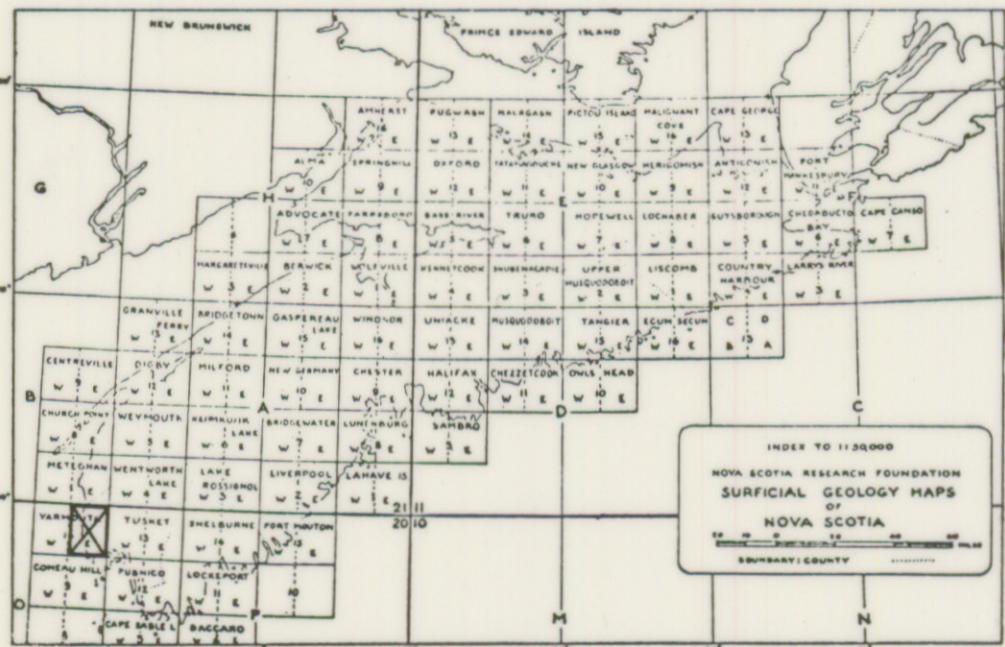




Geology by R.H. Mac Neill, 1956



DESCRIPTIVE NOTES

GENERAL

The western half of the 20 0/16 map sheet consists entirely of water, while the eastern half is only about three-fifths land. The bedrock consists of the generally impure slates, quartzites, and gneisses of the Meguma Group, as well as the meta-volcanics and sediments of the Silurian and the Devonian granite. These rocks outcrop frequently over the whole area and only in the extreme southeastern part does any of the Devonian batholithic granite occur. The lakes are numerous and generally shallow, attesting to their partially or completely glacial origin. The topography is that of an undulating peneplain which has been modified by glacial action. The coastline is one of recent submergence.

TILL AND DRUMLINS

The map area is generally till covered and the thickness of the drift varies considerably. Some areas have only a thin veneer of till, others have from a few inches to several feet of drift cover, and other parts have the drift forced into small to medium sized drumlins. The till varies in colour from reddish to greyish, attesting to its varying sources. The material found in the drift has been derived largely from the bedrock in the area, although travellers in the form of sand-to-boulder-sized debris from North Mountain and possibly from New Brunswick are very common.

GLACIOFLUVIALS

Eskers, kames and deltas from the decaying ice sheets of the Wisconsin, and possibly from some of the earlier glacial stages, are common in the southern half, extending from Brooklyn to lower Melbourne and Cowan Hill. These eskers sometimes carry the roads in this area. Occasional eskers have been buried by effluent materials from the local ice sheet and by post-glacial debris and these are found in bog or marsh areas.

Terraces are to be found, but by ocean waters. These are very striking in the Cape Fourchu area, especially just to the north of the lighthouse where the waters have cut three distinct benches. An excellent view of these may be obtained from the top of the lighthouse. Other terraces may be found on the eastern side of Milton Lake or Lake Milo. In the Sandford - Short Beach area a terrace may be found which is largely drift covered. These terraces are all considered to be pre-Wisconsin.

OTHER

Striae have been recorded north-west of Lakeside but none has been noted in any other areas. This may be due to the erosive action of water and ice on a rock which does not retain striae under those conditions.

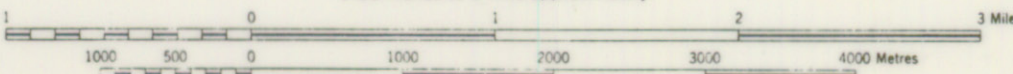
From all the present evidence, it is apparent that the general ice movement was from north to south, with the local ice sheets of the Lake Wisconsin moving from a more northeasterly direction. Post-Pleistocene isostatic recovery is clearly shown in the elevated deltas.

The ice sheet was quite thin in this area, as is generally the case in southwestern Nova Scotia and no terminal debris is found on the present emerged land.

# YARMOUTH 20 0/16E 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