

For a record of the number and tonnage of ships engaged in the carrying trade of Canada, see the tables under Sect. 3 (pp. 695-702) of this Part of the Chapter. The tables are included there under traffic statistics because they relate more directly to traffic and services than merely to the shipping available. For an account of the shipping services operated by the Dominion Government, see pp. 685-687.

Subsection 2.—Aids to Navigation and Miscellaneous Works

Included under this heading are the lighthouses and the whole system of marine danger signals on the east and west coasts of Canada, on Hudson Bay and Strait, the St. Lawrence River and Gulf, the inland rivers and lakes, and at the entrances to harbours—a very extensive system designed to provide safe navigation in all Canadian waters. In addition, a pilotage service is maintained in waters where navigation is difficult; this service is described under marine services at p. 685. As a further aid to safe navigation, there are chains of radio signal and direction-finding stations which are described under radiotelegraphy, at p. 728.

Aids to navigation, excepting very minor ones, are listed in three annual publications of the Department of Transport covering the Atlantic Coast, Inland Waters and Pacific Coast, respectively. A summary table showing marine danger signals maintained in Canada during the fiscal years 1929-40 is given at p. 581 of the 1941 Year Book.

A great deal has been done to improve navigable waters by dredging in channels and harbours, by the removal of obstructions, and by the building of remedial works to maintain or control water levels. Probably the largest task of this nature has been the St. Lawrence River Ship Channel. An extensive floating plant is in service to maintain and improve the deep-water channel from Montreal to the sea for ocean-going shipping. Incidental to these developments of navigable waters are works to guard shorelines and prevent erosion, and also the control of roads and bridges that cross navigable channels. In order to prolong the season of navigation in important waters that freeze over in winter, ice-breaking operations are carried on at both the beginning and end of winter. This is particularly the case in connection with sea-going shipping from Montreal: these operations are primarily intended to prevent flood conditions during the spring ice break-up.

1.—Duration of the Season of Open Navigation on the St. Lawrence Ship Channel, 1931-44

NOTE.—For the years 1882 to 1911, see the Canada Year Book, 1934-35, p. 756, and for 1912-30, p. 615 of the 1942 edition.

Year	Channel Open, Quebec, to Montreal ¹	First Arrival from Sea, Montreal Harbour	Last Departure for Sea, Montreal Harbour	Year	Channel Open, Quebec to Montreal ¹	First Arrival from Sea, Montreal Harbour	Last Departure for Sea, Montreal Harbour
1931.....	Mar. 19	Apr. 15	Dec. 11	1938.....	Apr. 12	Apr. 18	Dec. 4
1932.....	" 27	" 14	" 8	1939.....	" 29	" 29	" 12
1933.....	" 23	" 14	" 6	1940.....	" 23	" 24	" 5
1934.....	" 28	" 26	" 8	1941.....	" 14	" 19	" 17
1935.....	" 30	" 15	" 9	1942.....	" 17	May 2	" 16
1936.....	" 28	" 13	" 11	1943.....	" 29	" 24	" 13
1937.....	Apr. 9	" 19	" 8	1944.....	" 20	Apr. 21	" 9

¹ "Channel Open" means it can be navigated although there may be floating ice still in the river.