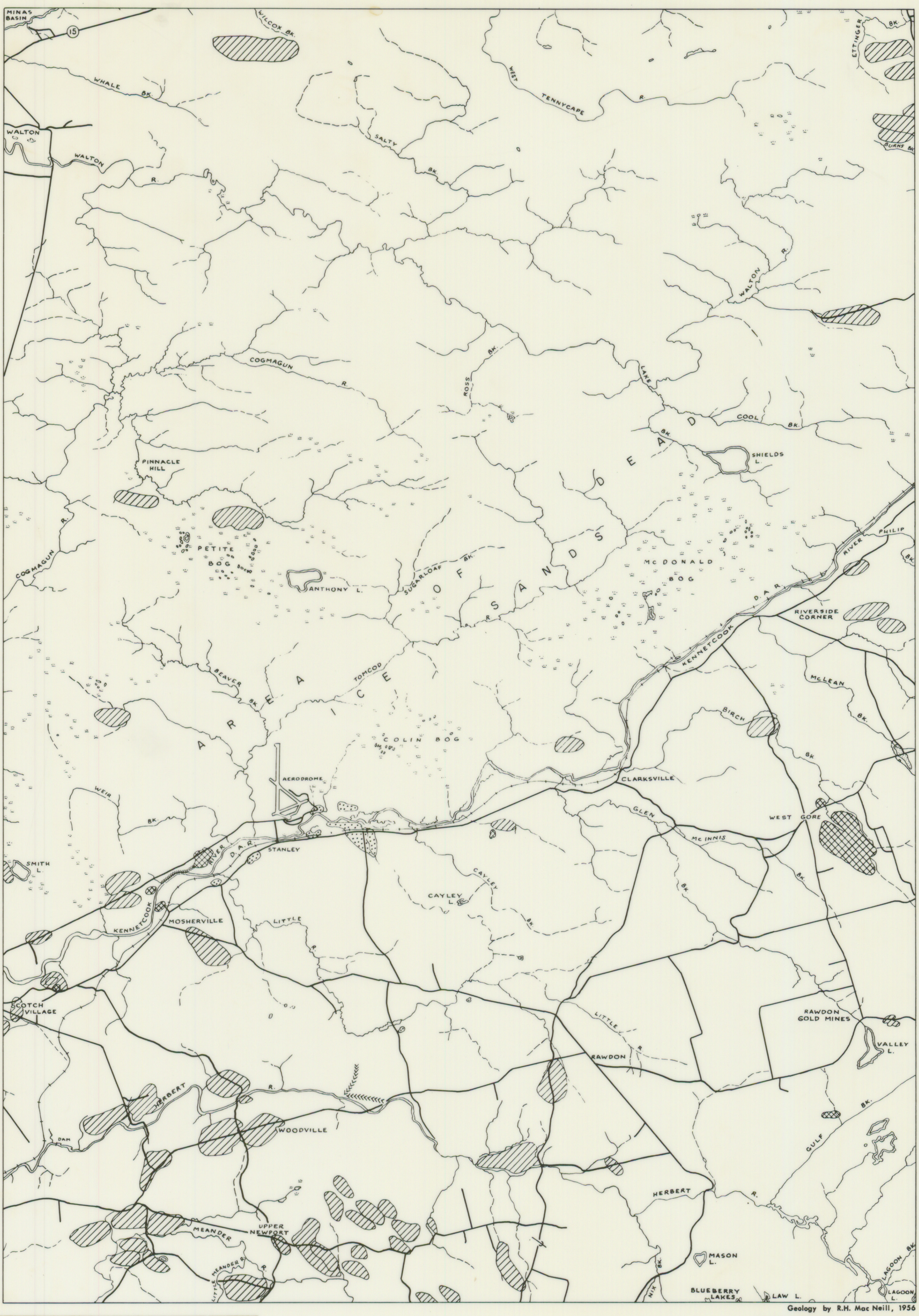
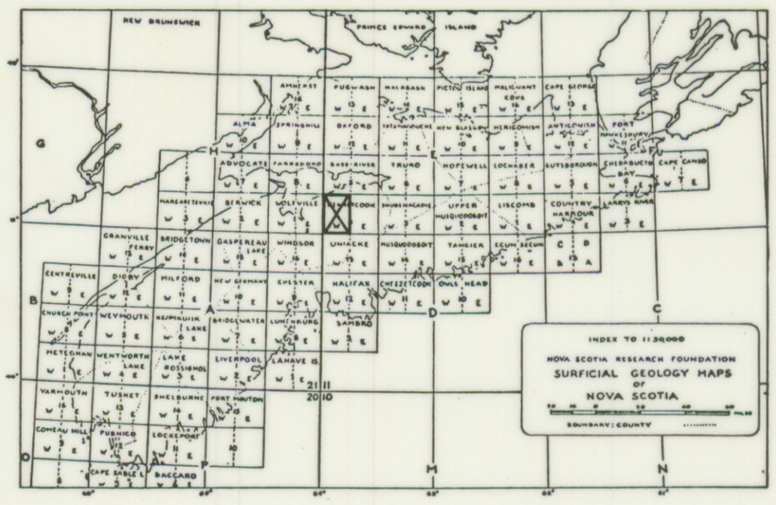


Geology by R.H. Mac Neill, 1956



KENNETCOOK 11E/4W

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 area north of the Kennetcook River on the Kennetcook West Map Sheet is relatively flat and contains many bogs. There are no great differences in elevation. South of the Kennetcook River the land is more hilly and reflects a change in rock types.

BEDROCK GEOLOGY

The area south of the Kennetcook River is underlain by rocks of Mississippian age. Halifax slates and Goldenville quartzites of the Meguma Group, and Pennsylvanian rocks of Riversdale age. North of the river the rocks are mainly those of the Riversdale Group with windows of Windsor Group rocks. North of these Pennsylvanian rocks is a band of Horton and Windsor rocks extending across the map area. Salt is known below the Pennsylvanian northwest of Kennetcook.

GLACIAL DEPOSITS

Till and Drumlins

The southern part of the map sheet has a till cover, thickening in places and forming irregular drift hills or drumlins. The orientation of the drumlins indicates a major ice advance from the northward and a secondary one approximately at right angles. The latter has modified the shape of the drumlins and has added some materials to them. North of the Kennetcook River there is a paucity of drumlins, and those heavier till deposits apparently take their shape from the underlying bedrock ridges which acted as traps. The northern part of the map area has a generally thin till cover often masked in the area just north of the Kennetcook river by sands.

Glaciofluvials

Several kames may be found in the southern half of the area: West of Stanley, south of Rawdon Gold Mines, a small one between Stanley and Clarksville, and a much larger aggregate in West Gore. Outwash fans occur in the Stanley area and a small outwash deposit can be found on McLean Brook, east northeast of West Gore. In the area north of the Kennetcook River there is a considerable number of bogs and semi-bog land. This region is mantled with sand which was apparently washed out into a pro-glacial pond or shallow lake during the final stages of deglaciation of the remanent ice caps. The full extent of this lake is not shown. More detailed study in parts of the area is needed to delineate it accurately. Two eskers are to be found, one tailing off westward from the kame just west of Stanley deposited by westward flowing meltwater and the double one north of the Herbert River east of Woodville. The meltwater which deposited this esker flowed westward down the Herbert River. The kames and eskers consist of gravels and sands with some clasts up to cobble size.

Striae

Striae are difficult to find. About 3.5 km south of Rawdon striae show an ice movement from 300° toward the southeastward.