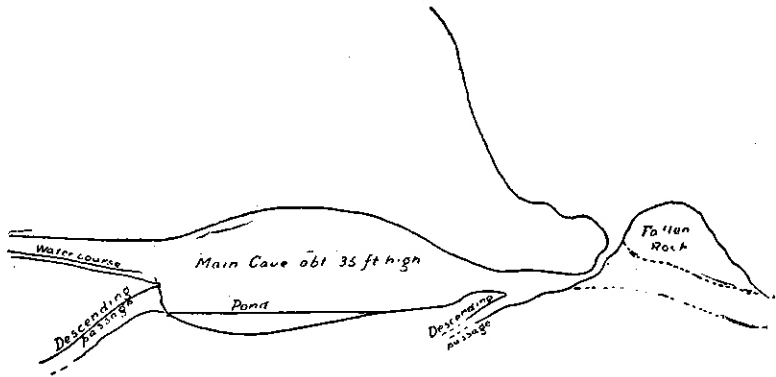


REPORT ON CAVE EXAMINATION IN HANTS COUNTY, N. S.—  
BY WALTER HENRY PREST, Bedford, N. S.

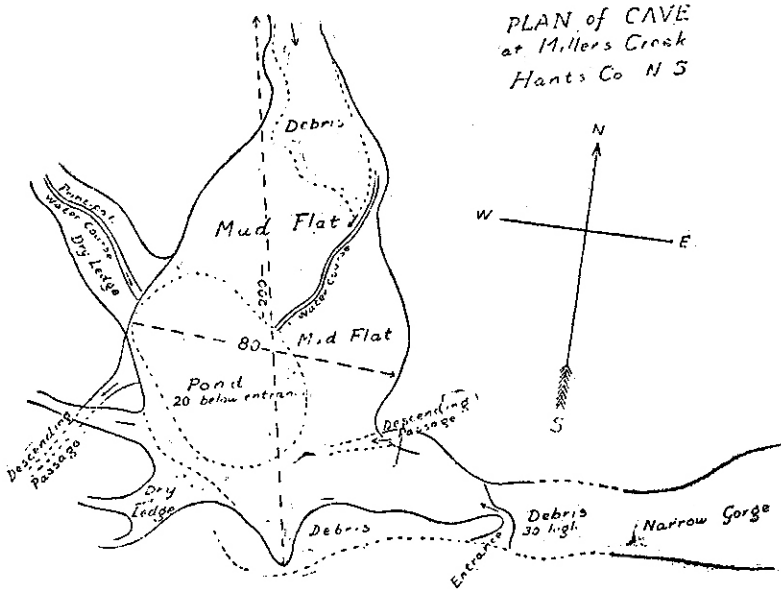
Read 13th November, 1911.

Having been asked by the council of the N. S. Institute of Science to make some investigations into the anthropological possibilities of the caves in Nova Scotia, I submit the following as the result of a few days' work. A visit to three of the caves of Hants County gave information that may be worth recording, though it does not bear very strongly on the purpose of my visit. These caves were: Miller's Creek Cave, Frenchman's Cave, and Five-mile River Cave, all within easy reach of town and railway.

*Miller's Creek Cave.*—This cave is about  $4\frac{1}{4}$  miles north-eastward of the town of Windsor, Hants County, and about  $1\frac{1}{4}$  miles north of the Midland railway. It is buried among steep hills near the headwaters of Miller's Creek, which here becomes only a dribble. A branch of the Miller's Creek road reaches the home of a man by the name of Connors, just back of whose house in the gulch in which is the cave. The original entrance is now nearly blocked by fallen rock, and the visitor is obliged to squeeze through a corkscrew-like hole in what was once the roof. Securing a guide, a lantern, and tools for use if the passage should be blocked, I entered an old quarry, at the end of which I climbed an immense pile of debris at the mouth of the cave. After sliding through the entrance backward, I found myself in a passage which had apparently once been about 30 feet wide and 15 feet high, but which is now choked almost to the roof by fallen rock. Descending to the level of the main cave the floor became more even and less littered with rubbish, and the roof higher. Then suddenly the cave expanded and a pond showed itself in the faint light of the



Miller Creek Cave  
 — See —  
 from entrance to NW branch —



lantern. The rest of the floor of the cave was covered with soft mud so deep and sticky that it was almost impossible to travel through it. It had evidently been often overflowed, covering the sloping surfaces as well, with a coating of mud which made walking very difficult and insecure. The only dry ledges were on the southwest and northwest sides penetrated by small branches of the main cave.

The cave continued to the north, but was blocked to the roof in this direction by fallen rock. To the northwest was a smaller branch which probably penetrated farther than the others as it contained the main watercourse. I did not enter it as the ascent thereto was almost vertical and I was encumbered with the lantern. My guide refused to follow me farther than the entrance and I could not climb it alone. His conversation had been solely on ghosts and buried treasure and his absence was acceptable until this point was reached. The overflow from the pond, which was only 3 or 4 feet deep, was through a small slanting passage on the west side which descended to a lower level. The southern end of the cave, like the northern, was piled high with debris from the roof. Most of the branch passages were but from two to five feet high. The main cave is nearly 200 feet long, 80 feet wide, and probably 35 feet high in the centre. The annual freezing and thawing continually adds to the obstructions at the mouth of the cave and will in time doubtless make the entrance impassable. The inhabitants of the locality tell me that within their memory the passage was large enough to walk through upright.

I was convinced that the cave in its present condition never was a human habitation, though it may have been a refuge from storm or a hiding place from an enemy. However, when the land was higher the torrents may have kept the place cleaner, but just now the only places in the interior of the cave

that could furnish spots dry enough for habitation are the branch passages to the northwest and southwest. The extremely thin deposit on these ledges may perhaps yield human relics. The original entrance, now buried beneath from 20 to 30 feet of debris, would probably yield something of interest, though the cost of removal would be great.

*Frenchman's Cave.*—This cave is situated  $\frac{3}{4}$  mile northeast from the village of St. Croix, Hants County, in the rough gypsum land to the east of the river.\* This tract of land is full of sink-holes, some of which are now being formed to the detriment of the farms. One man spent much time trying to fill a newly formed hole with stones, but gave up the attempt after much labor. In the neighborhood of the cave it is hard to find a path among the numerous sink-holes, evidence of course of caves beneath. In one of these sink-holes is the entrance to the Frenchman's Cave, where it is claimed that the Acadian French hid their wives and children and buried their treasure in the days of Evangeline. Many other tales are connected with it, some based on fact but grossly exaggerated, some uncanny with superstition, and others simply ridiculous.

After travelling through a tract of very rough land, my guide led me down one of the numerous sink-holes, where at a depth of 35 feet we found the entrance to the cave. This was about 20 feet wide and 7 or 8 feet high and ran in a westerly direction. Its easterly extension was blocked by the fall of rock when the roof gave way. A large number of sink-holes farther east indicated its course. A small stream ran through the cave, which in rainy weather became a torrent, preventing entrance. I followed the cave about 150 feet, where it became only 2 feet high, becoming still less farther on. The bottom was small pebbles and mud. I was told afterward that one could penetrate several hundred feet to some larger rooms by crawling through on his stomach in dry weather.

---

\* This cave is situated on the north bank of Wier Brook, a branch of the St. Croix River.

As a human habitation, even for the lowest savages, it seems to be out of consideration, owing to its susceptibility to floods, and the limited floor space above the water or mud level. It might, however, have furnished a refuge for a limited number of people for a short time. I therefore dismissed the idea that it had any archæological value in spite of the entertaining stories told about it.

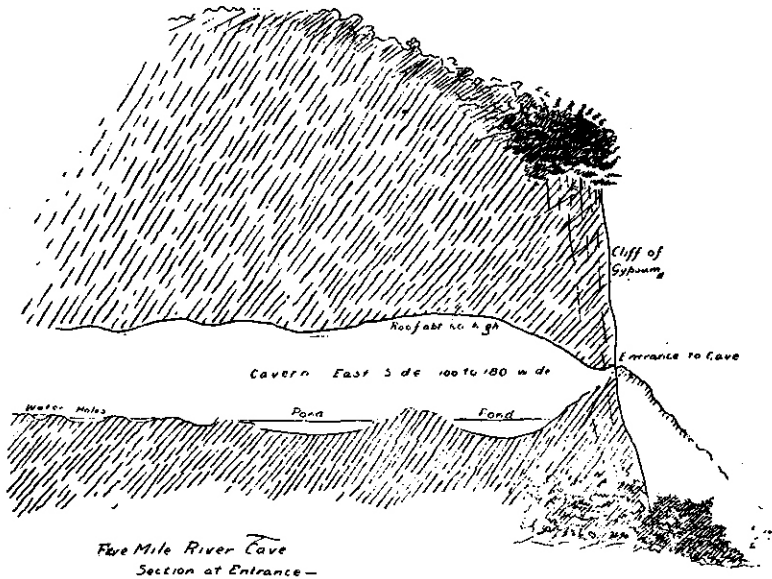
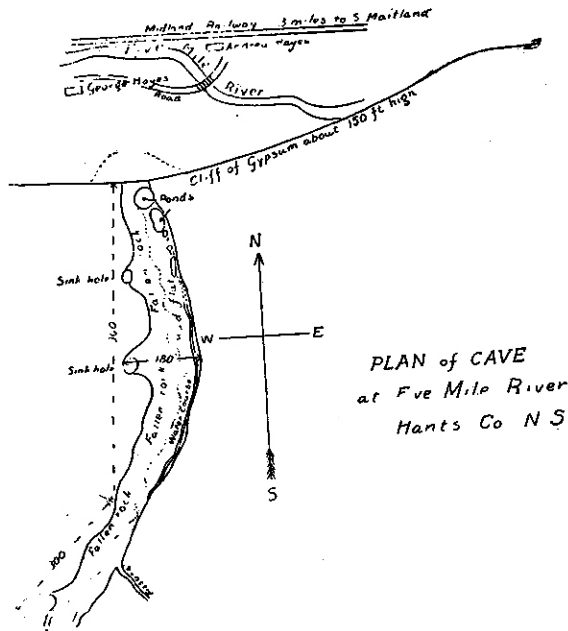
*Five-mile River Cave.*—This cave is situated in Hants County on the south bank of the Five-mile River, a western tributary of the Shubenacadie. It is  $\frac{1}{8}$ th mile south of the Midland railway, the nearest stations being South Maitland ( $2\frac{3}{8}$  miles) and Burton's ( $2\frac{1}{8}$  miles). The river, green hills, and towering white gypsum cliffs give a wildness and beauty to the surroundings not often seen outside Nova Scotia. Nearly half way up the pure white cliffs, is the mouth of the cavern. The mouth is wide and easy of access, being reached by an inclined plane of debris fallen from the cliff. It is, however, being slowly blocked up by rock as the fall of the friable and frost-riven gypsum is yearly adding to the obstruction. The entrance is probably 20 feet wide and 7 or 8 feet high, but the oldest inhabitants tell me that it once was over 20 feet high. The river, which once kept the face of the cliff clear, has long since been diverted to the opposite side of the narrow valley.

Procuring a guide and a couple of lanterns, I descended the pile of fallen rock at the entrance, and penetrated about 250 or 300 feet before lighting the lanterns. Here I stood beneath a vast dome over 150 feet wide and 60 feet high. On the left were several ponds and water-holes, deep and transparent, reaching to the wall. On the right was a slope of broken rock reaching to the right wall and almost to the roof. Proceeding, the lower part of the cave became muddy while the roof became higher and the cave wider. Near the first sink-hole it must have been nearly, if not quite 200 feet wide, and the white gypsum roof stretched almost flat, without a support, from one

side to the other. Great blocks of gypsum littered the floor and finally compelled us to climb over them or squeeze through, between, or beneath them. In climbing over the boulders, the guide fell and put one of our lanterns out of commission. In so large a cave this was a great inconvenience, as the narrow circle of light from the remaining lantern did not reach to either wall. The wide and slightly arched roof continued for over 1000 feet. Spreading from wall to wall without a single support it seemed to me a marvel of natural architecture. About 1300 feet from the entrance, the cave became so obstructed by enormous blocks of gypsum that a passage was hard to find. Many apertures were entered, followed a few yards, and retraced. Then others were followed up, down, or laterally. Some ended in diverging fissures, too small to be followed. The last, only 15 inches wide, ascended at an angle of  $60^\circ$  and became impassable. Even here the cave was large, but blocked from bottom to top by a jumble of fallen rock that prevented all further progress. The extreme length, as far as passable, is about 1600 feet.

The archaeological value of this cave is much reduced by the enormous quantity of rock continually falling from the roof and cliff outside. In its original condition it was doubtless an ideal place for shelter, and was probably so used by the aborigines. Now there is probably 30 or 40 feet of debris over the original floor at the mouth of the cave. Probably nearly all the caves in the gypsum region are in the same condition, this friable rock rapidly crumbling under the influences of frost and heat.

*Geological Conditions.*—That the origin of these caves reached back to a time when this province was much higher than now, there is no doubt. Some evidence for this view is furnished by the springs that come up from the bottoms of rivers at tide-level, such as are seen in the River St. Croix above the bridge on the road leading from St. Croix to Brook-



lyn. In some places the gypsum is honeycombed with caves below the tide-level. Springs sometimes burst out in estuaries and tidal-flats as at Shubenacadie.

If we place the gypseous origin of the rock in question in the Triassic age, a time of great seismic disturbance, we have the whole of the long period since that time for the various phases of cave formation and destruction. There has been elevation, excavation, denudation (aerial and sub-aerial), and finally subsidence. A former covering of gypsum has been removed from a large tract of country, and former caves obliterated, now traceable only by narrow valleys or precipitous gulches. Existing caves are located by strings of sink-holes, which latter are growing larger and more numerous as years go by. The gradual subsidence of the province has placed many of these caves beyond reach, and, according to the best evidence, this subsidence is still going on, unless it has very recently reached its lowest point. It may be mentioned that the three caves I have described, are located in formations of carboniferous limestone (the Windsor series).