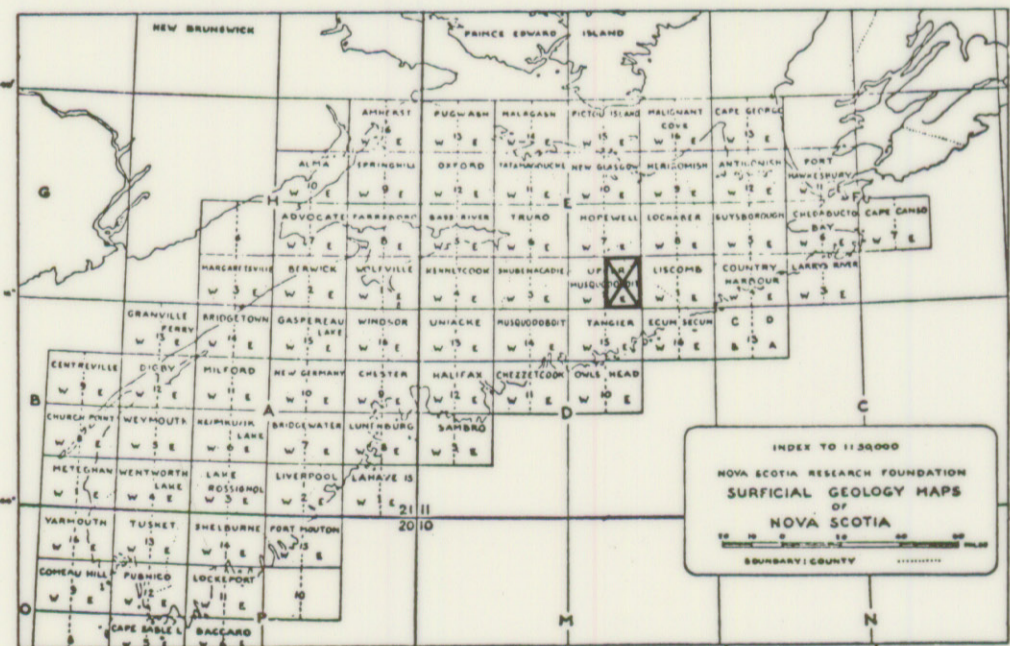


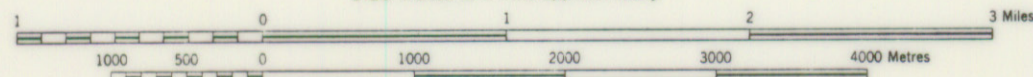


Geology by R.H. MacNeill, 1956



UPPER MUSQUODOBOIT II E/2 E 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

DESCRIPTIVE NOTES

GENERAL
The map area forms part of the northern section of the gently sloping Southern Upland. Elevations reach a maximum of 750 ft above sea level in the north, to an average of 350 ft in the south. Although several streams rise within the area, drainage is complex. The Ten, Twelve and Fifteen Mile Streams drain via the East River Sheet Harbour, while a small part of the western section is drained by the West River Sheet Harbour.

BEDROCK GEOLOGY

Metamorphic and igneous rocks underlie the map area, being Cambro-Ordovician and Devonian in age. This

Meguma Group, consisting of greenish grey quartzites and dark grey slates, underlies 75 per cent of the area, while the Devonian granites underlie the remaining 25 per cent.

QUATERNARY GEOLOGY

Drumlins and Till

The map area is characterized by a thin, patchy till cover, by scoured basins and disorganized drainage, and consequently, by many lakes and swamps. The granite areas are largely barren with granite boulders strewn over the surface. The northwestern section is almost inaccessible except by a few walking trails.

The most widespread occurring

till is a brownish grey, bouldery, sandy till containing angular to sub-angular quartzites and traces of granite. This till is most plentiful in the Governor Lake-Como Lake areas.

Till in the Anderson Intervale

Till in the Anderson Intervale area ranges from a light brown to a brownish grey sandy clay matrix. Drumlins of various shapes and sizes are confined to the slate and quartzite areas. The drumlins range from brownish grey to brown and dark brown color, with a silty sand to sandy clay matrix. Several of the clay-rich drumlins in the Anderson Intervale are hard packed with subangular to subrounded pebbles and cobbles of quartzite, granite, brown siltstone and sandstone in the matrix.

Glaciofluvials

Glaciofluvial deposits in the map area take the form of a few small eskers. These occur on the slope along some of the higher ridges.

One esker occurs on the north end of Little Ten Mile Lake.

This esker does not trend in the direction of ice movement but passes through a narrow divide in a south-to-northerly direction, probably formed in contact with late ice.

Direction of Ice Movement

Quartzites in the eastern area along Fifteen Mile Stream and Twelve Mile Stream record an ice movement across the map area from north to south, trending 160°.