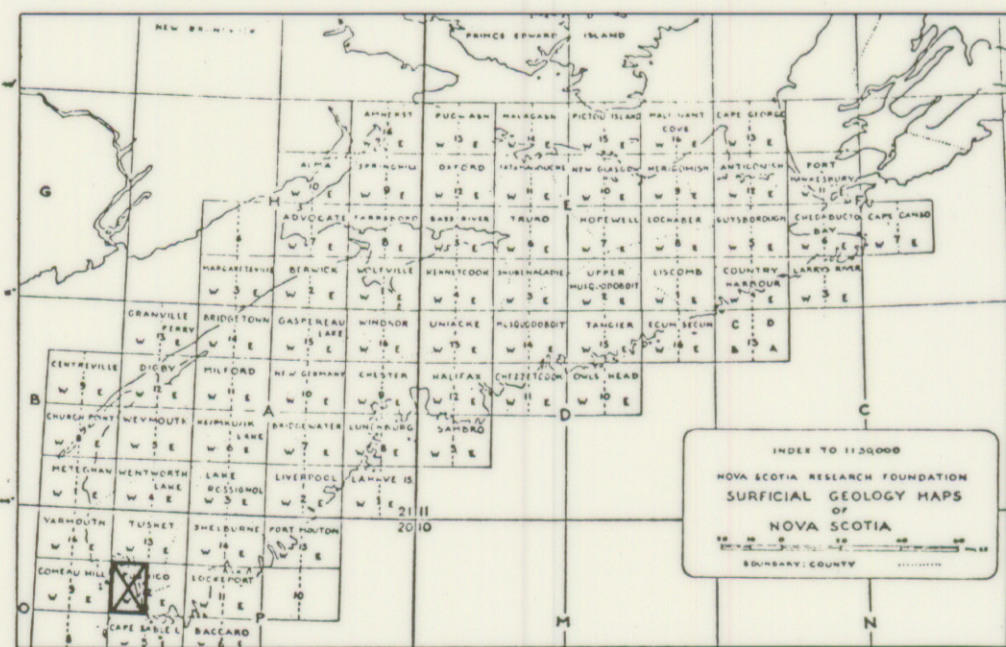
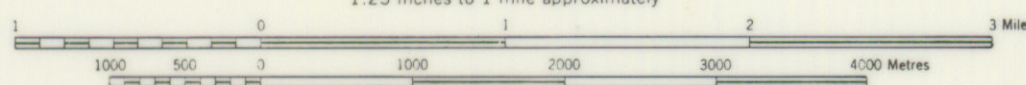


Geology by R.H. MacNeill, 1956



# PUBNICO 20 P/12W SURFICIAL GEOLOGY

SCALE 1:50,000  
1.25 inches to 1 mile approximately



NOVA SCOTIA RESEARCH FOUNDATION  
CORPORATION

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

### DESCRIPTIVE NOTES

**BEDROCK**  
The Pubnico map sheet has the metamorphosed sediments of the Cambro-Ordovician Meguma Group as bedrock. The rocks vary in degree of metamorphism from mica schists to staurolite schists with many very arenaceous sections yielding an impure quartzite.

**DRUMLINS AND TILLS**  
Many of the offshore islands are drumlins which have been immersed by the sea. There is also a considerable number of these glacial forms on the mainland but are restricted to areas near the coastline. Inland the till cover is

generally very thin and the surface is one of barrens and bogs or swamps. The till tends to be grey and sandy with a considerable amount of rock flour. There appears to be only one till sheet in this area - age not known, except that it appears to be the result of the last major advance of the Wisconsin ice.

**KAMES**  
The eastern part of the map sheet, in the Pubnicos, contains a number of kames and/or kame areas. These are not inconsiderable in size, yet do not attain any great depth, varying from a thin cover of one foot to about 10 feet in thickness. The rock material was derived from the arenaceous rocks but traces of diorite and basalt from the northward are to be found.

**ESKERS**  
Several short eskers may be found in the eastern part of the area associated with the kame and delta areas. However, an esker north of Pubnico, about a mile and a quarter in length, appears not to be directly associated with any other glacial features. The eskers indicate a southward flow of water except one in East Pubnico which formed in an east-west direction and drained westward into Pubnico Harbour.

**DELTA**  
A delta occurs at Pubnico and may be the result of sediments discharged by waters which also deposited the esker to the north.

**STRIAE**  
The direction of striae, assumed to have been formed by the last major ice advance are trending in a south-westerly direction, about 170° to 180°. Later striae crossing these show a movement of the ice in a south-southwesterly (205°) direction and are attributed to the action of the local icecap postulated to have its centre near Skull Bog Lake, west of Springfield in Annapolis County.

**DEGLACIATION**  
The whole area was actively glaciated and left with thin cover. The sparseness of the drift and the form of the glacial features present indicate that the ice sheet was extremely thin. The till appears to be late Wisconsin and the glacial features are, in part at least, from the same ice advance, the remainder deposited by the local ice cap meltwater.