COMMISSION GÉOLOGIQUE DU CANADA — GEOLOGICAL SURVEY OF CANADA
MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES
DEPARTMENT OF ENERGY, MINES AND RESOURCES



# SURFICIAL MATERIALS AND GEOMORPHIC FEATURES

## LEGEND

### QUATERNARY

8 **ORGANIC DEPOSITS:** peat and muck underlying bogs and fens which range in thickness from more than 10 m in plateau bogs on the lowlands to less than 1 m in slope fens on the highlands.

7 **COLLUVIAL DEPOSITS:** material emplaced by gravity sliding and creep on steep rocky slopes, consisting mainly of blocky rubble at the foot of failing rock cliffs; 7a: undivided talus and cliffs; 7b: thick apron on lower slopes produced by coalesence of adjacent debris fans; may contain muddy solifluction and debris-flow layers; may overlie till; locally re-mobilized as rock-glaciers most of which are inactive.

6 **FLUVIAL DEPOSITS:** mainly sandy gravel, 1-20 m thick, underlying modern floodplains, deltas and fans; may include small remnants of Holocene degradational terraces; 6a: alluvial plains; 6b: alluvial fans.

**MARINE DEPOSITS:** gravel, sand, silt, and clay, 1-30 m thick, laid down in beach, delta, and deepwater environments during postglacial submergence.

5c,5d Beach gravel and sand in ridges; swales, and plains including modern marine deposits at the present coast: 5c, bulky accumulations up to 30 m thick, as beach-ridge complexes and as terrace remnants of deltas; fossiliferous (commonly overlies Unit 5a) ; 5d, discontinuous veneer of beach gravel over till and bedrock.

5b Glaciomarine deltas composed of ice-contact outwash deposited at marine limit; locally fossiliferous.

5a Stony mud varying in thickness up to 20 m that was deposited in water depths of 50-100 m mainly near retreating glaciers; includes submarine meltout till deposited adjacent to subaqueous end moraines, and glaciomarine drift deposited by melting ice bergs fossiliferous.

**GLACIOFLUVIAL DEPOSITS:** gravel with sand, 5-50 m thick, laid down by meltwater beneath and in front of a glacier.

4b Outwash, 5-50 m thick, deposited on former floodplains and fans; locally includes postglacial degradational terraces; may overlie and grade laterally to marine deposits.

4a Ice-contact stratified drift as hummocks and ridges (kames, kame moraines, crevasse fillings and small eskers) cut by meltwater channels, and locally interspersed with undifferentiated till knolls.

**TILL:** nonsorted debris up to 30 m or more in thickness, generally thin, bouldery and sandy over Precambrian rock highlands, thicker and more silty over sedimentary rock lowlands; locally clayey where deposited subaqueously as major end moraines.

3b Till as continuous blanket, averaging 2-10 m thick, in the form of drumlinized or hummocky plains, or major end moraine ridges and associated glaciomarine drift; locally fossiliferous.

3a Till as discontinuous veneer, generally less than 2 m thick, with numerous rock outcrops and interspersed bedrock areas.

2b Till of variable thicknes and composition with morainic topography partly subdued by solifluction and mass wasting includes undivided areas of bedrock partly buried by sandy debris (grus) and incipient blocky rubble (felsenmeer) produced by frost action.

2a Till of variable thickness and composition, where all traces of glacial relief have been graded by protracted solifluction and where interspersed rocky areas have been reduced to mature blockfields (felsenmeer) from which small tors locally project.

1 **RESIDUUM:** rubble and grus produced by disintergration of bedrock in place; possibly not covered by Quaternary glaciers.

### PRE-QUATERNARY

Bedrock of various ages and lithologies showing strongly undulating relief of basins and knobs produced by glacial erosion; includes cliffs cut by glacial and coastal erosion, and areas stripped by nivation and wave washing.

Rc Bedrock areas interspersed with undivided patches of thin till veneer.

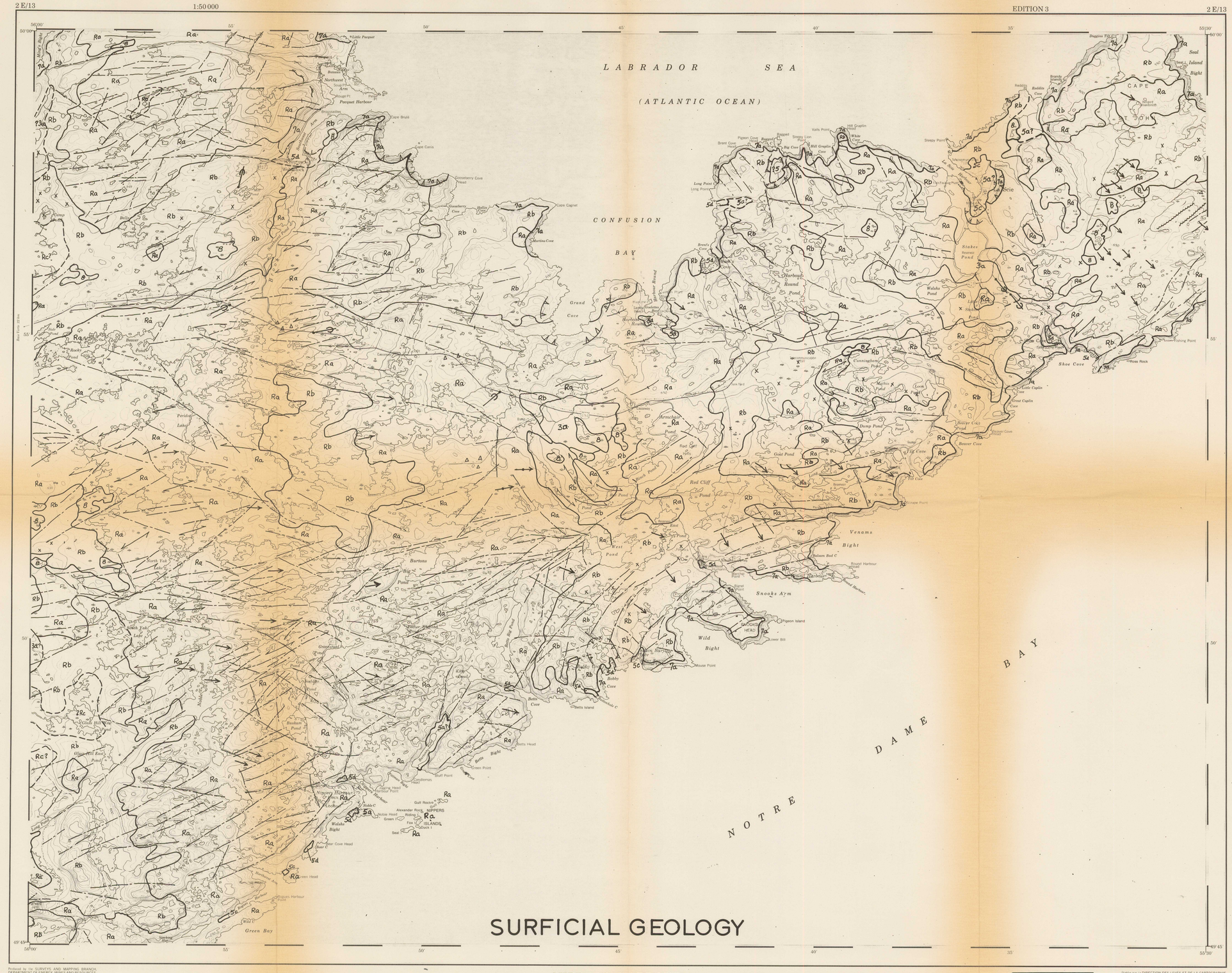
Rb Bedrock areas largely obscured by forest vegetation in which patches of till may be present mainly in low areas.

Ra Bare bedrock denuded by glaciation and by modern and postglacial nivation and marine washing.

### SYMBOLS

- Geological boundary (defined, approximate, inferred)
- Ridge following rock structure; sedimentary stratification, metamorphic foliation
- Rock outcrop
- Cirque; pre-last glaciation, post-last glaciation
- Drumlin, fluting; directional, non-directional
- Crag-and-tail hill (rock hill with drift lodged on down-glacier side)
- Roche moutonnée, rock drumlin, stoss-and-lee (ice-streamlined bedrock)
- Striation (numbers indicate relative age based on cross-cutting relatinships)
- Esker
- Crevasse filling (ice-contact gravel ridge)
- Kame, isolated gravel knoll
- Kettle, ice-block depression
- End moraine; sharp-crested, subdued or buried by marine action
- Minor moraine, ribbed moraine
- Ice-contact face (teeth facing glacier margin)
- Meltwater channel; large and small proglacial, submarginal (with barb on uphill side)
- Marine limit; defined, approximate
- Proglacial and postglacial lake shoreline; defined, approximte
- Raised beach
- Terrace edge (marine and fluvial)
- Sinkhole; single depression, line of sinks along stratification
- Fault or fracture with sharp edges (postglacial reactivation?)
- Rock glacier (inactive)
- Avalanche track
- Mudflow, landslide, slump (in till and marine clay)
- Sackung (large-scale cliff failure in bedrock)
- S Solifluction terraces, lobes, stripes
- N Nivation hollow
- Stadial boundary (upper and outer glacial limit); Late Wisconsinan, older
- ? Composition, genesis or thickness of material uncertain
- 12 000 ± 120 (GSC-1735) 20m — Carbon-14 age determination (date, material, lab number, elevation)
- (P) 101023 — Fossil locality (Quaternary marine shells with GSC collection number)
- Float occurrence (transported mineralized debris)

Geology and cartography by Douglas R. Grant, 1985, 1986


LABRADOR SEA
(ATLANTIC OCEAN)
CONFUSION BAY
NOTRE DAME BAY
Pacquet Harbour
Snooks Arm
Wild Bight
Venams Bight
Green Bay
Seal Island Bight
CAPE ST. JOHN
Shoe Cove
Ross Rock
Pigeon Island
Betts Island
Mouse Point
Green Point
Green Head
Nippers Harbour
Alexander Rock
Gull Rocks
Seal Rock
Fox Rock
Green Rock
Noble Head
Noble C.
Welsh Bight
Sandiemas Head
Stuff Point
Betts Head
Bobby Cove
Cape Cagnet
Cape Canis
Cape Brulé
Little Pacquet
Northwest Arm
Gooseberry Cove Head
Martins Cove
Grand Cove
Harbour Round
Long Point
Brent's Cove
Vails Point
Hill Grapkin Head
Sleepy Point
Stakes Harbour Round
Waldeks Pond
Cunningham Pond
Markes Pond
Little Coplin Cove
Great Coplin Cove
Beaver Cove
Dump Pond
Goat Pond
Red Cliff Pond
Fig Cove
Grape Point
Round Harbour
Bulbam Bad C.
Fishing Point
Dugglers Tickle
Reddin Cove
Brands Brandy Brandy Abandoned
Burtons Pond
Big Pond
Kitty Jewell
Bushan Pond
Pine Pond
Gull Pond
Greenland Pond
Grade Hill Pond
Gilson Trail Road Pond
Long Pond
Peridot Lake
North Yak Lake
Rocky Pond
Pond
Rocky Pond
Hawser Harbour
Pacquet Harbour
Nippers Harbour
Nippers Harbour Road
Harbour Point
Noble Head
Green Point
Green Head
Green Bay
Stocking Head
Jackson Head
Jackson Point
Long Point
Hawser Harbour
Harbour Point
Harbour Round
Harbour Round Road
Sandy Harbour
Gooseberry Cove
Martins Cove
Hollis Cove
Belle Cove
Brent's Cove
Long Point
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