

IDENTIFICATION OF PETITOT'S RIVIERE LA RONCIERE-LE NOURY*

J. K. Fraser

IN SPITE of the vastness of the northern portions of Canada's mainland, it is unusual that a river of one hundred and ninety miles in length should remain unexplored for some eighty years after its discovery. This is apparently what happened to a river discovered in 1868 by a French missionary who mapped its course during his explorations, but unfortunately never reached its mouth and consequently drew in the lower reaches and the outlet from hearsay. Later explorers found no river where he had placed it on the map, and were apt to conclude that it did not exist. Recent mapping from air photographs (Fig. 1) and geographical studies in the area have now probably vindicated this explorer and show that his maps were not as inaccurate as cartographers had believed. But it remains a mystery why intelligent travellers should conclude from one negative piece of evidence that the river was non-existent, especially when the rest of the map was found to be fairly accurate.

This river, now known as the Hornaday, drains part of the virtually unexplored country between Great Bear Lake and the coast of the Arctic Ocean. Access to the arctic coast was supplied to early explorers by the valleys of the Mackenzie and Coppermine rivers and consequently there was little reason at first to investigate and map the area between these rivers. The main migration routes of the caribou swing away to the Coppermine and Bathurst Inlet country to the east, and so only a few Eskimo occupy the northern coastal fringe, while the Hare and Yellowknife Indians living along the northern shores of Great Bear Lake seldom venture north of the tree line.

No explorer has searched here for gold and copper. No wealth of fur exists in the treeless lands north and south of the ribbon of spruce along the winding Horton River. This region has been almost by-passed in the exploration of the north and only in the last three years has it been photographed from the air and the drainage features added to the map.

The first white men entered the area from the west and visited only the coasts washed by the arctic waters. In 1826 the eastern detachment of Franklin's Second Expedition under the command of Dr. John Richardson examined and mapped most of the coastline from the Mackenzie River to the Coppermine (Franklin, 1828). The head of Darnley Bay was not explored, but they traversed the shores of Franklin Bay and a large river entering the sea from the west was given the name of Wilmot Horton River for the then

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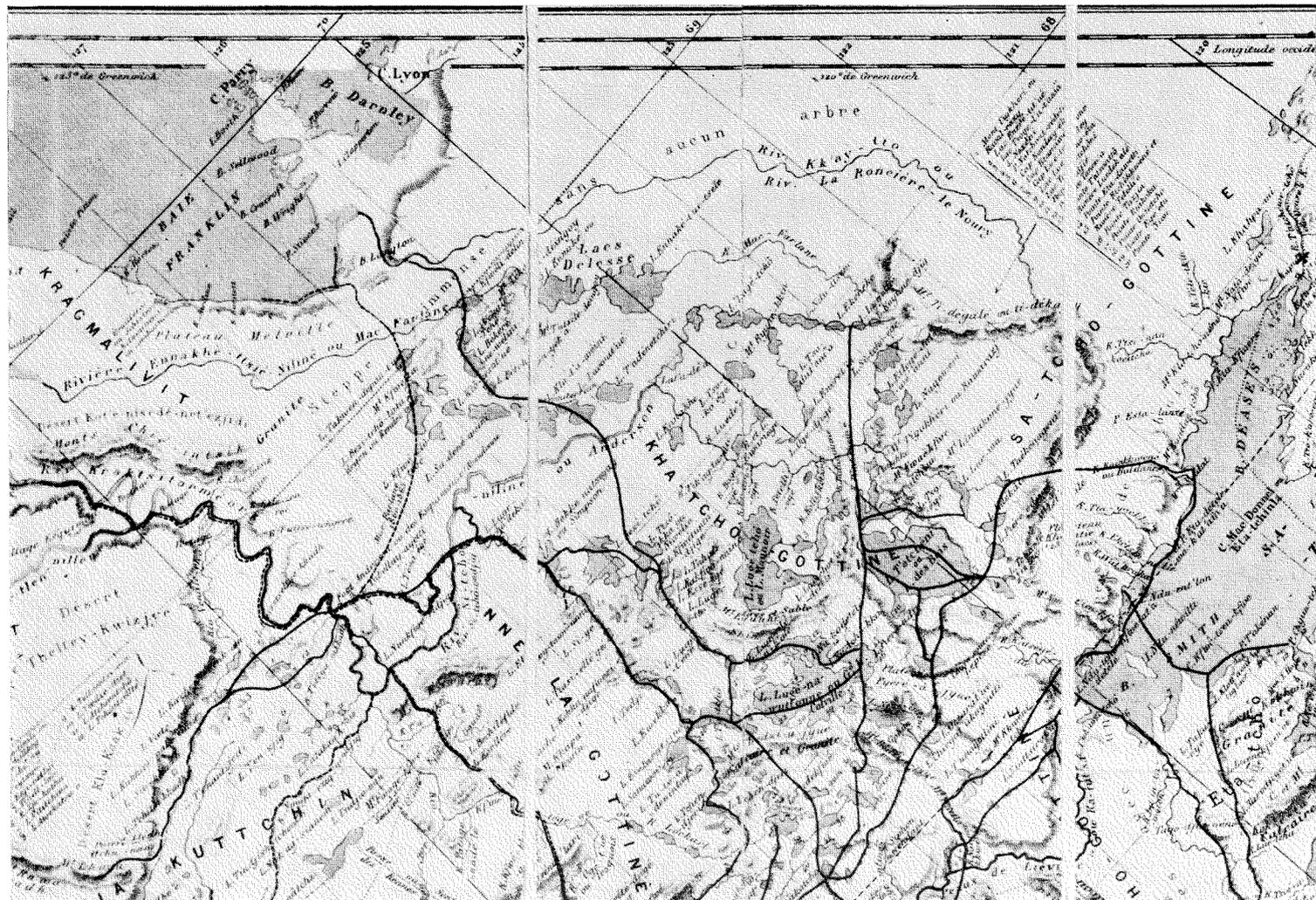


Fig. 2. Part of Petitot's map of 1875.

In 1875 Petitot published an account of his journeys to the north of Great Slave Lake in the *Bulletin de la Société de Géographie* in Paris. While Petitot did not reach the shores of Franklin or Darnley bays, he claimed to have visited, in 1867 and 1868, three rivers which flowed to the north and had their headwaters in the height-of-land between Great Bear Lake and the arctic coast. These rivers are identified in his memoir as the Anderson, the Mac-Farlane, and La Roncière-le Noury. His map of 1875 (Fig. 2) shows these rivers flowing generally parallel to each other to the north and northwest, the western two entering Liverpool Bay and La Roncière emptying into the southeast corner of Franklin Bay. The Wilmot Horton River discovered by Richardson is shown only as a short stream entering Franklin Bay in approximately the same position as that plotted by Richardson in 1826, and most probably was copied directly from Richardson's map.

The height-of-land north of Great Bear Lake was described by Petitot as being composed of limestone, apparently outcropping extensively and barren of vegetation. In the text, he calls it "la montagne Ti déray" and states that it rises some 800 to 1,000 feet above the surrounding plateau. He placed the source of the Roncière at approximately 120° west longitude on the eastern slope of "Ti déray", and continues in his description by stating that the Roncière enters Langton Bay at the head of Franklin Bay: "Sans former aucun lac ni aucun rapide". However, Petitot admits that he did not follow the river to its mouth and did not descend "le plateau élevé qui domine la mer à distance". He mentions heavy fogs on the Melville Plateau which often obscure the sight of the ocean. Following Petitot's publication, La Roncière-le Noury, which he named for l'amiral baron de La Roncière-le Noury was added to the maps and remained on them for some forty years.

Although whalers visited Franklin Bay after 1890, no scientific expedition which contributed to the maps again entered the area until 1899. During the spring of that year, A. J. Stone (1900), a naturalist working under the auspices of the American Museum of Natural History, made a four-month journey from the Mackenzie delta as far as some eighty miles past Cape Lyon. He investigated the shores of Franklin and Darnley bays and discovered the mouth of a large river entering the latter bay, which he named after William T. Hornaday, the Director of the New York Zoological Society. Stone was the first to find that no large river discharged into Langton Bay as shown on Petitot's map. Stone made no extensive surveys inland and the rest of his map of Darnley Bay is remarkably inaccurate, and despite the Wilmot Horton River having been clearly marked on both Richardson's and Petitot's maps, Stone "rediscovered" it and gave it the name of the Constable River, a name which was never adopted.

The Hornaday River was not revisited for fifteen years, but Petitot's "Mac-Farlane" River was soon found to be the upper course of the Horton. Between 1909 and 1912 Vilhjalmur Stefansson and Rudolph M. Anderson made numerous trips on foot and by dog sled around Franklin and Langton bays, along the Horton River and across Darnley Bay (Stefansson, 1913). Semi-permanent camps were made on Parry Peninsula, at Langton Bay, and

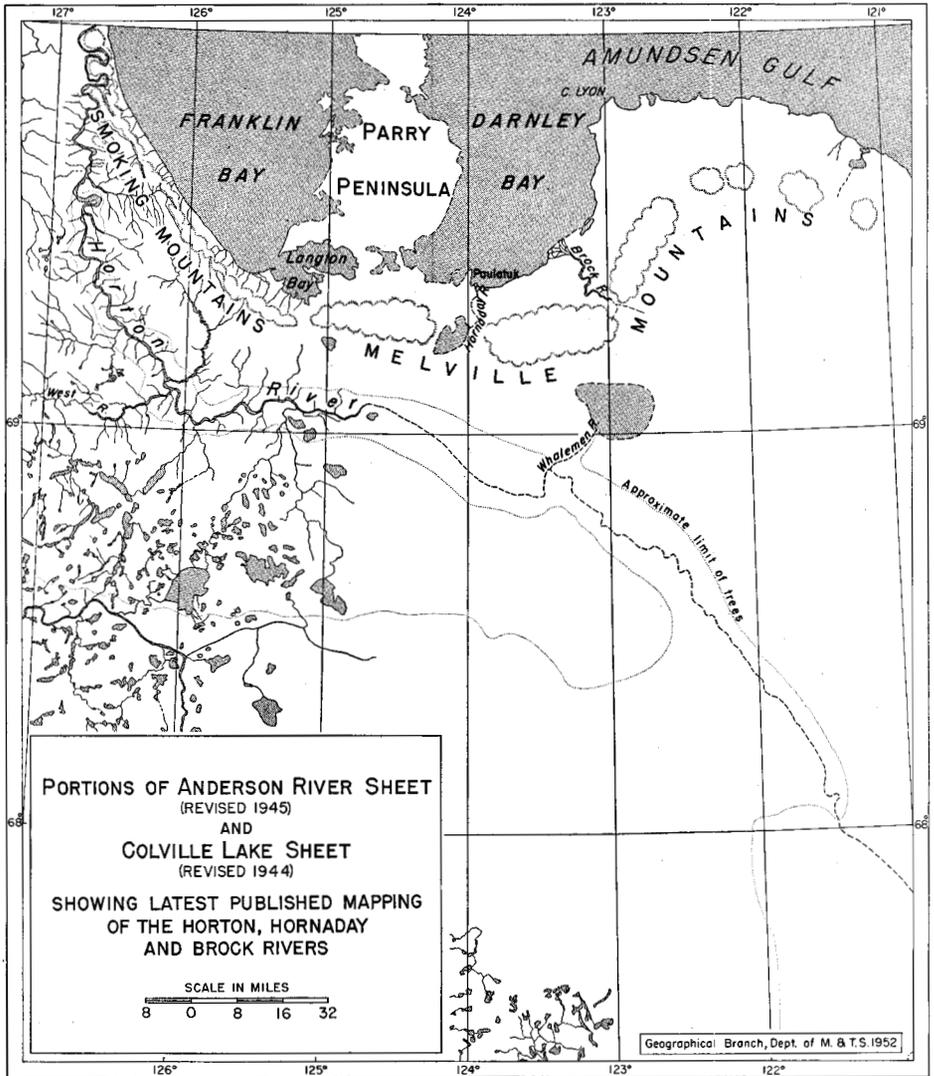


Fig. 3.

on Coal Creek, a small northern tributary of the Horton River. The general course of the Horton was added to the map from several trips made along the river and the latest published map of the area (1945) still shows the course which they plotted (Fig. 3).

Stefansson had hoped to find a large river and follow it inland. The reasons for this plan were that a boat of shallow draft could generally be used for some distance upstream and that usually a supply of willows and possibly spruce for fuel may be found along such a river valley. Examining the map he carried with him, he noted that Petitot's Roncière River was marked as entering Franklin Bay and therefore hoped to follow this river.

He writes: "we were now near the place where a large river, known as the 'River la Ronciere,' is drawn across the map with great detail as heading to the southeast several hundred miles away, near Bear Lake, and entering the Arctic Ocean at the foot of the Parry peninsula. The day we came to that part of the coast where the mouth of the river is laid down on the chart, we found, sure enough, that there was every appearance to indicate that this was the delta of a considerable river. There was a big bight filled with many low alluvial islands and the shores of these were strewn with willows and small spruce drift-wood, all of which might reasonably be supposed to come from such a river as the 'la Ronciere' is on the map." (1913, pp. 124-5).

However, further investigations up the river were disappointing, as the stream was small and apparently drained a small lake four or five miles inland. Stefansson therefore concluded that Petitot's Ronciere River did not exist. He makes no mention in his book of the discoveries of Stone, and the Stefansson-Anderson party made no explorations immediately south of Darnley Bay, although Stefansson did cross the bay in 1911 and noted "two good-sized rivers that come into it from the southeast" (p. 321). These were, of course, the Hornaday and what was later called the Brock.

The delineation of the southern shores of Darnley Bay, omitted by Richardson, was not finished until 1915, when J. J. O'Neill and K. G. Chipman of the southern party of the Canadian Arctic Expedition of 1913-18 filled in the rest of the coastline. This expedition also fixed the position of the mouth of the Hornaday River, named the Brock River for Major R. W. Brock, a former Director of the Geological Survey, and made a short geological survey up the latter stream. No explorations were made up the Hornaday, which is still shown on the best available *published* map (see Fig. 3) as a short stream entering Darnley Bay and draining a large lake only a few miles inland. The Horton River entering Franklin Bay follows the indefinite course mapped by Stefansson and Anderson.

In 1949 the area was photographed from the air by the Royal Canadian Air Force. From these photographs the Topographical Survey has prepared preliminary maps on a scale of 8 miles to the inch. The Horton River is shown on these maps (Fig. 1) as a river 370 miles in length, flowing in generally the same position as the course mapped by Stefansson and Anderson. Parallel-ling the Horton to the east is the Hornaday River, entering Darnley Bay after flowing some 190 miles from its source at approximately 68°40N., 120°20W. The map shows the Hornaday flowing in a wide channel for some 65 miles in its middle course. Farther to the east, the Brock River enters Darnley Bay and is only about 70 miles in length.

Studies in the field have provided additional information about the nature of the rivers and their valleys. J. R. Mackay and J. K. Fraser during the summer of 1951 made two extensive traverses inland from Paulatuk, the Roman Catholic mission in Darnley Bay, on the west side of the Hornaday delta. On the first of these trips, they explored the country between the Hornaday and the Brock rivers, and visited the canyon of the Hornaday at a point some 40 miles from its mouth. Here the river flows swiftly through



Fig. 4. Looking south on a creek flowing into the Horton River in the distance.



Fig. 5. La Roncière Fall on the Hornaday River.



Photo: R.C.A.F.

Fig. 6. Oblique air photograph of part of the middle course of the Hornaday River, looking east.

a steep-sided canyon cut in level-bedded sandstones and limestones, and at one point plunges over a fall sixty feet in height (Fig. 5).¹ While flying over the river valley *en route* to Paulatuk and again on the flight out in September, it was noted that the canyon of the Hornaday extends upstream from the fall for another ten or fifteen miles, when it broadens out into the wide channel shown on Fig. 6.

The Hornaday is a fairly large river, but its volume is not as great as that of the Horton River which drains the country to the west (Fig. 7). Mackay and Fraser travelled overland to the Horton south of Parry Peninsula and noted one striking difference in the valleys of the two rivers. The Horton valley supports a comparatively dense cover of spruce, with some trees up to 30 feet in height (Fig. 4), while no spruce at all is found along the Hornaday River.

¹The name La Roncière Fall was adopted for this feature by the Canadian Board on Geographical Names on 6 June 1952.



Photo: R.C.A.F.

Fig. 8. Old drainage channel south of Parry Peninsula, looking west.

northwest across the foot of Parry Peninsula (Fig. 8). It is probable, or at least possible, that the lower course of the river was drawn by Petitot from the descriptions given to him by the Hare Indians with whom he travelled. It is an interesting point that the Roncière River on Petitot's map entered Franklin Bay at the place where Stefansson found the signs of a large delta and where the air photographs show the outlet of a former drainage channel. It is unlikely that the Hare Indians made many trips down the Roncière to the sea because of their unfriendly relations with the Eskimo and the timidity associated with this Indian tribe, and it is possible that under winter conditions, the large valley leading towards Franklin Bay may have been regarded by them as the course followed by the river. When Petitot was drawing his map of the region north of Great Bear Lake, he may well have been told by the Indians that the Roncière entered Franklin Bay a little distance up the west coast.

We find further evidence in Petitot's memoir to support the Roncière-Hornaday relationship. Petitot placed the source of the Roncière at approxi-

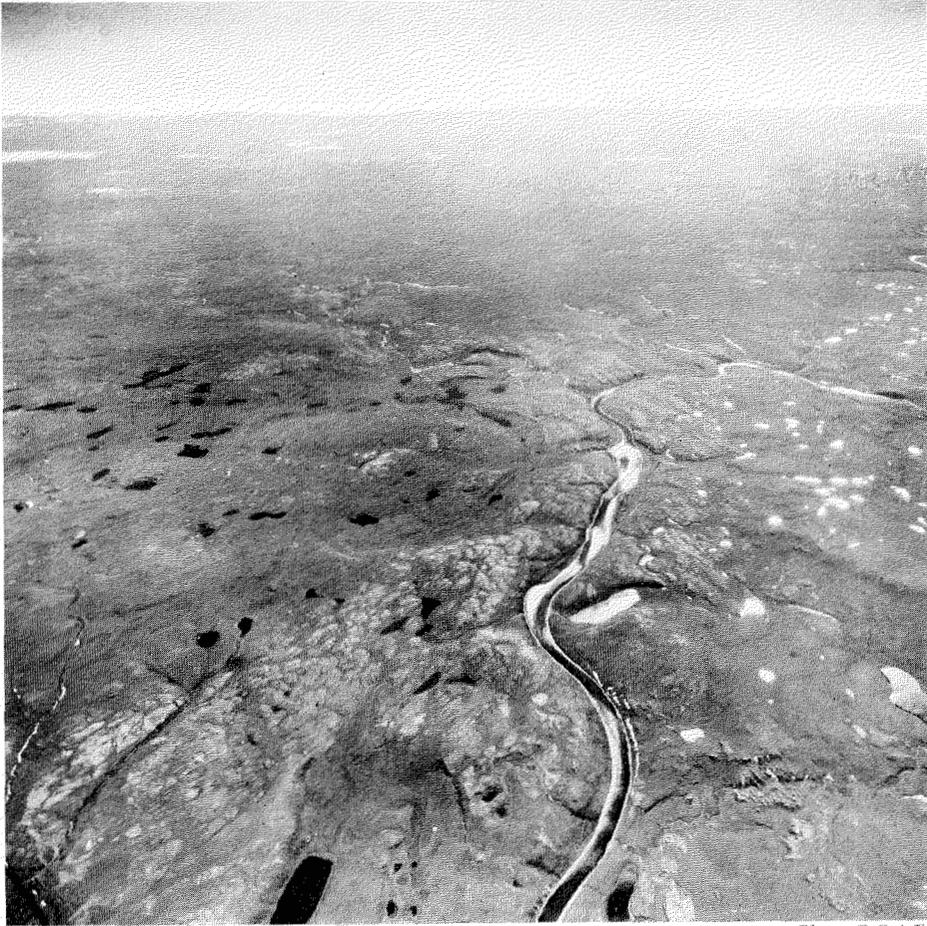


Photo: R.C.A.F.

Fig. 7. Oblique air photograph of the upper Horton River, looking east.

It is suggested that Petitot's Rivière La Roncière-le Noury is what is now known as the Hornaday River. The evidence to support this opinion appears to be sufficiently convincing. Petitot apparently followed the upper reaches of the Hornaday where the river flows in its broad calm channel and did not descend it far enough to reach the falls and rapids where the river cuts through the sediments bounding the Melville Plateau on the south. Therefore the Oblate states that there were no rapids, which is quite probably true as far as he went. He admits that he did not descend the plateau and that fog hampered visibility.

Therefore Petitot must have added the lower course of the river to his map either by guesswork or hearsay and it is suggested from further evidence that the latter was the case. From his studies in the field and from examination of air photographs, Mackay concluded that at one time the Hornaday River drained to Franklin Bay through a wide well-defined valley running east-west some four or five miles south of the head of Darnley Bay and swinging to the

mately 120°W. From Fig. 1 it may be seen that the headwaters of the Hornaday rise at about 120°20W., only about 8 miles west of Petitot's position. Again, the missionary mentions in the text that the "Mac-Farlane" is a larger stream than the Roncière. Stefansson showed satisfactorily that the "Mac-Farlane" is actually the Horton and the recent maps bear this out. The relative sizes then of the Horton and the Hornaday agree with Petitot's statement and are corroborated by the investigations of Mackay and Fraser in 1951.

One final piece of evidence is the fact that on Petitot's map of 1875, he has written along the course of the Roncière, "sans aucun arbre". As noted by Mackay and Fraser, no spruce grow along the valley of the Hornaday River as they do in the valley of the Horton.

To summarize, the Rivière La Roncière-le Noury which was discovered in 1868 and placed on the map in 1875 by Emile Petitot, was believed by later explorers to be non-existent. These conclusions were mainly based on the fact that no river of this size entered the ocean where Petitot had marked it. Instead, another river, the Hornaday, was discovered entering Darnley Bay east of the supposed mouth of the Roncière, but this river was unexplored for many years beyond five or six miles from its mouth. It is suggested that the Roncière is the same river as the Hornaday and evidence has been advanced to support this opinion. Far from being non-existent, it appears that the Rivière La Roncière-le Noury of Emile Petitot has merely been mislaid for three quarters of a century.

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