

MAP GR80-7
SURFICIAL GEOLOGY
of the
SWAN RIVER AREA

To accompany Geological Report GR80-7

Scale 1:100 000

KILOMETRES 0 2 4 6 8 10

LEGEND

QUATERNARY

- POSTGLACIAL DEPOSITS**
- Organic deposits: formed by the accumulation of vegetation producing a flat wetland overlying fine textured sediment
 - Undifferentiated deposits: glacial and nonglacial sediments including till, glaciolacustrine silt and clay, detritic sand and gravel, beach deposits and slump deposits on steep slopes
 - Wind deposits: parabolic dunes and blowndunes consisting of well sorted sand
 - River alluvium deposits: stream sediment occurring along the flanks and bottoms of meltwater channels and modern streams; includes gravel, sand and silt
 - Alluvial fan deposits: broad deposits of river sediment interrupted by braided channels, sand, silt and clay (often fossiliferous) grading into coarse sand and gravel near the apex of the fan

LATE GLACIAL AND EARLY POSTGLACIAL DEPOSITS

- Beach deposits: prominent ridges including beach, spit and offshore bar deposits including some littoral deposits; consists of gravel, sand and silt
- Littoral deposits: nearshore blanket of silt grading basinward into undifferentiated silt and clay; underlies extensive organic deposits
- Delta deposits: topset beds (may contain kettle holes) consisting of fine-grained sand and gravel grading into fine-textured foreset beds; delta front often terraced; grade into sandy bottomset beds; may include beach and littoral deposits
- Deltatic deposits: primarily sandy foreset beds; includes some beach and littoral deposits
- Proximal wave-dominated detritic deposits: fan-lying cross-stratified sand grading basinward into silt; includes some beach and littoral deposits
- Intermediate wave-dominated detritic deposits: glaciolacustrine silt grading into clay
- Distal wave-dominated detritic deposits: glaciolacustrine clay deposited as bottomset beds; clay and silty clay

GLACIAL DEPOSITS

- Supraglacial lake deposits: hummocky, ice-supported and ice-walled glaciolacustrine sediment; silt, sand and minor gravel; includes extensive organic deposits
- Glaciolacustrine deposits: sand and gravel deposited as eskers
- Fluted till: drumlinoid ridges consisting of calcareous stony till
- Till plain: flat to gently rolling till plain; calcareous stony till including areas of littoral deposits and organic deposits; includes extensive areas of thin lacustrine sediment in the Swan River Valley
- Hummocky stagnation moraine: broad areas of dead-ice topography; brown, wet, clay till containing some shales; includes outwash and extensive areas of fine textured glaciolacustrine sediment, and organic deposits
- Hummocky stagnation moraine: areas of dead-ice topography with relief greater than 10 m suggestive of moraines; brown, wet, clay till containing some shales

SYMBOLS

- Geological boundary (defined, approximate)
- Sampling site: Carbon dating locality
- Escarpment
- Slump topography
- Minor beach ridge, offshore bar, etc.
- Iceberg scour mark
- Ice-walled channel
- Abandoned channel
- Meltwater channel
- Linear ridges in hummocky stagnation moraine
- Ribbed moraine
- Moraine plateau
- Moraines: including end, lateral and terminal moraines
- Glacial striae, Glacial flute
- Ice thrust block
- Provincial Trunk Highway (paved)
- Provincial Road (paved, gravel)
- Railway
- Towns, villages, other settlements
- Topographic contours, interval 100 feet (elevations in feet above sea level, for metres divide contour value by 3.28)
- Provincial boundary
- Township/Range boundary
- Provincial Park or Indian Reserve boundary
- Provincial Forest boundary

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Cartography by DOUG F. BAGWELL, 1985
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INDEX MAP

The base map was scanned at the printed scale from the following National Topographic System Series: 60N-13 to 16 and 60C-1 to 8 indicates. Air photographs covering this map may be obtained from the Department of Natural Resources Air Photo Library, Winnipeg. The magnetic declination at the centre of the map is approximately 10° 42' East (1985) and is decreasing by 15' annually.

