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CENTER FOR ENVIRONMENTAL AND ESTUARINE STUDIES UNIVERSITY OF MARYLAND Ref. No. [UMCEES]CBL 85-126 VMRR 85-6 November 4, 1985

Chesapeake Biological Laboratory Solomons, MD 20688

FALL 1985 POTOMAC RIVER OYSTER BAR SURVEY

Elgin A. Dunnington James P. Whitcomb

Selected oyster bars in the Potomac River were sampled on 21, 22, and 23 October 1985. Bottom material was dredged aboard the MISS KAY, and counts and observations were made by personnel from MD/DNR, UMCEES/CBL, VIMS, PRFC, and VMRC. Standard bar composition data were recorded. A summary of the collected information is appended.

There has been a good general set of oyster spat this year. Reproduction has not been confined, as it often is, to the area near the mouth of the river; it has extended up through the middle bars to some upper bars, and into the tributaries. This is the most widely distributed recruitment since 1963. Only the most upriver bottoms, which are nearly devoid of broodstock, failed to share in this year's set. Planted shells which were disappointingly clean of spat (and fouling) last year received a good spatfall this year. Most important however, are the spat attached to "natural" cultch such as oysters, oystershell fragments, clamshells, mussel shells, and stones, because most of them can grow to maturity where they are without being transplanted. Maturation of the 1985 set will yield more widely dispersed oyster populations, resulting in less concentrated harvest efforts. Although this year's spat counts may seem low when compared to what are usually regarded as "seed quality" numbers in other areas, they are nevertheless significant quantities in the Potomac, where survival is usually good.

The maximum yield from this fortuitous reproduction will only be realized if these spat are allowed to grow to market size. Because of the general scarcity of cultch, a substantial portion of the 1985 spat are attached to market size oysters. Spat which are difficult to cull off market oysters now without killing them will be more easily separated without injury next year.

Mortalities were generally low except at Cornfield and in the 1985 Cole's Point seed.

The condition of cysters in the middle and upper river was good, and in the lower river it was fair. These levels of "fatness" are normal for this time of year.

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Box	Market Oysters	Volune १ Markets	Small Oysters	Volume २ Small	Spat	Old Boxes	Recent Boxes	Gapers	Volume % Shells	% Recent Boxes an Gapers	id Remarks
Cedar Point ('al seed)	56	20	20	5	Ø	8	Ø	Ø	74	Ø	
Cedar Point (natural)	40	25	2	<1	Ø	Ø	Ø	Ø	75	Ø	One spat in dredge lick
Watsons ('81 seed)	20	15	4	<1	Ø	14	Ø	Ø	84	Ø	All boxes were smalls
Gum Bar (natural)	68	30	38	8	Ø	24	Ŵ	Ø	42	Ø	Old brood stock planting
Swan Point (outside)	76	60	4	Ţ	8	10	Ø	Ø	3Ø	Ø	
Swan Point (inside)	12	8	Ø	Ø	Ø	16	Ø	Ø	82	Ø	One spat in dredge lick
Cobb Bar (lower)	102	5Ø	8	1	18	32	Ø	Ø	30	Ø	
Cobb Bar ('81 seed)	130	64	4	<1	16	26	Ø	Ø	22	Ø	ſ
Dukehart Channel ('82 seed)	108	55	2	<1	2Ø	14	Ø	Ø	46	Ø	
Sheepshead (lower inside)	64	36	12	2	16	8	6	Ø	` 4 9	6	
Huggins (tug damage)	6Ø	3Ø	8	3	72	16	2	Ø	49	1	
Knott's Hollow (natural)	30	22	2	1	85	12	6	Ø	63	5	
Posey's Bluff ('81 & '83 seed)	106)	60	3Ø	7	24	12	Ø	Ø	25	Ø	
Kingcopsico ('81 seed)	86	40	16	3	4	2Ø	Ø	Ø	47	Ø	
Coles Point ('85 seed)	104	32	118	18	4	44	22	Ø	35	9	Most recent boxes are transplanted seed
Ragged Point (upper)	82	6Ø	4	<1	ЗØ	2	4	Ø	35	3	

SUMMARY, FALL 1985 POTOMAC RIVER OYSTER BAR SURVEY

Bes.	Market Oysters	Volume % Markets	Small Oysters	Volume % Small	Spat	Old Boxes	Recent Boxes	Gapers	Volume % Shells	% Recent Boxes and Gapers	d Remarks		
Ragged Point	38	30	10	3	18	36	8	Ø	46	11			
(outside deep) Ragged Point (lower inside)	SØ	35	10	1	108	12	8	Ø	47	4			
St. Georges Is. ('85 gr. shell)	20	10	4	1	312	4	2	Ø	48	<1			
St. Georges Is. ('84 gr. shell)	6	1	10	2	176	Ø	6	Ø	66	3			
St. Georges Is. (natural)	92	35	42	10	112	14	2	Ø	42	<1			
Bonum (nat. & gr. she)	32 1)	3Ø	6	1	122	8	2	Ø	5Ø	1			
Bonum ('84 shells, dr.	Q	Ø	Ø	Ø	46	Ŵ	2	Ø	92	4			
& gr.) Bonum (natural)	28	20	Ø	Ø	112	2	6	Ø	67	4			
Lynch Point ('79 shells)	46	20	10	1	204	4	8	Ø	56	1			
Hoy Island ('85 gr. shells)	2Ø)	12	12	4	4Ø	4	8	Ø	61	1			
Hog island (natural)	146	44	40	9	6Ø	4	4	Ø	41	2	Probable work site. About 12% of markets have spat.		
Great Neck	4	1	6	1	132	Ø	4	Ø	7Ø	3	nave opuer		
Great Neck (natural)	62	20	14	2	132	4	4	Ø	6Ø	2	Probable work site. About 20% of markets have spat.		
Kitts Point	Ø	Ø	4	2	180	12	4	Ø	63	2	nave spac.		
Kitts Point ('85 dr. shell)	Ø	Ø	Ø	Ø	296	2	12	Ø	75	4			
Kitts Point ('79 dr. shell)	72	35	52	11	266	36	12	Ø	21	3			
PRFC/DNR add.#2 ('34 dr. shell)	Ø	Ø	28	10	786	Ø	1Ø	Ø	ЗØ	1			

Box	Market Oysters	Volume % Markets	Small Oysters	Volume % Small	Spat	Old Boxes	Recent Boxes	Gapers	Volume % Shells	% Recent Boxes ar Gapers	id Remarks			
Jones Shore Lot #1, outside	66	22	234	4Ø	166	12	14	Ø	12	3				
Jones Shore Lot #1, inside	104	40	126	22	58	6	12	Ø	31	4				
Jones Shore Lot #2, outside ('84 shell)	16	7	28	6	442	2	2	Ø	57	<1				
Jones Shore Lot #2, inside ('84 shell)	32	18	8	1	210	22	12	Ø	31	5				
Jones Shore Lot #12	48	21	48	11	528	14	8	Ø	35	l				
Cornfield Harbon (natural)	r 80	3Ø	6Ø	13	47Ø	18	38	Ø	16	6				
Cornfield Harbon ('85 dr. shell)	r 8	2	6	1	222	Ø	Ø	Ø	17	Ø		¢		
Cornfield Harbon (natural)	r 88	3Ø	252	3Ø	296	32	28	Ø	17	4				

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