

there. As a general rule, heavy drift ice coming out of Kotzebue sound is found between cape Blossom and point Hope up to July 12. The current between these points runs rapidly, carrying the ice along at the rate of from 2 to 3 knots, and banking it closely together extending 10 miles off shore at point Hope after the pack has moved off from that vicinity.

In the vicinity of point Hope and cape Lisburne the pack breaks off about 3 miles from the shore, from April 5 to May 25, and moves off and closes in again with changing winds, gradually working off to the northward and westward. Young ice forms in the spaces thus left to about 5 inches in thickness, and gradually gets thinner until it disappears about May 15.

The time of departure of the shore ice varies greatly. In 1886 it moved off July 13, and in 1889, June 14.

By following the shore ice, natives make the trip from point Hope to cape Lisburne in canoes as early as June 1, but it is not safe for vessels to enter the lead thus made until the solid pack has moved to the northward.

Drift ice remains in sight until July 10-25.

As the prevailing spring winds are southerly, there is always more or less open water close inshore in the bight to the eastward of cape Lisburne after May 1.

On account of the contour of the shore line and the banking of the Kotzebue sound ice around point Hope, with prevailing southwest winds, vessels can break through the strip of drift ice off cape Lisburne and find an anchorage off cape Sabine before they can make the point Hope anchorage. Point Hope is the rendezvous of the New Bedford Whaling Fleet to meet the tender sent up with supplies. The leading vessels generally reach there July 4, and the tender arrives from July 5-10, without encountering very much ice.

Vessels have arrived at cape Lisburne as early as June 17, and then again have been until July 25 getting to point Hope; but these were exceptional cases, and probably illustrate the extreme cases of open and late seasons.

Whales are seen off point Hope as early as April 23, showing that ice-holes must be plentiful at that early date.

From cape Beanfort to point Barrow the pack moves gradually north, clearing from point to point. Vessels cannot attempt to force it, but follow closely, being cautious not to get between it and the shore ice. A shift of wind to the westward brings the pack in on shore when a few