


11-1961

## Benthic Spot Survey (1961)

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## Benthal Depth 'Spot' Survey

## Androscoggin Pool

1961

Introduction.

During the summer a series of measurements was made of the depth of Benthal in the Androscoggin Pool at ninety-one different locations, twenty-six in four Bays and sixty-five in the main stem of the Pool. Comparison was then made with the results obtained at the same location during the very extensive survey made in 1948.

The 1948 survey included measurements of the depth of the Benthal and the analysis of representative samples at each of the three hundred and sixty-seven stations, all South of Turner Center Bridge. The report covering this survey listed the bay areas separate from the main stem areas in the pool. For this summer's investigation the depth measuring equipment, method of procedure and mode of reporting employed, was similar to that used for the 1948 survey; in 1961 due to time limitations, no analyses were made.

The results of this years investigation and comparison with those of 1948 are recorded in the accompanying Tables.

Observations.

The following observations may be made;

1. There does not appear to be any increase in the average Benthal deposits.

2. The average decrease may not be as large as the figures indicate viz.

Bay areas 27.6 % decrease  
Stem areas 18.8 % decrease

due to the fact that there is some evidence of compacting. Ignoring compacting the overall rate loss appears to have been about two percent per year.

3. Floating sludge is now less prevalent during the entire season and especially so after mid-August, than it was in 1948.
4. Gas production is still very extensive but less than that in 1948. In 1961 the evolution of gas south of mile one and one half (1.5) was small compared to thirteen years ago.
5. While there is some evidence of a slight southward movement of the Benthal, the major depths are still in the mile three to four and one quarter (4.25) area.
6. Excluding any compacting effect the results appear to indicate an average yearly loss of about two percent in the Bays and about one and one-half percent in the main stem.
7. Comparison of 1948 with 1961 measurements.

Year	Bays	Stations	Depth aver.	% Decrease
1961	4	26	16.5"	27.6
1948	4	26	22.8"	
1961	Stem	65	26"	18.8
1948	Stem	65	32"	

## BENTHAL COMPARISONS 1961\* and 1948\*\*

## Bays only

## Bay 6

Station	Inches	Station	Inches	Station	Inches	Station	Inches
117	"0" 13	118	22 18	119	15 14	120	18* 17**
125	22 28	129	10 5				

## Bay 9

176	11 19	177	19 8	178	14 26	179	42 22
180	15 17	183A	14 33	190	43 18	193	9 9
197	9 37	201	27 29				

## Bay 13

284	10 49	286	4 34	288	30 30	293	14 26
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## Bay 16

337	30 19	339	11 22	341	"0" 38	352	5 12
354	31 10	356	4 40				

Bay Stations	26
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1961 avg.	16.5
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1948 avg.	22.8
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Benthal Comparison 1961\* and 1948\*\*

<u>Mile</u>	<u>Stn</u>	<u>In"</u>	<u>Stn</u>	<u>In"</u>	<u>Stn</u>	<u>In"</u>	<u>Stn</u>	<u>In"</u>	<u>Stn</u>	<u>In"</u>	<u>AVG.</u>
2.5	112	8 29	113	26 27	114	17 12	115	4? 4	116	12 14	13* 17**
3.0	146	18 15	147	27 24	148	55 21	149	42 63	150	19 18	32 28
3.25	156	19 31	157	31 18	158	51 52	159	38 35	160	12 18	30 31
3.5	166	20 18	167	48 61	168	60 79	169	59 41	170	18 38	41 47
3.75	171	15 12	172	33 22	173	37 69	174	53 73	175	8 21	29 39
4.0	225	16 35	226	39 70	227	42 73	228	45 76	229	31 23	35 55
4.25	230	28 15	231	32 57	232	40 17	233	21 6	234	29 37	30 26
4.5	235	19 39	236	58 63	237	17 3	238	31 5	239	30 33	31 29
4.75	244	7 4	245	19 "0"	246	8 "0"	247	21 7	248	46 53	20 13
5.0	263	4 33	264	28 20	265	16 33	266	43 52	267	16 68	21 41
5.5	273	22 33	274	21 50	275	54 25	276	5 29	277	27 36	26 35
6.25	310	10 33	311	"0" 60	312	"0" "0"	313	5 13	314	"0" 11	3 23
6.75	327	47 52	328	48 28	329	23 "0"	330	4 42	331	16 40	28 32

River Stem	Lines	Stations	1961 Avg	1948 Avg
	13	65	26"	32"