

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

GENETIC OR PROCESS/ENVIRONMENT CATEGORIES OF TERRAIN CLASSIFICATION

	S	C	Z	F	GF	L	M	O	E
	ROCK	COLLUVIAL	HYPERALM	FLUVIAL	GLACIOFLUVIAL	LACUSTRINE	MARINE	ORGANIC	HUMAN
c concealed	observed only by vegetation	-	-	-	-	-	-	-	-
w weathered (felsic)	front-broken	-	windward, "washed" and subbed 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	-	-	-	-	-	-	-
'collapsed'	scar	-	kettle	-	kettle	kettle	-	-	-
p plain	plain	plain	floodplain	outwash plain	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	tetracton	transverse elements and, recessional, ribbed, De Geer moraine	point bars	eskerine complex	beach bars, strand-lines and wave-cut benches	-	string bog	dunes
h hummocky	-	-	ablation and chaotic disintegration moraine	-	lakes	-	-	-	palae dunes
d drumlinoid	-	-	longitudinal elements - drumlins, fluting, crag-and-tail hills	-	-	-	-	-	-
l lineated	fractured	soilification lines	-	scaber	-	-	-	vegetation stripes	-
d delta	-	-	-	delta	-	delta	delta	-	-
f fan	-	talus cone	-	alluvial fan	-	-	-	-	-
a apron	-	scree slope	-	-	-	apron	apron	-	-
t terrace	-	anticlinal terrace	-	terrace bench	same	terrace bench	terrace bench	-	-

SYMBOLS

- Boundary of terrain units: defined, approximate, transitional
- Longitudinal ice-flow features
- Drumlin, drumlinoid, fluting
- Crag-and-tail hill
- Edge moraine
- Striation
- Transverse ice-flow features
- Crestline of end moraine: prominent and continuous, subdued and broken
- Ribbed moraine, De Geer moraine, minor moraine
- Esker, crasse 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
- Sinkhole, pond
- Location of radiocarbon-dated organic material

EXPLANATORY NOTES

COMPLEXES
Where two or more classes of terrain are interdispersed 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-part designation set off by slashes, denoting arbitrary percentage limits. For example "mv/0/0" 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. Rr/R indicates more than 60% bedrock concealed by vegetation and less than 1% outcrop.

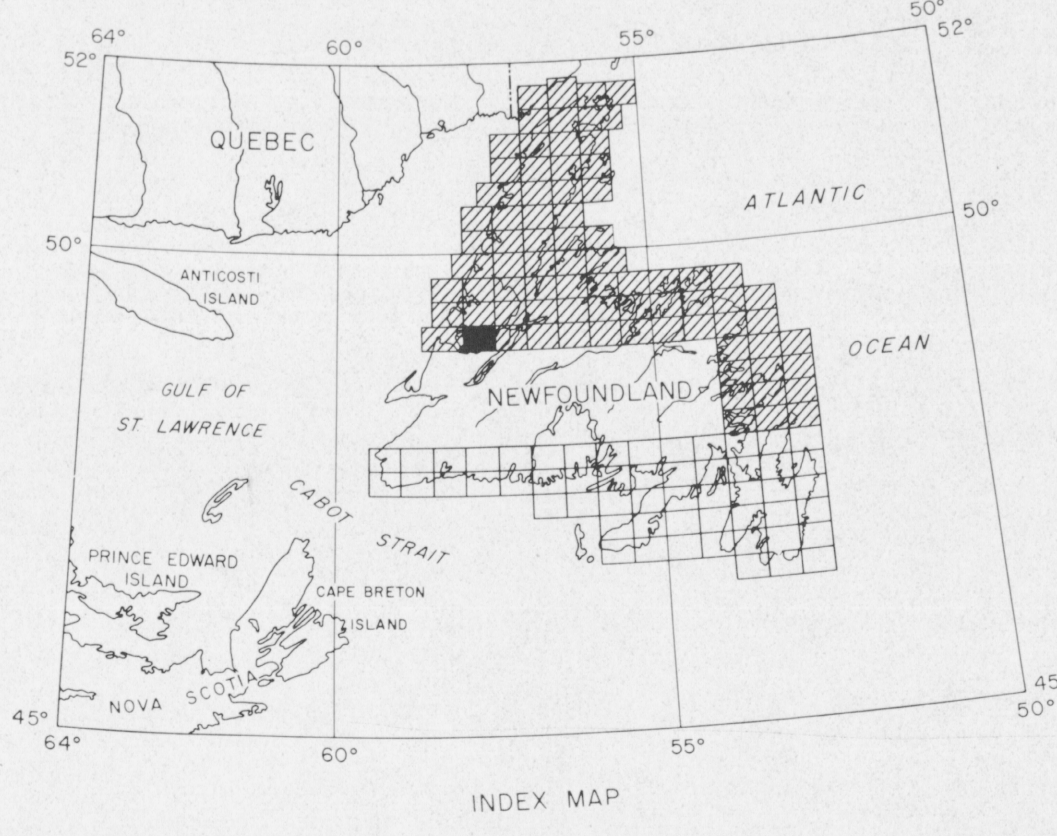
NONISOGONIC OVERLAP
Where a sequence of geomorphic processes has produced a multi-appearing or compound terrain fabric, the geomorphic modifier suffixes are appended to the inferred order of superposition.

TRANSITIONAL ASSOCIATIONS
Locally, two or more terrain units are juxtaposed by reason of related origin, temporal sequence, or ambiguous geomorphic differentiation. 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 ("up - Rr") or lake and kettle glaciofluvial topography that blends with hummocky disintegration moraine ("up - mv").

STRATIGRAPHIC SEQUENCE
Natural exposures are rare, except along coasts, and are minimally available 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:
"mv / Rr"
"mv", which indicates that this muskeg has developed over a ml marine mantle on drumlinoid till.

TERRAIN 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 poorly sorted sand, or a gravely alluvial plain. Textural designations are: "s" for gravelly alluvial plain; "st" for gravel and sand; "sa" for sand; "st" for fine sand and silt; "cl" for silt and clay. Combinations such as "sa st" signify a stony silt, like the sort of "fill" produced by the accumulation of ice-rated debris at the termination of a floating glacier.

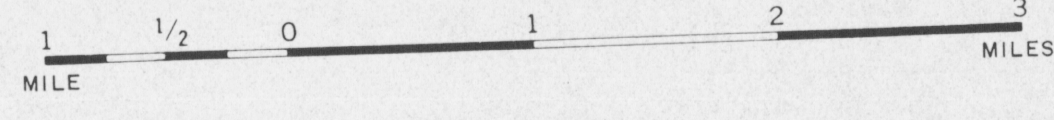
(N.B. with assistance, Deer Lake area, V.K. Prest)



SURFICIAL GEOLOGY

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