



MAP  
of part of the  
DISTRICT OF KEEWATIN  
showing survey of the  
WINISK RIVER  
by  
WILLIAM M'INNES, B.A.  
1903.

Scale 16 statute miles to 1 inch

SOURCES OF INFORMATION

Winisk river and route from Albany river to Weibikauk Lake from micrometer and track surveys by William M'Innes 1903.  
Albany and Attawapiskat rivers from surveys by Dr. R. Bell, 1870-71 and 1886.  
Severn and Tread rivers from survey by A. Low 1886.  
Etwan and Trout rivers from survey by D.B. Dowling 1901.  
Kapiskau river from survey by W. J. Wilson and O. Sullivan 1902.  
Supplemental information from Arrowsmith's map.  
Compilation by William M'Innes, assisted by V. Perrin.  
670' Height in feet above sea-level.  
Strike, — Horizontal strata.  
Glacial striae, — Latitude observation points.

GEOLOGICAL NOTES

- 1. Well foliated, biotite, granite-gneiss, striking parallel to the shore and dipping S.55° E. 60', occurs all along the lake. Brook trout of large size are plentiful in the rapids on the Opicheuan and Albany rivers.
- 2. A belt of fine, hard diorite and massive, coarse diabase crosses the river at this point.
- 3. Approaching the diorite belt the biotite-gneisses become much finer and close to the contact, they are micaceous.
- 4. On the north shore of the lake, fine, black, biotite-gneiss with garnet crystals, is cut by coarse white pegmatite that holds, in places, broken crystals of mica three inches in diameter. White and black spruces, fifteen inches in diameter, tall and straight, grow about the lake.
- 5. The belt of felspathic, chloritic and hornblende schists here shown is evidently a continuation of the belt of like rocks that crosses the Albany river farther west, at Petawanga lake.
- 6. A low ridge of chloritic, hard, pyritous diorite, slightly schistose and cut by veins of quartz and calcite, affords the first exposures of rock in situ north of the south end of Lansdowne lake.
- 7. Fine, gray and coarser, white, biotite-gneiss strikes east and west.
- 8. Well foliated, biotite-granite-gneiss.
- 9. Coarse, grey, biotite-granite-gneiss generally flat-lying or in low undulations.
- 10. Banded, coarse, white and fine, black, biotite-gneiss much disturbed by veins and arms of coarse pegmatite. The river banks here are of buff-colored boulder clay, thirty feet high, overlaid by one foot of stratified clay. From the lake to the foot of the rapids below Bostinety fall the river has an average descent of a little over six feet per mile; from the rapids to the sea the descent is about two feet per mile.
- 11. The banks are of boulder clay. Twenty-five feet, at the base, of stiff blue clay with a preponderance of large boulders, then fifteen feet of finer, buff-colored, less tough clay with only an occasional large boulder.
- 12. A section of the banks shows fifteen feet of the lower boulder clay, thirty feet of buff-colored and fine feet of stratified clay holding marine shells.
- 13. Eighty-five feet of boulder clay banks with six feet of marine clay overlaid by six to ten feet of sphagnum moss.
- 14. Eighty feet boulder clay banks, with six to nine feet of peat-moss.
- 15. First exposure of the magnesian limestones of the Hudson Bay basin. They occur in buff-colored, flat-lying, flaggy beds that form the bed of the river.
- 16. The river here flows through a gorge, with walls of limestone rising twenty-five feet from the edge of the water. A section from the water level shows six feet of massive, vesicular limestone with many small cavities lined with calcite crystals and large holes formed by the wearing away of the fibrous calcite that filled them, eight feet of flaggy limestone, four feet of darker shaly limestone and seven feet of heavy beds of limestone and very calcareous sandstone.
- 17. A compound anticlinal fold here brings up underlying beds of calcareous quartzite and brittle, black and green slates with calcareous bands and nodules, the whole hard baked-looking and cut by veins of quartz and calcite.
- 18. On the islands are tall spruces measuring two feet in diameter, six feet from the ground. Between this point and the mouth of the river, occasional groves of spruce and balsam poplar occur on some of the islands the remainder supporting only small bushes.
- 19. Occasional low cliffs of limestones and dolomite are common on the river to this point where the last exposure of limestone occurs in flat, flaggy layers two to six inches thick. The contained fossils indicate a Silurian age for all the limestones.
- 20. The banks are here made up of fifteen feet of boulder clay overlaid by ten feet of stratified clay. Brook trout and whitefish are caught plentifully at the mouth of the river and they and sturgeon are caught all along its course up to Weibikauk lake. At the mouths of many of the tributary streams the Indians take these fish as well as dace and suckers in trap-rivers (micheken) built across the current.
- 21. The immediate shore of Hudson Bay is here low and flat. A treeless, gravelly plain, with a sparse covering of bunchy grasses, daisies, rag-worts and other arctic plants, extends from the shore for about two miles back to the edge of the spruce and tamarack forest.
- 22. The water is shallow for a long distance out from the shore, and the ebb tide exposes wide flats of sand and mud dotted with large boulders. The points are formed of piled up, angular blocks of limestone.
- 23. Coarse biotite-granite-gneisses, generally lying comparatively flat, are seen all along the Albany river from Lake St. Joseph to about two miles and a half below the Etoumami river. Diorites and chloritic, felspathic and other schists are then seen to the foot of the Petawanga lake followed by biotite-gneisses to Eubamet lake. Small sturgeon and large brook trout are plentiful in the rapids along this part of the Albany river.