Significance of newly discovered Cambrian macrofossils from the Phillips Brook and North B Brook anticlines, Western Newfoundland

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Sixty-four macrofossil collections have been obtained from newly discovered fossiliferous areas/localities in shelf carbonates and lesser shales and siltstones of the Middle to Late Cambrian Port au Port Group in the Phillips Brook and North Brook Anticlines of western Newfoundland. The fauna is dominated by trilobites and inarticulate brachiopods, but also includes ostracodes and gastropods in some of the younger beds.

The March Point Formation, 50 m of limestone and minor shale and siltstone, has yielded a sparse late Middle Cambrian fauna of small trilobite fragments and inarticulate brachiopods. The conformably overlying Petit Jardin Formation comprises 340 m of limestone, dolostone and shale, divisible into several members. Much of the formation hosts a fairly rich early Late Cambrian (Dresbachian) fauna that is dominated successively by *Arapahoia raymondi* Lochman, 1938 and *Crepicephalus rivus* Kindle, 1948. The presence of *Irvingella major* Ulrich and Resser, 1924 in a mound bed just 90 m below the top of the formation indicates that the limestones of the formation range into uppermost part of the medial Late Cambrian (Franconian) *Elvinia* zone. Ostracodes also occur with the Franconian faunas.

The Berry Head Formation comprises a lower dolostone member and an upper member of peritidal limestone, dolostone and minor shale. The lower member is barren except for local inarticulate brachiopods. The basal part of the upper member contains the latest Cambrian (Trempealeauan) trilobites *Calvinella tenuisculpta* Walcott, 1914, *Plethopeltis armatus* (Billings, 1860) and *Stenopilus* sp. undet., plus inarticulate brachiopods, ostracodes and some gastropods (including *Sinuopea*).