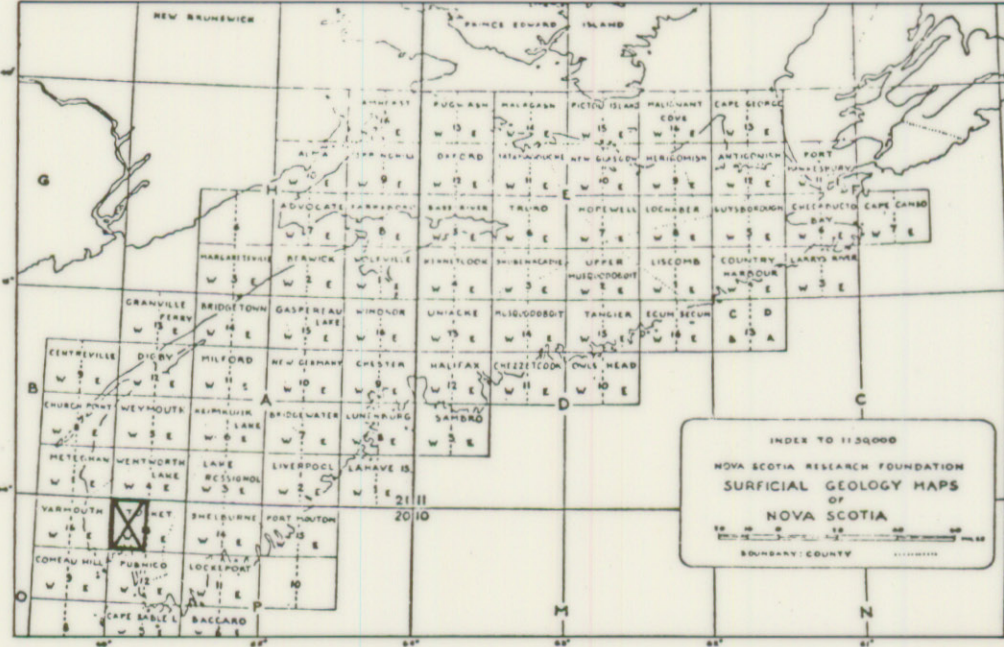


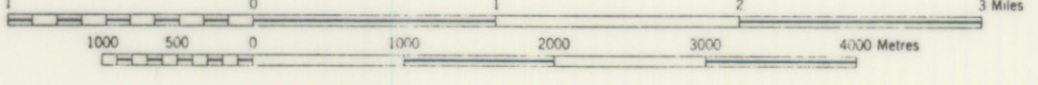
Geology by R.H. MacNeill, 1956



TUSKET 20 P/13W

SURFICIAL GEOLOGY

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



NOVA SCOTIA RESEARCH FOUNDATION CORPORATION

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

DESCRIPTIVE NOTES

INTRODUCTION
Western Nova Scotia is underlain for the most part by metamorphic rocks of the Meguma Group, Devonian sediments and intrusives, Triassic sediments and intrusives, and intrusives of undetermined age. The surface is part of the periplanated southern upland of Nova Scotia. The whole area has been glaciated during the Pleistocene Epoch, and a considerable amount of drift was left in some areas, while only a small amount was left in other parts of this map area. In general, the non-fluvial deposits of glacial drift are directly related to the bedrock traversed by the advancing ice sheets in their north-south movement. The silted readily provided material, while quartzites, granites, and basalts were generally not good

GENERAL

The west half of the Tusket sheet (20 P/13) contains numerous drumlins in the Deerfield, Arzila, and Glenwood areas. An occasional drumlin of fine sand is seen in the eastern part of the map area. The bedrock is covered by a till which varies from a mere veneer to many feet in depth. Much of the Tusket map sheet area is quite barren with many rock outcrops and outcrop areas. The glacial cover consists of sandy and gravelly till with finer deposits of rock waste. Sand and gravel occurs in the glacial drift. Many parts of the area appear to have been worked over by

DRUMLINS

Most of the drumlins are made up of small boulders, rock fragments, and the matrix is formed from a very sandy and rock flour material. The amount of clay is small, but much rock material of the texture of silt (less than 1/16 cm) is present. Some of the drumlins exhibit stratification in the internal parts (possibly re-shaped kames), while others show none at all. Others, again, show traces of stratification on the outside, testifying to the ablation deposition. None of these drumlins contain any appreciable number of large boulders - most of the rocks are small, in the order of one to two inches, with a few six inches or larger in diameter. The general appearance of the drumlin material is that of a flowy to sandy, somewhat rocky, whitish to grey, well-packed drift.

OUTWASH AND/OR DELTAS

Difficulty was experienced in differentiating between the deltas and/or

KAMES

Kames were usually of fine gravel and sand, sometimes well sorted, and sometimes with little or no sorting, but all were well stratified. Some of them had a veneer of till, while others showed no change in material on the surface except that which was caused by the action of plants and/or animals. Two kame areas occur between Fullerton Lake and the Foxter Run Brook area (this extends southward into the Publico map area). In areas of kames occurs in the Tusket Falls area, one south of Quinan,

ESKERS

Eskers of major size occur east of Mespark Lake, northwest of Great Pulpit Lake, west of Turtle Pond, west of Munde Lake, and along the Hamilton Creek-to-Clyde River area. Smaller eskers are to be found east and southeast of Munde Lake and in scattered localities over the map area.

ICE STAGES/SUB-STAGES

Evidence of two ice advances has been found but no definite date other than "Wisconsin" has been determined. Variation within the drift, and change of pattern within the deposits is attributed to the sub-stages of the Wisconsin rather than to part of the drift being of Illinoian age or older. No weathered profiles or gumballs were seen, thus obscuring the age picture, but the age is tentatively that of the Caryan and/or Mankatoan sub-stage.

LOCAL GLACIATION

Modification of drumlins and kames of the Wisconsin drift sheet, the burying of low eskers, and the reverse movement of boulders indicate that local glaciation took place during or after the final stages of the Wisconsin ice advances.