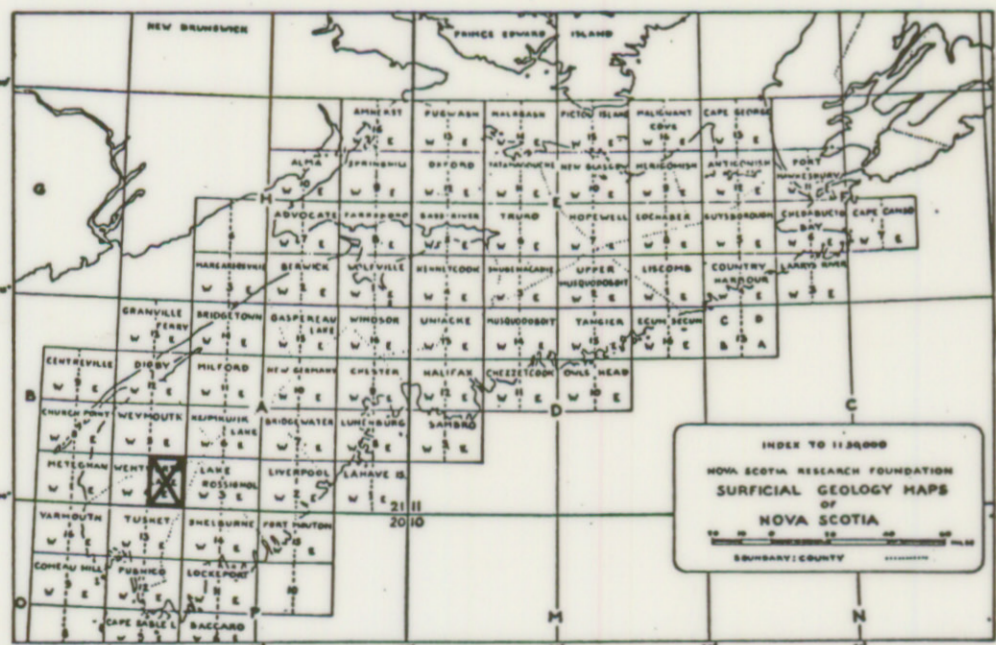




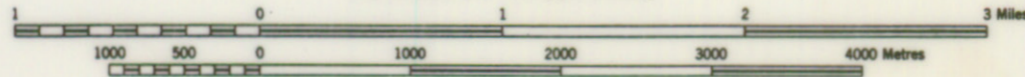
Geology by R.H. Mac Neill, 1956



## WENTWORTH LAKE 21A/4E SURFICIAL GEOLOGY

SCALE 1:50,000

1.25 inches to 1 mile approximately



NOVA SCOTIA RESEARCH FOUNDATION  
CORPORATION

### LEGEND

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

#### DESCRIPTIVE NOTES

##### BEDROCK

The Wentworth Lake Sheet covers an area of Southwest Nova Scotia which is largely underlain by the Goldenville and Halifax metasediments of the Cambro-Ordovician Meguma Group. The eastern and northeastern part is underlain by granites of the Devonian batholith, while a small area in the south western corner has a basement of Upper Silurian rocks of the White Rock Formation.

##### TOPOGRAPHY AND DRAINAGE

The map area is part of the rolling Southern Upland peninsular ranging in elevation from approximately 50 to 180 m with the higher elevation areas underlain by granites of the batholith.

The area is well drained by rivers and streams, many of which have widened out into stillwaters and lakes, at the same time having regions where rapids are common. Drainage is everywhere to the southward. Numerous lakes, varying in size from ponds to four mile ones, dot the surface and the many swampy areas attest to the location of former lakes.

##### GLACIATION

The peninsular surface has been severely glaciated, and the evidence of earlier glacial episodes has been largely removed by the Late Wisconsin ice sheet and the action of the local ice cap in the later stages of deglaciation.

The rocks have been smoothed and rounded and, later, generally covered by a till which ranges from very thin

to a few feet. The till material was largely derived from the rock of the area.

##### DRUMLINS

The western part of the area has numerous drumlins which are generally oriented in a north-to-south direction with a few of them slightly skewed. Their content reflects the bedrock types of the area. The eastern part has only the occasional drumlin, the area being covered by a thin till largely derived from the underlying rock which is predominantly granite.

##### GLACIOFLUVIALS

Glaciofluvial sands and gravels are generally confined to the northern part of the west half of the map area. Eskers may be found trending southward through

Wentworth Lake, southwestward intermittently from Basalgette Lake to Moody's Corner thence westward to Dean Brook. Another one can be found to the east of South Carrying Road Lake, to the south of Lucky Lake, and between Squash and Tumbler Lakes. This esker originated on the southern edge of a kame area to the east and the last 2 miles of it also is through the kame area between Squash and Tumbler Lakes. The meltwaters which deposited these eskers flowed southward and/or westward.

There are three areas where kames proliferate. One is to the east of the Carrying Road Lakes, one to the east of Basalgette and Red Lakes and one in the area between Squash and Tumbler Lakes. Kames also occur in association with the esker west of Moody's Corner, one small one may be found

near Harris Lake and one at the south end of a drumlin east of Crawley Lake and the Tusket River. A further group of kames occurs southeast of Rocky Lake.

The glaciofluvials appear to have been deposited from the late and local ice sheet during the late stages of deglaciation and do not appear to be relics of earlier ice mass melting.

##### STRIAE

Striae are not common, and, where found indicate a north-to-south movement of the ice sheet which is considered to be Late Wisconsin.