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**Gear data report from Atlantic plankton cruises for the R/V Pathfinder, December 1959 - December 1960**

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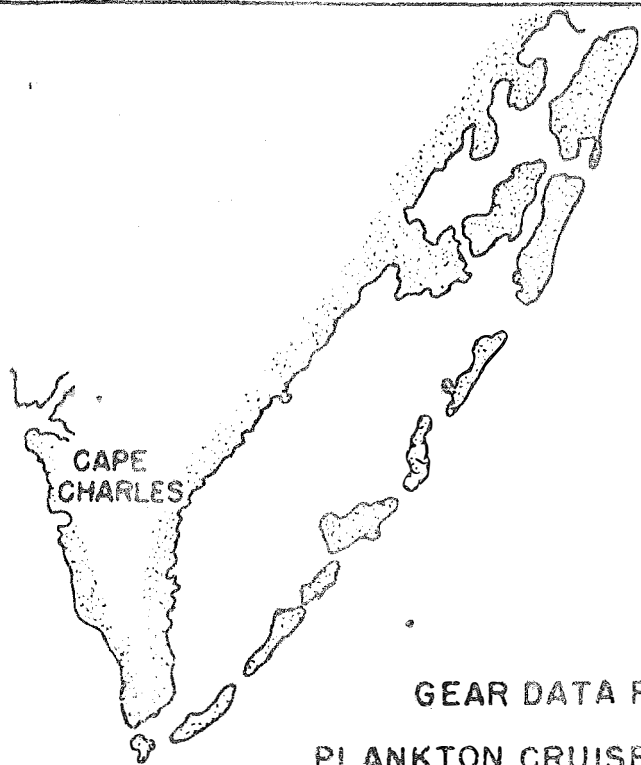
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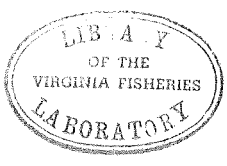
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GEAR DATA REPORT FROM ATLANTIC  
 PLANKTON CRUISES FOR THE R/V PATHFINDER  
 DECEMBER 1959 - DECEMBER 1960



VIRGINIA FISHERIES LABORATORY  
 SPECIAL SCIENTIFIC REPORT NO. 19

1961

I	II	III	IV
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730

720

710

700

650

640

VIMS  
 SH  
 1  
 V48  
 no.19

GEAR DATA REPORT FROM ATLANTIC PLANKTON CRUISES FOR THE  
R/V PATHFINDER

December 1959 - December 1960

In December 1959, the Ichthyology Research Section of the Virginia Fisheries Laboratory began a series of monthly cruises to obtain information on the distribution and abundance of pelagic fish eggs and larvae in the Atlantic off the mouth of Chesapeake Bay. A total of 22 stations, spaced at 10-mile intervals, were established in the Atlantic. In addition, three stations were regularly sampled in lower Chesapeake Bay. A detailed description of the study area and methods employed in collection of biological and hydrographic information is being published (Joseph, Massmann and Norcross, 1961).

This report consists of a compilation of the various types of gear used in the collection of the plankton (Tables 1, 2, 3). It seems advisable to distribute this information because of impending changes in the survey area and in the collecting gear. Such a report also obviates the necessity of repetitious recounting of gear use in subsequent papers resulting from the plankton survey.

The basic pattern of sampling consisted of 20-minute tows at 3 knots using surface and bottom gear. Meter or  $\frac{1}{2}$  meter nets were towed in pairs on the surface. Clarke-Bumpus nets were used to obtain surface and bottom samples, and the Gulf III was used for bottom tows during daylight hours. Relative straining capacities of the various gears were as follows: Clarke-Bumpus 1.0, Gulf III 10.4,  $\frac{1}{2}$  meter net 14.7, and meter net 63.9.

Literature Cited

Joseph, E. B., W. H. Massmann and J. J. Norcross. 1961.  
Investigations of inner continental shelf waters  
off lower Chesapeake Bay. Part 1 - General  
introduction and hydrography. Chesapeake Science  
(In press).

J. J. Norcross  
W. H. Massmann  
E. B. Joseph  
13 February 1961

Table 1. Collecting gear used by station by month<sup>1</sup>

		<u>DECEMBER 1959</u>			
		I	II	III	IV
		730	A, A	A, A	A, A
		720	A, A	A, A	A, A
		710	A, A	A, A	A, A
CB-0	A, A	700	A, A	A, A	A, A
		650	A, A, E	A, A	A, A
		640	A, A, E	A, A, E	A, A
		<u>JANUARY 1960</u>			
		I	II	III	IV
		730	B <sup>1</sup> , B <sup>1</sup> , D, D <sup>1</sup>	B <sup>1</sup> , B <sup>1</sup> , D, D <sup>1</sup>	B <sup>1</sup> , B <sup>1</sup> , C, D, E
		720	B <sup>1</sup> , B <sup>1</sup> , D, D <sup>1</sup>	B <sup>1</sup> , B <sup>1</sup> , C, D, E	B <sup>1</sup> , B <sup>1</sup> , C, D, E
		710	B <sup>1</sup> , B <sup>1</sup> , C, D, E	B <sup>1</sup> , B <sup>1</sup> , C, D, E	B <sup>1</sup> , B <sup>1</sup> , C, D, E
CB-0	A <sup>1</sup> , A <sup>1</sup> , C, D	700	B <sup>1</sup> , C, D, E	B <sup>1</sup> , B <sup>1</sup> , C, D, E	B <sup>1</sup> , B <sup>1</sup> , C, D, E
		650	A, A <sup>1</sup> , C <sup>1</sup> , D <sup>1</sup>	A, A <sup>1</sup> , C <sup>1</sup> , D <sup>1</sup>	A, A <sup>1</sup> , C <sup>1</sup> , D <sup>1</sup>
		640	A, A <sup>1</sup> , C <sup>1</sup> , D <sup>1</sup> , E	A, A <sup>1</sup> , C <sup>1</sup> , D <sup>1</sup> , E	A, A <sup>1</sup> , C <sup>1</sup> , D <sup>1</sup>

<sup>1</sup> A - Meter net - 0.7-0.8 Mesh dacron      A<sup>1</sup> Marion mesh  
 B - ½ Meter net - 0.7-0.8 Mesh dacron      B<sup>1</sup> Marion mesh  
 C - C/B S - #2 Mesh                              C<sup>1</sup> Marion mesh  
 D - C/B B - #2 Mesh                              D<sup>1</sup> Marion mesh  
 E - G III

Table 1 continued

		<u>FEBRUARY 1960</u>				
		I	II	III	IV	
		730		B, B, C, D, E	B, B, C, D, E	B, B, C, D, E
		720		B, B, C, D, E	B, B, C, D, E	B, B, C, D, E
		710	B, B, C, D	B, B, C, D, E	B, B, C, D	B, B, C, D
CB-0	B, C, D	700	B, B, C, D	B, B, C, D	B, B, C, D	B, B, C, D
		650	B, B, C, D	B, B, C, D, E	B, B, C, D, E	B, B, C, D, E
		640	B, B, C, D, E	B, B, C, D, E	B, B, C, D, E	B, B, C, D, E
		<u>MARCH 1960</u>				
		I	II	III	IV	
		730		B, B, C, D	B, B, C, D	B, B, C, D
		720		B, B, C, D	B, B, C, D	B, C, D
		710	B, B, C, D	B, B, C, D	B, B, C, D	B, B, C, D
CB-0	B, B, C, D, E	700	B, C, D	B, B, C, D	B, B, C, D	B, B, C, D
		650	B, B, D	B, B, C, D	B, B, C, D	B, B, C, D
		640	B, B, C, D, E	B, B, C, D	B, C, D	B, B, C, D

Table 1 continued

APRIL 1960

		I	II	III	IV
	730		B, B, C', D, E	B, B, C', D, E	B, B, C', D, E
	720		B, B, C', D, E	B, B, C', D, E	B, B, C', D, E
	710	B, B, C	B, B, C', D, E	B, B, C', D, E	B, B, C', D, E
CB-0	B, B, C, D, E	700	B, B, C, D	B, B, C', D	B, B, C', D, E
		650	B, B, C', D	B, B, C', D	B, B, C', D
		640	B, B, C', D	B, B, C', D, E	B, B, C', D

MAY 1960

		I	II	III	IV
	730		B, B, C, D	B, B, C, D	B, B, C, D
	720		B, B, C, D	B, B, C, D	B, B, C, D
	710	B, B, C, D	B, B, C, D	B, B, C, D	B, B, C, D
CB-0	B, B, C, D	700	B, B, C, D	B, B, C, D	B, B, C, D
		650	B, B, C, D	B, B, C, D	B, B, C, D
		640	B, B, C, D	B, B, C, D	B, B, C, D

Table 1 continued

		<u>JUNE 1960</u>				
		I	II	III	IV	
		730		B, B, C, D	B, B, C, D	B, B, C, D
		720		B, B, C, D	B, B, C, D	B, B, C, D
		710	B, B, C, D	B, C, D, E	B, B, C, D	B, B, C, D
CB-0	A, A, C, D, E	700	A, C, E	A, A, C, D	B, B, C, D, E	B, B, C, D
		650	A, A, C, D	B, B, C, D, E	B, B, C, D, E	B, B, C, D, E
		640	A, C, D	B, B, C, D, E	B, B, C, D, E	B, B, C, D, E
		<u>JULY 1960</u>				
		I	II	III	IV	
		730		B, B, C, D	B, B, C, D	B, B, C, D, E
		720		B, B, C, D	B, B, C, D	B, B, C, D, E
		710	B, B, C, D	A, A, C, D	A, A, C, D, E	A, A, C, D, E
CB-0	B, B, C, E	700	A, A, C, D, E	A, A, C, D, E	A, A, C, D, E	A, A, C, D, E
		650	A, A, C, D, E	A, A, C, D, E	A, A, C, D, E	A, A, C, D, E
		640	A, A, C, D, E	A, A, C, D, E	A, A, C, D, E	A, A, C, D, E

Table 1 continued

		<u>AUGUST 1960</u>				
		I	II	III	IV	
		730		B, B, C, D	B, B, C, D	B, B, C, D
		720		B, B, C, D	B, B, C, D	B, B, C, D
		710	B, B, C, D	B, B, C, D	B, B, C, D	B, B, C, D
CB-0	B, B, C, D, E	700	B, B, C, D	B, B, C, D	B, B, C, D	B, B, C, D
		650	B, B, C, D, E	B, B, C, D, E	B, B, C, D, E	B, B, C, D, E
		640	B, B, C, D, E	B, B, C, D, E	B, B, C, D, E	B, B, C, D, E
		<u>SEPTEMBER 1960</u>				
		I	II	III	IV	
		730		B, B,	B, B	B, B
		720		B, B	B, B	B, B
		710	B, B	B, B	B, B	B, B, C, D
CB-0	B, B, C, D, E	700	B, B, C, D	B, B, C, D	B, B, C, D	B, B, C, D
		650	B, B, C, D, E	B, B, C, D, E	B, B, C, D, E	B, B, C, D, E
		640	B, B, C, D, E	B, B, C, D, E	B, B, C, D, E	B, B, C, D, E



Table 1 continued

		<u>NOVEMBER 1960</u>				
		I	II	III	IV	
		730		B, B, C, E	B, B, C, E	B, B, C, E
		720		B, B, C, E	B, B, C, E	B, B, C, E
		710	B, B, C, E	B, B, C, E	B, B, C, E	B, B, C, E
CB-0	B, B, C, E	700	B, B, C, E	B, B, C, E	B, B, C, E	B, B, C, E
		650	B, B, C, E	B, B, C, E	B, B, C, E	B, B, C, E
		640	B, B, C, E	B, B, C, E	B, B, C, E	B, B, C, E
		<u>DECEMBER 1960</u>				
		I	II	III	IV	
		730		B, B, C, D, E	B, B, C, D, E	B, B, C, D, E
		720		B, B, C, D, E	B, B, C, D	B, B, D
		710	B, B, C, D, E	X	X	B, B, C, D
CB-0	B, B, C, D, E	700	B, B, C, D, E	B, B, C, D	B, B, C, D	B, B, C, D
		650	B, B, C, D, E	B, B, C, D, E	B, B, C, D	B, B, C, D, E
		640	B, B, C, D, E	B, B, C, D, E	B, B, C, D, E	B, B, C, D, E

Table 2. Collecting gear used on Chesapeake Bay stations by month. Symbols remain the same as for Table 1.

		<u>December 1959</u>
CB-20	A', A', E	
CB-10	A', A', E	
		<u>January 1960</u>
CB-20	A', A', C', D'	
CB-10	A', A', C', D'	
		<u>February 1960</u>
CB-20	B, C, D	
CB-10	B, C, D	
		<u>March 1960</u>
CB-20	B, B, C, D, E	
CB-10	B, B, C, D, E	
		<u>April 1960</u>
CB-20	B, B, C, D, E	
CB-10	B, B, C, D, E	
		<u>May 1960</u>
CB-20	B, B, C, D	
CB-10	B, B, C, D	
		<u>June 1960</u>
CB-20	A, A, C, D, E	
CB-10	A, A, C, D, E	

Table 2 continued

July 1960

CB-20 B, B, C, D, E

CB-10 B, B, C, D, E

August 1960

CB-20 B, B, C, D, E

CB-10 B, B, C, D, E

September 1960

CB-20 B, B, C, D, E

CB-10 B, B, C, D, E

November 1960

CB-20 B, B, C, E

CB-10 B, B, C, E

December 1960

CB-20 B, B, C, D, E

CB-10 B, B, C, D, E

Table 3. Additional samples collected from various locations. Symbols remain the same as for Table 1.

1-19-60	Wachapreague Channel - B <sup>1</sup> - all night	surface set
1-20-60	Wachapreague Inlet - B <sup>1</sup> B <sup>1'</sup> - all night	surface set
1-23-60	Machipongo Inlet - B <sup>1</sup> B <sup>1'</sup> - 4 hour	surface set
3-18-60	Wachapreague Channel - B - all night	surface set
4-12-60	Wachapreague Channel - B - 1.5 hour	surface set
5-16-60	Lynnhaven Roads - B, B - 1.0 hour	surface set
5-18-60	Wachapreague Channel - B, B - all night	surface set
6-23-60	Wachapreague Channel - B - 1.5 hour	surface set
8-30-60	Atlantic Ocean 37°20' N 74°44' W - B, B, C, D - 20'	tow
8-31-60	Atlantic Ocean 37°20' N 73°45' W - B, B - 20'	tow
8-31-60	Atlantic Ocean 37°10' N 73°45' W - B, B - 20'	tow
9-22-60	Sand Shoal Inlet - B - 1.5 hour	set
11-19-60	Atlantic Ocean 36°02' N 75°20' W - B - 1.5 hour	tow