

A fresh perspective on the middle Cambrian trilobites from Manuels River, Conception Bay South, Newfoundland, Canada

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The trilobite-rich middle Cambrian strata at Manuels River, Conception Bay South (CBS), Newfoundland and Labrador, were originally described by B.F. Howell in 1925. Howell identified and described a sequence of 125 discrete beds through his study area, comprising the Chamberlains Brook Formation (beds 1–35) and the overlying Manuels River Formation (beds 36–125). These formations are dominated by green, grey or black shales interbedded with minor to massive limestone deposits, achieving a combined total thickness of just under 100 m. Howell also provided a detailed description of the fossil fauna associated with this sequence, which is dominated by trilobites from the Orders Redlichiida, Ptychopariida, and Agnostida. In 1962, R.D. Hutchinson re-examined the trilobite fauna of this sequence as a part of a description of Cambrian stratigraphy and trilobite palaeontology in southeastern Newfoundland. While there have been subsequent studies examining specific components of the middle Cambrian trilobite fauna from Manuels River and associated localities, there has been no systemic overview of the trilobite fauna from this sequence in several decades.

The Manuels River Hibernia Interpretation Centre is located adjacent to the CBS Highway in Manuels, approximately 2 km southward from the end of Manuels River. Although the primary mandate of this facility is education, work has commenced there to re-examine the middle Cambrian trilobite fauna found on the river. Preliminary efforts will include a summation of the previously published literature relevant to the trilobite fauna of the area. Longer term goals include bed-by-bed collection of new material throughout the entire middle Cambrian sequence on Manuels River, followed by identification and description of this new material and reconsideration of the present fauna in regional and global contexts.