
**Stratigraphic studies of the Watts Bight Formation
(St. George Group), Port au Port Peninsula,
western Newfoundland**

W. DOUGLAS BOYCE¹, LUCY M. E. MCCOBB²,
IAN KNIGHT¹

1. *Geological Survey, Department of Natural Resources, PO Box 8700,
St. John's, Newfoundland A1B 4J6, Canada* ¶ 2. *Department
of Geology, National Museum of Wales, Cathays Park, Cardiff
CF10 3NP, Wales, UK*

Trilobites along with other macrofossils were systematically recovered from the lower part of the Tremadocian Watts Bight Formation (St. George Group) 1.5 km west of Ship Cove and from the Isthmus Bay Section, Port au Port Peninsula. The trilobite genera *Bellefontia* and *Symphysurina* are identified for the first time from the west Newfoundland platformal sequence. The presence of *Bellefontia gyracantha*, “*Hystricurus*” *ellipticus* and *Symphysurina myopia* indicates a correlation with the Tribes Hill Formation of New York State, U.S.A. *Millardicurus* sp. cf. *M. armatus* provides a faunal linkage with the Antiklin-albugt Formation of North-East Greenland.

The lithostratigraphy of the Watts Bight Formation is best known in the Isthmus Bay Section where it includes superb microbial mound complexes. Twenty kilometres to the west, however, the mounds are no longer dominant although still sporadic near the base. The succession instead consists of monotonous, thickly bedded, stylonodular lime mudstone and wackestone with frequent thin sheets and lenses of grainstone and rudstone supporting a more open, subtidal shelf setting in the west of the peninsula.