

ORIGINAL LOG BOOK OF THE "FISH HAWK"

UNITED STATES FISH COMMISSION

STATION NUMBERS

Numbers 1030 to 1073

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

Date,

Locality,

Bearings,

Time of day, ; of tide,

State of sky,

Temperature of air,

“ surface of water,

“ at depth of fathoms,

“ of bottom,

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

1030

REMARKS.

Depth	Spec Grav	Temp	
Surface	1.0249	66	1.02574
5 fms	1.0249	66.5	1.02581
10 ~	1.0248	65.5	1.02556

Trawling
Time

	Down	Up
0	1.52.45	38.40
100	1.56.10	35.25
200	1.59.35	32.15
300	2.03.15	29.05
400	2.10.00	25.45
500	15.50	22.05
530	2.17.10	2.20.40
	2.17.10	→

TEMPERATURE RECORD.

Instrument used, *Chester Lake Dredge*

Current number of observation, *1030*

Date, *Sept 14, 1881*

Locality,

Bearings, *Lat 39.58.30 N.*
Long 69.15 W

Time of day, *1.52* ; of tide,

State of sky, *Foggy*

Temperature of air, *65*

" surface of water, *66*

" at depth of *5* fathoms, *66 - 10 fms 63°*

" of bottom, <i>41</i>	<i>20 - 48</i>
	<i>30 - 45</i>
	<i>50 - 49</i>
	<i>100 - 46</i>

Depth, in fathoms, *325-337*

Nature of bottom, *Yellow mud*

Direction of surface current,
wind - E.N.E.

Force of surface current,
wind 4

Direction of bottom current,
Drift N by W. 1/2 miles

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

1031

REMARKS.

Depth	Spec Grav.	Temp.	
Surface	1.0247	65	1.025390
5 fms	1.0248	63.5	1.02528
10 "	1.0248	63	1.02521

	Soundings		Trawling	
	Time		Time	
	Down	up	Down	up
0	2.45.25	2.54	2.54.45	44.35
100	46.25	2.52.05	2.58.30	39.20
200	47.30	2.50.15	3.00.15	3.35.25
240	48.05	2.49.50	—	—
300			3.02.25	3.31.15
400			3.05.50	3.27.45
500			3.08.30	
520			3.09.05	3.22.35

24.20

TEMPERATURE RECORD.

Instrument used, *Trawl*
 Current number of observation, *1031*
 Date, *Sept. 14. 81*
 Locality,
 Bearings, *Lat 39.57 N*
 Long 69.19 W
 Time of day, *2.54* ; of tide,
 State of sky, *Foggy*
 Temperature of air, *64*
 " surface of water, *65*
 " at depth of *5* fathoms, *63.5*. *10 fms 58*
 " of bottom, *46* *20 " 47*
 30 " 45
 Depth, in fathoms, *240 255* *50 " 46*
 Nature of bottom, *yellow mud*
 Direction of surface current,
 " - *Wind - N.N.E.*
 Force of surface current,
 " - *Wind - 4*
 Direction of bottom current,
 Drift N.W + N - 1 1/2 mile
 Force of bottom current,
 Name of vessel,
 To what service attached,
 Name and rank of commanding officer,
 Name and position of observer,

1032

REMARKS.

2 1915

Depth	Spec & no.	Temp	
Surface	1.0247	65	1.02539
5 fms	1.0247	63.5	1.02528
10 "	1.0248	63	1.02521

Trawl

		Down	up
0		4.00.00	
100		06.30	
200		10.45	
300		14.10	
400		18.15	

TEMPERATURE RECORD.

Instrument used,

Small Trawl

Current number of observation,

1032

Date,

Sept. 14, 91

Locality,

Bearings,

Lat - 39.56 N

Long 69.22 W

Time of day,

4.00

; of tide,

State of sky,

Cloudy

Temperature of air,

65

"

surface of water, *65*

"

at depth of *5* fathoms, *63.5*, *10 fms 58*

"

of bottom, *46*

20 - 47

30 - 45

50 - 46

Depth, in fathoms,

~~*200*~~ *208*

Nature of bottom,

Yellow Mud

Direction of surface current,

Wind NNE

Force of surface current,

Wind 5

Direction of bottom current,

Drift

Force of bottom current,

2.2. 1/4'

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

1088.

		Trawl Time	
		Down	up
0		5.05	
100			
200			
300			
382		5.25	
404		5.26.45	5.35.45

Reynolds Zumbra Thermometer
no. 46405. Checked shield
& used for surface tem-
peratures.

No 46402, substituted
for bottom & intermediate
temperatures.

TEMPERATURE RECORD.

Instrument used,

Trawl.

Current number of observation,

1033

Date,

Sept 14, 1881.

Locality,

Bearings,

*Lat 39.56 N
Long 69.24 W*

Time of day,

4.55 ~~PM~~

State of sky,

b. c.

Temperature of air,

66°

" surface of water,

63° N. G. #46405

" at depth of

5 fathoms, 63° - 10 f 57°

" of bottom,

20 f 47°

Depth, in fathoms,

*183
175 f. S. G. 30 f 47°*

Nature of bottom,

S. G.

Direction of ~~surface current,~~

Wind S. E.

Force of ~~surface current,~~

do 3.

Direction of ~~bottom current,~~

drift NW.

Force of ~~bottom current,~~

do 2 m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

1034

REMARKS.

Serial		Travel		
Time	exp	Time	exp	
0	5.55.30	6.05.00	6.07.45	6.41.00
100	5.56.50	6.03.28	6.14.00	6.37.15
200	15.7.55	6.03.00		
200			6.17.25	6.33.20
300			6.20.00	6.28.15

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

1034

Date,

Sept, 14, 81

Locality,

Bearings,

Lat 39.56 N
Long 69.26 W

Time of day,

5.53; of tide,

State of sky,

b.c.

Temperature of air,

66

" surface of water, 62.

" at depth of 5 fathoms,

n.g. #46402.
60 10 fms 57
20 " 47
30 " 47
50 " 49

" of bottom, 46.5

Depth, in fathoms,

~~140~~ 146

Nature of bottom,

Sand & yellow mud

Direction of surface current,

Wind N.E.

Force of surface current,

Wind 3

Direction of bottom current,

Drift - N.N.W 1/2 mile

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

TEMPERATURE RECORD.

Instrument used,

Iron Trawl

Current number of observation,

1035

Date,

Sept. 14. 81

Locality,

Bearings,

Lat - 39.57 N
Long 69.28 W

Time of day,

6.56 ; of tide,

State of sky,

b. c.

Temperature of air,

65

"

surface of water, *62*

"

at depth of *5* fathoms, *60*th

10 fms 57

"

of bottom, *47*

20 - 48

Depth, in fathoms,

116 120

30 - 47
50 - 49

Nature of bottom,

Sand

Direction of surface current,

wind N.E.

Force of surface current,

" 3

Direction of bottom current,

Drift North 3/4 mile

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Tide

Down	up
100 - 7.54.30	8 31.30
100 -	
200	
300 - 8. 11. 15	8. 21. 35

↘ ↗

TEMPERATURE RECORD.

Instrument used,

Rake Dredge

Current number of observation,

1036

Date,

Sept 14, 81

Locality,

Bearings,

*Lat 39, 58 N,
Long 69, 30 W*

Time of day,

7.54 P.M.; of tide,

State of sky,

b.c.

Temperature of air,

62.

"

surface of water, *61.5*

"

at depth of — fathoms,

"

of bottom, *51*

Depth, in fathoms,

90 94

Nature of bottom,

Sand

Direction of surface current,

Wind N.E.

Force of surface current,

Wind "

Direction of bottom current,

Drift N N W 1/2 mile

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

1037
REMARKS.

10373 Sept 15th 7:20 am
16 f. s. Trawl - gag Head
bearing N. E. 3/4 N. 4.

1038

No specific grounds to term.

Trawl,
Time

Fathoms	down	up
325	7 08	7 40
100		
200	7 23	7 57
300		1
325	7 23	7 57
length of line out 325 fathoms		

~~1057~~
TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

1038

Date,

Sept 21st 1887

Locality,

Bearings, Lat. 39.56 N Long 70.06 W.

Time of day, 6.55 ; of tide,

State of sky,

Hazy -

Temperature of air,

67°

" surface of water,

67°

" at depth of 5 fathoms,

68° - 10 fms 68

" of bottom,

47° - 20° 49

Depth, in fathoms,

~~140~~ 146. f -

Nature of bottom,

Sand and shells

Direction of surface current,

Wind N. N. E.

Force of surface current,

Wind 4

Direction of bottom current,

Drift N + E 1 mile

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

Fish Commission

Name and rank of commanding officer,

Lt. J. L. Tanner

Name and position of observer,

- 10 ~~3~~

REMARKS.

No S. G. taken

Trawl Soundings

Depth.	Time	
	Down	Up
0		
100	9.45	10.24
100		
200		
295	10.02	10.35

length of line out 295 fathoms

1039

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1039

Date, Sept 21st 1887

Locality, Lat 39° 55' N,

Bearings, Long 70° 06' W.

Time of day, 9.35 ; of tide,

State of sky, Hazy

Temperature of air, 66.30

“ surface of water, 67

“ at depth of 5 fathoms, 68° - 10 fms.

“ of bottom, 50'

Depth, in fathoms, 130 136,

Nature of bottom, Sand and Shells

Direction of surface current, Wind N. E.,

Force of surface current, Wind 6

Direction of bottom current, Drift N + E. 2 miles

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, Fish Commission

Name and rank of commanding officer, Lieutenant
Zera L. Tanner

Name and position of observer,

10 ~~4.20~~

REMARKS.

no s.s. taken

Excursion dredge
Trawl sampling

depth	time down	up
-88-	10.47	- 11.15
100		
200		
300		
340	11.08	- 11.26

length of line out 340 fms -

1040

TEMPERATURE RECORD.

Instrument used,

Excelsior Graph

Current number of observation,

1040

Date,

Sept 21 " 1881

Locality,

Lat. 40.00.2.

Bearings,

Long. 70.06.20.

Time of day, 10.43 ; of tide,

State of sky,

Hazy

Temperature of air,

64°

" surface of water,

68°

" at depth of ~~8~~ fathoms,

" of bottom,

66.

Depth, in fathoms,

~~78~~ 93.

Nature of bottom,

Sand and Shell

Direction of surface current,

Wind N. N. E.

Force of surface current,

Wind 6

Direction of bottom current,

Drift N + E - 2 mile

Force of bottom current,

Name of vessel,

Fishhawk

To what service attached,

F Com

Name and rank of commanding officer,

Lieut. comd

John S. Tanner

Name and position of observer,

1046
REMARKS.

Travel Soundings

Depth	Time	down	up
0000	12.33		12.49
	12.42		12.54

Time register not
attached.

1040

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation, *1040*

Date, *Sept. 22nd 1887*

Locality, *San Sound*

Bearings, *West Chop St. E. $\frac{1}{2}$ h. $\frac{1}{4}$*

Time of day, *12.33* ; of tide,

State of sky, *b. c.*

Temperature of air, *63-30*

" surface of water, *65-*

" at depth of *5* fathoms, *65*

" of bottom, *65*

Depth, in fathoms, *9*

Nature of bottom, *Gravel*

Direction of surface current, *wind S-S.W.*

Force of surface current, *wind 4*

Direction of bottom current, *drift N. S. W. $\frac{3}{4}$ mile*

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached, *Fish Commission*

Name and rank of commanding officer, *Lieutenant*
J. L. Tanner

Name and position of observer,

1042

REMARKS.

Depth	Trawl Soundings time	
	down	up
00	1.17	1.29
36	1.24	
47	1.27	1.31

length of line out fathoms:

1042

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

1042

Date,

Sept 22 1887

Locality,

Vic. Sound

Bearings,

West Chop $1\frac{1}{2}$ N. $1\frac{1}{2}$

Time of day,

1.17

; of tide,

State of sky,

b. c

Temperature of air,

63.30

"

surface of water,

65°

"

at depth of

fathoms,

"

of bottom,

65

Depth, in fathoms,

6

Nature of bottom,

S. Gravel

Direction of surface current,

Wind S. S. W

Force of surface current,

Wind

5

Direction of bottom current,

drift N + W. $\frac{1}{2}$ mile

Force of bottom current,

Name of vessel,

Fishhawk

To what service attached,

Fish Commission

Name and rank of commanding officer,

Lieut

J. S. Tanner

Name and position of observer,

1043

REMARKS.

Depth	Spec. Grav	Temp
Surface	1.0256	65
5 fms	1.0254	64.5
10 "	1.0252	64

Trawl

fms	Down	Up
0	7.17	7.47.15
100	7.21.00	7.44.05
200	7.24.50	7.41.05
260	7.28	7.38.50

1044

REMARKS.

Depth	Spec. Grav	Temp.
Surf.	1.0252	65
5 fms	1.0252	65.
10 "		

Depth	Soundings		Trawlings	
			Down	Up
0.	8.31		8.31	9.18.30
100			8.35.05	9.15.50
200			39.15	9.12.00
216				
300			43.15	9.09.45
400			47.45	9.06.20
409				9.05.45

Came up empty
 Deepened water to 300 fms.

1045

REMARKS.

none taken

Soundings

Trawl.

Depth				
0			9.32.30	37.55
100			36.25	34.50
200			40.35	31.00
300			44.50	27.15
400			48.15	23.20
500			52.15	19.45
560			54.50	19.45
600			10.01.40	15.55
650			10.06.00	10.13.20

TEMPERATURE RECORD.

Instrument used, *Trawl*
 Current number of observation, *1045*
 Date, *Oct. 10. 81*
 Locality,
 Bearings, *Sur 38. 35, N.*
Long 73. 18. W.
 Time of day, *9.32* ; of tide,
 State of sky, *partly cloudy*
 Temperature of air, *67*
 " surface of water, *66*
 " at depth of *5* fathoms, *-66° - 10 fms 65°*
 " of bottom, *40°* *20 " 63.5*
30 " 53
100 fms 51°
 Depth, in fathoms, *300 3/2.*
 Nature of bottom, *Grey mud*
 Direction of ~~surface~~ current, *wind - N.W.*
 Force of ~~surface~~ current, *3*
 Direction of bottom current,
 Force of bottom current, *Drift N 3/4 N 3/4 mile*
 Name of vessel,
 To what service attached,
 Name and rank of commanding officer,
 Name and position of observer,

1046

REMARKS.

Surface 1.0252. 65°
 5 fms 1.0254. 65
 10 - 1.0255. 64

Depth	Lead		Trawl	
	Time Down	up	Time Down	up
0	11.08.10		11.14.00	50.30
100	09.15		11.17.10	47.30
200			23.10	11.44.00
230			11.35.15	11.42.40

N^o 46405 broken ^{was} (~~used for surface~~)
 - 47996 substituted for
 surface temperatures

10 44
REMARKS.

Trawl

	Down	up
0	12.15.	1.05.45
100	18.10	1.03.00
200	23.50	59.30
300	29.05	56.10
355	33.10	12.53.30

Register on boom showed 20 f
when trawl reached surface

1048

REMARKS.

surface	1.0250	.65
5 f.	1.0248	65.5
10 f.	1.0248	65.5

Soundings

Trawling

	Soundings		Trawling	
0	2.47.30	56.05	1.55.00	16.00
100	48.45	54.50	58.20	12.50
200	49.55	2.53.15	2.03.05	09.40
300			2.07.30	06.15
400			11.30	3.02.30
500			14.45	58.00
600			17.55	53.50
700			20.45	2.46.35

2.05^{m sec}
 Messenger 2.05 = 200 f.

Register on boom 5 fths ~~short~~ over
 when trawl reached surface

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

1048

Date,

Oct. 10 81

Locality,

Bearings,

Lat 38° 25' N.

Long 73° 21' W.

Time of day,

1.55 PM; of tide,

State of sky,

clear

Temperature of air,

71

"

surface of water,

66

"

at depth of

5

fathoms,

65.

"

of bottom,

40°

Depth, in fathoms,

~~40~~ 435.

Nature of bottom,

Mud.

Direction of surface current,

wind north

Force of surface current,

4

Direction of bottom current,

Drift - N. 2 miles.

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

10 f. 65°
 20 f. 55°
 30 f. 49°
 50 f. 51°
 100 f. 51°
 200 - 45°

1049

REMARKS.

Trawl

0		3.30.50	5.07
100		3.37.00	5.03.00
200		40.15	58.30
300		44.40	53.45
400		48.00	50.15
500		51.20	46.30
600		53.50	42.30
700		56.00	4.37.00
800		58.00	4.23.30
877	•	4.08.30	4.17.15

extra weights on runners of
trawl -

Register on boom 3 fms over
when dredge reached surface

105-0

REMARKS.

Drudging oysters
off St. Jerome's Creek.
Shoemaker Bay.

Caught 100 Bushel Oysters

1050

TEMPERATURE RECORD.

Instrument used, *Oyster dredge.*Current number of observation, *1050.*Date, *Feb. 27, 1882.*Locality, *Off St. Jerome's Creek -*Bearings, *Point to Point, N. N. E. 1 1/2*~~*Point to Point, N. N. E. 1 1/2*~~Time of day, *2 P.M.*; of tide, *Ebb.*State of sky, *Partly cloudy.*Temperature of air, *50*" surface of water, *41.*

" at depth of fathoms,

" of bottom,

Depth, in fathoms, *3 1/2*Nature of bottom, *Blue mud, shells, Oysters*Direction of surface current, *wind S.E.*Force of surface current, *1*Direction of bottom current, *swift*

Force of bottom current,

Name of vessel, *U. S. F. C. Ste Fish Hawk*To what service attached, *U. S. Fish Commission*Name and rank of commanding officer, *Lieutenant**G. L. Tanner, U. S. N.*

Name and position of observer,

REMARKS.

Dredge came up full of
grass.

1051

TEMPERATURE RECORD.

Instrument used, *Copter Sledge*Current number of observation, *1051*Date, *Feb, 27, 1882*Locality, *Off St. Jerome Creek*Bearings, *N. X. E. Point to Point, 1.1'*~~*with Point St. Jerome Creek mark*~~Time of day, *2.15 P.M.*; of tide, *Ebb*State of sky, *Partly Cloudy*Temperature of air, *50°*" surface of water, *41°*

" at depth of fathoms,

" of bottom, *40*Depth, in fathoms, *2*Nature of bottom, *Blue mud & shells*Direction of ~~surface current~~, Wind *S. E.*Force of ~~surface current~~, *1*Direction of ~~bottom current~~, *Drift*Force of ~~bottom current~~,Name of vessel, *W. S. F. C. Ste. Fish Hawk*To what service attached, *Fish Commission*Name and rank of commanding officer, *Lieutenant**G. L. Tanner, U. S. N.*

Name and position of observer,

REMARKS.

Dredge came up full of
mud and grass.

1052

TEMPERATURE RECORD.

Instrument used, *Oyster Dredge*Current number of observation, *1052*Date, *Feb. 27 - 1882*Locality, *Off St. Jerome Creek*Bearings, *Point to Point N. N. E. $3/4$ '*~~*North Point of St. Jerome Creek, West*~~Time of day, *2.30 P.M.*; of tide, *Ebb.*State of sky, *Partly cloudy*Temperature of air, *50*" surface of water, *41*

" at depth of fathoms,

" of bottom, *40*Depth, in fathoms, *10 fect.*Nature of bottom, *Hard Mud & Grass*Direction of ~~surface current~~, *Wind S. E.*Force of ~~surface current~~, *" 1*

Direction of bottom current,

Force of bottom current,

Name of vessel, *U.S.F.C. Ste Fish Hawk*To what service attached, *Fish Commission*Name and rank of commanding officer, *Lieutenant**G. L. Tanner, U.S.N.*

Name and position of observer,

REMARKS.

Dredge brought up ~~one~~ bucket
of oysters

1053

TEMPERATURE RECORD.

Instrument used, *Oyster Dredge*Current number of observation, *1053*Date, *Feb. 27 - 1882*Locality, *Off St. Jeromes Creek*Bearings, *Point to Point N. by E. 1/4*~~*South Point, St. Jeromes Creek, West*~~Time of day, *2.45 P.M.*; of tide, *Ebb*State of sky, *Partly Cloudy*Temperature of air, *50*" surface of water, *41*

" at depth of fathoms,

" of bottom, *40*Depth, in fathoms, *2 3/4*Nature of bottom, *Blue Mud & Shells.*Direction of surface current, *wind S.E.,*Force of surface current, *wind 1*Direction of bottom current, *Drift.*

Force of bottom current,

Name of vessel, *Fish Hawk*To what service attached, *Fish Commission*Name and rank of commanding officer, *Lieutenant**J. L. Tanner, U.S.N.*

Name and position of observer,

REMARKS.

Dredge brought up Two
Bushels of Oysters

1054

TEMPERATURE RECORD.

Instrument used, *Oyster Dredge*Current number of observation, *1054*Date, *Feb. 27 - 1882*Locality, *Off St. Jerome Creek*Bearings, *Point No Point N x E. 1 1/4'*~~*Point No Point St. Jerome Creek. West*~~Time of day, *2.50 P.M.*; of tide, *Ebb*State of sky, *Part Cloudy*Temperature of air, *50*" surface of water, *41*

" at depth of fathoms,

" of bottom, *40*Depth, in fathoms, *2 3/4*Nature of bottom, *Blue mud & shell*Direction of surface current, *Wind S. E*Force of surface current, *Wind 1*Direction of bottom current, *Drift*

Force of bottom current,

Name of vessel, *Fish Hawk*To what service attached, *Fish Commission*Name and rank of commanding officer, *Lieutenant**G. L. Tanner, U.S.N.*

Name and position of observer,

105-5

REMARKS.

Dredge brought up a
few Oyster shells

1055

TEMPERATURE RECORD.

Instrument used,

Dredge

Current number of observation,

1055

Date,

Feb. 28 - 1882

Locality,

Mouth Patuxent River

Bearings,

Drumy Pt. N.E. $\frac{1}{2}$ '

Time of day,

10.45 Am;

of tide, Flood

State of sky,

Cloudy

Temperature of air,

46

"

surface of water,

40

"

at depth of

fathoms,

"

of bottom,

Depth, in fathoms,

6

Nature of bottom,

~~Shell~~ Mud & shells.Direction of ~~surface current~~,

Wind Calm

Force of ~~surface current~~,

Wind 0

Direction of bottom current,

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

105-6

REMARKS.

Dredge brought up a few
cysters, - shells & grass,

1056

TEMPERATURE RECORD.

Instrument used,

Optic Sledge

Current number of observation,

1056

Date,

Feb 28th 1882

Locality,

Brew Point, Patuxent River

Bearings,

N. 13° E.

Time of day, 10.55 AM ; of tide,

Flood

State of sky,

Cloudy

Temperature of air,

46

" surface of water, 40

" at depth of fathoms,

" of bottom,

Depth, in fathoms,

6

Nature of bottom,

Blue mud & Shells

Direction of ~~surface current~~,

Wind Calm

Force of ~~surface current~~,

Winds 0

Direction of bottom current,

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

1057

REMARKS.

Trawl came up with
few jelly fish

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1059*

Date, *Feb. 28-1882*

Locality, *Off Barren Islands*

Bearings, *South Pt Barren Island*
bearing E by S 1 3/4

Time of day, *mid* ; of tide, *Flood*

State of sky, *Cloudy*

Temperature of air, *49*

“ surface of water, *40*

“ at depth of _____ fathoms,

“ of bottom, *40*

Depth, in fathoms, *17-20-12*

Nature of bottom, *Blue mud*

Direction of ~~surface~~ current, *Wind N-1*

Force of ~~surface~~ current, *Wind*

Direction of bottom current,

~~Force of bottom~~ current, *Drift "W, N, W, 1/2"*

Name of vessel, *U. S. Steamer Fish Hawk*

To what service attached, *Fish Commission*

Name and rank of commanding officer, *St Jd Tanner*

Name and position of observer,

1059

1058

REMARKS.

Trawl dropped in 3 fathoms
and dragged across 25
fathoms on WNW course
Trawl ^{on} hove up in 15 fathoms
at 12, 25 containing few
small fish and grass
1 cray fish, some shrimp and
Young Murexidae

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*
 Current number of observation, *1058*
 Date, *Feb 28th 1882*
 Locality, *Off South end Barrow Island*
 Bearings, *South Pt Barrow Island*
bearing S 6 X 2 1/2 E. 2'
 Time of day, *12.10* ; of tide, *Flood*
 State of sky, *Cloudy*
 Temperature of air, *49*
 " surface of water, *40*
 " at depth of fathoms,
 " of bottom, *40*
 Depth, in fathoms, *3-25-13*
 Nature of bottom, *Blue Mud*
 Direction of surface current, *N*
 Force of surface current, *1 1/2 Knot*
 Direction of ~~bottom current~~, *wind N-1*
 Force of ~~bottom current~~, *Drift W. N. W. 3/4*
 Name of vessel, *U S Steamer Fish Hawk*
 To what service attached, *Fish Commission*
 Name and rank of commanding officer, *Lt J. L. Tanner*
 Name and position of observer,

1059

REMARKS.

Trawl put over in 2 3/4 fathoms
orater and dragged off shore
W. W. (magnetic) in 20 fathoms
and was hauled up in 14 fms
at 12.45. containing small
fish and grass. Brit species

TEMPERATURE RECORD.

Instrument used, *Beam Therm*
 Current number of observation, *1059*
 Date, *Feb 28th 1882*
 Locality, *off Barren Islands*
 Bearings, *St Pt Barren Island S 6*
1/4 E 2'
 Time of day, *12, 30* ; of tide, *Flood*
 State of sky, *Cloudy*
 Temperature of air, *49*
 " surface of water, *40*
 " at depth of _____ fathoms,
 " of bottom, *40*
 Depth, in fathoms, *2 3/4 fathoms - 25 - 14*
 Nature of bottom, *Blue mud*
 Direction of surface current, *N*
 Force of surface current, *1/2 knots*
 Direction of ~~bottom current~~, *wind - Calm*
 Force of ~~bottom current~~, *drift WNW, 3/4*
 Name of vessel, *U. S. Steamer Fish Hawk*
 To what service attached, *Fish Commission*
 Name and rank of commanding officer, *Stz J. Tanner*
up
 Name and position of observer,

1860

REMARKS.

Beams Trawl was
put over at 4.40 and
dragged S E x S $\frac{3}{4}$ mile
at 5 hove up Trawl it
containing little grass
shells & blue mud

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*
 Current number of observation, *1060*
 Date, *Feb 25th 1882*
 Locality, *Smith Point S S E*
 Bearings, *Smith Pt S S W, 2'*
 Time of day, *4:40* ; of tide, *Flood*
 State of sky, *cloudy*
 Temperature of air, *46*
 " surface of water, *41*
 " at depth of fathoms,
 " of bottom, *40 1/2*
 Depth, in fathoms, *7*
 Nature of bottom, *Blue mud & shells*
 Direction of ~~surface current~~, *wind NE*
 Force of ~~surface current~~, *wind E*
 Direction of ~~bottom current~~, *drift S E x S 3/4 mile*
 Force of bottom current,
 Name of vessel, *U S Steer "Fish Hawk"*
 To what service attached, *Fish Commission*
 Name and rank of commanding officer, *St Jd Tanner*
upw
 Name and position of observer,
 C H. Cleveland
 U.S. upw

1061

REMARKS.

at 11:20

Dredge was put over
in 11 fathoms water at 11:20
and hauled up at 11:28
from 16 fathoms water containing
1 shrimp - half dozen
small shells & blue mud
& small fish

TEMPERATURE RECORD.

Instrument used, *Dredge*
 Current number of observation, *9061*
 Date, *March 2nd 1892*
 Locality, *Chesapeake Bay*
 Bearings, *Smiths Pt. Lt. No ~~5~~ S*
S. 70 1/2 W. 1 1/2
 Time of day, *11.20* ; of tide, *Ebb*
 State of sky, *Clear*
 Temperature of air, *48*
 " surface of water, *41 1/2*
 " at depth of fathoms,
 " of bottom, *41 1/2*
 Depth, in fathoms, *11 - 16*
 Nature of bottom, *Blue mud & shells*
 Direction of ~~surface current~~, *Wind NW*
 Force of ~~surface current~~, *Wind 2*
 Direction of bottom current, *Drift S 1/2 mile*
 Force of bottom current,
 Name of vessel, *U. S. Steamer "Fish Hawk"*
 To what service attached, *Fish Commission*
 Name and rank of commanding officer, *St. J. Tanner*
gfo
 Name and position of observer,

1062

REMARKS.

Beam Trawl put over
at 11.40 in 16 faths water
and hove up at 11.55 from
9 1/2 faths containing nothing

TEMPERATURE RECORD.

Instrument used, *Beam Therm*
 Current number of observation, *1062*
 Date, *July 2 - 1882*
 Locality, *Chesapeake Bay*
 Bearings, *Smith's Pt St S ~~S 1/2 E~~ ~~S 1/2 W~~*

 Time of day, *11.40* ; of tide, *Ebb*
 State of sky, *Clear*
 Temperature of air, *48*
 " surface of water, *41 1/2*
 " at depth of _____ fathoms,
 " of bottom, *41 1/2*
 Depth, in fathoms, *16-11-10-9 1/2*
 Nature of bottom, *Blue mud & shells*
 Direction of surface current, *Wind NW*
 Force of surface current, *Wind 2*
 Direction of bottom current, *Drift S & W 1 mile*
 Force of bottom current,
 Name of vessel, *U S Steamer Fish Hawk*
 To what service attached, *Fish Commission*
 Name and rank of commanding officer, *Ct J. L. Tanner*

 Name and position of observer,

1063

REMARKS.

Chester Rake Dredge
was put over at 1.35 PM
in 10 1/2 fathoms water
and hove up at 1.45 from
9 3/4 fathoms containing sea
weed and shrimp also
two species of marine
worms 1 small fish

TEMPERATURE RECORD.

Instrument used, *Chester Raker Sledge*
 Current number of observation, *1063*
 Date, *March 2nd 1882*
 Locality,
 Bearings, *N x E 3/4 E South Point
 of Tangier Island 2 1/4*
 Time of day, *9.35 PM* of tide, *Flood*
 State of sky, *Clear*
 Temperature of air, *50*
 " surface of water, *44*
 " at depth of / fathoms,
 " of bottom, *42*
 Depth, in fathoms, *10 1/2 - 10 - 9 3/4*
 Nature of bottom, *Grass + Blue Mud*
 Direction of ~~surface current~~, *Wind North*
 Force of ~~surface current~~, *Wind 2*
 Direction of bottom current, *Drift N E x E 1/2 mile*
 Force of bottom current,
 Name of vessel, *Fish Hawk*
 To what service attached, *U S Fish Commission*
 Name and rank of commanding officer, *Ct Zl Tanner*
 Name and position of observer,

1064

REMARKS.

Christie Rake Dredge
was put over at 2.17 PM
in 20 fathoms water and
hove up at 2.25 from
9 1/2 fathoms water containing
Black mud + dead oyster
shells and dead grass
2 dozen Shrimp - Brown
tubes + small shell

TEMPERATURE RECORD.

Instrument used, *Chester Rake Sledge*Current number of observation, *1064*Date, *Feb 2" 1882*

Locality,

Bearings, *NNW South Pt of
Langin Island I.*Time of day, *2:17* ; of tide, *Flood*State of sky, *Clear*Temperature of air, *50*" surface of water, *42*

" at depth of fathoms,

" of bottom, *42*Depth, in fathoms, *20 - 9 1/2 -*

Nature of bottom,

Direction of ~~surface~~ current, *Wind NW*Force of ~~surface~~ current, *Wind 2*Direction of ~~bottom~~ current, *Drift NE + E 1/2 mile*

Force of bottom current,

Name of vessel, *Fish Hawk*To what service attached, *Fish Commission*Name and rank of commanding officer, *Lt J. L. Tanner*

Name and position of observer,

1065

REMARKS.

Beam Trawl was put over
 at 9 am in 25 fathoms water
 and dragged W about 1/2
 mile - At 9:10 hauled up trawl
 in 12 fathoms it containing
 Sea urchins. 1 Dog fish
 4 Skates 15 Hermit Crabs
 25 Brit. 50 small Hake
 several Shrimps. 2 Sea
 Anises. Several Ripe fish
 10 Small Abundus

Note, Chryzothrix A. 100. 600 E. N. 2.

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*
 Current number of observation, *10.65*
 Date, *Feb 6th 1882*
 Locality, *Chesapeake Bay*
 Bearings, *Buoy off Entrance to Chesapeake*
Inlet bearing East $1/2$ S $3/4$
 Time of day, *9 AM*; of tide, *Flood*
 State of sky, *Cloudy*
 Temperature of air, *56*
 " surface of water, *45*
 " at depth of fathoms,
 " of bottom, *46.5*
 Depth, in fathoms, *25*
 Nature of bottom,
 Direction of ~~surface current~~, *Wind S.S.W.*
 Force of ~~surface current~~, *11 3*
 Direction of ~~bottom current~~, *Drift W. $1/4$ mile*
 Force of bottom current,
 Name of vessel, *Fish Hawk*
 To what service attached, *Fish Commission*
 Name and rank of commanding officer, *Lieutenant*
Z. L. Tanner U.S.N.
 Name and position of observer,

1066

REMARKS.

Beam Trawl was put over
at 9.20 AM, in 12 fms. water
and dragged E.S.E. at 9.33
hove in Trawl in 16 fms.
containing grass and half
dozen small fish (Brit.)

note photo. E.S.E.

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*Current number of observation, *1066*Date, *Mar. 6. 1882*Locality, *Chesapeake Bay.*Bearings, *Buoy off Entrance to Chesapeake**Light bearing S. S. E. 2°*Time of day, *9.20 AM*; of tide, *Flood*State of sky, *Cloudy*Temperature of air, *56.*" surface of water, *45*

" at depth of fathoms,

" of bottom, *45*Depth, in fathoms, *12*

Nature of bottom,

Direction of ~~surface current~~, *Wind S. S. W.*Force of ~~surface current~~, *Wind 3.*Direction of ~~bottom current~~, *Drift E. S. E. 1/4 mile*

Force of bottom current,

Name of vessel, *Fish Hawk*To what service attached, *Fish Commission*Name and rank of commanding officer, *Lieutenant**Z. L. Tanner U.S.N.*

Name and position of observer,

1067

REMARKS.

Beam Trawl was put
 over at 9.40 Am in ¹²
 fathoms water, at 9.58. hove up
 the Trawl, in 20 fms. water.
 It contained 2 Skates & about
 50 small Hake & 1 big fish
 1 crab 25 Brit. and
 several Shrimps. 1 Horn fish
 12 Flounders and few
 Hermit Crabs & small Shell
 Razor Shell

Wt. Lt. 100. 19 x 9. 749. 3'

TEMPERATURE RECORD.

Instrument used, *Beau Trawl*
 Current number of observation, *1067*
 Date, *Mar. 5-1882*
 Locality, *Chesapeake Bay*
 Bearings, *Buoy off entrance to Chesapeake*
bearing S.E. $1/4$ S $2 1/4$
 Time of day, *9.40 am*; of tide, *Flood*
 State of sky, *Partly cloudy*
 Temperature of air, *56*
 " surface of water, *45*
 " at depth of fathoms,
 " of bottom, *47*
 Depth, in fathoms, *12*
 Nature of bottom,
 Direction of ~~surface current~~, *Wind S.S.W.*
 Force of ~~surface current~~, *Wind 3.*
 Direction of ~~bottom current~~, *Drift WNW $1/2$ mile*
 Force of bottom current,
 Name of vessel, *Fish Hawk*
 To what service attached, *Fish Commission*
 Name and rank of commanding officer, *Lieutenant*
J. L. Tanner, U. S. N.
 Name and position of observer,

1068

REMARKS.

Beam Trawl was put
over at 10 am in 14 fms.
of water. At 10.15 hove
up Beam Trawl. it having
been down 15 minutes,
containing 1 Perch several
flat fish - mud & grass

TEMPERATURE RECORD.

Beam Trawl

Instrument used,

N. 3. 46402

Current number of observation,

1068

Date,

Mar. 11, 1882

Locality,

Off Kent Island

Bearings,

Thomas Pt. St. Horse bearing

N x S. $\frac{3}{4}$ S. 2'

Time of day,

9.50 ; of tide, Ebb.

State of sky,

Clear

Temperature of air,

49

" surface of water,

42

" at depth of

fathoms,

" of bottom,

41

Depth, in fathoms,

14-9-

Nature of bottom,

Dark Mud

Direction of ~~surface current~~

Wind S.W.

Force of ~~surface current~~

Wind 4

~~Direction of bottom current,~~Drift N $\frac{1}{2}$ mile

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

Fish Commission

Name and rank of commanding officer,

Lieutenant

J. L. Tanner, U.S.N.

Name and position of observer,

1069

REMARKS.

Beam Trawl was put
over ^{at 10.20 am} on 18 fathoms of
water. Hove up Beam
Trawl it having been
down 17 minutes containing
sea mud & several young
Herring

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*
 Current number of observation, *1069*
 Date, *March 11-1882*
 Locality, *Off Kent Island*
 Bearings, *Thomas Pt. Lt. House*
bearing) S. W x W $\frac{3}{4}$ W. 2, $\frac{1}{4}$
 Time of day, *10.20* ; of tide, *Ebb.*
 State of sky, *Clear*
 Temperature of air, *51*
 " surface of water, *42*
 " at depth of fathoms,
 " of bottom, *40*
 Depth, in fathoms, *18*
 Nature of bottom, *Black Mud.*
 Direction of ~~surface current~~, *Wind N.W*
 Force of ~~surface current~~, *Wind 4*
 Direction of ~~bottom current~~, *Drift S.W. $\frac{1}{2}$ mi*
 Force of bottom current,
 Name of vessel, *Fish Hawk*
 To what service attached, *Fish Commission*
 Name and rank of commanding officer, *Lieutenant*
B. L. Tanner, U.S.N.
 Name and position of observer,

1070

REMARKS.

Beam Trawl was put
over at 10.45 am, in
15 fms. of water, it having
been down 18 minutes
Hove it up containing several
young Menhaden, 2 Small
Rock fish and 1 flounder

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*
 Current number of observation, *1070*
 Date, *March 11, 1882*
 Locality, *Off Kent Island*
 Bearings, *Thomas Pt. Lt. House*
bearing N x S. E.
 Time of day, *10.45 am*; of tide, *Ebb*
 State of sky, *Clear*
 Temperature of air, *45-*
 " surface of water, *42*
 " at depth of fathoms,
 " of bottom, *42*
 Depth, in fathoms, *15 - 11 - 10*
 Nature of bottom, *Black mud*
 Direction of ~~surface~~ current, *Wind N.W.*
 Force of ~~surface~~ current, *Wind 4*
 Direction of ~~bottom~~ current, *Drift S.S.W. 1/2 mile*
 Force of bottom current,
 Name of vessel, *Fish Hawk*
 To what service attached, *Fish Commission*
 Name and rank of commanding officer, *Lieutenant*
B. L. Tanner, U. S. N.
 Name and position of observer,

1071
REMARKS.

Beam Trawl was put
over at 11.22 am. in 14 fms.
of water and hove up
at 14 minutes of 12.10.
it having been down 24
minutes. Contained a few
shrimps and young Menidia

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*
 Current number of observation, *1071*
 Date, *March 11, 1882*
 Locality, *Off Kent Island*
 Bearings, *Thomas Pt. bearing*
W x N 1/2 N. 2, 1/4
 Time of day, *11, 22 AM* of tide, *Ebb*
 State of sky, *Clear*
 Temperature of air, *49*
 " surface of water,
 " at depth of fathoms,
 " of bottom, *40*
 Depth, in fathoms, *14 - 15 - 13 -*
 Nature of bottom, *Black mud*
 Direction of ~~surface~~ current, *Wind N.W*
 Force of ~~surface~~ current, *Wind 4*
 Direction of ~~bottom~~ current, *Drift S W x W 3/4 mile*
 Force of bottom current,
 Name of vessel, *Fish Hawk*
 To what service attached, *Fish Commission*
 Name and rank of commanding officer, *Lieutenant*
W. L. Tanner, U.S.N.
 Name and position of observer,

1072

REMARKS.

Sub Rake Dredge over
at 12 m. in 16 fms of
water - At 12.20 hauled
up dredge it containing
nothing

TEMPERATURE RECORD.

Instrument used, *Rake Dredge*
 Current number of observation, *1072*
 Date, *March 11-1882*
 Locality, *Off Kent Island*
 Bearings, *Thomas Pt. bearing*
N. W. 2 1/4
 Time of day, *12 m* ; of tide, *Ebb*
 State of sky, *Clear*
 Temperature of air, *50*
 " surface of water, *42*
 " at depth of fathoms,
 " of bottom, *42*
 Depth, in fathoms, *16*
 Nature of bottom, *Black mud*
 Direction of ~~surface~~ current, *Wind N.W*
 Force of ~~surface~~ current, *Wind 4*
 Direction of ~~bottom~~ current, *Drift S 3/4 mile*
 Force of bottom current,
 Name of vessel, *Fish Hawk*
 To what service attached, *Fish Commission*
 Name and rank of commanding officer, *Lieutenant*
Z. L. Tanner U.S.N.
 Name and position of observer,

1073

REMARKS.

Put Rake Dredge over at
12.25 PM in 15 fathoms
Water at 12.47 hove up Rake
Dredge it containing Cyster
shells & grass - 2 crabs and
2 marine worms

19.

TEMPERATURE RECORD.

Instrument used, *Rake Dredge*
 Current number of observation, *10730*
 Date, *March 11th 1882*
 Locality, *off Kent Island*
 Bearings, *Thomas Pt bearing,*
NW x N 2 1/2
 Time of day, *12.25* ; of tide, *Ebb*
 State of sky, *Clear*
 Temperature of air, *50*
 " surface of water, *42*
 " at depth of fathoms,
 " of bottom, *42*
 Depth, in fathoms, *13 - 13 -*
 Nature of bottom, *Blk Mud + shells*
 Direction of ~~surface current~~, *wind NW*
 Force of ~~surface current~~, *wind 3*
 Direction of ~~bottom current~~ *drift SSW*
 Force of bottom current,
 Name of vessel, *"Fish Hawk"*
 To what service attached, *Fish Commission*
 Name and rank of commanding officer, *Lt Izera de*
Tanner USN
 Name and position of observer,

REMARKS.