

for the first time since that work, a continuous sedimentological log of the 619 m-thick red bed section of low relief that intervenes between underlying prominent, thick sandstone bodies of the Boss Point Formation and the cliff section of the Joggins coal measures. The strata, which correspond almost precisely with Logan's Division V, are exposed in the wave-cut platform and bluffs in a two kilometre long section at Lower Cove north and south of Little River.

The section of red beds illustrated herein provides a clear basis for the division and redefinition of stratigraphic units in this classic section, in particular the stratigraphic relationship of the Boss Point and Joggins formations and coeval units exposed across the Bay in New Brunswick. The Lower Cove red beds are currently included in the Joggins Formation but are lithologically distinct from overlying strata that comprise the Joggins coal measures (Division IV of Logan) and from the underlying Boss Point Formation (Division VI of Logan). Furthermore, the Lower Cove red beds, as quintessential dryland deposits, are key to understanding the evolution of the landscape, setting the stage for the wetland and seasonal dryland environments recorded in the succeeding classic Joggins section.

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**Sedimentology and stratigraphy of Pennsylvanian red beds near Joggins, Nova Scotia: the proposed Lower Cove Formation with redefinition of the Joggins Formation**

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The section of Carboniferous strata exposed along the eastern shore of Chignecto Bay has long been considered the classic section of the Pennsylvanian 'coal measures'. The seminal work that defined the stratigraphy of these strata is that of Sir William Logan, who undertook the meticulous bed-by-bed measurement of the section as the first project of the newly formed Geological Survey of Canada. In this poster, we present in detail