PALEONTOLOGICAL RESEARCH, WESTERN NEWFOUNDLAND

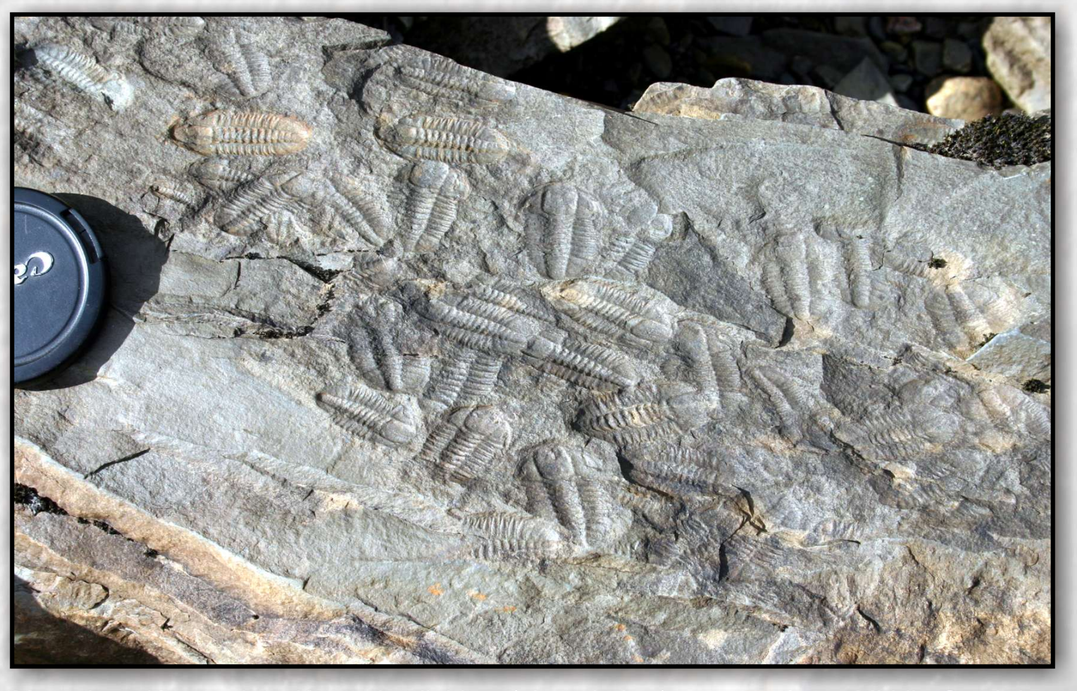
Doug Boyce

A spectacular block of Penguin Cove Formation containing more than 40 complete *Kootenia* trilobites (photo below) and representing a Middle Cambrian mass-kill was recovered by helicopter from North Brook, off Harrys River, near Gallants, western Newfoundland. The specimen is now part of the paleontology collection (Specimen NFM F-657) at The Rooms Natural History Annex, St. John's.

In the Bonne Bay Little Pond area, previously undocumented macrofossils were recovered from the “Aliant tower” road. These included *Macluritid* snails and the trilobites *Bathyurus perplexus* Billings, 1865 and *Pseudomera barrandei* (Billings, 1865), diagnostic of the Middle Ordovician Table Point Formation (Table Head Group).

Exposures of the late Early Cambrian Forteau Formation (Labrador Group) in southeastern Labrador were examined with Dr. Ian Knight, as a follow-up to our 2007 work with Drs. Christian Skovsted and Uwe Balthasar (University of Oslo).

Altogether, 51 previously undocumented fossil localities were sampled in the Cambrian–Ordovician sequences of western Newfoundland and southeastern Labrador.



More than 40 complete *Kootenia* trilobites (photo below) representing a Middle Cambrian mass-kill. Penguin Cove Formation. Harry’s River, western Newfoundland.

The trilobite *Pseudomera barrandei* (Billings, 1865), diagnostic of the Middle Ordovician Table Point Formation (Table Head Group).

The Global Stratotype Section and Point (GSSP) for the base of the Ordovician System, as exposed at Green Point, Gros Morne National Park, Great Northern Peninsula, western Newfoundland. The Cambrian–Ordovician boundary occurs within Bed 23 of the measured section, within the Broom Point Member of the Green Point Formation (Cow Head Group, Humber Arm Supergroup); it is marked (see arrow) by the first appearance of *Iapetognatus fluctivagus* Nicoll, Miller, Nowlan, Repetski and Ethington, 1999, a distinctive, widespread conodont species, which occurs only 4.8 m below the first planktic graptolites.

The gastropod *Lytospira* from the Watts Bight Formation (St. George Group), West Isthmus Bay Section - Green Head, southwest of The Gravels, Port au Port Peninsula.