



W&M ScholarWorks

Reports

10-25-1984

Fall 1984 Survey of Proposed Potmac Handscape Extension Area

Elgin A. Dunnington
Virginia Institute of Marine Science

Dexter S. Haven
Virginia Institute of Marine Science

Follow this and additional works at: <https://scholarworks.wm.edu/reports>



Part of the [Aquaculture and Fisheries Commons](#)

Recommended Citation

Dunnington, E. A., & Haven, D. S. (1984) Fall 1984 Survey of Proposed Potmac Handscape Extension Area. Marine Resource Report No. 84-10. Virginia Institute of Marine Science, College of William and Mary. <http://dx.doi.org/doi:10.21220/m2-vbxj-wr26>

This Report is brought to you for free and open access by W&M ScholarWorks. It has been accepted for inclusion in Reports by an authorized administrator of W&M ScholarWorks. For more information, please contact scholarworks@wm.edu.

CENTER FOR ENVIRONMENTAL AND
ESTUARINE STUDIES
UNIVERSITY OF MARYLAND
Chesapeake Biological Laboratory
Solomons, Maryland 20688

Ref. No. (UMCEES)CBL 84-107
VIMS Marine Resource Report #84-10
25 October 1984

FALL 1984 SURVEY OF PROPOSED
POTOMAC HANDSCRAPE EXTENSION AREA

Elgin A. Dunnington
Dexter S. Haven

It has been proposed that the area in which handscraping is permitted in the Potomac be extended upstream to a line between Hollis Marsh and the cross on St. Clements Island. In order to assess oyster populations within the proposed extension, samples were dredged aboard the MISS KAY on 18 September 1984. Counts and observations were made by personnel from MD/DNR, VMRC, UMCEES/CBL, VIMS, and PRFC and by a waterman. Standard bar composition data were recorded. A summary of the collected information is attached. Samples that were taken within this area during the regular fall 1984 survey are also listed.

Significant numbers of oysters were found only on bottoms that were already known and recognized to be productive. Areas that had been suggested as possible sources of oysters were either barren or contained only a few scattered oysters. Only a few live oysters were found in water over 20 feet deep. Thus it appears that contrary to some beliefs, oyster stocks within this area are not substantially larger than has been indicated by regular surveys and harvest records.

No spat were seen in the area, and long term records indicate a very poor setting potential for this part of the river. Therefore neither planted shell or shells exposed by dredging would significantly enhance oyster reproduction on these bottoms.

Increased harvest pressure through handscraping would probably result in an initial spurt of increased production, but it would surely be followed by decreased yields if the removals were not replenished with seed. Continued restriction to hand tonging would keep the area in production longer than if the more efficient handscraping were allowed there. Current biological and financial resources available to the Potomac River Fisheries Commission limit the amount of seed planting which can be done in this area to much less than would be required to support a more active fishery. The opening of this portion

Ref. No. (UMCEES)CBL 84-107

VIMS Marine Resource Report #84-10, Cont'd.

Page 2

of the Potomac to handscraping could only yield a small, temporary benefit to a few watermen--and the depleted bottoms could not be replenished soon.

Note: Additional material related to this matter can be found in two earlier reports.

Haven, D. S. and E. A. Dunnington. 1982. Report to the Potomac River Fisheries Commission on hand scraping and oyster culture in the hand scrape area. Univ. of MD Cen. Env. & Est. Stud. Ref. No. 82-69 CBL/VA Inst. Mar. Sci. Mar. Res. Rep. #82-7.

Haven, D. S. and E. A. Dunnington. 1983. Report to the Potomac River Fisheries Commission on hand scraping and oyster culture in the lower Potomac River. Univ. of MD Cen. Env. & Est. Stud. Ref. #83-80 CBL/VA Inst. Mar. Sci. Mar. Res. Rep. #83-5.

SUMMARY, FALL 1984 SURVEY OF PROPOSED POTOMAC HANDSCRAPE EXTENSION AREA

Bar	Market Oysters	Volume % Markets	Small Oysters	Volume % Small	Spat	Old Boxes	Recent Boxes	Gapers	Volume % Blank Shells	% Cumulative Mortality	% Recent Boxes & Gapers	Remarks
*Heron Isl. ('81 & '83 seed)	74	36	58	15	0	24	0	0	39	15	0	
*Huggins	62	22	4	1	0	24	0	0	69	27	0	
Posey's Bluff (20 ft. depth)	--	Sample was 100% buried			--	--	--	--	--	--	--	
Posey's Bluff (15 ft. depth)	--	Sample was 90% buried			--	--	--	--	--	--	--	
Posey's Bluff (12 ft. depth)	64	38	80	24	0	26	2	0	26	15	1	
Flood Creek (22 ft. depth)	6	2	4	1	0	2	0	0	95	17	0	Stony bottom
Blake Creek (12 ft. depth)	--	No Sample			--	--	--	--	--	--	--	
S. of Blake Creek (12 ft. depth)	4	1	0	0	0	0	0	0	5	0	0	Stones comprise most of sample.
Herring Ck. (12 ft. depth)	30	15	10	4	0	8	2	0	78	20	4	

Bar	Market Oysters	Volume % Markets	Small Oysters	Volume % Smalls	Spat	Old Boxes	Recent Boxes	Gapers	Volume % Blank Shells	% Cumulative Mortality	% Recent Boxes & Gapers	Remark
Wright's Pt. ('81 seed)	64	32	24	8	0	28	0	0	47	24	0	
Peach Orchard	---	No Sample	--	--	--	--	--	--	--	--	--	
Peach Orchard (15 ft. depth)	52	22	4	<1	0	4	2	0	75	10	3	
Stony Bar (12-18 ft. depth)	66	50	14	8	0	20	0	0	22	20	0	
*Coles Pt. ('82 seed)	62	38	10	3	0	22	0	0	43	23	0	
*Ragged Pt. (upper inside)	70	55	4	1	0	12	0	0	34	14	0	
*Ragged Pt. (lower inside)	74	40	28	6	0	26	0	0	44	20	0	
Ragged Pt. (upper, 15 ft. depth)	50	50	4	<1	0	8	0	0	36	13	0	
Red Bar ('78 seed, 15-18 ft. depth)	66	28	18	10	0	10	0	0	57	11	0	
Bonum (16-20 ft. depth)	44	24	4	<1	0	32	0	0	53	40	0	
Bonum ('82 shell)	62	35	14	3	0	16	0	0	52	17	0	

Sample taken during regular fall survey. Data are repeated here for these locations within the proposed extension area.