Southern Maine Vocational Technical Institute

Department of Applied Marine Biology and Oceanography

Technical Report Series

Number 1

1970

HYDROGRAPHIC DATA FROM CASCO BAY, MAINE; FALL, 1968

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A total of six stations in Casco Bay, Maine, were visited on the training vessel M/V Aqualab of Southern Maine Vocational Technical Institute. All of the data was collected during daylight cruises of the Fall and early winter of 1968. Stations 4, 6, and G (Figure 1) were visited once each during this period. Visitation of stations was dictated by weather conditions and training schedules. Station names and coordinates are given in Table I. Water samples were collected at surface, mid-depth, and bottom, or at surface and bottom, for salinity, dissolved oxygen, and pH.

Temperatures were recorded on location with a stem thermometer or a reversing thermometer. Salinities were determined in the laboratory on an induction salinometer. Dissolved oxygen was determined by Winkler (unmodified) titrations. A hand-held color comparator was used for pH estimation. Relative visibilities were determined by lowering a 30 cm Secchi disc. The data collected are shown in Table II.

This report initiates a series of data reports and special publications to be released by the Department of Applied Marine Biology and Oceanography at Southern Maine Vocational Technical Institute.

Instructors and students of the marine science program at Southern Maine Vocational Technical Institute are hereby acknowledged for their contribution to the preparation of this report.

TABLE I

Stations Locations and Low Water Depths

1)	Brothers Island	70° 12' 07" W x 43° 41' 50" N	23' - 25'
2)	Luckse Sound	70° 06' 28" W x 43° 42' 19" N	80' - 85'
3)	Richmond Island	70° 12' 00" W x 43° 30' 00" N	125'
4)	Luckse Sound	70° 08' 07" W x 43° 39' 25" N	100'
6)	Portland Lightship	70° 05' 30" W x 43° 31' 37" N	120'
G)	Pomroy Rock	70° 13' 40" W x 43° 40' 09" N	30'

TABLE II

Station 1

Date	* Depth Sampled	Salinity 0/00	D.O. mg/l	Temp. °C.	pH	Visibility feet
17 Oct. '68	S	31.7	---	13.5	---	---
	B	31.9				
21 Oct. '68	S	32.0	8.2			9.5
	B	31.8	8.0			
7 Nov. '68	S	32.2	7.9		7.9	11.0
	B		8.0			
13 Nov. '68	S	31.8		6.0		8.0
	B	32.4				
19 Nov. '68	S	30.2	8.8	6.0	6.8	6.0
	B	31.5	9.0	6.5	6.8	
3 Dec. '68	S	30.3	9.0	5.0		11.0
	B	32.0	8.8	6.1		
5 Dec. '68	S	28.9		6.0		3.0
	B	28.7	9.1	6.0		
9 Dec. '68	S	31.3	9.4	3.5	8.0	10.2
	B	31.4	9.4	3.1	7.9	

* S = Surface; M = Mid Depth; B = Bottom.

TABLE II (continued)

Date	*Depth Sampled	Salinity 0/00	D.O. mg/l	Temp. °C.	pH	Visibility feet
Station 2						
14 Oct. '68	S	32.1		8.5		10.5
17 Oct. '68	S	32.0		14.0		
	B	32.2				
5 Nov. '68	S	32.4	7.7			21.0
	B	32.6	7.2			
7 Nov. '68	S	32.5	7.8			16.0
	B	32.4	7.6			
14 Nov. '68	S	32.5		8.5	7.9	17.0
	M	32.0		7.0	7.5	
3 Dec. '68	S	32.3	9.0	6.1	6.8	17.2
	B	32.4	8.6	6.7		
9 Dec. '68	S	32.0	9.0	-1.5	7.9	10.0
	B	32.8	8.6	4.1	7.9	
Station 3						
22 Oct. '68	S	32.1	8.0	14.0	7.5	12.5
	M	32.8	6.8	12.5	7.6	
	B	33.0	6.6	12.0	7.5	
15 Nov. '68	S	32.6		8.0	7.6	6.0
	M	32.0		6.9	8.1	
	B	33.0		7.0	7.9	
11 Dec. '68	S	32.2		4.6	8.0	15.2
	B	32.3			8.0	
Station 4						
5 Nov. '68	S	32.6	7.5			21.5
	B	32.5	7.1			
Station 6						
4 Nov. '68	S	33.0				
	B	33.0				
Station G						
15 Oct. '68	S	30.9		9.0		9.5
	B	32.0				

* S = Surface; M = Mid-depth; B = Bottom.

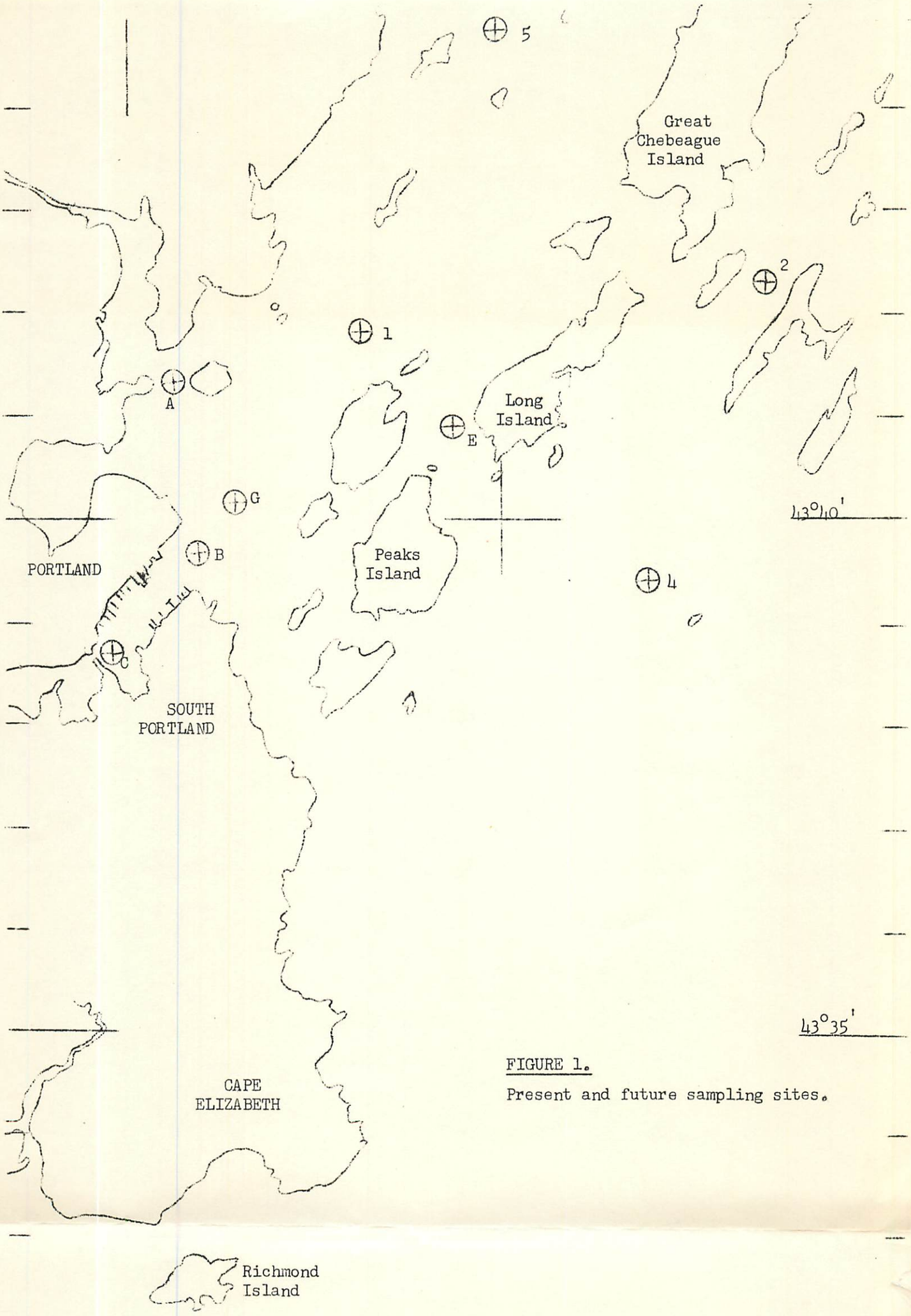

FIGURE 1.

Present and future sampling sites.