

southerly winds vessels may run well into the cove and anchor under the lee of Calf Island.

Little Kennebec River is an excellent harbor of refuge, the anchorage being about $1\frac{1}{2}$ miles above the Point of Main, and the approaches perfectly safe.

Hickey Island, lying in the middle of the entrance to the Little Kennebec, is a low island, partly sand and partly rock, dotted here and there with spruce and fir and a stunted growth of pine. A reef, bare at low water, extends 200 yards from its southern end.

Tides.—It is high water, full and change, in Englishman Bay at 11h. 15m. Mean rise and fall of tides is 13 feet.

Ice.—The bay is generally closed by ice during a portion of each winter. In severe winters navigation by sailing vessels is impossible after the 15th of January, although steamers can usually keep running until the end of the month, when the bay is usually completely closed, remaining so until towards the 1st of March. The formation commences in the coves and sheltered places along shore and extends gradually out into the bay.

Machias Bay, just to the eastward of Englishman Bay, has a length in a north and south direction of 6 miles and varies between $2\frac{1}{2}$ and 4 miles in width. The main entrance to the bay is between Cross Island on the east and Libby Island on the west.

The western channel, between Libby Island on the south and Ram and Stone Islands on the north, affords a good and nearly unobstructed passage, with good water.

There is a good channel, though unsafe for strangers, from the eastward, between Cross Island and the main land, the outer entrance being between The Old Man and Wash Island.

Cross Island, on the east side of the entrance to Machias Bay, is a remarkable looking island, crowned with a thick growth of sickly and stunted fir. A reef makes out from its southwestern end about $1\frac{1}{2}$ miles in a westerly direction; otherwise the southern and western shores are remarkably bold and steep-to.

Libby Islands, forming the western side of the main entrance to Machias Bay, consist of two rocky islands, which, at low water, are nearly joined by the intervening reefs. The larger (western island) is entirely bare of trees, but has two houses on its summit, near its northern end. The eastern islet has a few dead fir and spruce near its northern end, but is otherwise rocky and bare of vegetation.

Stone Island, about one mile to the northward and westward of Libby Islands, is a barren, rocky island of moderate height, covered with a thick growth of small fir, except at its southern end, where is a remarkable round bluff head with a white face, called Stone Head.

Yellow Island, on the west side of the channel to the upper bay, is remarkable for being composed of nearly white rocks. At its eastern end is a high head called Yellow Head, which is bare except on top, where grow a few stunted fir trees.