



CASE NO.....

MANUSCRIPT REPORTS OF THE BIOLOGICAL STATIONS

No.193A

THE FALL LOBSTER SEASON IN THE GULF OF ST. LAWRENCE.

No.193B

PLANKTON TOWS FOR LOBSTER LARVAE 1937.

by

G. F. M. Smith.



BIOLOGICAL BOARD OF CANADA

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Author

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The Fall Lobster Season in the Gulf of St. Lawrence

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The fall lobster season in the Gulf of St. Lawrence opened 5 days earlier in 1937 than in previous years. The opening date was August 10th. The weather during the first part of the season was unusually hot and large losses were experienced by those engaged in handling lobsters, especially with lobsters for the live market trade. Canner's lobsters were however not except.

Pte. Sapie and Chockfish River, N. B., and Summerside and Miminegash, P. E. I., were each visited three times during the open fishing season, by the writer. Dr. Templeman obtained data from Pte. du Chene and Cape Tormentine. As the season opened and market lobsters were shelling and continued to shell during the first part of the season. Thus in addition to the weather being warm to handle lobsters satisfactorily, the lobsters were in the buckle shell condition. The greatest percentage of buckle shell market lobsters was found on the second visit to each locality, being about the middle of the season. The shell condition of the canner's lobsters was harder than the market lobsters as the season opened and the largest proportion of buckle shell canner's lobsters was found in the last half of the season. Over 15,000 lobsters were measured and their shell condition recorded.

The figures for the total daily landings of lobsters at Summerside were obtained. The figures were recorded as pounds of markets and cannery. At the beginning of the season there were two pounds of markets per pound of cannery. This ratio decreased as the season progressed and at the end of the season

the ratio was about 1:1.

A few berried lobsters were obtained. Those observed in the first two weeks of the season were new eggs before the eye stage. Eggs obtained later were in later stages of development. No lobster carrying old eggs was observed during the fall season.

The tabulated data are appended.

April 19, 1938.

DISTRIBUTION OF SOME LOBSTER CATCHES IN THE GULF OF ST. LAWRENCE BY SIZE AND COUNT 1937.

Note: Cannery lobsters are less than 8 $\frac{1}{2}$ inches (21 cm.) total length.
 The size distribution by weight would give figures much lower than those in this table, which are by count.
 Percentages are rounded off to the nearest whole number.

Place	Date	Number		% of total			% of cannery		
		Total	Cannery	6 inches 15 cm.	7 inches 18 cm.	7 $\frac{1}{2}$ in. 19 cm.	6 in. 15 cm.	7 in. 18 cm.	7 $\frac{1}{2}$ in. 19 cm.
	Aug. 16-17		1260				9	90	66
Pt. Capin N.S.	Aug. 30- Sept. 1	974	498	1	29	42	1	40	59
	Sept. 18-19	845	714	1	35	52	1	41	61
	Aug. 18-19	1558	1355	4	45	61	7	52	71
Chockpish N.S.	Sept. 2	1022	853	12	48	60	14	54	71
	Sept. 16	1091	790	4	27	37	5	34	50
	Aug. 23-24	1083	988	7	49	63	7	35	70
Minesgash P. E. I.	Sept. 7-9	515	498	8	35	71	9	37	73
	Sept. 22-24	773	753	10	63	79	10	67	81
	Aug. 26-27	838	507	0	7	17	0	9	23
Summerside P. E. I.	Sept. 11-13	624	506	0	7	15	0	15	30
	Sept. 23-28	781	471	0	11	22	0	18	37
Tormentine	Sept. 15	517	280	0	3	9	0	6	16

16
Shell Condition Pte. Sapin, N. B. Aug. 17 - 17, 1917.

L. No.	Hard		Moult				Buckle				Number			
	Male Female		Male		Female		Male		Female		Male	Female		
	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12	1	100	1	100								1	1	
13	2	100	4	100								2	4	
14	28	98	23	96				1	2	1	4	29	34	
15	68	90	52	99	1	1	3	3	7	9	5	6	26	59
16	91	84	84	91	1	1	2	2	16	15	6	6	108	92
17	91	87	102	92	1	1	5	4	12	11	14	11	104	121
18	89	85	94	81	3	3	2	2	13	12	17	16	105	103
19	61	75	78	81	1	1	2	2	16	20	16	17	79	96
20	46	77	75	79			3	3	14	23	17	18	60	95
21	25	63	43	69	2	5	2	5	13	32	16	26	40	62
22	14	56	39	81			1	2	11	44	8	17	25	48
23	33	79	13	62	1	2			8	19	8	38	42	21
24	12	20	5	42					5	30	7	58	17	12
25	9	69	1	9					4	31	10	90	13	11
26	5	71							2	29	2	100	7	2
27	6	86							1	14			7	1
28	2	100	1	100									2	1
29														
30														
31														
32														
33														
34	583		605		10		20		123		127		716	752
35														
36														
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43														
44														
45														
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47														
48														
49														
50														
51														
52														

Total 1982

Shell Condition Pte. Sapin, N. B., Sept. 17-18, 1937.

L	H	Hard				Moult				Buckle				Number	
		Male		Female		Male		Female		Male		Female		Male	Female
		1	2	1	2	1	2	1	2	1	2	1	2		
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14	5	100													5
15	44	67	40	62					7	13	6	17	21	16	
16	43	67	39	75				1	2	21	33	12	23	64	52
17	52	76	48	72	2	3	1	1	14	31	20	29	68	67	
18	40	69	58	69			1	1	16	31	25	30	58	84	
19	36	72	45	69					12	25	20	31	48	65	
20	23	50	28	58			1	2	21	50	19	40	46	42	
21	14	40	18	49					21	60	19	51	35	37	
22	30	79	26	60					8	21	17	40	38	43	
23	42	63	27	44	1	2			24	76	47	56	67	24	
24	28	57	25	38					27	49	41	62	55	66	
25	20	59	11	24	1	3			13	38	41	76	34	54	
26	14	61	7	32					7	37	15	68	23	22	
27	5	58							9	45	10	100	7	10	
28	5	62							3	27	4	100	8	4	
29	1	50	1	33					1	50	2	67	3	3	
30	2	100									1	100	2	1	
31											1	100		1	
32															
33											2	100		2	
34															
35											1	100		1	
36															
37															
38															
39	274		365		4		4		205		303		583	662	
40															
41															
42															
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94															
95															
96															
97															
98															
99															
100															

Total 1245

L	N	Hard		Moulting				Buckle				Number		
		Male Female		Male		Female		Male		Female		Male	Female	
		%	N	%	N	%	N	%	N	%	N	%	N	
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13	7	88	5	100	1	12							8	5
14	43	94	31	89	1	2			2	4	4	11	46	32
15	29	95	26	92			1	1	4	5	6	7	23	83
16	95	89	104	91	2	2	1	1	10	9	8	8	107	114
17	85	75	101	89	1	1	3	3	27	24	11	10	113	115
18	82	79	119	83	1	1	6	4	21	20	19	13	104	144
18a														
19	44	70	75	65			3	3	19	30	37	24	63	115
20	38	59	45	62			1	1	27	41	26	36	65	72
21	23	22	29	55			2	4	7	23	22	41	30	53
22	17	49	23	47			1	2	18	51	25	51	35	49
23	12	70	19	51			2	5	5	30	16	43	17	37
24	5	50	6	29	1	10			4	40	15	71	10	21
25	6	96	1	7					7	54	13	73	12	14
26	2	50	2	18					2	50	7	82	4	11
27	2	75							1	25	4	100	4	4
28									1	100			1	
29	2	67							1	33	1	100	3	1
30	1	50							1	50			2	
31	1	50							1	50			2	
32														
33														
34	545		636		7		20		158		217		210	873
35														
36														
37														
38														
39														
40														
41														
42														
43														
44														
45														
46														
47														
48														
49														
50														
51														
52														
53														
												Total 1583		

L	N	Hard		Moulting				Buckle				Number		
		Female		Male		Female		Male		Female		Male	Female	
		%	N	%	N	%	N	%	N	%	N	%	N	
Week	Date													
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14	1	100												1
15	3	100	2	100										3
16	5	100	5	100										5
17	30	100	24	97								1	3	30
18	42	98	47	98					1	2	1	2	43	48
18a														
19	55	98	45	96					1	2	2	4	56	47
20	45	98	44	96					1	2	2	4	46	46
21	42	93	55	98					3	2	1	2	45	56
22	40	98	59	100					1	2			41	59
23	37	90	37	92					4	10	3	8	41	40
24	23	85	23	82					4	15	5	18	27	28
25	17	90	13	93					2	10	1	7	19	14
26	17	90	5	83					2	10	1	17	19	6
27	10	67	5	71					5	32	2	29	15	7
28	10	83	1	100					2	17			12	1
29	3	75							1	25	1	100	4	1
30	2	67							1	33	1	100	3	1
31	1	100									1	100	1	1
32	2	100									1	100	2	1
33														
34														
35														
36														
37														
38														
39														
40														
41	1	100												1
42														
43														
44	386		378							29		23	414	401
45														
46														
47														
48														
49														
50														
51														
52														
												Total 815		

