



DESCRIPTIVE NOTES

The map-area is part of a coastal region bordering on and merging with the highland mass of northern Cape Breton Island. Topographically it shows the result of renewed erosion on an uplifted and tilted peneplain of post-Triassic age. The old erosion surface is represented by the flat-topped highlands underlain by resistant early Carboniferous and pre-Carboniferous rocks. The major stream valleys, such as the Margaree and its branches, have been excavated on softer Carboniferous rocks of the Windsor and Canso groups.

The oldest rocks in the area are those of an altered sedimentary and volcanic group (1) underlying the Lower Mississippian, Horton group. The sedimentary members comprise altered grey and reddish brown shale, grey sandstone, and arkose. The volcanic members consist of dark green and brown fine-grained tuffs, with some amygdaloidal lava, and a few bands of volcanic breccia. Commonly the volcanic rocks are sheared and chloritized. These rocks are cut by small dykes and bodies of granite (2) believed to be part of much larger bodies occurring beyond the limits of the area. A great unconformity is believed to separate these older rocks from those of the overlying Carboniferous formations.

The Horton group (3) occupies extensive higher parts of the area, where it consists of grey shale, red shale, red sandstone, grey arkose and conglomerate. These rocks are believed to be the equivalent of the Horton group, of Lower Carboniferous age, as determined in Lake Ainslie map-area to the south, but the possibility exists that in both areas the lowest members, as mapped, may be of pre-Carboniferous and, hence, pre-Horton age.

Rocks of the Windsor group (4) of Upper Mississippian age disconformably overlie the Horton, though the contact is a fault in many places. Rocks of this group comprise red and grey shale, buff limestone, gypsum, anhydrite, and a dark grey, laminated, basal limestone. The last is easily recognizable and is remarkably persistent for long distances. The Windsor strata are much folded and faulted.

The Canso group (5) overlies Windsor strata disconformably, and is the equivalent of the Mabou formation of the Lake Ainslie area. It is of Upper Mississippian age and terrestrial origin, and comprises red and greenish grey shale, grey sandstone, and minor, thin limestone beds.

Overlying the Canso rocks is the Riversdale group, represented by the Port Hood formation (6) of Lower Pennsylvanian age, and comprising massive grey sandstone with interbedded red and grey shale.

Deposits of stratified sands, gravels, and clays of glacial origin occur throughout the area. Thick deposits occur at Belle Cole, Grand Etang, and Point Cross.

Gypsum outcrops at many places in the area, and was quarried until 1939 at Belle Marche, 2 miles east of Cheticamp and $\frac{3}{4}$ mile east of the map-area.

Copper was prospected for in the pre-Carboniferous rocks east of Point Cross. Calcite veins in the sandstones and volcanic rocks show some chalcopryrite.

Limestone and marl deposits are found in many places within the area, and are used for agricultural purposes.

LEGEND

- CARBONIFEROUS**
- PENNSYLVANIAN**
- RIVERSDALE GROUP**
- 6** PORT HOOD FORMATION: grey sandstone, grey and red shale, coal
- MISSISSIPPIAN AND (?) PENNSYLVANIAN**
- CANSO GROUP**
- 5** MABOU FORMATION: grey and brownish red shale, grey sandstone, limestone
- WINDSOR GROUP**
- 4** Red shale, siltstone, mudstone, limy shale, limestone, gypsum, anhydrite
- HORTON GROUP**
- 3** Grey and red shale, sandstone, conglomerate, arkose
- DEVONIAN (?)**
- 2** Granite
- CAMBRIAN OR (?) EARLIER**
- 1** Tuff, breccia, amygdaloidal lava; shale, arkose, sandstone
- PALAEZOIC AND/OR EARLIER**
- Rock outcrop, outcrop area X
- Bedding (inclined, vertical, overturned) /
- Fossil locality @
- Gypsum (outcrop, sink hole) * S.H.
- Shaft, slope □
- Fault ~~~~~