

2.—Marine Danger Signals Maintained in Canada, Fiscal Years 1929-40—concluded

Description	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Hand fog horns.....	147	151	152	153	154	154	155	158	158	158	156	154
Hand fog bells.....	4	4	4	4	4	4	4	4	4	4	4	4
Gas, and combination gas, whistling, and bell buoys.....	411	425	429	436	444	440	438	441	445	460	456	464
Whistling buoys.....	40	40	40	42	42	41	41	41	41	39	41	44
Bell buoys.....	111	119	119	119	122	122	122	124	126	127	124	122
Submarine bells.....	4	4	4	3	2	2	2	2	2	2	2	2
Fog guns and bombs....	5	5	5	5	5	5	4	6	9	12	13	13
Fog alarm stations only.	13	13	13	13	13	13	13	13	13	13	13	13

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.

3.—Duration of the Season of Open Navigation on the St. Lawrence Ship Channel, 1911-40

NOTE.—For the years 1882-1910, see Canada Year Book, 1934-35, p. 756.

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
1911.....	Apr. 25	Apr. 26	Dec. 3	1926.....	May 1	May 3	Dec. 6
1912.....	" 29	" 30	" 3	1927.....	Apr. 11	Apr. 12	" 6
1913.....	" 14	" 19	Nov. 29	1928.....	" 26	" 26	" 9
1914.....	" 25	" 29	Dec. 4	1929.....	" 10	" 20	" 7
1915.....	" 14	" 30	" 11	1930.....	" 12	" 21	" 12
1916.....	" 22	May 1	" 3	1931.....	Mar. 19	" 15	" 11
1917.....	" 22	" 1	" 7	1932.....	" 27	" 14	" 8
1918.....	" 22	" 7	" 14	1933.....	" 23	" 14	" 6
1919.....	" 16	Apr. 22	" 10	1934.....	" 28	" 26	" 8
1920.....	" 18	" 25	" 7	1935.....	" 30	" 15	" 9
1921.....	Mar. 29	" 21	" 8	1936.....	" 28	" 13	" 11
1922.....	Apr. 13	" 24	" 2	1937.....	Apr. 9	" 19	" 8
1923.....	" 29	May 3	" 2	1938.....	" 12	" 18	" 4
1924.....	" 17	Apr. 24	" 3	1939.....	" 29	" 29	" 12
1925.....	" 10	" 22	" 9	1940.....	" 23	" 24	" 5

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

Subsection 3.—Canals

Before the period of extensive railway construction, which commenced for Canada in the 1850's, the water routes, more especially the St. Lawrence, the Great Lakes, and the Ottawa, were the chief avenues of transportation. These routes were interrupted at certain points, necessitating portages, and to eliminate the toil of unloading, transporting, and reloading at the portages the canals of Canada were constructed.