setts Bay, but also about Prince Edward Island, the Magdalens, in the Bay of Chaleur, and in the Bay of Notre Dame, Newfoundland, it follows, if the alleged migrations have any foundation in fact, that the same schools of this fish spawn during some seasons in the comparatively warm coastal waters of Massachusetts, in other seasons in the ice cold waters of the Gulf, and become an exception to the general rule governing fish life, namely, that fish return, as near as possible, to the place of their birth to exercise the functions of re-production. (3)

The area within the sixty fathon line of soundings in the Gulf acquires a higher temperature than the deeper portion of the Gulf in the latter part of June and during July and August. It possesses a more southern fauna, but it is cut off from the Atlantic by the Arctic outflow, which is the cause of the great southerly bend of the Isothermal lines on this part of the American coast, through which the fish would have to pass during their supposed northward migration.

According to resident Newfoundland fishermen young Mackerel have been seen in great numbers in the Bay of Notre Dame during the months of September and October, about three inches in length.

They appear on the coasts there generally about the 20th July, and during the period when Mackerel were common on the north-east coast, Green Bay, at the extremity of the Bay of Notre Dame was a noted place for swarms of Mackerel fry.

⁽³⁾ Vide page xxxviii. Report of the U. S. Commissioner of Fish and Fisheries.