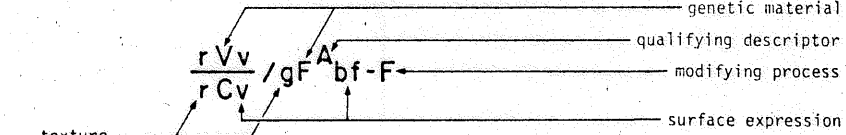


TERRAIN LEGEND

1. Explanation of Letter Notation

A combination of letters is used to designate each map unit. The relative position of letters within the symbol indicates the characteristic that they represent.



Explanatory Notes

- Units consisting of two or more types of terrain are designated by two or more types of terrain are designated by two or more groups of letters separated by slashes and/or dots (see Composite Units below).
- Materials underlying the surface unit are shown by a symbol that is written beneath the surface unit symbol and separated from it by a horizontal line.

3. Texture

Texture refers to the size, roundness and sorting of particles in clastic sediments, and the proportional fibre content of organic sediments.

Symbol	Name	Size (mm.)	Other characteristics
b	bouldery	>256	rounded & subrounded particles
k	cobbly	64-256	rounded & subrounded particles
p	pebbly	2-64	rounded & subrounded particles
g	gravelly		a mixture of pebbles, cobbles and possibly boulders in a sand matrix
s	sandy	.06-2	
sl	silty	.004-.06	
c	clayey	<.004	
f	finer		a mixture of clay, silt and possibly fine sand
r	rubbly	2-256	angular and subangular particles
a	blocky	>256	angular and subangular particles
e	fibric		The least decomposed of all organic materials. There is a large amount of well-preserved fibre that is readily identifiable as to botanical origin.
m	mesic		Organic material in an intermediate stage of decomposition. An intermediate amount of fibre is present that can be identified as to botanical origin.
h	humic		Highly decomposed organic material. There is a small amount of fibre present that can be identified as to botanical origin.

Explanatory Notes

- The absence of a textural term from a unit symbol indicates that texture of the material was not observed in the field and cannot be reliably interpreted from air photos or from a knowledge of the bedrock geology. The reader is referred to genetic material descriptions for general textural information.
- Where two textural terms are used together, they are written in order of increasing importance. eg. \$s is silty sand, \$g is sandy gravel.

5. Genetic Materials

Surficial materials are classified according to their mode of formation or deposition. This influences their physical characteristics such as texture, structure and compaction which in turn control conditions of drainage and slope stability.

Symbol	Name (Process Status*)	Description
A	anthropogenic (A)	Man-made or man-modified materials, the rock quarry used as a ballast source for the Ladle Dam.
C	colluvial (A)	Products of mass wastage; generally consist of moderately well-sorted angular fragments; dominant particle sizes range from 4 to 12 cm with minor amounts of interstitial sand. Slope range is from approximately 20° to 50°; slopes greater than 30° are undergoing modification by mass movement processes. Source of rubble is generally an actively weathering rock face or hummock.
F	fluvial (I)	Materials transported and deposited by streams, alluvial materials; generally consist of gravel or sand; gravels are typically well-sorted and contain interstitial sand; sediments tend to be moderately to well-sorted and stratified; includes floodplains, river terraces, deltas, and some alluvial fans.
FG	fluvio-glacial (I)	Fluvial materials deposited in association with glacier ice; generally consists of approximately 60% gravel, 30% sand, and 10% silt and clay; gravels are subrounded and angular and contain interstitial sand; sediments are poorly sorted and stratified; sediments are located at elevations less than 975 m (3202 feet), they usually superimpose moraine or bedrock.
M	morainal (I)	Material deposited directly by glaciers, till; generally consists of well-compacted material that is non-stratified and contains a heterogeneous mixture of particle sizes, shapes, and lithologies in a mixture of approximately 10% gravel, 30% sand, 25% silt, 25% clay; the nature of the till generally reflects the underlying bedrock of interbedded chert and argillite; massive chert; crystalline limestone; subdominant rock types are, basalt, andesite, tuff, breccia, hornblende-biotite - quartz diorite.
O	organic (A)	Material resulting from the accumulation and decay of sedges; texture is mesic; material superimposes a strata of volcanic ash.
R	bedrock (I)	Outcrops and rock covered by less than 10 cm of unconsolidated rock; exposed rock faces and ridges weather relatively easily due to the extensive jointing; dominant rock types are, thinly interbedded chert and argillite; massive chert; crystalline limestone; subdominant rock types are, basalt, andesite, tuff, breccia, hornblende-biotite - quartz diorite.
V	volcanic (I)	Unconsolidated pyroclastic sediments referred to as the Bridge River Ash dated at 2,400 BP, this vesicular rhyolite tuff particles, the terrain with a depth range between 35 to 60 cm; bulk density is approximately 0.4; particle size range is 3 mm to 21 mm; the material is very porous and subject to movement or flow on slopes greater than 30° (58°).

* See Qualifying Descriptors for definition of process status descriptors.

8. References

- Cairnes, C.E. 1924. Gun Creek Map Area, Canada Department of Mines, Geological Survey Summary Report, 1928 Part A, Ottawa, Ontario.
- E.L.U.C. Secretariat. May 1976. Terrain Classification System.
- Nesmith, W., Mathews, W.H. and Rouse, G.E. 1967. Bridge River Ash and Some Other Recent Ash Beds in British Columbia. Canadian Journal of Earth Sciences Vol. 4.

2. Composite Units

Composite units are employed where two or three types of terrain are intermixed or occupy such small areas that they cannot be designated as separate units at the scale of mapping. Symbols (defined below) are used to indicate the relative amounts of each terrain type, and the components are always written in decreasing order of importance.

- = the components on either side of this symbol are approximately equal
- / the component in front of the symbol is more extensive than the one that follows
- // the component in front of the symbol is considerably more extensive than the one that follows
- eg. Mb//R Mb is considerably more extensive than R
- Mb//R/Cv Mb is considerably more extensive than R; R and Cv are of roughly equal extent
- Mb/R/Cv R is less extensive than Mb; Cv is considerably less than R.

4. Surface Expression

Surface expression is the topography or form of the land surface. In general, the terms listed here are used to describe features that are not adequately shown on the topographic base map.

Symbol	Name	Description
a	apron	A sloping surface that is typically at the foot of a steeper slope and underlain by material derived from above.
b	blanket	A mantle of unconsolidated material which derives its general surface expression from the topography of the unit which it overlies; it masks minor topographic irregularities in the underlying unit and is more than 1 m thick; if the underlying unit consists of unconsolidated materials, it is shown in the unit symbol; if no underlying unit is shown, it may be assumed to be bedrock; if the underlying unit consists of unconsolidated materials of unknown origin, then only its surface expression is shown, e.g. m.
f	fan	A surface that is a sector of a cone.
h	hummocky	Steep-sided hillocks and hollows that are rounded or irregular in plan; slopes of 10 to 35° predominate on unconsolidated materials and slopes of 10 to 35° predominate on bedrock; local relief is greater than 1 m.
l	level	A flat or gently inclined (less than 5°) surface with uniform slope and local relief of less than 1 m.
m	subdued	Irregular and linear features with slopes ranging up to 10° and local relief greater than 1 m.
r	ridged	Elongate or linear, parallel or subparallel hills or ridges with slopes predominantly between 10 and 35° on unconsolidated materials and between 10 and 30° on bedrock.
s	steep	Steeply inclined erosional slopes (scarps) with gradients commonly greater than 35° on both unconsolidated materials and bedrock.
t	terraced	Step-like topography; includes both scarp face and the horizontal or gently inclined surface (scars) above it.
v	veneer	A mantle of unconsolidated materials which has no constructional form of its own, but derives its surface expression from the topography of the underlying unit. It reflects minor irregularities of the underlying surface, is generally between 10 cm and 1 m in thickness, and outcrops of the underlying unit are common; if the underlying material is unconsolidated, it is included in the unit symbol; if no underlying unit is indicated, it is assumed to be bedrock.

Explanatory Notes

- The use of two (or more) surface expressions symbols together implies that there is a mixing of discrete forms, not a set of intermediate forms.
- Where more than one surface expression symbol is used, no significance is attached to the order in which the symbols are written.

6. Modifying Processes

These are terms which indicate processes that are currently modifying or have modified genetic materials and surface expressions.

Symbol	Name (Process Status*)	Description
A	avalanched (A)	Slopes modified by frequent snow avalanches and by the deposition of rock debris and volcanic ash transported by snow avalanches.
F	falling (A)	Slopes where slow downslope movement of volcanic ash is occurring by soil flow; slopes where rock fragments or scree spread as rubby colluvium is slowly sliding downslope in conjunction with the volcanic ash, which occurs on slopes generally greater than 30° (58°); evidence for failures are small tension cracks at the ash surface in conjunction with tree correction; in very active colluvial slopes rock scree superimpose a remnant ash strata.

Explanatory Notes

These letter symbols are used where a relatively large portion of a map-unit is affected by the modifying process. On-site symbols may be used to indicate modification of a small part of the unit by a single or a few features such as kettles or avalanches.

7. Qualifying Descriptors

These descriptions qualify either genetic material or modifying process terms. They are used in order to supply additional information about the mode of formation or modification of terrain units.

Symbol	Name	Description
G	glacial	Used to qualify non-glacial genetic materials or process modifiers where there is evidence that glacier ice affected the mode of deposition of materials or the mode of operation of a process.
A, I	active, inactive	Process Status Descriptors - used to qualify genetic materials and modifying processes with regard to their current state of activity. Active: there is evidence that a modifying process is either operating continuously or is of a recurrent nature at the present time. Inactive: there is no evidence that the process of formation of a genetic material is operative at the present time. (See process status column Genetic Materials and Modifying Processes above.) Process status descriptors are shown in unit symbols on the map only where the current state of activity is contrary to the designated state.

9. Credits

- Project Mapped by: R.E. Maxwell
Resource Analysis Branch
Ministry of Environment
Kelowna, B.C.
- Project area: Gun Lake, B.C., 923/15
- Date of airphotos: September 5, 1975
- Date of fieldwork: August, 1979
- Date of drafting: December, 1979

