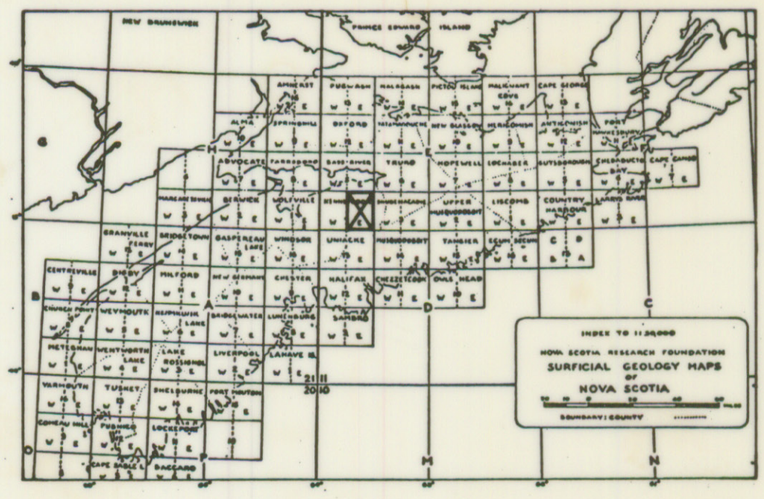
Geology by R.H. Mac Neill, 1956



KENNETCOOK 11E/4E

SURFICIAL GEOLOGY

SCALE 1:50,000

1.25 inches to 1 mile approximately

1 0 1 2 3 Miles

1000 500 0 1000 2000 3000 4000 Metres

NOVA SCOTIA RESEARCH FOUNDATION CORPORATION

LEGEND

- DRUMLIN & MORAINE
- KAME
- ESKER
- DELTA
- TILL AREAS (undiff.)
- SWAMP
- ROADS & TRAILS
- STREAMS
- GLACIAL STRIAE

DESCRIPTIVE NOTES

The topography of the Kennetcook East Map Sheet area varies from a flatland in the Nine Mile River-to-Shubenacadie area to a rolling one with relatively high hills in much of the remainder of the area. The Kennetcook and Nine Mile Rivers are underfit in their valleys.

BEDROCK GEOLOGY

Rocks of the Cambro-Ordovician Meguma Group and the Mississippian Horton and Windsor Groups of the Carboniferous Period underlie the map area with the Carboniferous rocks predominating.

GLACIAL DEPOSITS

Till and Drumlins

The area is generally mantled by till which varies from a mere veneer to several feet. Drumlins appear in the Nine Mile River area and in the Kennetcook region with occasional ones in other parts of the map area such as McPhee Corner and Georgefield. Those in the southern part indicate deposition by the Classical Wisconsin ice advance while those farther north appear to have been modified by late ice movement and/or by the bedrock acting as a linear trap. The till content reflects the bedrock of the locality, with no great travel distance indicated except for some very small amounts of clasts from the Cobequids or from the weathered Triassic conglomerates and conglomeratic sandstones which occur along the Minas Basin.

Glaciofluvials

The region from Nine Mile River to the Shubenacadie Indian Reserve is one which contains eskers, and kames. Outwashed sands occur in the area, indicating the presence of a shallow proglacial ponded area or lake. This appears to have been short-lived and the extent is not at all well defined. Water from the ice flowed eastward toward the Shubenacadie River at the time the eskers were formed. In the Burton's area kames and an esker also indicate an eastward flow of meltwater. Three small kames appear just east of Kennetcook and these are the only glaciofluvials exposed in that area.

The Kennetcook River occupies only the top part of a deeply eroded channel now filled with gravel outwashed from the wasting ice mass.