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Features

The History of Canadian Geology

Métis and Proud

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The title "Métis and Proud" is that of a serial feature in "New Breed", the monthly magazine of the Saskatchewan Metis Association. Recently, one of these articles was devoted to Alexander Kennedy Isbister (1822-1883). In it Isbister's career as a teacher and lawyer is mentioned, as is his acquisition of a personal fortune which he left to the fledging University of Manitoba (Anonymous, 1976). The scholarships which the fund would provide were to be distributed to "both sexes . . . without any distinction of race, creed or nationality . . .", a clause much in advance of its time but not unexpected in the will of this proud Metis (Knox, 1957, p. 11).

Neither the short article in "New Breed", nor any of the published biographies, of which the one by Knox (1957) is the most extensive, make any mention of the great interest Isbister took in the geology of his native country: the northwestern part of present Canada. His contribution in this respect should, however, not be so easily forgotten merely because it was one minor aspect of a man of considerable accomplishments in many other unrelated endeavours.

Alexander Kennedy Isbister was born in Cumberland House, the oldest settlement in Saskatchewan, founded by Samuel Hearne as a trading post for the Hudson's Bay Company in 1774. In June of 1822, the year of Alexander's birth, Captain John Franklin and Dr. John Richardson passed through Cumberland House after their near-tragic ending of the "Journey to the shores of the Polar Sea." No mention is made in their journal of Alexander's father, Thomas Isbister, who had come from the Orkneys as a labourer in either 1810 or 1812 and who at the time of the birth of his son probably held the position of clerk for the Honourable Company, although he was listed as such only in the Minutes of 1824. The mother, Mary Kennedy was born about 1804, also in Cumberland House. Her father was Alexander Kennedy, later to become Chief Factor; her mother was listed as an Indian woman. Among Mary's brothers and sisters was William Kennedy to whom an entire museum is dedicated in St. Andrews, Manitoba to commemorate his arctic exploits.

When Alexander was 10 years old he received his first education at St. Margaret's Hope, Ronaldshay, in the Orkneys but in 1833 young Isbister was back in western Canada, at the Red River Settlement where he attended school. At age 16 he entered in the service of the Hudson's Bay Company as apprentice postmaster. In July 1838 he was sent to the Mackenzie District to take a post in Fort Simpson where he stayed until the 25th of May, 1840, when he left Fort Simpson for Fort Good Hope to meet his senior officer, Mr. Bell. He then travelled with him, "twelve Orkney-men and Canadians, and four Indians with their families, who were engaged to act as fort hunters" (Isbister, 1845 p. 335). The party went to establish a trading post at "Peel's River," named by Sir John Franklin after Sir Robert Peel. It was Franklin who had called the HBC's attention to the fact that the Indians inhabiting the river's banks "were clothed in furs". The spot selected for a trading post by Bell and Isbister later become known as Fort McPherson, after the then Manager of the Company. For

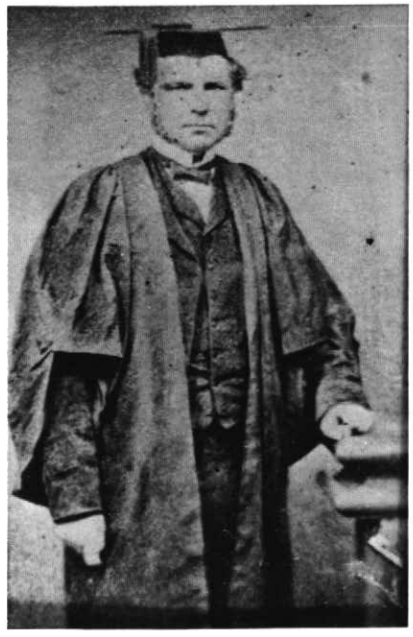

Figure 1
Alexander Kennedy Isbister (1822-1883) This photograph of poor quality is the only known portrait of A.K.I. Photographer and date are unknown but the photograph could have been taken in 1858 on the occasion of obtaining a Master of Arts from the University of Edinburgh or in 1864 when A.K.I. obtained his L.L.B. from the University of London. (Photo courtesy of the Manitoba Provincial Archives.)

many years it was the Company's most northern post.

Fort McPherson became Isbister's base for exploration of the surrounding country, but he did not stay long and left the employ of the Hudson's Bay Company. In the fall of 1842 he went to England, never to return to the land of his birth.

Alexander Kennedy Isbister's geological writings dealing with North America comprise only two papers (Isbister, 1845 and 1855, reprinted 1856). Both contain some first-hand geological observations, but more importantly they are comprehensive reviews of the work of others in a then largely unknown region.

Isbister's "Account of Peel River" is accompanied by an annotated topographical sketch map which covers the country between The Ramparts on the Mackenzie River in the east, the elbow and first major forks of the Peel River in the south, the Rat River in the west, and the Mackenzie Delta in the north. Or, more precisely, the region between North latitudes 64° to 69° and West longitudes 128° to 140°. Surveying was done by using ". . . a pocket sextant and a spirit level . . . two very good compasses and the free use of Mr Bell's valuable watch . . " (Isbister, 1845, p. 335).

At the end of his paper Isbister (1845, p. 343-344) presents a stratigraphic column in narrative form and from top to bottom. He starts with 1) alluvium, derived from the "annual overflowings" of the Peel River. Below this is 2) "diluvium, containing gravel and small boulders." In turn this is underlain by 3) "aluminous shale . . . alternating with thin strata of brown coal . . ." Underneath the shale is 4) "loose red sandstone", which overlies 5) "a limestone deposit." This whole section lies on the 6) "primitive district" which is exposed farther south and which is composed of "Gneiss, syenite, greywacke, and slate, and more rarely granite . . ." In modern terms the section would be: 1) alluvium, 2) glacial drift, 3) Lower Cretaceous shale and coal, 4) Mississippian and Upper Devonian sandstone, 5) Middle Devonian and Lower Paleozoic limestone, and 6) Precambrian Rocks. A glance at the Geological Map of Canada (GSC Map 1250A, 1969) shows that Isbister had grasped the essence of the stratigraphic sequence of the region he had visited.

Isbister's second paper (1855), the first attempt at integrating all the geological knowledge then accumulated about western Canada and the Arctic, became a much-quoted reference during the second half of the 19th century. Undoubtedly the most important part of this paper is the "Geological Sketch Map of the Northernmost Parts of America" which covers the continent north of 30° N Lat. This map shows a great deal more detail than did Sir John Richardson's (1851), the earliest geological map to cover all of what is now Canada. Richardson used only two categories: 1) Metamorphic or Primitive Rocks, 2) Fossiliferous Rocks from the Silurian Rocks upwards, the distinction between them made by pink and light blue water colours applied by hand. Isbister's legend shows from top to bottom: 1) Drift with boulders and recent shells, bones of the Mammoth and other mammals, 2) Tertiary, 3) Aluminous shales, 4) Coal and Lignites, 5) Devonian, 6) Silurian, 7) Crystalline Rocks (gneiss, granite, trap, etc.). This map was probably the earliest chromolithograph produced in England but Ireland (1943, p. 1233) regards it as poorly executed and much inferior to the excellent hand-coloured maps typical of the English publications of that date. That the new technique of chromolithography was as yet unavailable in the United States may be the rationale behind the terse statement "We omit the map" by the Editor of the *American Journal of Science* which reprinted Isbister's article in 1856.

Here is not the place to provide a detailed critique of the interpretation of the geology entered by Isbister on his map or the discussion of it provided by him in the text. It is sufficient to say that Isbister kept up with recent developments in science by recognizing the importance of fossils in determining the relative age of rocks when he wrote: "Farther north, where the chain was explored by myself, near its termination in the Arctic Sea, the prevailing formations were found through their organic remains . . . to be referable to certain members of the Carboniferous series" (Isbister, 1855, p. 501). The true age of the limestones cut by the lower part of the Peel River had thus become recognized.

But, whatever his contributions to geology, Alexander Kennedy Isbister will be remembered foremost as the ". . . native of Rupert's Land, and an able barrister, [who] was a fiery orator and ardent advocate of the cause of the half-breeds in their petition against the monopoly of the Hudson's Bay Company, and the harshness of its Officers' rule (Knox, 1957, p.9)."

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