

NOOK

Rocks in the Leven Gorge near Ulverstone contain agnostids and trilobites of Middle and Upper Cambrian age (see Banks, 1956, pp. 183-186), and rocks further east at Palcoona and Sheffield were also considered Cambrian. During 1956, K.L. Burns discovered fossils in these rocks at Nook, which is between the two townships mentioned.

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The fossils occur in a small open cut about 100 feet above the river, on the south bank of the Leven River at 4255 E/ 9119 N (see fig.). The country rock is soft, friable shale, dark grey when fresh but weathering yellow. Nearby, this lithology is interbedded with greywacke conglomerates and keratophyre volcanics. The stratigraphic position is uncertain, but is considered on the basis of regional mapping to be high in the Dundas Group.

The fossils are carbonaceous markings, and small inarticulate brachiopods which include

Isandula

In October, 1958, K.L. Burns traced trilobites occurring in road metal to a large quarry on the eastern side of the Isandula Road, west of the Gawler River, 2.7 miles south of the turn off from the Preston Main Road at Gawler. Approximate co-ordinates are 4134/9.3N (Locality A of fig.).

The country rock is interbedded greywacke sandstone and siltstone, in beds about 2' thick. The fossils are fragmentary, and occur in bands in the siltstone close to the sandstone, more rarely within the sandstones.

The formation dips vertically and is strongly cleaved oblique to bedding, so fossils are difficult to extract. This formation extends north for over a mile, exposed in cuttings on the Isandula Road. It occurs close to the Pre Cambrian, but the boundary is a movement zone so the stratigraphic position of the fossils is not yet clear.

Fossils present are -

S.N. Ulverstone

In November, 1958, K.L. Burns discovered an assemblage including trilobites, dendroids and brachiopods on the southern shore of the Leven River, at the northern tip of the headland immediately east of the mouth of the Gawler River (Localite C of fig.). Approximate co-ordinates are 412E/932N.

The succession in this vicinity is laminated, thin bedded siltstones and brown greywacke conglomerate (bottom) sandstones and shales with the black fossiliferous sandstone at the top, then volcanics including a green felspar porphyry.

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This sequence is correlated structurally and lithologically with rocks outcropping on the East Beach at Ulverstone, which A.H. Spry (pers. comm) had previously considered to be Pre Cambrian, although a Cambrian age was thought possible. It appears certain these rocks are very low in the Dundas Group, within a few hundred feet of the base and possibly closer. It may be noted that Banks (1956 p) records sponge spicules and carbonaceous markings from approximately the same horizon, from cuttings on the Preston Main road 1 mile S.W. of Gawler (locality B of fig).

Fossils from S.W. Ulverstone include -