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An analysis of surface water temperatures for the
Atlantic coast of Canada for the year - 1936.

Author

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AN ANALYSIS OF SURFACE WATER TEMPERATURES
FOR THE ATLANTIC COAST OF
CANADA

for the year ---- 1936

by

H. B. Hsichey

Introduction:

The whole situation, with reference to the taking of surface water temperatures on the Atlantic coast of Canada, was reviewed in a recent report (Surface Water Temperatures of the Canadian Atlantic Coast) which has been submitted for publication. At the present time, regular and continued observations of surface water temperatures are taken at St. Andrews, Halifax, Scataris Is., Entry Is., St. Mary's Is., and on the Halifax Lightship. Temporary arrangements have been in effect at Sambro Is., Mutton Bay, and Hall's Harbour. In this report certain data are also included from Grand Manan and the Lurcher Lightship. The data for Entry Is. are not complete, due to failure of a thermometer.

Data:

The available average daily temperatures for the year 1936 for each of the stations referred to, are plotted in figure 1 and furnished in appended tables. The monthly mean temperatures for each station have been calculated and are furnished in table 1. The mean as well as the annual range of monthly means is also furnished. In table 2, the period with temperatures above 10° C. is given for each station when possible. This period is determined by

the date at which the daily average water temperature attains a permanent summer value of 10° C. or higher, and the date at which the daily average water temperature attains a permanent autumn value of less than 10° C.

General Observations:

In so far as surface water temperatures of the Canadian Atlantic coast for 1936 are concerned, the comparatively mild winter was reflected in the higher mean surface water temperatures of the winter months at points relatively free from ice. An early spring break-up was reflected in early and rapidly rising temperatures, resulting in monthly means to the end of June which were somewhat higher than average. By the end of July, however, mean surface water temperatures were generally lower than average, an exception being St. Mary's Is., where the monthly mean of 12.0° C. was 2.7 degrees higher than the average of the previous five years. This general condition, of temperatures lower than normal, prevailed throughout August. Temperatures for September and October were either normal or less than normal. November means were generally lower than normal, while December monthly means were generally higher than normal. The amount of ice on the coast in spring was seemingly very light. This was reflected in the comparatively high monthly mean temperature of the surface waters at Scataris Is. for April (1.5° C. as compared to a five year average of 0.2° C.).

Month	Grand Manan	Lurcher Igt.	St. Andrews	Sambre Is.	Halifax	Scatari Is.	Entry Is.	St. Mary's Is.	Hall's Mbr	Mutton Bay	Halifax Lg
Jan.	3.2	5.5	1.4	0.8	3.0	1.2		-1.6			3.1
Feb.	1.4	3.6	-0.2	-1.4	0.2	-1.3		-1.6			0.1
Mar.	2.7	3.7	1.9	1.5	2.5	-0.2		-0.6			0.3
Apr.	3.5	4.6	3.6	2.8	3.6	1.5		-0.5	2.9		2.2
May	5.7	6.5	6.5	6.0	7.6	4.5		3.2	5.6		5.7
Jun.			10.4	11.2	13.0	7.2		8.1	9.0	8.2	11.9
Jul.			11.3	13.1	13.5	13.9		12.0	11.6	12.7	14.6
Aug.			12.8	14.4	15.1	17.4	17.0	9.3	13.9	11.2	16.6
Sep.			12.2	13.6	15.0	15.0	14.2	9.2		10.0	15.9
Oct.			10.4	9.9	10.7	11.1	8.7	---			12.1
Nov.			7.0		7.6	6.7	4.1	1.6			9.6
Dec.			3.7		5.1	3.4		-1.0			7.0
Mean			6.8		8.1	6.7					8.3
Min. Mon. Mean			-0.2	-1.4	0.2	-1.3		-1.6			0.1
Max. Mon. Mean			12.8	14.4	15.1	17.4		12.0			16.6
Annual Variation			13.0	15.8	14.9	18.7		13.6			16.5

Table 1.

Table 2.

Station	Date at which a permanent summer temperature of 10°C or greater was reached.	Date at which a permanent fall temperature of less than 10°C was reached.
G. Manan		
Larcher Lgt.		
St. Andrews	July 4th.	October 26th.
Sembre Is.	July 2nd.	October 25th.
Halifax	July 4th.	October 26th.
Scateri Is.	June 29th.	October 27th.
Entry Is.	?	October 12th.
St. Mary's Is.	?	?
Hall's Hbr.	June 25th.	?
Mutton Bay	?	?
Halifax Lgt.	June 5th.	November 27th.

Table ----- 2.

BIOLOGICAL BOARD OF CANADA

Daily and Monthly Mean Water Temperatures

Atlantic Coast of Canada

Grand Manan 1936

<u>Day of Month</u>	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>
1	4.2	1.4	2.0	3.4	5.1
2	3.8	1.1	1.7	3.3	4.7
3	4.8	1.1	1.3	3.4	4.5
4	5.0	1.1	2.0	3.2	4.3
5	5.0	1.2	1.7	3.5	5.5
6	4.6	1.0	1.9	3.1	5.3
7	4.8	0.0	0.9	3.5	4.6
8	4.1	0.9	1.2	3.6	5.2
9	3.2	1.8	1.3	3.5	5.9
10	4.2	1.8	2.2	3.4	5.8
11	4.6	1.6	2.5	3.1	5.4
12	3.9	1.0	2.7	2.8	5.4
13	3.9	1.1	2.8	2.8	5.6
14	3.2	1.7	2.8	3.3	5.7
15	4.0	1.7	2.9	3.2	6.0
16	4.7	2.3	3.3	3.0	5.7
17	2.8	2.5	3.4	3.6	5.3
18	2.7	2.8	3.6	3.7	5.4
19	2.7	0.9	3.6	3.6	5.8
20	2.6	0.8	3.5	3.8	5.5
21	2.5	1.0	3.5	3.7	5.2
22	2.7	1.1	3.5	3.4	6.5
23	3.2	1.0	3.3	3.6	5.2
24	2.2	1.0	3.4	3.6	5.6
25	1.1	1.8	2.9	4.4	6.6
26	1.6	2.4	3.9	4.0	6.9
27	1.2	1.7	3.4	4.2	6.5
28	1.2	2.0	3.3	4.0	6.2
29	0.8	1.6	3.4	4.1	6.6
30	1.5		3.6	4.2	7.7
31	1.4		3.4		7.8
	<u>3.2</u>	<u>1.4</u>	<u>2.7</u>	<u>3.5</u>	<u>5.7</u>

BIOLOGICAL BOARD OF CANADA

Daily and Monthly Mean Water Temperatures

Atlantic Coast of Canada

Lurher Lightship 1936

<u>Day of Month</u>	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>
1	6.8	3.1	3.3	3.9	5.7
2	6.5	3.5	3.1	3.9	5.6
3	6.8	3.9	2.9	4.1	5.7
4	7.0	4.0	3.4	4.0	5.6
5	7.0	4.5	3.8	4.1	5.9
6	6.5	4.1	3.5	4.0	6.0
7	6.0	4.0	3.4	4.2	6.4
8	6.1	3.7	3.5	4.2	6.5
9	6.2	3.3	3.1	4.5	6.4
10	6.1	3.1	2.9	4.2	6.3
11	6.0	3.2	3.3	4.4	6.3
12	6.1	3.5	3.4	4.5	6.3
13	6.1	3.5	3.7	4.3	6.1
14	5.9	3.6	3.8	4.2	6.2
15	6.1	3.3	3.7	4.4	6.3
16	6.0	4.0	4.0	4.5	6.1
17	5.4	3.7	3.9	4.7	6.2
18	5.9	4.5	3.9	4.9	6.7
19	5.6	3.8	4.0	5.1	7.0
20	5.1	4.0	3.9	5.0	7.1
21	4.6	3.3	4.0	4.7	6.6
22	5.0	3.3	3.8	5.0	6.9
23	4.9	3.0	3.9	5.1	6.5
24	4.5	3.0	4.0	5.2	7.0
25	4.1	3.3	3.9	5.1	7.1
26	4.6	3.4	4.0	5.1	7.1
27	4.6	3.5	4.1	5.1	7.0
28	4.1	3.3	4.0	5.3	7.3
29	3.9	3.1	3.9	5.4	6.8
30	3.5		4.3	5.4	7.3
31	3.1		4.9		7.5
	5.5	3.6	3.7	4.6	6.5

BIOLOGICAL BOARD OF CANADA

Daily and Monthly Mean Water Temperatures

Atlantic Coast of Canada

St. Andrews, N. B. 1936

Day of Month	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	2.5	-0.6	0.8	3.5	5.0	8.7	10.8	13.4	12.5	11.1	8.8	4.2
2	2.1	-0.8	0.4	2.6	7.7	9.0	9.6	12.9	12.5	11.3	8.9	4.4
3	2.7	-0.5	0.4	3.2	6.9	10.0	10.5	12.6	12.1	11.0	8.8	5.1
4	2.4	-0.7	0.4	2.9	6.1	10.6	10.8	12.0	12.2	10.9	9.4	4.7
5	2.5	0.3	0.5	3.5	5.7	10.3	10.3	12.4	12.1	11.0	8.8	4.1
6	2.1	-0.9	0.4	3.1	5.9	11.5	10.9	12.5	12.1	11.0	8.4	3.8
7	2.2	-1.5	0.2	3.8	5.7	10.4	10.5	12.8	12.3	11.1	8.5	5.1
8	2.2	-0.6	0.8	3.4	6.4	9.6	10.7	-	12.3	11.6	8.9	3.8
9	2.4	-0.6	0.4	3.6	6.2	11.2	11.4	12.7	12.6	11.6	8.6	3.4
10	2.6	-0.2	0.9	3.4	6.2	10.8	10.9	12.1	13.1	11.3	8.2	4.4
11	2.3	-0.7	1.1	2.9	6.3	10.1	10.8	12.0	-	11.6	7.7	4.6
12	2.3	-1.4	1.4	2.9	6.7	10.5	10.8	12.8	12.7	10.9	7.5	3.8
13	2.5	-1.2	1.7	-	6.8	11.0	10.8	13.6	12.7	10.2	8.0	3.2
14	2.6	-0.2	1.7	3.1	6.6	10.3	10.5	14.1	12.1	10.4	7.7	3.0
15	2.0	-0.3	0.9	3.3	6.8	10.5	11.8	12.9	12.3	10.1	8.2	3.7
16	2.8	0.3	1.6	2.7	6.0	10.1	11.8	13.5	-	10.6	7.4	-
17	1.5	0.6	2.2	3.9	5.7	9.3	11.5	13.1	12.6	10.7	6.9	4.4
18	0.7	0.7	3.5	4.0	6.3	9.7	11.1	13.2	12.3	11.0	6.4	3.9
19	1.1	-0.5	3.8	4.2	6.7	10.6	11.4	12.8	11.9	10.1	5.3	3.7
20	0.4	-0.5	3.2	4.1	6.1	11.8	11.5	12.6	12.2	10.2	5.3	4.0
21	0.7	0.3	2.8	3.3	5.8	12.3	11.5	12.6	12.0	10.5	6.5	3.8
22	0.8	0.3	2.2	3.4	5.7	11.0	-	12.6	12.0	11.0	6.4	2.7
23	1.4	0.4	2.4	4.0	6.7	10.8	12.1	12.6	12.2	10.5	6.1	2.6
24	-0.8	0.3	2.6	3.8	6.6	10.6	11.3	13.0	12.1	9.8	5.6	2.8
25	0.0	0.4	2.9	3.7	6.7	10.1	11.7	13.6	12.3	9.9	5.8	3.1
26	-1.0	0.4	3.2	3.8	6.9	10.1	12.1	13.0	11.8	9.9	5.8	3.3
27	0.4	0.4	3.2	3.5	6.8	9.6	12.6	13.2	11.8	8.6	5.3	3.2
28	-0.4	-	3.5	4.0	6.3	9.4	11.9	13.2	12.0	8.4	4.5	3.9
29	-0.4	0.1	2.9	4.2	7.7	10.9	11.9	12.6	11.4	9.2	4.8	2.8
30	0.1	-	3.7	5.5	7.8	10.2	13.8	12.2	11.2	9.2	4.8	2.7
31	-0.4	-	3.7	-	8.8	-	13.8	12.6	-	8.7	-	3.8
Mean	1.4	-0.2	1.9	3.6	6.5	10.4	11.3	12.8	12.2	10.4	7.0	3.7

BIOLOGICAL BOARD OF CANADA

Daily and Monthly Mean Water Temperatures

Atlantic Coast of Canada

Sambro Is. 1936

Day of Month	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.
1	-0.5	-1.3	-1.0	2.6	5.3	7.6	10.0	13.3	16.1	9.4
2	0.5	-1.3	-1.5	2.3	6.1	8.4	9.8	11.8	15.0	10.5
3	1.8	-1.4	-1.1	2.8	6.3	7.9	11.5	13.5	14.0	11.5
4	1.8	-1.6	-0.4	2.3	4.5	8.5	12.6	13.5	14.5	9.6
5	2.3	-1.5	-0.3	2.6	4.4	8.1	13.0	13.5	12.8	10.6
6	2.3	-1.5	0.3	2.3	5.6	9.9	12.0	13.5	13.8	11.3
7	2.3	-1.6	-0.3	3.3	5.6	10.8	11.9	13.5	15.1	13.0
8	1.8	-1.8	-0.8	2.3	6.6	11.3	11.3	14.5	14.0	13.6
9	1.8	-1.4	-0.8	2.6	6.0	11.1	12.3	15.3	14.8	13.5
10	2.1	-0.9	0.0	3.4	4.5	10.5	12.3	14.8	14.0	13.3
11	1.8	-1.3	0.8	2.5	4.9	11.6	13.5	13.6	15.0	13.4
12	2.3	-1.4	1.1	2.8	5.9	12.5	14.4	14.5	15.5	13.1
13	2.0	-1.7	1.4	2.3	5.4	12.0	14.4	15.3	13.5	8.0
14	2.0	-1.7	1.3	1.8	5.0	12.3	13.5	14.8	12.0	8.1
15	0.8	-1.7	1.3	1.9	5.8	12.5	13.4	15.0	12.3	7.0
16	1.3	-1.4	1.5	1.9	4.6	12.4	12.8	14.3	12.8	10.0
17	0.8	-1.3	2.1	2.5	3.8	12.3	13.1	13.6	13.4	11.0
18	0.3	-1.0	2.4	3.0	5.9	11.6	12.5	15.4	12.3	10.8
19	0.8	-1.6	2.6	3.1	7.3	12.8	12.8	15.8	12.3	8.4
20	1.0	-1.5	3.4	3.5	6.9	13.4	14.1	14.0	13.3	8.0
21	-0.3	-1.5	3.3	3.1	5.5	12.0	14.1	13.1	13.8	9.1
22	0.0	-1.8	3.0	3.0	5.8	12.0	14.1	13.9	15.0	10.8
23	0.8	-1.7	2.8	3.3	6.1	13.4	15.1	14.8	16.0	11.0
24	0.0	-1.5	3.1	3.6	6.8	12.4	15.3	15.5	16.3	10.9
25	-0.8	-1.3	2.4	2.3	7.8	11.9	15.4	15.5	15.4	6.5
26	-0.5	-1.0	2.6	2.6	6.8	12.1	13.9	15.9	12.5	8.5
27	-0.5	-0.9	3.3	3.1	7.5	11.9	14.0	14.9	12.3	6.4
28	-1.0	-0.8	3.5	3.6	6.6	12.0	14.1	14.0	11.5	6.8
29	-0.8	-1.3	2.4	4.0	7.3	11.1	13.3	14.1	9.5	7.4
30	-0.8		3.1	4.4	8.1	10.0	13.8	15.5	9.5	8.3
31	-1.0		4.0		8.5		13.0	16.5		6.5
	0.8	-1.4	1.5	2.8	6.0	11.2	13.1	14.4	13.6	9.9

BIOLOGICAL BOARD OF CANADA

Daily and Monthly Mean Water Temperatures

Atlantic Coast of Canada

Halifax, N. S. 1936

Day of Month	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	-	1.8	-	3.9	5.5	9.1	-	14.8	16.8	11.7	-	5.1
2	3.1	-	0.4	3.5	5.7	9.8	10.0	15.9	16.9	12.3	9.8	5.0
3	3.2	0.8	0.0	3.5	-	10.3	9.5	15.0	16.9	12.3	8.8	5.5
4	4.0	0.2	1.0	-	5.7	11.3	9.3	14.9	16.0	-	9.3	6.1
5	-	0.5	1.1	-	6.4	11.4	-	14.2	14.7	12.3	9.2	6.5
6	3.1	0.0	0.9	3.4	6.6	11.6	13.1	13.7	-	12.1	8.0	-
7	3.5	-0.5	0.9	3.8	6.1	-	12.6	14.1	-	13.6	8.0	7.3
8	3.7	0.1	-	3.5	6.4	13.1	13.0	13.5	13.3	-	-	-
9	3.5	-	0.5	3.1	7.1	14.4	13.2	-	15.5	12.6	-	4.3
10	3.9	0.0	1.2	-	-	12.5	10.6	14.5	15.5	12.1	-	5.1
11	3.9	0.0	1.4	3.0	6.6	12.8	12.0	14.6	16.5	-	-	5.1
12	4.0	-0.5	1.3	-	8.2	13.8	-	15.4	16.5	-	8.0	5.9
13	3.4	-1.0	1.0	-	8.0	13.8	12.8	15.7	-	12.1	7.6	-
14	3.3	-0.6	2.5	2.8	7.8	-	13.9	17.8	14.2	9.2	8.9	-
15	3.0	0.1	-	3.0	8.0	14.7	14.4	17.7	13.9	9.6	8.3	-
16	4.2	-	3.0	4.0	7.5	14.6	14.2	-	14.0	9.4	8.6	5.3
17	2.8	0.1	3.0	3.0	-	13.9	13.8	16.4	14.5	10.5	8.0	5.0
18	-	0.7	3.4	3.1	7.4	13.7	12.4	14.7	13.3	-	7.3	4.5
19	-	0.6	4.0	-	6.9	14.5	-	15.0	-	10.2	7.0	4.0
20	2.2	-0.1	4.9	3.6	6.0	15.0	12.4	16.0	-	9.3	7.0	-
21	2.2	-0.5	0.7	3.7	6.4	-	13.5	13.8	-	9.7	6.4	5.0
22	2.1	0.0	-	3.6	6.7	15.4	15.5	13.0	13.0	9.5	-	4.3
23	2.2	-	5.0	4.3	7.0	-	16.4	-	15.5	10.2	6.7	4.8
24	2.0	0.0	4.1	4.1	-	13.8	16.0	16.4	14.8	10.9	6.3	5.0
25	-	-0.1	3.3	3.0	-	15.0	15.9	16.2	15.6	-	7.0	-
26	-	0.3	4.0	-	7.2	13.4	-	14.9	16.3	10.0	6.8	4.7
27	-	0.4	3.7	3.6	7.9	13.6	17.2	14.1	-	8.6	6.1	-
28	-	0.7	4.5	3.0	7.7	-	-	14.5	14.5	9.0	5.9	-
29	1.7	0.9	-	4.6	8.1	12.3	-	15.4	12.5	9.3	-	4.4
30	2.1	-	4.3	5.3	8.3	12.0	16.3	-	12.3	9.2	6.0	3.7
31	2.1	-	4.8	-	8.6	-	15.3	16.3	-	8.6	-	4.7
	3.0	0.2	2.5	3.6	7.6	13.0	13.5	15.1	15.0	10.7	7.6	5.1

BIOLOGICAL BOARD OF CANADA

Daily and Monthly Mean Water Temperatures

Atlantic Coast of Canada

Scataris Is. 1936

Day of Month	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	2.0	-0.9	-1.0	1.0	3.2	5.5	11.3	14.7	17.1	13.2	9.2	4.5
2	1.9	-1.2	-1.0	0.7	4.0	5.7	11.5	15.8	16.4	13.0	9.0	4.0
3	1.5	-1.1	-1.0	0.7	3.7	5.7	11.6	16.2	16.4	12.8	9.0	4.0
4	1.4	-1.0	-1.0	0.5	3.9	5.7	12.7	16.0	16.3	12.1	9.0	4.1
5	3.2	-0.5	-0.7	0.4	3.4	5.8	12.9	16.2	16.2	12.0	8.1	4.9
6	2.8	-0.9	-0.5	0.7	3.2	5.8	12.2	16.5	16.2	12.1	7.9	5.0
7	2.8	-1.2	-0.9	0.7	3.3	5.9	12.2	16.5	15.0	12.0	7.7	5.0
8	2.5	-1.1	-1.0	0.5	4.1	5.2	13.3	16.9	15.0	11.9	7.9	5.0
9	2.4	-1.2	-1.1	0.5	4.5	6.5	13.5	17.2	15.1	12.0	7.7	4.8
10	2.4	-1.8	-1.1	1.1	4.3	6.9	13.7	18.8	15.9	11.9	7.6	3.7
11	2.6	-1.7	-1.0	1.0	4.2	6.9	14.3	18.8	16.0	11.9	7.5	3.6
12	2.1	-1.6	-1.0	0.9	4.5	7.0	14.9	17.6	16.2	12.0	7.5	5.0
13	2.0	-1.8	-0.5	0.6	4.1	7.0	15.1	17.7	15.7	12.0	7.4	5.0
14	2.0	-1.8	-0.4	0.4	4.5	7.0	15.1	17.8	15.0	12.0	7.3	4.8
15	1.3	-1.8	-0.3	1.0	4.5	7.1	15.1	17.9	15.0	11.7	7.0	4.8
16	1.4	-1.5	-0.6	1.5	4.4	7.0	12.5	18.0	13.7	11.1	7.0	3.0
17	1.4	-1.5	-0.2	1.4	4.4	7.0	12.6	18.0	13.9	10.8	6.0	3.3
18	1.1	-1.1	-0.2	1.2	4.5	7.1	13.3	18.1	14.0	10.7	6.0	3.0
19	1.2	-1.0	-0.2	1.7	5.1	7.2	13.6	18.1	13.8	10.7	5.0	2.8
20	1.9	-1.0	0.3	2.0	5.1	7.2	13.9	17.8	13.6	9.5	5.2	2.7
21	0.6	-1.0	0.5	2.0	5.1	7.3	13.9	17.8	13.5	9.2	5.3	2.8
22	0.6	-1.2	0.2	2.0	5.2	7.3	13.9	17.8	14.0	9.9	5.7	2.7
23	0.3	-1.5	0.3	2.1	5.3	7.4	15.3	17.9	14.3	10.3	5.7	2.3
24	0.4	-1.5	0.3	2.3	5.2	8.8	16.0	17.8	15.0	10.3	5.1	2.3
25	-0.7	-1.4	0.5	2.4	5.0	9.0	16.0	17.7	15.0	10.1	5.1	2.1
26	-0.5	-1.1	0.6	2.6	5.0	8.9	15.9	17.7	14.8	10.6	5.2	1.8
27	-0.7	-1.0	0.7	2.9	5.0	9.0	16.1	17.9	14.7	9.7	5.3	1.6
28	-0.7	-1.0	1.0	3.0	5.1	9.3	16.1	18.0	14.7	9.3	5.1	1.9
29	-0.2	-1.0	1.0	3.0	5.0	10.1	14.4	17.5	14.2	9.3	5.0	1.6
30	0.0		0.7	3.1	5.2	10.4	14.0	17.3	14.0	9.4	4.8	1.7
31	0.0		0.3		5.5		14.1	17.3		9.2		1.6
	1.2	-1.3	-0.2	1.5	4.5	7.2	13.9	17.4	15.0	11.1	6.7	3.4

BIOLOGICAL BOARD OF CANADA

Daily and Monthly Mean Water Temperatures

Atlantic Coast of Canada

Entry Is. 1936

Day of Month	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1								16.1	16.3	10.8	5.6	0.3
2								16.5	16.0	11.0	5.5	0.9
3								16.8	15.6	10.3	6.1	2.9
4								16.6	15.8	10.3	5.9	2.6
5								16.6	14.8	10.0	6.1	1.8
6								16.3	15.0	10.6	5.3	0.8
7								16.8	15.3	10.6	5.4	2.4
8								16.6	15.6	10.8	5.9	0.6
9								17.8	15.1	11.4	6.0	1.9
10								18.4	15.8	10.8	5.9	0.7
11								17.9	15.5	10.9	4.9	2.4
12								18.4	15.1	11.0	4.5	2.5
13								18.5	14.8	8.8	4.6	1.6
14								19.0	14.0	7.9	4.0	1.4
15								17.4	13.6	7.9	5.6	1.6
16								17.6	13.8	8.6	4.3	-0.3
17								18.0	14.3	9.1	3.6	0.4
18								17.8	14.1	8.5	1.9	-0.1
19								17.6	13.8	7.9	0.9	-0.9
20								17.6	13.4	7.4	2.6	0.0
21								16.1	13.5	7.6	2.6	1.5
22								17.1	13.8	8.0	3.0	0.4
23								16.4	14.0	8.3	3.4	-0.3
24								16.6	14.1	7.8	2.1	-0.9
25								16.4	13.8	6.9	3.1	-1.0
26								15.6	12.8	7.4	3.3	-1.8
27								16.1	12.8	5.0	3.4	
28								16.6	13.0	5.0	1.8	
29								16.3	11.1	5.3	2.4	
30								15.9	10.6	6.0	2.6	
31								16.0		6.4		
								17.0	14.2	8.7	4.1	

BIOLOGICAL BOARD OF CANADA

Daily and Monthly Mean Water Temperatures

Atlantic Coast of Canada

St. Mary's Is. 1936

Day of Month	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	-1.7	-1.7	-1.6	-0.5	2.2	6.1	9.4	10.5	12.0		2.8	-1.3
2	-1.6	-1.7	-1.6	-1.2	1.6	5.3	9.9	10.9	11.9		2.5	-1.1
3	-1.4	-1.7	-1.6	-1.2	1.3	5.8	10.6	12.3	11.6		2.1	0.1
4	-1.3	-1.7	-1.6	-0.9	1.1	7.0	10.2	7.1	10.8		3.4	0.2
5	-1.4	-1.7	-1.5	-1.2	1.3	8.2	10.7	8.9	10.6		2.1	0.5
6	-1.4	-1.8	-1.5	-0.9	1.3	8.9	10.6	9.9	10.0		1.8	-0.7
7	-1.4	-1.7	-1.1	-1.2	1.7	6.8	10.3	12.9	10.0		2.7	0.4
8	-1.2	-1.7	-1.2	-1.5	1.9	5.4	10.7	14.8	11.4		2.2	-1.4
9	-1.4	-1.7	-1.4	-1.5	2.4	6.7	10.7	15.1	11.1		1.8	-1.6
10	-1.5	-1.9	-1.3	-0.9	2.7	7.8	11.3	9.0	10.1		1.9	-1.5
11	-1.4	-1.6	-1.4	-0.7	3.2	8.2	11.8	10.3	9.6		2.4	-0.4
12	-1.6	-1.8	-1.5	-1.0	3.6	7.7	12.0	9.0	9.4		2.9	-0.2
13	-1.6	-1.8	-0.3	-1.6	3.6	8.0	11.9	9.8	9.5		2.8	-1.2
14	-1.8	-1.8	0.2	-1.0	3.5	8.8	10.4	9.1	8.8		1.0	-1.3
15	-1.7	-1.7	0.4	-0.4	3.3	8.1	12.0	6.5	9.1		2.6	-0.9
16	-1.6	-1.6	0.4	-0.4	5.0	8.5	13.2	9.5	8.8		2.6	-0.9
17	-1.7	-1.6	0.3	-0.5	3.7	9.1	13.5	8.6	8.7		2.2	-1.0
18	-1.6	-1.5	0.3	-1.1	2.9	8.2	13.2	7.8	8.8		0.4	-1.2
19	-1.7	-1.0	0.3	-0.5	3.4	8.4	13.4	6.6	9.0		0.6	-1.3
20	-1.9	-1.5	-0.2	-0.2	3.4	9.1	13.2	3.8	8.6		0.3	-0.5
21	-2.9	-1.4	0.1	-0.2	3.1	9.3	12.8	4.2	8.6		1.1	-0.2
22	-1.9	-1.7	0.5	-0.4	3.1	9.5	13.4	7.6	8.6		2.1	-0.7
23	-1.9	-1.6	0.4	-0.2	4.0	9.8	14.6	6.8	8.2		1.6	-1.6
24	-1.6	-1.7	0.0	-0.9	4.0	9.3	13.4	6.6	7.6		0.9	-1.0
25	-1.8	-1.7	-0.1	-0.4	4.3	9.3	13.5	5.6	7.3		-0.3	-1.8
26	-1.7	-1.6	-0.4	-0.2	4.3	8.6	12.6	8.8	7.4		0.4	-1.7
27	-1.6	-1.6	-0.6	-0.4	4.2	7.5	12.9	9.7	7.3		0.6	-1.7
28	-1.8	-1.6	-0.7	0.8	4.5	8.3	12.5	9.4	7.7		1.1	-1.5
29	-1.7	-1.7	-0.6	2.0	4.4	8.5	13.0	10.7	7.1		-0.9	-1.7
30	-1.7		-0.3	2.2	4.3	9.5	13.4	12.9	6.4		0.2	-1.6
31	-1.7		-0.3		4.5		12.1	12.4				-1.3
	-1.6	-1.6	-0.6	-0.5	3.2	8.1	12.0	9.3	9.2		1.6	-1.0

BIOLOGICAL BOARD OF CANADA

Daily and Monthly Mean Water Temperatures

Atlantic Coast of Canada

Hall's Harbour, N. S. 1936

Day of Month	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1				2.0	5.0	8.0	10.0	12.5
2				2.0	5.0	8.5	10.0	12.5
3				2.0	5.0	8.5	11.0	12.5
4				2.0	4.5	8.0	11.0	12.5
5				2.0	4.5	8.0	11.5	13.5
6				2.5	5.0	8.0	11.5	13.5
7				2.5	5.0	8.0	11.5	14.0
8				2.5	5.0	8.0	11.5	14.0
9				2.5	5.0	8.0	11.5	14.0
10				3.0	5.0	8.8	11.5	14.0
11				2.5	5.5	9.0	11.5	14.0
12				2.5	5.5	9.2	11.5	14.0
13				2.5	6.0	8.4	11.5	14.0
14				2.5	6.0	9.0	11.5	14.2
15				2.5	6.0	9.5	11.5	14.2
16				2.5	5.0	9.5	11.4	14.5
17				3.0	5.0	9.0	11.4	14.5
18				3.0	5.5	9.5	11.5	14.2
19				3.0	5.5	9.4	11.5	14.2
20				3.0	5.0	9.5	11.5	14.2
21				3.5	5.0	9.5	11.5	14.00
22				3.0	5.5	9.5	11.5	14.1
23				3.5	6.0	9.5	11.5	14.0
24				3.5	6.0	9.5	12.0	14.0
25				3.3	6.0	10.0	12.0	14.0
26				3.8	6.5	10.0	12.0	14.0
27				4.0	6.5	10.0	12.0	14.2
28				4.5	6.0	10.0	12.5	14.2
29				4.5	6.8	10.0	12.5	14.2
30				4.8	8.0	10.0	12.5	14.5
31					8.0		12.5	14.5
				3.9	5.6	9.0	11.6	13.9

BIOLOGICAL BOARD OF CANADA

Daily and Monthly Mean Water Temperatures

Atlantic Coast of Canada

Mutton Bay 1936.

Day of Month	Jan.	Feb.	Mar.	Apr.	May	June	July	AUG.	Sep.
1						7.9	9.8	14.0	11.0
2						7.8	10.3	12.5	13.5
3						7.0	11.9	12.9	12.8
4						7.5	11.8	13.8	10.5
5						7.9	10.8	11.0	12.1
6						7.6	12.0	12.0	10.5
7						7.5	11.4	12.0	10.5
8						6.4	9.8	11.5	10.5
9						7.5	10.6	12.0	10.3
10						7.8	11.5	11.8	12.5
11						8.0	11.9	11.5	11.0
12						6.5	12.5	12.1	12.1
13						8.3	13.4	11.6	10.5
14						8.8	12.5	10.2	8.9
15						8.4	12.4	10.3	9.3
16						9.1	12.5	9.8	9.5
17						7.2	12.4	11.8	9.5
18						8.5	13.0	11.3	9.5
19						8.9	13.3	11.6	9.5
20						9.5	13.3	9.3	8.5
21						9.8	14.3	9.0	9.4
22						8.4	14.0	8.4	9.3
23						8.0	14.8	9.3	9.0
24						9.3	14.0	8.5	9.5
25						7.5	14.1	7.6	9.9
26						8.8	13.9	9.3	8.0
27						9.0	14.9	11.4	8.5
28						9.5	14.6	11.3	7.5
29						7.5	15.8	13.0	7.6
30						10.0	13.0	13.9	7.1
31							15.8	12.8	
						8.2	12.7	11.2	10.0

BIOLOGICAL BOARD OF CANADA

Daily and Monthly Mean Water Temperatures

Atlantic Coast of Canada

Halifax Lightship 1936

Day of Month	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	3.8	0.0	0.3	2.0	3.8	9.5	11.5	16.8	16.0	13.0	10.3	8.3
2	3.3	0.3	0.0	1.8	4.3	7.6	11.8	15.0	16.8	12.6	9.6	7.3
3	4.4	0.0	-0.3	1.8	4.0	8.8	11.8	16.3	16.0	13.5	10.5	9.5
4	4.0	0.8	0.0	2.0	3.5	8.9	14.0	16.5	17.3	12.9	10.8	8.5
5	4.0	1.3	1.0	0.9	4.3	8.8	13.8	16.5	16.5	13.6	10.5	7.0
6	4.1	0.5	0.8	2.0	4.5	11.0	13.3	18.8	16.4	13.5	10.0	7.3
7	3.9	0.0	0.5	2.4	5.0	10.3	13.0	14.5	15.8	14.3	9.9	8.8
8	3.6	0.0	0.8	2.0	5.0	10.8	13.3	16.0	15.8	14.5	10.0	8.5
9	4.0	0.3	-0.5	2.0	5.0	11.8	14.0	16.3	15.9	14.0	10.3	6.8
10	4.0	1.0	-0.3	2.8	5.3	11.3	12.5	16.8	15.5	14.1	10.8	7.9
11	3.8	0.0	0.4	2.0	5.3	12.3	14.5	16.5	17.3	14.5	9.9	9.0
12	3.8	-0.5	-0.1	1.8	5.5	12.1	14.4	16.0	17.0	14.0	10.3	9.5
13	3.0	0.0	0.1	1.6	5.4	12.8	15.0	17.0	17.8	9.8	10.0	7.8
14	3.0	0.8	-0.3	1.4	5.3	13.3	14.8	17.8	16.3	11.3	9.0	6.8
15	3.6	-0.5	-0.3	1.5	5.5	13.6	13.0	18.3	15.8	11.5	10.8	7.8
16	4.0	0.5	0.3	1.5	5.1	15.4	14.5	17.5	15.6	11.8	9.0	6.5
17	2.8	0.0	1.0	1.8	5.0	12.8	14.0	18.4	15.1	12.5	8.0	7.8
18	3.4	1.0	0.5	1.9	5.5	15.8	13.5	16.5	15.5	13.5	7.5	6.3
19	3.1	-0.5	0.8	2.4	6.1	13.0	14.0	17.0	14.8	12.0	7.8	3.0
20	3.5	-0.5	1.0	3.3	6.3	15.4	14.8	17.5	15.8	11.0	8.5	7.3
21	2.0	0.0	1.0	2.8	6.0	13.0	16.0	16.5	16.3	11.4	10.5	8.0
22	2.9	-0.3	0.8	2.8	6.4	13.8	16.3	16.4	15.9	11.4	11.0	7.5
23	2.8	-0.5	1.3	2.8	5.8	15.0	15.5	16.9	16.3	11.0	9.5	2.3
24	2.8	-0.5	2.3	2.4	6.0	13.8	16.5	16.5	16.3	10.8	8.3	6.0
25	2.0	-0.8	2.0	2.5	6.3	12.3	16.6	16.3	15.4	11.0	9.8	6.5
26	3.0	-0.5	1.5	2.4	7.1	12.5	15.5	17.0	14.9	11.5	10.5	4.3
27	2.0	-	2.0	2.8	7.3	12.6	15.9	16.9	14.1	8.8	9.3	7.8
28	2.3	0.3	1.8	3.0	7.5	13.0	17.0	17.8	13.3	9.8	7.0	7.4
29	2.1	-0.8	1.4	3.0	8.0	11.0	15.5	16.5	14.5	10.6	9.5	4.4
30	1.8	-	2.4	3.5	8.0	10.6	16.3	16.5	13.6	10.9	8.8	4.8
31	0.5	-	1.8	-	8.5	-	16.6	16.5	-	9.4	-	6.5
	3.1	0.1	0.8	2.2	5.7	11.9	14.6	16.6	15.9	12.1	9.6	7.0