

BIOLOGICAL BOARD OF CANADA

MANUSCRIPT REPORTS OF THE BIOLOGICAL STATIONS

No. 148

Title

Settlement of Teredo larvae in 1938.

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pt. 48

SETTLEMENT OF TEREDO LARVAE IN 1938

Report for 1938
by
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Alfreda Berkeley Needler

Report for 1938.

During the spring, summer and part of the Autumn of 1938 test boards were placed in the water at intervals to determine when Teredo larvae settled. The boards used were of planed spruce 1" x 6" x 18" and were suspended vertically below the Biological Station landing stage. Two boards were put out at a time, one near the bottom and the other covered by a few inches of water at low tide. Twice a week a fresh pair was put out and each pair was left in the water for a week.

The series was started on June 3rd and carried on regularly until September 2nd. By mistake the boards were not put out semi-weekly during September but three boards put out early in September were left until the middle of October and contained so few Teredo that the settlement during September must have been very small. From October 14th to the end of the month more test boards were put out at intervals but no Teredo settled.

The test boards were usually given a brief examination when taken from the water but detailed examinations were not made until the winter. On each board twelve strips each 3" x $\frac{1}{2}$ " were examined. Six strips were on each side and they were evenly spaced, each strip running from the edge to the middle of the board and alternately from the two edges. In this way comparable areas were examined on each board and the areas were widely scattered over the surface. The areas were labelled A, B, C, D, E, F on one side and G, H, I, J, K, L on the other. On each board the end with the areas A and G was the one which had been uppermost in the water.

The results of the examination are summarized in the accompanying table.

The first settlement of larvae was about June 24th. By the end of June the larvae were settling heavily and the peak of settlement for the summer was reached about the middle of July. The settlement then decreased somewhat but rose to a lesser peak about the end of July. During the first week in August settlement decreased a great deal but a light settlement continued to the end of the month. There was some settlement during September but only very little. It is worth noting that the bottom boards were almost always more heavily infested than the surface boards.

In 1937 a similar series of test boards was put out but only at the surface. Comparison of the two years shows that settlement was altogether much heavier in 1938 than in 1937. In 1937 settlement almost stopped for part of August but began again in September whereas in 1938 it continued throughout August and almost stopped in September. But in both years settlement started about June 25th and became really heavy about July 1st. Observations indicate, then, that all wooden equipment needing protection should be taken from the water and painted about July 1st.

SETTLEMENT OF TRACKS IN 1938

Date of runovers	AHEAD												Average Remarks	
	A	B	C	D	E	F	G	H	I	J	K	L		
June 3-June 10	0	0	0	0	0	0	0	0	0	0	0	0	0	
June 6 -June 13	Sur.	0	0	0	0	0	0	0	0	0	0	0	0	0
	Ret.	0	0	0	0	0	0	0	0	0	0	0	0	0
June 10-June 17	Sur.	0	0	0	0	0	0	0	0	0	0	0	0	0
	Ret.	0	0	0	0	0	0	0	0	0	0	0	0	0
June 13-June 20	Sur.	0	0	0	0	0	0	0	0	0	0	0	0	0
	Ret.	1	2	0	0	0	0	0	0	0	0	0	0	0
June 17-June 24	Sur.	0	0	0	1	5	0	5	1	0	1	1	3	1.4
	Ret.	0	4	2	2	1	1	1	2	1	0	0	0	1.16
June 20-June 27	Sur.	7	0	2	1	7	7	3	11	2	2	4	19	2.2
	Ret.	42	7	12	1	15	42	24	6	9	10	6	60	21.5
June 27-July 4	Sur.	109	57	12	34	63	23	95	59	35	42	29	114	32.0
	Ret.	36	20	5	14	2	44	102	12	7	21	5	70	27.5
July 2-July 9	Sur.	2	23	3	21	11	7	5	12	1	7	2	12	2.3
	Ret.	1	42	0	6	1	23	14	7	1	27	0	22	12.75
July 4-July 11	Sur.	25	11	42	10	36	21	112	20	22	12	0	70	41.75
	Ret.	26	71	0	53	3	22	122	72	22	22	34	149	52.0
July 8-July 15	Sur.	25	0	7	6	12	12	79	12	2	2	3	7	20.2
	Ret.	226	29	10	46	53	129	120	20	42	24	27	117	77.

Ret. 25 Mostly lying on top of boards. One hole.
 Do top or slightly buried.
 Ret. 1.16 Mostly very slightly embedded.
 Ret. 2.2 (Ret.) Still only shallow and
 Embedding as in top board.
 Ret. 32.0 Mostly just embedded and
 calcified. A few showing
 holes.
 Ret. 12.75 A smooth, 2 rough, 3 partly rough.

Date of SURVEY	AREA													AVERAGE	REMARKS
	A	B	C	D	E	F	G	H	I	J	K	L			
July 11-July 16	Sur. 54	32	11	23	45	102	56	10	4	11	7	71	31.4	All quite embedded in both boards, some well in.	
	Det. 142	27	26	17	71	99	244	39	62	33	72	149	61.1		
July 18-July 22	Sur. 14	0	0	4	1	1	10	23	2	13	1	10	6.50	Well embedded.	
	Det. 75	11	41	1	35	22	45	4	3	4	17	36	24.5		
July 17-July 25	Sur. 40	10	3	10	8	12	36	2	14	12	12	9	14.0		
	Det. 47	1	15	5	10	20	72	14	9	31	25	26	25.5		
July 22-July 27	Sur. 63	17	10	6	7	14	79	4	1	2	1	17	19.25	Mostly only partly emb., believed to be top, believed to be bottom, but not certain	
	Det. 111	20	20	15	21	136	191	14	26	10	40	105	42.75		
July 28-Aug. 1	Sur. 76	17	7	4	6	44	51	11	15	11	20	119	31.0		
	Det. 60	12	7	1	15	119	168	24	24	34	23	161	58.16		
July 29-Aug. 5	Sur. 21	0	0	4	3	7	11	0	1	0	13	0	6.75		
	Det. 45	23	19	2	25	75	74	5	9	6	6	27	26.5		
Aug. 1-Aug. 8	Sur. 18	3	1	2	5	14	9	5	1	2	1	10	6.0	Mostly well embedded, a very few right on the surface.	
	Det. 14	13	2	21	1	36	20	6	3	9	0	56	16.6		
Aug. 5-Aug. 12	Sur. 5	1	3	1	1	1	3	1	1	0	0	0	1.42	A few right on the surface.	
	Det. 9	4	2	3	12	13	16	2	2	0	2	9	5.92		
Aug. 6-Aug. 15	Sur. 2	2	1	1	0	0	0	2	1	1	0	3	1.16		
	Det. 1	4	1	4	1	2	3	1	0	0	2	2	1.75		
Aug. 12-Aug. 20	Sur. 0	0	0	0	0	0	0	0	0	0	0	0	0.75	Probably but not certainly A.G. end up.	
	Det. 4	0	0	0	3	0	1	0	0	1	0	0			
Aug. 15-Aug. 22	Sur. 3	3	0	1	3	2	2	3	2	1	2	0	2.50	A few on or near the surface but mostly well buried.	
	Det. 0	1	0	0	0	0	0	2	0	2	0	0	2/12		
Aug. 19-Aug. 26	Sur. 2	2	2	3	1	12	1	1	1	0	1	5	2.93	Mostly near the surface.	
	Det. 2	2	1	6	5	0	5	2	5	0	5	1	3.75		

Dates of occurrence

Areas

Average

Remarks

		A	B	C	D	E	F	G	H	I	J	K	L	
Aug. 22-Aug. 27	Sur.	5	4	0	0	2	6	0	10	3	4	4	0	3.4
	Net.	1	3	1	1	6	1	2	3	1	0	1	1	1.75
Aug. 28-Sept. 2	Sur.	0	0	0	0	0	0	0	0	0	0	1	0	1/12
	Net.	0	1	0	0	0	0	0	0	0	0	0	0	1/12
Sept. 3-Oct. 16	Sur.	0	0	1	1	0	0	2	2	1	1	0	3	11/12
	Net.	0	3	0	1	5	10	1	0	3	1	2	3	2.0
Sept. 5-Oct. 17	Sur.													No top board
	Net.	5	3	2	10	3	9	12	1	2	1	2	2	3.24

Two burrows measured in other parts of board, probably much like in B, each about 3 mm. long.

Top edge such as in last two boards. One burrow found 6 mm. long.

2021.1.10.113