

1:50000 SURFICIAL GEOLOGY MAP SERIES - ISLAND OF NEWFOUNDLAND

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Geological Survey of Canada

GENETIC OR PROCESS/ENVIRONMENT CATEGORIES OF TERRAIN CLASSIFICATION

	R ROCK	C COLLUVIAL	T (Hu) TERRACE	F FLUVIAL	GF GLACIOFLUVIAL	L LACUSTRINE	M MARINE	O ORGANIC	E EOLIAN
c concealed	observed only by vegetation	-	-	-	-	-	-	-	-
w 'weathered'	front-lobes (feleemmer)	- Winnowed, "washed" and subdued by wave action	-	-	-	-	-	blowouts
e eroded channelled by former streams of glacial meltwater, in a braided or parallel pattern	-	-	-	-	-	-	-	-
g gullied dissected by modern ravines in a dendritic pattern	-	-	-	-	-	-	-	-
k 'collapsed'	karst	-	kettled	-	kettled	kettled	kettled	-	-
p plain	plain	plain	plain	floodplain	outwash plain	plain	plain	'high bog'	plain
v veneer	-	thin enough - usually less than 10 feet thick - to reveal geomorphic fabric of underlying formation	-	-	-	-	-	-	-
r ridged	corrugated with parallel strati- fication ridges, igneous and tec- tonic foliation	terraces	transverse elements: end, recessional, ribbed, De Geer moraine	point bars	eskerine complex	beach ridges, strand- lines and wave-cut benches	string bog	-	dunes
h hummocky	-	-	ablation wind chaotic disinte- gration moraine	-	kunes	-	-	palsa	dunes
			longitudinal ele- ments: drumlins, fluting, crag-and- tail hills	-	-	-	-	-	-
l lineated	fractured	solifluction lines	-	meander scars	-	-	-	vegetation strips	-
d delta	-	-	-	delta	-	delta	delta	-	-
f fan	-	talus cone	-	alluvial fan	-	-	-	-	-
a apron	-	scree slope	-	-	apron	apron	apron	-	-
t terrace	-	anticlinal terrace; bench	-	terrace; bench	kame terrace	terrace; bench	terrace; bench	-	-

SYMBOLS

	Boundary of terrain units: defined, approximate, transitional
	Longitudinal ice-flow features
	Drumlin, drumlinoid, fluting
	Crag-and-tail hill
	Ridge moutonnée
	Striation
	Transverse ice-flow features
	Crestline of end moraine: prominent and continuous, subdued and broken
	Ribbed moraine, De Geer moraine, minor moraine
	Saker, crevasse filling
	Solifluction lines in colluvial and organic terrain
	Stratification ridges in sedimentary and volcanic rocks; igneous and tectonic foliation
	Depressional lineament along fracture or fault trace
	Abandoned channel of former meltwater stream
	Emergent shorelines of former proglacial lake or marine submergence
	Landslide scar
	Scarp of terrace, bench, delta
	Marl sediment in lake or pond
	Location of sample
	Spring
	Sinkhole, pond
	Location of radiocarbon-dated organic material

EXPLANATORY NOTES

COMPLEXES

Where two or more classes of terrain are interposed in a mosaic or repeating pattern on a scale too small to warrant meaningful differentiation, the proportion of each component in the combination is given in a three-position designation set off by slashes denoting arbitrary percentage limits. For example "T₁₀/O₈₀" means that at least 60% of the area is underlain by thin till, with up to 40% boggy areas, and less than 15% scattered rock outcrops. R₁₀/F₉₀ indicates more than 60% bedrock concealed by vegetation and less than 15% outcrop.

MORPHOLOGIC OVERPRINT

Where a sequence of geomorphic processes has produced a multi-aspect or compound terrain fabric, the geomorphic modifier suffixes are appended in the inferred order of superposition. "T₁₀hu" means that a veneer of till has been moulded into a seaward or drumlinoid form, then mantled with hummocky till during ablation, and finally channelled by former meltwater streams.

TRANSITIONAL ASSOCIATIONS

Locally, two or more terrain units are juxtaposed by reason of related origin, temporal sequence, or ambiguous geomorphic distinction. Such situations are identified by a compound designation marked by a hyphen. Examples are: an outwash plain that slopes down and is transitional to a marine terrace ("G₁₀ - R₁₀") or kame and kettle glaciofluvial topography that blends with hummocky disintegration moraine ("G₁₀ - T₁₀").

STRATIGRAPHIC SEQUENCE

Natural exposures are rare, except along coasts, and are minimally shallow along roads, but where materials of different origin or texture are known to be superimposed, or can be reasonably confidently inferred, the sequence is indicated in conventional order using horizontal separators, such as, "O₁₀/R₁₀", which indicates that thin mantles have developed over a marine mantle on drumlinoid till.

TEXTURAL MODIFIER

Ordinarily, textural characteristics are implied by the genetic-morphologic assignment, but occasionally more specific grain-size information is available either from ground observation or inference from distinctive morphology, or where texture differs significantly from that usually associated with a particular process, as in the case of a purely sand esker, or a gravelly alluvial plain. Textural designations are: 's' for gravelly alluvial plain; 'g' for gravel and sand; 'a' for sand; 'ac' for fine sand and silt; 'c' for silt and clay. Combinations such as 'ac' signify a sandy pebble, like the sort of "fill" produced by the accumulation of ice-rafted debris at the terminus of a floating glacier.

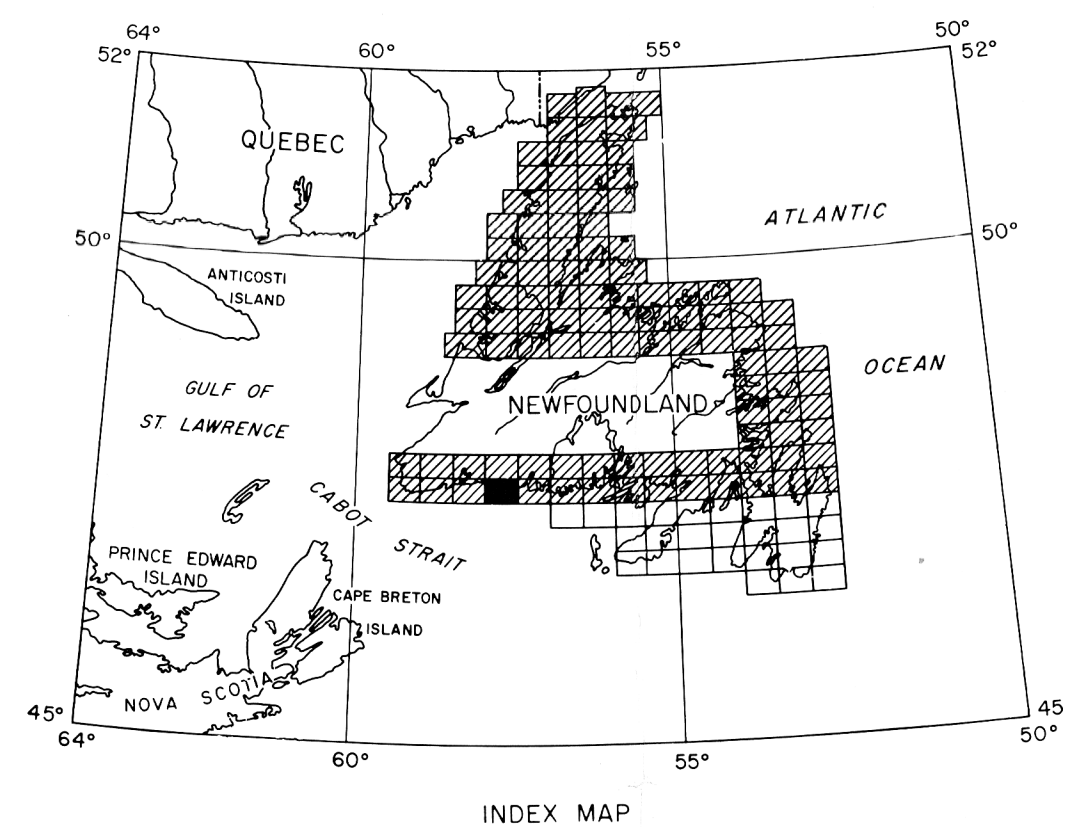
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GEOLOGICAL SURVEY
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SURFICIAL GEOLOGY

BURGIO

NEWFOUNDLAND

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INDEX MAP

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