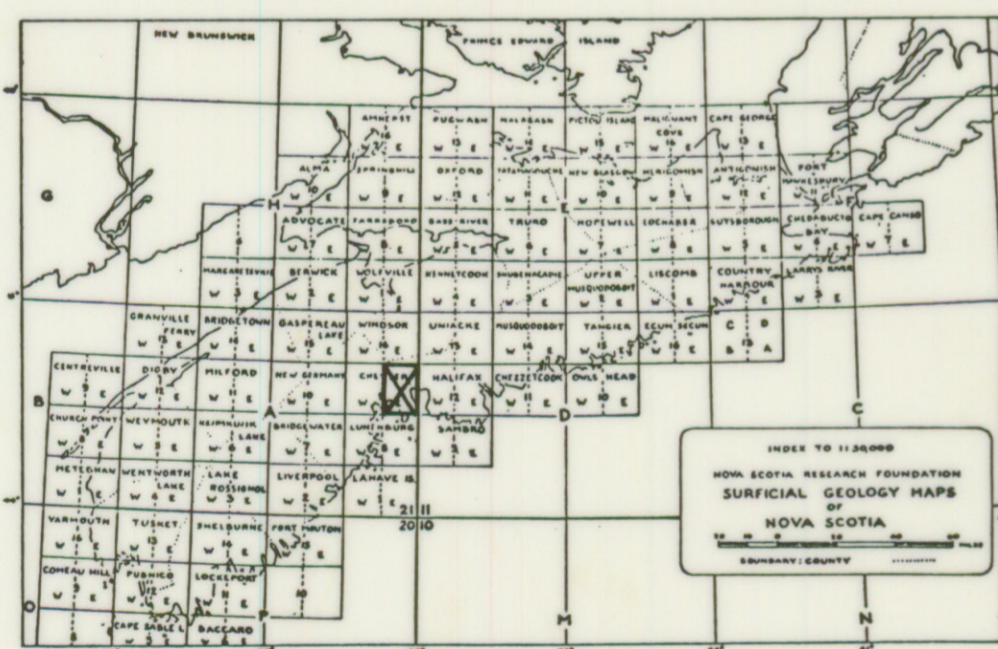


Geology by R.H. Mac Neill, 1956

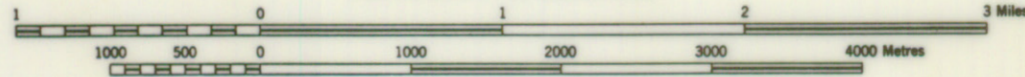


CHESTER 21A/9E

SURFICIAL GEOLOGY

SCALE 1:50,000

1.25 inches to 1 mile approximately



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LEGEND

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

DESCRIPTIVE NOTES

The Chester Map Sheet, 21 A/9, covers part of the Southern Peninsula surface of Nova Scotia and ranges in elevation from sea level at the Atlantic to a maximum of 230 metres in the northwest. The drainage is well established and does not appear to have been altered to any degree by ice action.

BEDROCK

The southern part of the Aspotogan peninsula is underlain by the Goldenville quartzites and the Halifax slates of the Cambro-Ordovician Group. These also appear in Chester and northward to Hemlock Lake and in the region from New Box to Carl Lake. Minor group rocks are found on the west and north of Mahone Bay with occasional smaller areas from East River Point to Red Bank at Hubbards. The remainder of the area is underlain by Devonian Granites.

GLACIAL GEOLOGY

TILL AND DRUMLINS

The till of the area is generally a light grey sandy, rock floor type with rocks ranging from granitic to boulder size. In the western part of the area, the till is more silty and the colour of the till tends to be buff to brownish. These tills reflect their source in the Meguma Group rocks. Many of the drumlinoid forms are nearly shaped bedrock knobs or knolls with till cover ranging from zero to a very thin veneer, occasionally thickening to a few feet. Many of the islands in Mahone Bay are truncated drumlins and are generally composed of a red-brown till.

GLACIOFLUVIALS

This, small banded and other depositional features attendant to a thinning stagnant ice sheet are very common. Many of these are grouped in low areas without attempt to show the many small deposits within the designated areas. Very few debris or outwash deposits can be found.

STRIAE

Striae are found in many areas but are difficult to find in granite regions. These striae range in direction from 315° to 340° and trend southward showing an ice advance from the northwest. No crossing striae were observed, indicating that any striae which may have been made by late ice cap movement in that area coincided generally with those of the Classical Wisconsin ice sheet.

DEGLACIATION

During the late stages of the Wisconsin ice mass on the mainland of Nova Scotia became in itself, one or more local ice sheets. These moved radially from their centres until the ice was too thin to support further movement. At this time the ice became stagnant, melted away, and left a profusion of small glaciofluvial deposits, most of them too small to be of any real commercial value. Since the retreat of the ice sheet, and in recent time, there has been a drowning of the coast line in a number of places. One such place giving evidence of this is the cove just south of Grandall's Point where a marsh has been drowned and the trees killed.