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Geological Survey of Canada.

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1895.
S. N. W.

Sheet

No 5 S.W.



Explanation of Colours and Signs.

Recent Deposits.

- M3(a) Fresh Water.
- M3(b) Marine.

Pleistocene.

- M2(a) Even Surface.
- M2(b) Rolling Surface.
- M2(c) Saxicava Sand and Leda Clay. (Marine fossils.)
- M1 Boulder Clay.

Glacial striae.

Forest covered Areas.

- Old growth.
- Recent growth.

Note. Heights in feet above mean tide level. From barometric profiles thus: 192'. Barometrically ascertained: 235'

Note 1. M3 (a).
Some of the largest peat bogs of the Maritime Provinces occur in Prince Edward Island, and are described in the "Report on the Geological Structure and Mineral Resources of P. E. Island," by Sir J. W. Dawson and Dr. E. J. Harrington, 1871.
A peat bog of considerable extent was found on the mainland on the coast of Kent county, New Brunswick, just south of Little Gully.
River flats are only of limited width in P. E. Island, the rivers there being small, and the same remark applies to the rivers of that part of the mainland included in this sheet. Intervals were reserved along the Shediac and Cocagne rivers.

Note 2. M3 (b).
Sand dunes are well developed along the north-east coast of Prince Edward Island, and also on the New Brunswick coast. Where these dunes are widest, the beach which they collectively form consists of several ridges, supposed to have been thrown up by the waves at successive intervals. The accumulation of these sands at the mouths of rivers, or in harbours, is often a serious obstruction to navigation. (See Report accompanying these sheets, p. 124 M.)
Salt marshes skirt the coast of New Brunswick at Little Gully, Shediac Point, and in two or three places to the east of Shediac harbour; but they are narrow, and produce only small quantities of hay. No salt marshes worth mentioning were found in P. E. Island within the area embraced in this sheet.

Note 3. M2 (a).
The deposits referred to under this note are those which occur above the highest Post-Tertiary shore line, and have hitherto proved unfossiliferous. In general they consist of stratified sand and gravel on the surface, underlain in most places by boulder-clay or rolled rock. In P. E. Island rolled rock is quite common on the higher grounds, though usually overlaid with stratified beds of greater or less thickness. Much of the soil on these uplands, both on P. E. Island and the mainland, is, however, coarse and gravelly, and is consequently of inferior agricultural value.

Note 4. M2 (b).
The deposits classed under this head, which occupy by far the largest part of the area embraced in this sheet, are those stratified marine sands, gravels and clay (Saxicava sand and Leda clay), found lying below the highest Post-Tertiary shore line. In many places they are terraced and of considerable thickness, elsewhere they form merely a veneering upon the other superficial deposits. Only in P. E. Island have marine fossils been hitherto found in them. Their agricultural character is, generally speaking, much superior to that of the inland deposits, and large portions of the area occupied by them are, therefore, under cultivation. Fine farming lands occur in the coast districts of P. E. Island and of the adjacent mainland of New Brunswick, in those localities the materials constituting the soil having been more finely comminuted than upon the higher grounds, and intermixed with greater or less quantities of organic matter. The mussel mud which occurs in the creeks and bays affords an excellent fertilizer, easily obtained, and capable of raising the productive power of these arenaceous clay soils to a high degree.

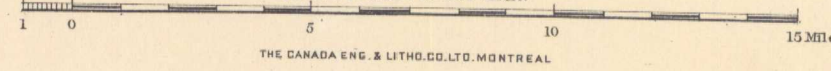
Note 5. M1.
Though boulder-clay is so common in the region covered by this sheet, it is seldom seen forming the surface soil. On the higher grounds it crops out occasionally, but is of very limited extent there. In the vicinity of Irishtown and Lutz Mountains, however, the hills are mantled with it, and it forms the bulk of the superficial materials.

The elevations indicated on this sheet are taken from the profiles of the railway lines laid down on it, these being shown in black, and from barometric heights measured by myself and W. J. Wilson, based on those of the railway stations, and the Government Meteorological station at Charlottetown, P. E. I., and on tide marks along the coasts. They are all referred to mean tide level in the Gulf of St. Lawrence. The courses of the striae are also referred to the true meridian.

Compiled and drawn by R. W. Ellis, assisted by N. J. Giroux from Admiralty Surveys and Baker's Map of Prince Edward Island (1863). Hill features and Railway lines added by R. Chalmers and W. J. Wilson.

SURFACE GEOLOGY.
PART OF NEW BRUNSWICK AND PRINCE EDWARD ISLAND.

Cape Traverse Sheet.
Nat. Scale: 253,440.
Scale: 4 miles to one inch.



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Accompanying Part M, Vol. VII, (N.S.) Geologically surveyed by R. Chalmers.

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