785] marks give access to approximately 350 m of highly fossiliferous interbedded laminated siltstone-mudstone, calcareous mudstone and friable and siliceous sandstone successions. These successions are correlates of the Eldon Group. Fossil collections were made from five localities.

LOCALITY 1 - LPD 40.5 km [CP729792]

Leptostrophia sp. (parvicostellate form) very common
Rhynchonellid ?*Ancillotoechia* sp. or ?*Stegerhynchus* sp. very common
Cornulites sp. common
Tentaculites sp. very common
Smooth ostracods
Trilobite fragments

LOCALITY 2 - LPD 38.5 km [CP714784]

?*Ancillotoechia* sp. or *Stegerhynchus* sp. very common
cf. *Delthyris* sp.
Leptostrophia sp. common
Nucleospira sp.
Encrinurus sp. very common
Trimerus (Trimerus) sp.
Tentaculites sp. very common
Smooth ostracods
Actinopteria sp.
cf. *Grammysia* sp.
Crinoid debris and fragments of colonies of favositids and heliolitids

LOCALITY 3 - LPD 37.9 km [CP708783]

Atrypa sp. a very large species
?*Ancillotoechia* sp. or *Stegerhynchus* sp.
Leptostrophia sp. (a parvicostellate form) very common
Encrinurus sp.
Tentaculites sp. very common
Gillatia sp. and other ostracods
Michelinoceratids and loxonemids rare.

LOCALITY 4 - LPD 37.4 km [CP702784]

?Ancillotoechia sp. or *Stegerhynchus* sp. very common
Leptostrophia sp. very common
Tentaculites sp. very common
Actinopteria sp.
Loxonemids rare.

LOCALITY 5 - LPD 35.9 km [CP696785]

Rostricellula synchoneua (Gill)
Crinoid ossicles (very large, up to 30 mm in diameter)

CONCLUSION

The sequence of predominantly siltstone and calcareous siltstone with subordinate sandstone (localities 1-4) which occupies the core of the syncline may be correlated with the Amber Formation of the Zeehan area. A Middle Silurian (Wenlockian) age is probable. *Gillatia* and *Atrypa* are unknown below the Late Llandoverian, and *Nucleospira, Trimerus, ?Ancillotoechia* or *?Stegerhynchus* and *Delthyris* are unknown below the Wenlockian. These faunas are dissimilar to those from the proved Late Llandoverian faunas from the Richea Formation in the Tiger Range (Sheehan and Baillie, *in press*) despite the overall similarity in facies. This further supports the younger age assignment.

The underlying sequence of sandstone and quartzite exposed in the Department of Main Roads quarry immediately west of the Huskisson River (locality 5) can be correlated both lithologically and faunally (abundant very large and coarsely-ribbed *Rostricellula*) with the Crotty Formation of the Zeehan area. An essentially Early Silurian (Llandoverian) age is probable.

In all probability, the facies change from sandstone to siltstone and shale (Crotty Formation to Amber Formation and Gell Formation to Richea Formation) is diachronous, occurring first in the Tiger Range and later in the Huskisson River area. This does not necessarily imply that sedimentation was laterally continuous between the two areas.

REFERENCE

SHEEHAN, P.M.; BAILLIE, P.W. *in press* A new species of *Eospirifer* from Tasmania. *J.Palaeont.*

[27 November 1980]