H02946

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No.

Registry No. H02946

LOCALITY

State Maryland

General Locality Chesapeake Bay

Sublocality West Shore, Kedge Strait to Holland Strait

19 07

CHIEF OF PARTY
C. C. Yates, Swepson Earle

LIBRARY & ARCHIVES

DATE

MARYLAND OYSTER SURVEY

CERTIFIED PROJECTION
D
1907
Somerset County
~~Dorchester County~~
Natural Oyster Bars
Crab Bottoms
Clam Beds
and
Triangulation Stations

surveyed by

MARYLAND SHELL FISH COMMISSION
U. S. BUREAU OF FISHERIES
U. S. COAST AND GEODETIC SURVEY

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Scale 1/10,000

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Explanation

The primary object of the work covered by the projections of the Maryland Oyster Survey was the gathering of information for the purposes of an "oyster survey." Consequently these sheets do not fulfill the requirements of an ordinary hydrographic survey. But it is intended that they shall be used for all future plottings of the hydrography contained in the records of SOUNDINGS of the Maryland Oyster Survey filed in Archives.

In general, the lines of soundings only cover the vicinity of the natural oyster bars outlined in green ink on these projections, and therefore, it will be useless to plot the soundings unless information is desired for these particular localities. For the same reason, the boundaries of the Natural Oyster Bars shown on the Maryland Oyster Survey Charts, Nos. 1 to 42 published by the U. S. Coast and Geodetic Survey, can be used as a general index of the limits of the hydrography of the Maryland Oyster Survey.

For descriptive report see U. S. Coast and Geodetic Survey publications "Summary of Survey of Oyster Bars of Maryland" and "Survey of Oyster Bars, Somerset County, Maryland," and for limits of related projections see progress map in the latter publication.

Boundaries of Natural Oyster Bars are indicated by green lines.

Boundaries of Crab Bottoms, when on projections, are indicated by blue lines.

Boundaries of Clam Beds, when on projections, are indicated by yellow lines.

Triangulation Stations are indicated by small red triangles.

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This projection is one of a series of eighty-seven original certified projections of all oyster bar and other boundaries established by the Maryland Oyster Survey and was filed in the Archives by C. C. Yates, representative of the U. S. Coast and Geodetic Survey on the work of the Maryland Oyster Survey.

C. C. Y.
Balto. 6/16/13

COAST AND GEODETIC SURVEY
O.H.Tittmann, Superintendent

2946

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STATISTICS OF HYDROGRAPHY

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TO ACCOMPANY HYDROGRAPHIC PROJECTIONS AND RECORDS RESULTING FROM THE SURVEY OF OYSTER BARS OF SOMERSET COUNTY, MARYLAND MADE BY THE MARYLAND SHELL FISH COMMISSION IN COOPERATION WITH THE UNITED STATES COAST AND GEODETIC SURVEY.

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PROJECTIONS

B——Wicomico River and Mouth of Nanticoke River
C——Tangier Sound off Deal Island
D——Chesapeake Bay, from Holland to Kedge Straits
E——Tangier Sound off Entrances to Manokin and Big Annemessex Rivers
F——Manokin River
G——Big Annemessex River
H——Chesapeake bay, off West Shore of Smith Island
I——Tangier Sound, between Entrances to Big and Little Annemessex Rivers
J——Lower Tangier Sound
K——Outer Pocomoke Sound
L——Inner Pocomoke Sound
M——Chesapeake Bay, off Kedge Straits
N——Waters of Smith Island

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UNITED STATES COAST AND GEODETIC SURVEY
C. C. Yates, Chief of Party

MARYLAND SHELL FISH COMMISSION
Swepson Earle, Hydrographic Engineer

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1907

NOTES: The primary object of the work covered by these statistics, was the furnishing of information for the purposes of the "Oyster Survey". Consequently the hydrography does not necessarily fulfill all the requirements of cusomary hydrographic operations.

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In general, the lines of soundings only cover the area of the natural oyster bars as indicated on the projections in green ink;and therefore, it will be useless to plot up a sheet for hydrographic information unless the waters in question are included in these oyster bar boundaries.

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For Progress Map showing scheme of projections, etc., see published report of Survey of Oyster Bars, Somerset County Maryland and Descriptive Report in Archives.

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For Index showing relation of sounding and tidal records with projections, see the following statistics.

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For purposes of the "Oyster Survey" several well established rules of the Coast and Geodetic Survey as to the manner and method of taking soundings have been modified or omitted in the sounding records. Notably, the jumping about from book to book without reference to the limits of the projections, the use of a "book letter" in addition to a volume number, and the substitution of letters and angle numbers by volume for letters and angle numbers by day. However, no difficulty will be experienced in plotting the work if the combined statistics, index and explanation attached to Volume I and to each projection is consulted.

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E X P L A N A T I O N

These Statistics and Index cover all hydrography executed in connection with the "Oyster Survey" in Somerset County and adjacent waters of Maryland. All this work is contained in the sounding and tidal records on file in the Archives of the Survey, but only a part of it has been plotted on the projections. For purposes of an index to the hydrographic work, the boundary lines of oyster bars as shown on charts of oyster bars of"Somerset County and Adjacent Waters" published by the Survey, indicate very closely the area covered by soundings. Hence, it will not be necessary to plot up any of the hydrography covered by these statistics, UNLESS IT IS DESIRED TO INVESTIGATE THE WATERS INCLUDED IN THE OYSTER BOUNDARY LINES AS SHOWN ON THE PUBLISHED CHARTS OF OYSTER BARS.

The following tables are self explanatory except as to column 2 and 3.

The second column (under heading C.& G.S. Day Letter) gives the day letter as customarily used in the Survey, but the different colors, stated in parenthesis at the head of the column, indicate different series of alphabets not different sounding boats. The third column (under heading of M.S.F.C. Book Letter) gives the book letter of the Maryland Shell Fish Commission. This was adopted by the M.S.F.C. for purposes of their own. It really has no meaning except as an additional symbol for the volume number (Vol. No.) given in the 4th column. In this connection, attention is called to the fact that there are two sets of angle numbers in the sounding records. The ones in black pencil are peculiar to the book letter system described above, and occupy the ordinary position of day angle numbers. The ones in colored pencil are the day angle numbers of the C.& G.S. and they occupy the column in the sounding record headed up " Boat head by Compass".

These colored numbers correspond to such positions as were plotted on the projections, and are the ones that should be used in any future plotting that may be done on the sheets.

Attention is also called to another feature of the sounding records;- In the column under heading of "Remarks" one of the capital letters B, S, M, or D, occur opposite each sounding. These letters refer to the indications of the oyster shell character of the bottom as shown by vibration of a wire to which is attached a chain dragged over the bottom. This chain causes the wire to vibrate in proportion to the number of shells it is passing over, and the observer with his hand on the wire calls out at each sounding, the character of the bottom the vibrations indicate. For no vibrations the words "barren of shells" are used(B); occasional vibrations are named "scattering shells" (S); frequent vibrations are named " medium amount of shells" (M); and continuous vibrations and jerks are named " dense amount of shells" (D).

The "Miles of sounding lines" given in the sounding records at the end of each days work and those given on the labels of the books are in nautical miles; although the following statistics give the "statute miles" for each day, as is customary in the Survey.

In addition to the usual contents of tabular statistics, there has been added a column under the heading "Tide Vol. No.", which gives the "series numbers" of the tide record volume of Somerset County used in the reduction of soundings of the sounding record indicated on the same line of the table. These tide volume numbers are given on the bottom of the label of the tidal records and are in addition to the customary number which indicates merely the volume of tidal observations at one particular station.

The following table shows the relation between the customary station number of the Tide Record Volumes and the " series numbers" given in these statistics.

Dates	Locality	Tide Gauge	Serial No. (Statistics)	Vol. No. (Archives)
May 27 to June 29	Tangier Sound	James Id. L.H.	I	I
July 16 to Aug 30	Kedge Straits	Solomons Lump L.H.	II	I
Sept. 5 to Sept 16	Off Monie Bay	Great Shoals L.H.	III	I

Date 1907	C.& G.S. Day Letter (red)	M.S.F.C. Book Letter	Volume No.	Positions	Soundings	Miles Statute	Hyd. Sheet Letter	Tide Vol. No.
May 29	a	A	I	94	708	10.4	L	I
" 30	b	A	I	92	645	7.8	K	I
June 4	c	B	II	98	524	10.2	J,K	I
" 6	d	B	II	131	788	14.4	J	I
" 7	e	B	II	43	220	4.2	J	I
" 10	f	C	III	40	198	3.9	I	I
" 13	g	C	III	27	135	2.6	I	I
" 14	h	C	III	5	23	0.4	I	I
" 17	i	A,D	I-IV	105	776	10.4	L,K	I
" 18	j	C	III	109	572	9.5	G	I
" 27	k	D	IV	20	228	3.1	L	I
" 28	l	E	V	67	554	14.7	M	I
July 18	m	E	V	69	515	13.2	H,M	II
" 19	n	E	V	54	387	10.4	D	II
" 22	o	C	III	89	733	15.0	F,G	II
" 23	p	F	VI	40	315	6.3	F,G	II
" 24	q	G	VII	101	878	17.8	F,G	II
" 25	r	F	VI	85	686	13.5	F,G	II
" 26	s	F	VI	25	190	4.2	F	II
Aug. 1	t	F	VI	77	576	10.6	F	II
" 2	u	G	VII	69	476	10.4	G	II
" 3	v	H	VIII	5	37	0.6	F,G	II
" 5	w	H	VIII	90	637	11.5	G	II
" 7	x	I,G	VII-IX	52	375	7.8	D,G	II
" 8	y	I	IX	69	525	10.4	E	II
" 9	z	H	VIII	46	294	6.3	G	II

Date 1907	C.& G.S. Day Letter (blue)	M.S.F.C. Book Letter	Volume No.	Positions	Soundings	Miles Statute	Hyd. Sheet Letter	Tide Vol. No.
Aug. 13	a	J	X	49	306	6.2	F	II
" 20	b	J	X	89	555	9.8	F	II
" 21	c	G,J	VII-X	74	537	10.9	E,F	II
" 27	d	G,I	VII-IX	86	581	11.4	E	II
" 28	e	K	XI	89	508	10.2	E,	II
" 29	f	K	XI	89	619	12.5	E	II
" 30	g	K	XI	29	212	4.0	C	II
Sept. 6	h	L	XII	95	450	8.1	B	III
" 10	i	I,M	IX-XIII	105	572	10.9	B,C	III
" 12	j	M	XIII	71	504	9.7	B,C	III
" 13	k	L	XII	126	605	11.8	B	III
" 14	l	L	XIIi	20	84	1.6	B	III
" 16	m	L	XII	20	82	1.5	B	III

V.E.C.
Nov.3,1908.

HYDROGRAPHIC SHEET NO.2946.

West Shore, Kedge Strait to Holland Strait, Maryland, by Asst. C. S. Yates and Swepson Earle, 1907.

TIDES

	Janes Id. Lt.Ho. ft.	Solomons Lump Lt.Ho. ft.	Great Shoals Light House ft.
Mean low water, or plane of reference on staff	3.94	1.72	1.80
Lowest tide observed	3.20	1.10	1.00
Highest " "	6.95	4.20	5.10
Mean rise and fall of tides	1.78	1.68	2.46