

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	C	S, T	F	GF	L	M	O	E
GENETIC MODIFIER	ROCK	COLLUVIAL	NEURAL	FLUVIAL	GLACIOFLUVIAL	LACUSTRINE	MARINE	ORGANIC	SOLLIAN
c concealed	observed only by vegetation								
v 'weathered' (dissected)	front-broken (dissected)		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	channelled by former streams of glacial meltwater, in a braided or parallel 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 geographic fabric of underlying formation							
r ridged	corrugated with parallel stratification ridges, igneous and tectonic foliation	terraces	transverse elements, recessional, rimmed, De Geer, moraines	point bars	eskerlike complex	beach bars, strandlines and wave-cut benches	string bog		dunes
h hummocky			ablation and chaotic disintegration moraine		kames			palms	dunes
d drumlinoid			longitudinal elements: drumlins, fluting, elongated-tail hills						
l lineated	fractured	solifluction lines		meander scars				vegetation stripes	
d delta				delta		delta	delta		
f fan		talus cone		alluvial fan					
a apron		scree slope				apron	apron		
t terrace		undulation 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
- Esker, 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
- Emerged 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
- Builder train (dispersion fan of mineralized fragments)
- Boundary of geochemical test area
- Isopleth of per cent granite fragments in till
- Down-ice edge of granite source area

EXPLANATORY NOTES

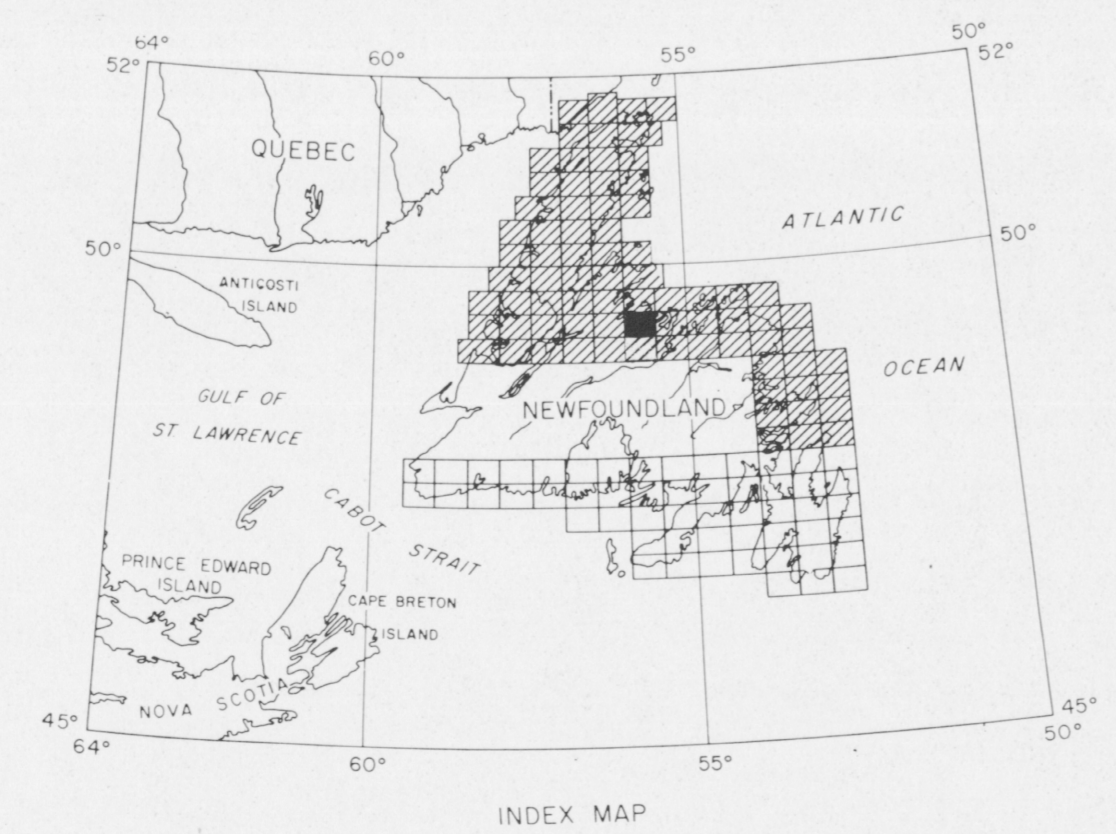
COMPLEXES
Where two or more classes of terrain are interdispersed in a mosaic or overlapping pattern on a scale too small to warrant meaningful differentiation, the proportion of each component in the combination is given in a three-position designation set off by slashes denoting arbitrary percentage limits. For example "Mv/Ov" means that at least 50% of the area is underlain by this till, with up to 40% boggy areas, and less than 10% scattered rock outcrops. R/R indicates more than 50% bedrock concealed by vegetation and less than 10% 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. "Mvda" means that a veneer of till has been moulded into a rounded 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 subsequent geomorphic distinction. Such situations are identified by a compound designation marked by a hyphen. Examples are: on outwash plain that slopes down and is transitional to a marine terrace ("Ov - Rc") or kame and kettle glacial/fluvioglacial topography that blends with hummocky disintegration moraine ("Gff - mva").

STRATIGRAPHIC SEQUENCE
Natural exposures are rare, except along coasts, and are usually 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 separator, such as: mva - mv - Rc, which indicates that this marking has developed over a meltwater mantle on drumlinoid till.

TEXTURAL MODIFIERS
Ordinarily, textural characteristics are implied by the genetic morphologic assignment, but occasionally more specific grain-size information is available either from ground observation or by 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 cover, or a gravelly alluvial plain. Textural designations are: 'r' for rocks and rubble; 'g' for gravel and sand; 'f' for sand; 'st' for fine sand and silt; 'c' for silt and clay. Combinations such as 'gr' signify a strong matrix, like the sort of "fill" produced by the accumulation of ice-rafted debris at the terminus of a floating glacier.

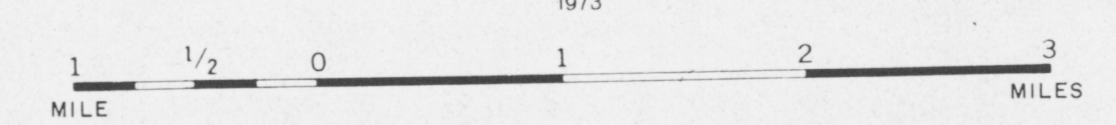


SURFICIAL GEOLOGY

ROBERT'S ARM

NEWFOUNDLAND

D.R. GRANT
1973



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GEOLOGICAL SURVEY
OTTAWA

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