

exploration. It might be of interest to note, in this connection, that shells of *Litorina irrorata* Say, which species now ranges no farther north than the coast of Florida, were found in the refuse of a prehistoric rockshelter near New Haven, Connecticut.²¹ Its place in Connecticut waters is now taken by *Litorina litorea*.

While we are on the subject, I might mention a few other archaeological discoveries of interest to the conchologist. The Mahone bay shell-heap, besides shells of *Mya arenaria* Linn., *Pecten Magellanicus* (Gmelin), *Venus mercenaria* Linn., *Spisula solidissima* (Dillwyn), *Spisula polynyma* (?) (Stimpson), *Mytilus edulis* Linn., *Ensis directus* (Conrad), *Lunatia heros* (Say), *Purpura lapillus* (Linn.), and *Buccinum undatum* Linn., also yielded two small shells of the oyster (*Ostrea virginica* Gmelin.) So far as I can learn very few oysters now occur in the bay. No oyster shells were found in the prehistoric shell-heap near French Village at the head of St. Margaret's bay.²² Only a single fragment was discovered in a shell-heap on Cole harbor, east of Halifax.²³ Dr. Matthew did not find any oyster shells in the heap at Bocabec,²⁴ nor were they reported by Professor Baird from the heaps at Oak bay, St. Croix river.²⁵ Oysters seem very scarce on the Atlantic coast of Nova Scotia, and according to Whiteaves only a few are found at Jeddore Head, and in Country and Lipscombe harbors, east of Halifax. The same authority does not mention their occurrence anywhere on the Bay of Fundy.²⁶

Our shell-heap evidence therefore is interesting as suggesting that the oyster also was scarce on the whole outer or Atlantic coast of the Maritime Provinces in prehistoric times. Mr. Smith found many oyster shells in the heaps on Merigomish harbor, which accords well with the present more common occurrence of the species in Northumberland straits.

On the coast of Maine there is a scarcity of oysters at the present day, but the prehistoric shell-heaps are almost entirely composed of oyster shells, some of the heaps, especially those on the Damariscotta river, reaching a depth of from six to twenty-five feet and covering many acres of ground.

²¹MacCurdy, G. G.: The Passing of a Connecticut Rockshelter, *The American Journal of Science*, 1914, Vol. XXXVIII, pp. 517-518.

²²Jones, J. M., in *Smithsonian Report*, 1863, p. 371, and [Glossip], W., On the Occurrence of the Kjøkkenmoedding on the Shores of Nova Scotia, *Proceedings and Transactions of the Nova Scotian Institute of Natural Science for 1863-1866* (Halifax, 1867), Vol. I.

²³[Glossip], op. cit., p. 98.

²⁴Op. cit.

²⁵Baird, Spencer F., Notes on Certain Aboriginal Shell Mounds of the Coast of New Brunswick and of New England, *Proceedings of the U.S. National Museum*, 1881, Vol. IV, p. 293.

²⁶Catalogue of the Marine Vertebrata of Eastern Canada (Geological Survey, Canada), Ottawa, 1901, p. 115.

THE PREHISTORIC FAUNA OF THE ST. LAWRENCE AND OTTAWA VALLEYS.

One can get a fairly good knowledge of the fauna of the St. Lawrence and Ottawa valleys in prehistoric times from a study of the animal bones recovered from the Roebuck village site. This is the largest collection of animal bones from a single site in any museum in Canada. The bones comprise those of mammals, birds, reptiles and fish, and there also are shells of several species of land snails and fresh-water shell-fish. My information is as yet not complete enough to reconstruct the entire fauna, so I will attempt to show how the mammalian fauna alone could be reconstructed by means of archaeological and other evidences.

The first column in the table below indicates the animals which are known to inhabit the country surrounding the Roebuck village site. The second column shows those whose former presence is vouched for by old residents.²⁷ In the third column is indicated the species formerly and still living elsewhere in the Ottawa valley within from fifty to seventy-five miles of the site. The last column gives the species represented by bones found at the Roebuck village site.

Names of Mammals	Present known Fauna.	Former known Fauna.	Elsewhere in Ottawa valley	Prehistoric Roebuck village site.
COTTON-TAIL RABBIT, <i>Sylvilagus floridanus</i> (Allen)	X			
VARYING HARE, <i>Lepus americanus</i> Erxleben ²⁸			X	X
CANADA PORCUPINE, <i>Erethizon dorsatum</i> (Linn.)		X	X	X
JUMPING MOUSE, <i>Zapus hudsonius</i> (Zimmerman)	X		X	
RED-BACKED MOUSE, <i>Evolotomys gapperi</i> (Vigors)			X	

²⁷I am indebted to Mr. George A. Drummond, of Roebuck, Ont., and Mr. F. P. Smith, of Brockville, for lists of mammals found in the vicinity of the site.

²⁸It is interesting to note that neither Mr. Drummond nor Mr. Smith mentions the White or Southern Varying Hare. It has been known for some time that the common Cotton-tail rabbit is continually pushing its way farther to the north, gradually displacing the hare. The hare goes with the destruction of the coniferous forests and the Cotton-tail comes in with the second-growth. (See *The Geographical Distribution of the Eastern Races of the Cotton-tail, etc.*, by Outram Bangs, in *Proc. Boston Society of Natural History*, 1895, Vol. XXVI, p. 412.)