

H U D S O N

B A Y

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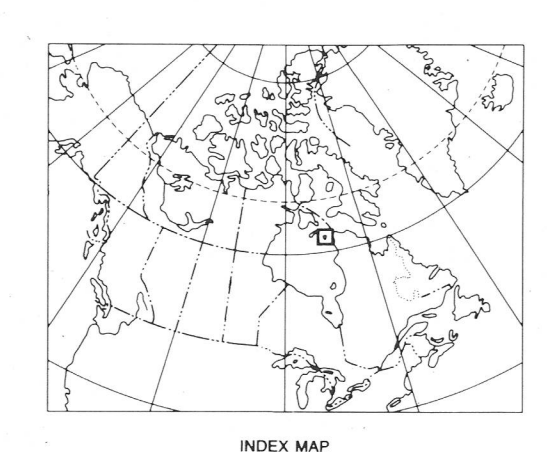
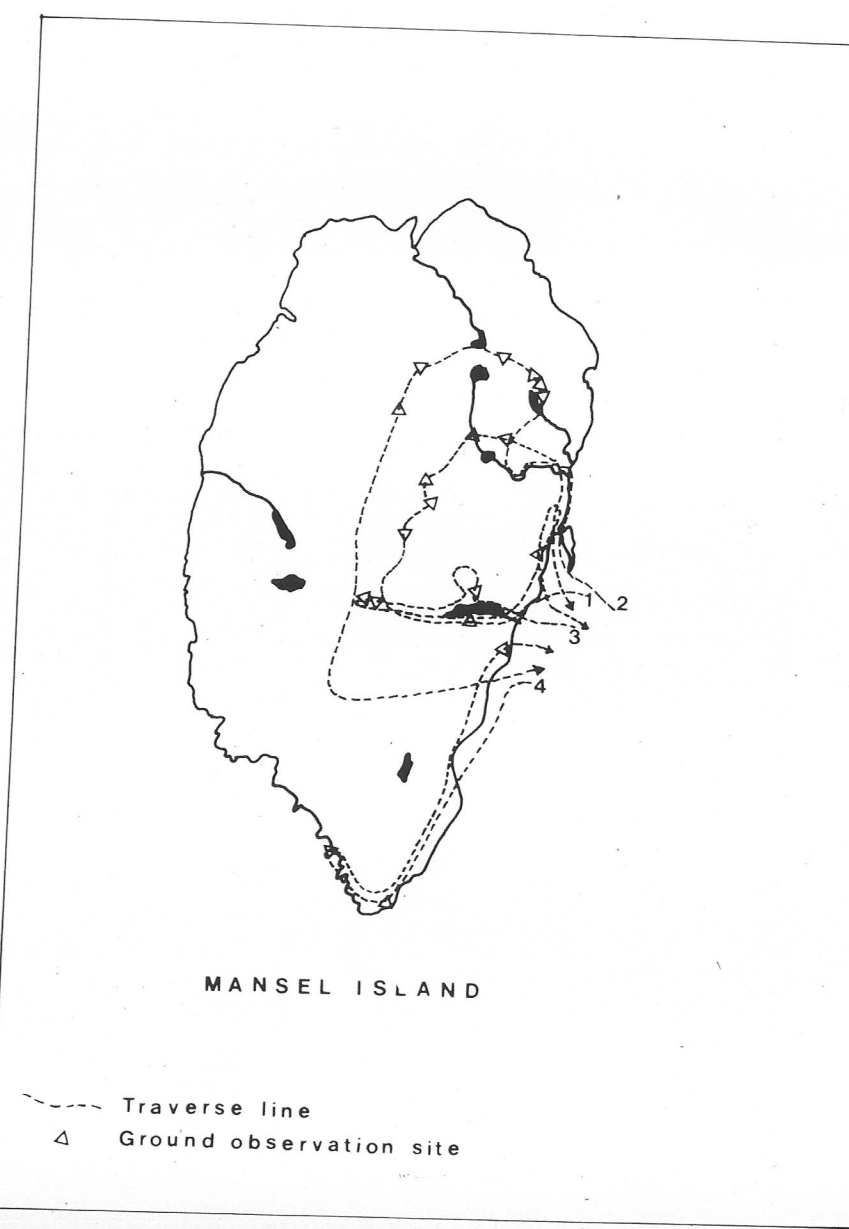
B A Y

LEGEND

SURFICIAL DEPOSITS	REMARKS
Ac ALLUVIAL DEPOSITS: silt, sand, gravel, cobbles, and boulders deposited in channels or on floodplains of modern active drainage systems "modern" is defined as the period since retreat of the sea, which can be up to 8000 years, depending on elevation above sea level.	
MARINE DEPOSITS: sediments deposited in or at the margin of the marine environment glacial deposits modified by marine processes. All sediments represent offlap conditions as a result of continuous isostatic uplift.	
MA R/MA Deepwater (depths greater than wave base) sediments and postdepositional MAI clay, silt, and sand washed from slopes into deep water by wave action during emergence or deposited offshore from river mouths; marine sediments commonly overlain by peaty organic materials; may include pockets of alluvium.	Well drained surfaces characterized by mudboils; poorly drained surfaces characterized by frost polygons and a cover of peat and sedge meadows; normal drainage, resulting in shallow dammed lakes, extensive areas of tundra ponds, and a network of tiny rivulets cutting through the organic mat. Also includes recently drained lake basins.
R/MA Surface composed of sediment of undetermined thickness and 20 to 80% bedrock outcrop, or less than 1 m of deposit mantles bedrock.	
Mn MAI R/Mn Nearshore sediments.	
Mn MAI R/MA Mix sand, gravel, and cobbles deposited as beaches, bars, and spits; formed by wave action on till, bedrock, esters, and by reworking of alluvial and MAI; sandy nearshore sediments with cover of vegetation.	Pebbles and cobbles of Paleozoic lithologies are frost shattered on all from frost-shattered bedrock. Difficult to distinguish parallel strandlines or other slight irregularities in the surface have disrupted tundra ponds, and a network of tiny rivulets cutting through the organic mat. Also includes recently drained lake basins.
Mn MAI sandy nearshore sediments with cover of vegetation.	
R/MA Surface composed of sediment of undetermined thickness and 20 to 80% bedrock outcrop.	
Mn MAI sand, gravel, and cobbles forming ridges parallel to former shorelines, with intervening flat areas of peaty organic deposits resulting from poor drainage; ridges comprise more than 25% of area.	
R/MA Surface composed of sediment of undetermined thickness and 20 to 80% bedrock outcrop.	
Mn sand deposited as a thin sheet on the coastal plain by migrating shorelines likely derived from wave reworking of marine clayey sand or silt/sand.	
Md MAI Deltic sediments: isostatically uplifted detritic sand and gravel.	
Md detritic sediments covered with distinct beach ridges which form a chevron pattern curving back from the river on both banks.	
GLACIAL DEPOSITS: sorted and unsorted sediments deposited by, on, or near glacial ice.	
Gk Glaciofluvial sediments: ice-contact stratified sand and gravel deposited as eskers in ice tunnels by meltwater streams; pebble surface, boulders scarce; commonly enriched in Precambrian erratics in contrast to surrounding, nearly erratic-free terrain.	Commonly reworked by wave action; unvegetated.
Th R/Th Till: calcareous, clay- and silt-rich till with sparse clasts contains erratics specific to Quebec mainland; includes undifferentiated pockets of fine grained marine sediment.	Heavily reworked by waves; surface characterized by mudboils or sorted circles, and small frost polygons (cell size 1 m).
Tr R/Tr The hummocky till: irregular hummocks, 100-300 m diameter and 5-10 m high; probably marks zones of ice stagnation.	
R/Th Surface composed of sediment of undetermined thickness and 20 to 80% bedrock outcrop.	
Tr ribbed (Ragen) moraines: hummocks and straight to sinuous ridges generally less than 1.5 km long; ridge may be asymmetric in cross-section with steep side facing down-ice; ridges commonly oriented transverse to direction of ice flow.	
R/Tr Surface composed of sediment of undetermined thickness and 20 to 80% bedrock outcrop.	
TM R/TM Till and marine sediments, undifferentiated: till veneered by fine grained marine sediments or depressions in till surface filled by marine sediments or <i>Urtica</i> vegetation enclosures.	Surface characterized by mudboils or sorted circles; sediment commonly contains marine shells.
R/Tr Surface composed of sediment of undetermined thickness and 20 to 80% bedrock outcrop.	
ROCK	
R Ordovician and Silurian carbonate rocks: surface comprises more than 80% outcrop or outseams.	Bedrock generally frost shattered and jointed; abundant evidence of solution along joints.

- Geological boundary
- Small bedrock outcrop
- Fluting or other glacier-inscribed linear feature
- Ribbed (Ragen) moraine ridges
- De Geer moraines
- Esker (direction of flow assumed)
- Nearshore ridges: beaches, bars, spits and ice-pushed ridges
- Recently drained lake basin
- Hummocky gravel deposit on beach-covered slopes
- Small alluvial fan

Geology by J.M. Aylsworth and W.W. Shultz, based mainly on airphoto interpretation with limited ground observations and sampling, 1979.



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Magnetic declination 1969 varies from 30°12' westerly at centre of west edge to 32°12' westerly at centre of east edge. Mean annual change 14.7' easterly. The daily change of the South Magnetic Pole causes the magnetic compass to be very erratic in this area. For complete reference see reverse side.

SURFICIAL GEOLOGY
MANSEL ISLAND
DISTRICT OF KEEWATIN
NORTHWEST TERRITORIES

Établie en 1968, par la DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES. Levés sur le terrain en 1968. Imprimée en 1979.

La déclinaison magnétique pour 1969 varie de 30°12' Ouest au centre de l'extrémité Ouest à 32°12' Ouest au centre de la limite Est. Variation moyenne annuelle 14,7' Est. La variation diurne du pôle Nord magnétique attire le compas magnétique dans cette région. Pour une liste complète des signes, voir au verso.

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