

1:50000 SURFICIAL GEOLOGY MAP SERIES - ISLAND OF NEWFOUNDLAND  
D.R. Grant  
Geological Survey of Canada

GENETIC OR PROCESS/ENVIRONMENT CATEGORIES OF TERRAIN CLASSIFICATION

	R	C	T (Hil)	F	GF	L	M	O	E
GEOMORPHIC MODIFIER	ROCK	COLLUVIAL	MORAINAL	FLUVIAL	GLACIOFLUVIAL	LACUSTRINE	MARINE	ORGANIC	SOLIAN
c concealed	obscured only by vegetation	-	-	-	-	-	-	-	-
w 'weathered' (feleensmer)	front-broken	-	..... 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 stratification ridges, igneous and tectonic foliation	terraces	transverse elements, end, recessional, ribbed, De Geer moraine	point bars	eskerine complex	bench berms, strand-lines and wave-cut benches	string bog	-	dunes
h hummocky	-	-	ablation-wind sheets, disintegration moraine	-	kames	-	-	palsa	dunes
l lineated	fractured	soilification lines	longitudinal elements: drumlins, fluting, crescent-tail hills	meander scars	-	-	-	vegetation stripes	-
d delta	-	-	-	delta	-	delta	delta	-	-
f fan	-	talus cone	-	alluvial fan	-	-	-	-	-
a apron	-	scree slope	-	-	apron	apron	-	-	-
t terrace	-	antiplanation 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
- Esche 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
- Soilification 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
- Stinkhole, pond
- Location of radiocarbon-dated organic material

**EXPLANATORY NOTES**

**COMPLEXES**  
Where two or more classes of terrain are interspersed 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 "Tv/O" means that at least 60% of the area is underlain by thin till, with up to 40% boggy areas, and less than 1% scattered rock outcrops. Rc/R indicates more than 60% bedrock concealed by vegetation and less than 1% outcrop.

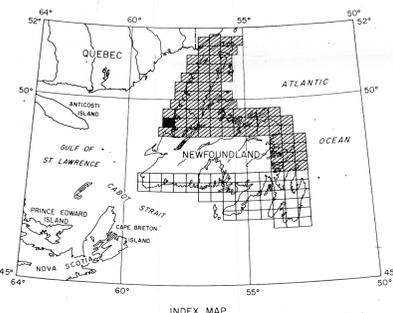
**MORPHOLOGIC OVERPRINT**  
Where a sequence of geomorphic processes has produced a multi-aspect or compound terrain fabric, the geomorphic modifier suffixes are appended in the inferred order of superposition. "Tche" means that a veneer of till has been moulded into a meander or drumlinoid form, then 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 ("Op - Rc") or kame and kettle glaciofluvial topography that blends with hummocky disintegration moraine ("Gh - Th").

**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, "Rw/O". "Rw" indicates that this marking has 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 by inference from distinctive morphology, or where texture differs significantly from that usually associated with a particular process, as in the case of a poorly sand esker, or a gravelly alluvial plain. Textural designations are: "r" for rocks and rubble; "g" for gravel and sand; "s" for sand; "st" for fine sand and silt; "c" for silt and clay. Combinations such as "gs" signify a stony pelite, like the sort of "till" produced by the accumulation of ice-rafted debris at the terminus of a floating glacier.

OPEN FILE  
244  
DEC. 1974  
GEOLOGICAL SURVEY  
OTTAWA



**SURFICIAL GEOLOGY**  
**TROUT RIVER**  
NEWFOUNDLAND  
D.R. GRANT  
1974

