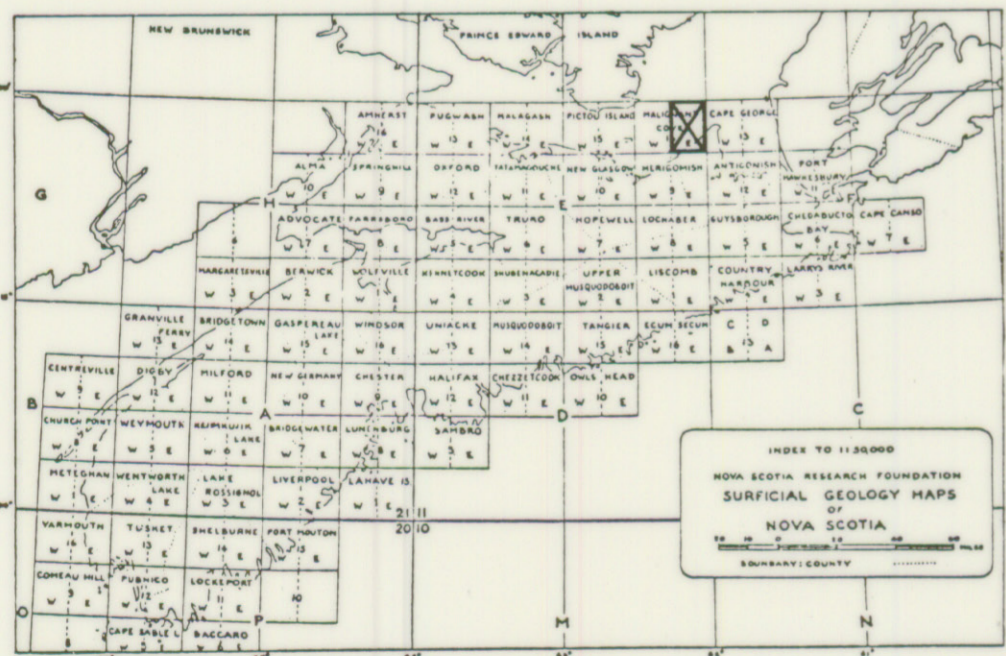


NORTHUMBERLAND STRAIT



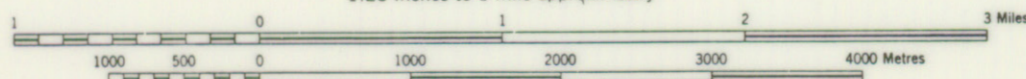
Geology by R.H. MacNeill, 1956



MALIGNANT COVE 11E/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	

DESCRIPTIVE NOTES

GENERAL
The Malignant Cove map sheet area is underlain by Ordovician and Silurian igneous, metamorphic and/or sedimentary rocks which form the generally peneplained upland area of this region. The area near the coast has been subjected to terracing by the sea, and several of these Pre-Pleistocene erosion terraces may be found in this region.

GLACIAL DRIFT

Till and Drumlins
Till covers most of the area and is generally quite thin, generally little more than a veneer of less than 3

to 6 feet thick, sandy, silty, and generally rocky in nature.

GLACIOFLUVIALS

The elevated sea terraces are generally mantled by till with the occasional deltaic deposit resting thereon. These deltaic deposits occur parallel to the coastline at Georgeville and at Malignant Cove and appear to have been deposited in contact with the ice, hence are termed kame-deltas. At Arisaig and at Doctor's Brook deltaic deposits are to be found and appear to be the result of meltwater flowing northward from the hills, carrying its load of sand, granules, gravel and cobbles.

At the settlement of Malignant Cove, about 2 1/2 miles south from the shore, a kame delta/outwash area is to

be found. The kame material was deposited in a stagnant ice mass, followed by a blanketing by sands and fine gravel washing into the area from the northward-flowing Malignant Brook.

Nowhere in this area is there any evidence of marine overlap attributable to Pleistocene glaciation, and any depressing of the land by the ice must have been almost negligible.

There is no clear evidence of any northward movement of continental ice, in that the rock content of the boulder clay appears to be largely very locally derived, and restricted to rock fragments from the northward or from the underlying bedrock.