

Wrecks and Casualties.—The statement in Table 53, supplied by the Department of Marine, applies to vessels of every nationality in respect of wrecks and casualties in Canadian waters and to Canadian vessels in respect of wrecks and casualties in other waters. The returns in some years cover wrecks and casualties of previous years.

53.—Canadian Wrecks and Casualties for the years ended June 30, 1870-1900 and for 1901-1919.

| Year. | Casualties. | Tonnage. | Lives lost. | Damages | Year. | Casualties. | Tonnage. | Lives lost. | Damages. |
|------------|-------------|-----------|-------------|------------|-------------------------|---------------|------------------|--------------------|------------------------|
| | No. | Tons | No. | \$ | | No. | Tons | No. | \$ |
| 1870-1900. | 9,670 | 3,577,367 | 5,096 | 61,525,760 | 1911..... | 271 | 122,619 | 48 | 942,093 |
| 1901..... | 136 | 47,181 | 126 | 285,782 | 1912..... | 293 | 269,569 | 59 | 1,053,768 |
| 1902..... | 222 | 105,814 | 132 | 835,916 | 1913..... | 275 | 270,905 | 160 | 1,963,870 |
| 1903..... | 237 | 162,297 | 32 | 409,991 | 1914..... | 255 | 210,368 | 1,083 ¹ | 4,983,775 |
| 1904..... | 192 | 81,143 | 9 | 489,699 | 1915..... | 280 | 214,036 | 70 | 1,459,012 |
| 1905..... | 178 | 79,588 | 15 | 621,267 | 1916..... | 308 | 242,996 | 67 | 1,377,442 |
| 1906..... | 220 | 139,586 | 149 | 573,420 | 1917..... | 239 | 715,384 | 152 | 4,850,145 ² |
| 1907..... | 317 | 131,441 | 55 | 672,466 | 1918 ³ | 226 | 312,928 | 402 ³ | 1,818,895 |
| 1908..... | 307 | 120,269 | 34 | 1,390,891 | 1919 ⁴ | 240 | 205,720 | 100 | 1,808,690 |
| 1909..... | 343 | 189,906 | 24 | 1,131,966 | | | | | |
| 1910..... | 321 | 211,565 | 101 | 1,569,580 | Totals... | 14,530 | 7,410,682 | 7,914 | 89,764,428 |

¹Includes 1,042 lives lost in the "Empress of Ireland" disaster. ²Excluding damage to cargo estimated at \$4,310,350. ³Includes 328 lives lost in the "Princess Sophia" disaster. ⁴Calendar year.

54.—Comparative Statement of Marine Danger Signals, 1909-1919.

| Description. | 1909. | 1910. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. | 1917. | 1918. | 1919. |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | No. | No. | No. | No. | No. | No. | No. | No. | No. | No. | No. |
| Light stations.... | 946 | 969 | 952 | - | - | - | - | - | - | - | - |
| Lights..... | 1,193 | 1,227 | 1,291 | 1,452 | 1,393 | 1,461 | 1,521 | 1,555 | 1,560 | 1,575 | 1,577 |
| Light ships..... | 11 | 12 | 13 | 12 | 12 | 12 | 12 | 12 | 12 | 9 | 9 |
| Light boats..... | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Light keepers.... | 923 | 961 | 976 | 975 | 1,020 | 1,040 | 1,066 | 1,099 | 1,126 | 1,128 | 1,122 |
| Fog whistles.... | 15 | 14 | 14 | 13 | 14 | 13 | 11 | 11 | 11 | 11 | 10 |
| Sirens..... | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Diaphones..... | 65 | 72 | 82 | 83 | 89 | 98 | 105 | 110 | 113 | 124 | 128 |
| Fog bells..... | 20 | 20 | 23 | 29 | 26 | 26 | 29 | 31 | 32 | 30 | 29 |
| Hand fog horns.. | 108 | 121 | 129 | 137 | 145 | 150 | 148 | 151 | 156 | 154 | 156 |
| Hand fog bells.. | 4 | 4 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 5 | 5 |
| Gas and whistling buoys.... | 234 | 254 | 260 | 281 | 299 | 319 | 336 | 327 | 330 | 334 | 339 |
| Whistling buoys. | 23 | 24 | 28 | 27 | 29 | 30 | 31 | 31 | 32 | 32 | 31 |
| Bell buoys..... | 58 | 50 | 55 | 65 | 71 | 82 | 86 | 89 | 87 | 87 | 86 |
| Submarine bells. | 9 | 9 | 10 | 10 | 10 | 13 | 21 | 22 | 22 | 18 | 15 |
| Fog guns or bombs..... | 7 | 7 | 8 | 9 | 9 | 9 | 9 | 8 | 8 | 8 | 6 |
| Fog horns..... | 20 | 17 | 12 | 14 | 11 | 12 | 10 | 7 | 5 | 3 | 3 |
| Fog alarm stations..... | 9 | 9 | 9 | 9 | 12 | 11 | 12 | 13 | 13 | 13 | 12 |
| Gas beacons..... | 27 | 32 | - | - | - | - | - | - | - | - | - |

NOTE.—Besides the foregoing, in 1919 there were 102 lighted spar-buoys, floats and dolphins, 4,924 unlighted buoys and 408 unlighted dolphins, spindles and beacons.