

1888  
From 1286 to 1335

ORIGINAL LOG BOOK OF THE "FISH HAWK"

UNITED STATES FISH COMMISSION

STATION NUMBERS

Numbers 1286 to 1335

32  
11  
—  
9

1286

Specimens Obtained  
Sharks Flat fish. Sea Robbins  
Lemonfish Starfish. Hermit crabs



# TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1286*

Date, *Sept 6<sup>th</sup> 89*

Locality, *Menemsha Bay & Vineyard Sound*

Bearings, *Gayhead N 1/4 S Quicks Hole S S W  
Tanquatic Cove S S E 1/4 E*

Time of day, *11.22 Am* ; of tide, *High*

State of sky, *b-c*

Temperature of air, *63*

“ surface of water, *63*

“ at depth of \_\_\_\_\_ fathoms,

“ of bottom, *63*

Depth, in fathoms, *9*

Nature of bottom, *Sand*

Direction of ~~surface current~~, *Wind North*

Force of ~~surface current~~, *Wind 4*

Direction of ~~bottom current~~, *Wind S 1/4 E mag 10*

Force of bottom current,

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

To what service attached, *26076*

Name and rank of commanding officer, *James A. Smith  
Master U.S.N.*

Name and position of observer, *John M. Smith  
Master U.S.N.*

1297

REMARKS.

Specimens Obtained  
Lobsters Flat Fish, Skates,  
Sea Robbers Star Fish, Hermit Crabs

# TEMPERATURE RECORD.

Instrument used, *Beam Trawl*  
Current number of observation, *1287*  
Date, *Sept 6<sup>th</sup> 88*  
Locality, *Monomaha Right Towing and Sounding*  
Bearings, *Gay head W 1/4 S Luid skale N X W 7/8 W*  
*Zor paulin Cove N X E 3/4 E*  
Time of day, *11.37 Am*; of tide. *Waxt*  
State of sky, *bc*  
Temperature of air, *62*  
    "    surface of water, *65*  
    "    at depth of          fathoms,  
    "    of bottom, *63*  
Depth, in fathoms, *8. 1/4*  
Nature of bottom, *Sand*  
Direction of ~~surface current~~, *W*  
Force of ~~surface current~~, *4*  
Direction of ~~bottom current~~, *Swift S E X E 1/2 E 1/4 E*  
Force of bottom current.  
Name of vessel, *U. S. Ste Fish Hawk*  
To what service attached, *U. S. F. C.*  
Name and rank of commanding officer, *James A. Smith*  
*Master U. S. N.*  
Name and position of observer, *J. W. S. S.*  
*Master U. S. N.*

1298

REMARKS.

Specimens Obtained  
Shore Flat fish sea Rabbits  
Conchs star fish Young seals  
Lard eggs

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*  
Current number of observation, *1288*  
Date, *Sept 6 88*  
Locality, *Manuscha Bay Vineyard Sound*  
Bearings, *Cape head N x S Quicks Hole x x x x*  
*Torpaulin Cove x E 3/4 E*  
Time of day, *11.53 am*; of tide, *mid*  
State of sky, *bc*  
Temperature of air, *62*  
" surface of water, *65*  
" at depth of fathoms,  
" of bottom, *63*  
Depth, in fathoms, *8*  
Nature of bottom, *Sand*  
Direction of ~~surface~~ *minel* current, *North*  
Force of ~~surface~~ *minel* current, *4*  
Direction of ~~bottom~~ *minel* current, *x x x x*  
Force of bottom current,  
Name of vessel, *U.S. Fish Hawk*  
To what service attached, *U.S.F.*  
Name and rank of commanding officer, *James A Smith*  
*Master U.S.F.*  
Name and position of observer, *J. Huntington*  
*Master U.S.F.*



1289

REMARKS.

Specimens Obtained

Winkles / Star fish. Razor fish shell.  
Scallop shell, Winkle spawn  
~~Clam shell~~ Stones. Lurch. Quahog  
shells, King crabs

# TEMPERATURE RECORD.

Instrument used, *Oyster dredge*  
 Current number of observation, *1289* 21  
 Date, *Sept 13*  
 Locality, *Norhampton Bay*  
 Bearings, *Cominieu Pt No N x E 1/2 E*  
*Warrick Pt S x E 1/2 S Allen Rock Beacon E 1/2 N*  
 Time of day, *9.55 Am*, of tide, *Flood 1<sup>st</sup> 2<sup>nd</sup>*  
 State of sky, *b-c*  
 Temperature of air, *65*  
     "    surface of water, *65*  
     "    at depth of ~~5~~ fathoms,  
     "    of bottom, *66*  
 Depth, in fathoms, *2.5*  
 Nature of bottom, *gray sand*  
 Direction of ~~surface~~ *wind* current, *W S W*  
 Force of ~~surface~~ *wind* current, *2*  
 Direction of ~~bottom~~ *drift* current,  
 Force of bottom current,  
 Name of vessel, *U.S. Fish Hawk*  
 To what service attached, *U.S.F.C.*  
 Name and rank of commanding officer, *James J. Smith*  
*Master*  
 Name and position of observer, *Anderson*  
*mate U.S.F.C.*

1290

REMARKS.

Specimens Obtained  
One during time

# TEMPERATURE RECORD.

Instrument used, *Dryter Hydgr*

Current number of observation. *1390*

22

Date. ~~*San Francisco Bay*~~ *Sept 13*

Locality, *San Francisco Bay*

Bearings. *Cominical de Ho N + E 1/2 E*

*Warrick de SW 1/2 W. Allens Rock beacon E + 1/2 N*

Time of day, *10.10 AM*; of tide. *Flow*

State of sky, *bc*

Temperature of air. *70*

“ surface of water, *66*

“ at depth of \_\_\_\_\_ fathoms,

“ of bottom. *67*

Depth, in fathoms, *3*

Nature of bottom, *Mud*

Direction of ~~surface current~~, *NSW*

Force of ~~surface current~~, *2*

Direction of bottom current.

Force of bottom current.

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

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *Comdr. G. M. ...*

Name and position of observer, *Julien ...*  
*Mate ...*

1291  
REMARKS.

Specimens Obtained  
Nothing.

# TEMPERATURE RECORD.

Instrument used, *Dyster Thermometer*

Current number of observation, *1291*

Date, *Sept 13* 88 23

Locality, *Narragansett Bay*

Bearings, *Cominac to No 26 1/4 E*

*Warride to 5 1/2 W. Allen Rock Beacon ENE*

Time of day, *10.30* : of tide, *High Low*

State of sky, *bc*

Temperature of air, *70*

" surface of water, *66.5*

" at depth of \_\_\_\_\_ fathoms,

" of bottom, *66*

Depth, in fathoms, *4*

Nature of bottom, *Mud*

Direction of ~~surface~~ current, *East*

Force of ~~surface~~ current, *gulf*

Direction of bottom current,

Force of bottom current,

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

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James D. Smith*

*Master U.S.N.*

Name and position of observer,

*Amberlighton*  
*Master U.S.N.*

1292  
REMARKS.

*Specimen Obtained  
from*

# TEMPERATURE RECORD.

Instrument used, *Wester Magazine*

Current number of observation, *1292* 24

Date, *Sept 13<sup>th</sup> 88*

Locality, *Stannard's Bay*

Bearings, *Cominicut to No N  $28\frac{1}{4}$  E*  
*Danwick to No  $28\frac{1}{4}$  S. Allens Rock to same N  $28\frac{1}{2}$  E*

Time of day, *10:55* ; of tide, *High water*

State of sky, *bc*

Temperature of air, *72*

" surface of water, *67.5*

" at depth of \_\_\_\_\_ fathoms,

" of bottom, *66*

Depth, in fathoms, *6.5*

Nature of bottom, *Mud*

Direction of ~~surface current~~, *Wind* *same*

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

Direction of bottom current,

Force of bottom current,

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

To what service attached, *U.S. F.C.*

Name and rank of commanding officer, *James Stewart*  
*Master U.S.N.*

Name and position of observer, *W. H. Loring*  
*Master U.S.N.*



1293

REMARKS.

Specimen obtained  
in trials

TEMPERATURE RECORD.

Instrument used, *Oyster Budge*

Current number of observation, *1243*

25

Date, *Sept 13<sup>th</sup> 89*

Locality, *Stamford Cove Bay*

Bearings, *Commenced to Ho North*

*Warrick at 2 1/2 N, Allens Rock Beacon N E*

Time of day, *11.30 am* : of tide, *2/3 Flood*

State of sky, *bc*

Temperature of air, *72*

.. surface of water, *67*

.. at depth of fathoms,

.. of bottom, *67*

Depth, in fathoms, *4*

Nature of bottom, *Mud*

Direction of surface current, *Wind N N W*

Force of surface current, *2*

Direction of bottom current,

Force of bottom current,

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

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James A. Smith  
Master U.S.N.*

Name and position of observer, *W. H. ...  
Master U.S.N.*

294

REMARKS.

Specimens of ...

Flat Fish Spider Crab

Oyster & scallop shells, young

& cup dead winkles, Hermit

Crab, & Clam shells

# TEMPERATURE RECORD.

Instrument used, *Beam Trawl* 46  
Current number of observation. *1295*  
Date, *Sept 13" 88*  
Locality. *Starray, north of Bay*  
Bearings. *Longitude, 110° 14' W*  
*Latitude, 41° 28' N*  
Time of day, *1:13* am; of tide, *3/25 Flood*  
State of sky, *bc*  
Temperature of air, *72*  
" surface of water, *67*  
" at depth of \_\_\_\_\_ fathoms,  
" of bottom, *66*  
Depth, in fathoms, *4*  
Nature of bottom, *Mud*  
Direction of ~~surface current~~, *Wind WSW*  
Force of ~~surface current~~, *Wind 2*  
Direction of bottom current,  
Force of bottom current,  
Name of vessel, *U.S. Fish Com. S.S. Albatross*  
To what service attached, *U.S.F.C.*  
Name and rank of commanding officer, *James G. Smith*  
*Master*  
Name and position of observer, *J. M. Smith*  
*Master*

1295  
REMARKS.

Specimens Obtained  
Sponges, Bryozoa Flat Fish  
1 Star fish, Skink, Crab, Hermit  
Crabs. Dead Clam shells  
Shell of ...

TEMPERATURE RECORD.

Instrument used, *Beam Trawl* 27

Current number of observation. *129.*

Date, *Sept 13<sup>th</sup> 88*

Locality, *Sarapanette Bay*

Bearings, *Immigrant Pt to N 1/4 W*

*Harbour Pt to N 2 3/4 E Allen Rock Beacon N E x E*

Time of day, *11:20 AM*; of tide, *3<sup>rd</sup> Flood*

State of sky, *bc*

Temperature of air, *71*

" surface of water, *67*

" at depth of \_\_\_\_\_ fathoms,

" of bottom, *GG*

Depth, in fathoms, *3.5*

Nature of bottom, *Mud*

Direction of ~~surface~~ current, *Drift WNW*

Force of ~~surface~~ current, *Mud 2*

Direction of bottom current.

Force of bottom current,

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

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James H. Smith  
Master U.S.N.*

Name and position of observer, *J. M. S. Thompson  
Master U.S.N.*

1296

REMARKS.

Specimens obtained  
by Capt. [unclear] [unclear] [unclear]  
Order, [unclear] [unclear] [unclear] [unclear]  
[unclear] [unclear] [unclear] [unclear] [unclear] [unclear]

# TEMPERATURE RECORD.

Instrument used, *Beaman Trawl*

Current number of observation, *1296*

Date, *Sept 18 88*

Locality, *Starbuck Point*

Bearings, *Conimicut Pt No N 1/4 W*

*Warwick St N 1/4 W, N. Allen Rock Beacon S 8 1/2 E 1/2 S*

Time of day, *12:03 P.M.*; of tide, *3:25 Flood*

State of sky, *bc*

Temperature of air, *72*

“ surface of water, *67.5*

“ at depth of \_\_\_\_\_ fathoms,

“ of bottom, *66*

Depth, in fathoms, *8.2*

Nature of bottom, *Mud*

Direction of ~~surface~~ <sup>*wind*</sup> current, *N 1/4 W*

Force of ~~surface~~ <sup>*wind*</sup> current, *3*

Direction of bottom current,

Force of bottom current,

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

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James A. Smith  
Master*

Name and position of observer, *John Hamilton  
Master*



1297

REMARKS.

Specimens Obtained  
same as 1296  
with the exception of no star fish

# TEMPERATURE RECORD.

Instrument used, *Beaman Thermometer*

29

Current number of observation. *1297*

Date, *Sept 13<sup>th</sup> 88*

Locality. *Barrow, Alaska*

Bearings. *Greenland Pt No 50 X W*

*Wainich Pt 80 X W N. Alaskan Rock 8 X N 1/4 W*

Time of day. *11:55 AM* : of tide. *High water*

State of sky, *bc*

Temperature of air. *72*

.. surface of water, *69*

.. at depth of fathoms,

.. of bottom. *66.5*

Depth, in fathoms. *11*

Nature of bottom. *Gravel*

Direction of surface current. *Small S W*

Force of surface current. *Small 2*

Direction of bottom current,

Force of bottom current,

Name of vessel. *U.S. Fish Com. Fish Hawk*

To what service attached, *No 676*

Name and rank of commanding officer, *James W. Smith*

*Master*

Name and position of observer,

*J. S. ...  
... ..*

1298

REMARKS.

Specimens Obtained

Black Grouselets & Shells

Starfish. Winkles Flat fish

# TEMPERATURE RECORD.

Instrument used, *Bain Therm* 30  
Current number of observation, *1298*  
Date, *Sept 13" 88*  
Locality, *Harvey's Cove Bay*  
Bearings, *Cominac - N 45 W x N 7/4 W*  
*Warrick Pt S 2/4 W, Allens Rock buoy E 3/4 N*  
Time of day, *12.3 PM* : of tide, *High water*  
State of sky, *bc*  
Temperature of air, *72*  
" surface of water, *68.5*  
" at depth of \_\_\_\_\_ fathoms,  
" of bottom, *66.5*  
Depth, in fathoms, *5*  
Nature of bottom, *Mud*  
Direction of ~~surface~~ *surface* current, *Drift*  
Force of ~~surface~~ *surface* current, *2*  
Direction of bottom current.  
Force of bottom current.  
Name of vessel, *U.S. Fish Hawk*  
To what service attached, *U.S.F.C.*  
Name and rank of commanding officer, *James A. Smith*  
*Comdr. U.S.N.*  
Name and position of observer, *Johnston*  
*Master*

## REMARKS.

Specimens Obtained  
Rock sponge & scallop shells  
Stones. 3 Starfish. Head Ray  
Fish shells. Two shells crabs

TEMPERATURE RECORD.

Instrument used, *W. T. Knappe*

Current number of observation, *1297*

Date, *Sept 18<sup>th</sup> 88*

Locality, *Narragansett Bay*

Bearings, *Seaward to the north*

*Nearby S. M. Allen Rock Beacon E. I. S.*

Time of day, *1.30* Part of tide, *High water*

State of sky, *bc*

Temperature of air, *69*

" surface of water, *67*

" at depth of fathoms,

" of bottom, *67*

Depth, in fathoms, *5.2*

Nature of bottom, *fine sand*

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

Force of surface current, *3*

Direction of bottom current.

Force of bottom current,

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

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James H. Smith  
Master*

Name and position of observer, *W. T. Knappe  
Master*

1800

REMARKS.

Specimens of *Abies*  
No. 4 - 4 specimens each

# TEMPERATURE RECORD.

Instrument used, *Agate dredge*  
 Current number of observation, *1370*  
 Date, *Sept 13<sup>th</sup> 88*  
 Locality, *W. W. Bay with Perry*  
 Bearings, *Cominlet Pt No W N W*  
*N. 1/2 S. 1/2 W. 1/2 N. 1/2 E. 1/2 S. 1/2 E.*

Time of day, *1.54* : of tide, *1<sup>st</sup> Ebb*  
 State of sky,

Temperature of air, *72*  
 " surface of water, *66.5*  
 " at depth of *1* fathoms.  
 " of bottom, *66*

Depth, in fathoms, *3.5*  
 Nature of bottom, *fine*

Direction of ~~surface~~ <sup>*Wind*</sup> current, *W N W*  
 Force of ~~surface~~ <sup>*Wind*</sup> current, *3*

Direction of bottom current.  
 Force of bottom current.

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

To what service attached, *26876*

Name and rank of commanding officer, *James S. Smith*  
*Comdr. U.S.N.*

Name and position of observer, *Wm. H. ...*  
*Master U.S.N.*



1301

REMARKS.

Specimens Obtained  
Pike fish, King Crabs, Flat fish  
Spider Crabs, Hermit Crabs  
Mussels, oysters, scallops  
Conchae, Scallops shells

# TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1301*

Date, *Sept 13<sup>th</sup> 88*

Locality, *Warraginnett Bay*

Bearings, *Cominicut Lt No N 22 1/4 W*

*Marwick Lt. S 22 1/2 W. Allens Rock beacon E 2 1/4 N*

Time of day, *2:12 P.M.*; of tide, *1<sup>st</sup> Ebb*

State of sky,

Temperature of air, *72*

" surface of water, *66*

" at depth of fathoms,

" of bottom, *66*

Depth, in fathoms, *4*

Nature of bottom, *Mud*

Direction of surface current, *Wind N 22 W*

Force of surface current, *3*

Direction of bottom current.

Force of bottom current,

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

To what service attached, *26076*

Name and rank of commanding officer, *James A. Smith  
Yeoman*

Name and position of observer, *J. M. [unclear]  
Yeoman*

1302

REMARKS.

Specimens Obtained  
Flat fish Winkles, Dead  
Oyster & Scallop shells. Hermit  
Crab & Lady Crab

# TEMPERATURE RECORD.

Instrument used, *Beane Trawl*  
Current number of observation, *1302*  
Date, *Sept 13<sup>th</sup> 88*  
Locality, *Green Point Reef*  
Bearings, *Cominant pt N 50° 20' W 1/2 N*  
*7 1/2 miles S 10° 20' W 1/2 S. Adams Rock Beacon N 24° E*  
Time of day, *2.24 P.M.*; of tide, *1<sup>st</sup> 2<sup>d</sup> Ebb*  
State of sky, *bc*  
Temperature of air, *72*  
" surface of water, *67*  
" at depth of \_\_\_\_\_ fathoms,  
" of bottom, *65*  
Depth, in fathoms, *5.5*  
Nature of bottom, *Mud*  
Direction of surface current,  
Force of surface current,  
Direction of ~~bottom~~ *bottom* current, *Drift N 40° W*  
Force of ~~bottom~~ *bottom* current, *Drift 3*  
Name of vessel, *U.S. Fish Com. Fish Hawk*  
To what service attached, *U.S. Fish Com.*  
Name and rank of commanding officer, *James A. Bennett*  
*Master U.S.N.*  
Name and position of observer, *Wm. S. Kirtland*  
*Master U.S.N.*

1303

REMARKS.

Specimens Obtained  
Oyster & clam shells / *Stropharia*  
& Squid

# TEMPERATURE RECORD.

Instrument used, *Beam Thermometer*

Current number of observation, *1303*

Date, *Sept 13<sup>th</sup> 88*

Locality, *Greenwich 1 day*

Bearings, *Commencement to 40° 50' N 4 1/2° E  
to 41° 18' 1/2 S Allen Rock beam N 8 1/4 E*

Time of day, *2.34 pm*; of tide, *1 1/2<sup>h</sup> ebb*

State of sky, *bc*

Temperature of air, *72*

“ surface of water, *67*

“ at depth of \_\_\_\_\_ fathoms,

“ of bottom, *65*

Depth, in fathoms, *5 1/2*

Nature of bottom, *Gravel*

Direction of ~~surface~~ <sup>wind</sup> current, *W or W*

Force of ~~surface~~ <sup>wind</sup> current, *3*

Direction of bottom current,

Force of bottom current,

Name of vessel, *U.S. Fish Commission*

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James A. Smith  
Master U.S.N.*

Name and position of observer, *J. M. ...*

1304

REMARKS.

Specimens Obtained  
Flat fish Hermit crabs  
Spider crabs. Head Aiptasia  
Shells & stones. Star fish &

TEMPERATURE RECORD.

Instrument used, *Beane Trawl* 30

Current number of observation, *1304*

Date, *Sept 13" 88*

Locality, *Bay of Amherst Bay*

Bearings, *Comme au de No r + W 3/4 N*  
*Narrinde to N. b. Allen's Rock bearing + E 1/2 N*

Time of day, *2.06 PM*; of tide, *1<sup>st</sup> Ebb*

State of sky, *bc*

Temperature of air, *72*

" surface of water, *67*

" at depth of \_\_\_\_\_ fathoms,

" of bottom, *65.5*  
*4.5*

Depth, in fathoms, \_\_\_\_\_

Nature of bottom, *Mud*

Direction of ~~surface~~ current, *South West*

Force of ~~surface~~ current, *Force 4*

Direction of bottom current,

Force of bottom current,

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

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James A. Smith*  
*Comdr. U.S.N.*

Name and position of observer, *J. Smith*  
*Comdr. U.S.N.*



1305

REMARKS.

Specimens Obtained  
Flat fish, Spider Crabs, Conch  
Hairs, Ripe fish, dead oyster &  
Scallops shells

# TEMPERATURE RECORD.

Instrument used, *Beam Trawl*  
Current number of observation, *1305*  
Date, *Sept 28 88*  
Locality, *Narragansett Bay*  
Bearings, *Gun Point Light S 20° W 1/2 N*  
*W. side of Pt. A. Allen's Rock Beacon S 20° E 1/2 S*  
Time of day, *2:55 PM*; of tide, *1 1/2 Ebb*  
State of sky, *bc*  
Temperature of air, *73.5*  
" surface of water, *67*  
" at depth of \_\_\_\_\_ fathoms,  
" of bottom, *66*  
Depth, in fathoms, *5*  
Nature of bottom, *Mud*  
Direction of surface current, *Wind*  
Force of surface current, *3*  
Direction of bottom current,  
Force of bottom current,  
Name of vessel, *U.S. Fish Hawk*  
To what service attached, *2657E*  
Name and rank of commanding officer, *James R. Smith*  
*Captain U.S.N.*  
Name and position of observer, *W. L. ...*  
*Assistant*

1306

REMARKS.

Specimens of *Phormium*  
*terrestris* & *maritimum*

TEMPERATURE RECORD.

Instrument used, *Dryden Hydrog*

Current number of observation, *1056*

*25*

Date, *Sept 14 85*

Locality, *Providence River*

Bearings, *Gunpoint Pt S x E*

*Bulllocks Pt S 82 S 3/4 E Sayut Pt E N E*

Time of day, *10 05* : of tide, *7/8 of flood*

State of sky, *bc*

Temperature of air, *50*

" surface of water, *69*

" at depth of \_\_\_\_\_ fathoms,

" of bottom, *64*

Depth, in fathoms, *8*

Nature of bottom,  *Mud*

Direction of surface current, *Wind*

Force of surface current, *Wind*

Direction of bottom current,

Force of bottom current,

Name of vessel, *U.S. Fish Commission*

To what service attached, *U.S. Fish*

Name and rank of commanding officer, *James A. Smith  
Lieutenant*

Name and position of observer, *Anderson  
Master*

1307

REMARKS.

Specimens Obtained  
Starfish flat fish Hairs oysters  
shell Mussels shells Lurches  
Lobsters scallop shell Spiders  
Crabs. King crabs Lurches

# TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1307* *39*

Date, *Sept 17 88*

Locality, *Providence River*

Bearings, *Gunpoint - S 10 E 1/2 S*  
*Bullsheads Lt - S 1/2 E 3/4 S Magnet Pt - East*

Time of day, *11.59 am*; of tide, *1<sup>st</sup> 2<sup>d</sup> Flood*

State of sky, *bc*

Temperature of air, *66*

“ surface of water, *69 1/2*

“ at depth of \_\_\_\_\_ fathoms,

“ of bottom, *64*

Depth, in fathoms, *7 1/2*

Nature of bottom, *Sandy*

Direction of ~~surface~~ current, *none*

Force of ~~surface~~ current, *wind 2*

Direction of bottom current,

Force of bottom current,

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

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James A. Smith*  
*Captain U.S.N.*

Name and position of observer, *John W. ...*  
*Master of ...*

1308  
REMARKS.

Specimens Obtained  
at the Gray's Bay, Kaitiaki  
Point, Otago. By Mr. Bennett  
Otago Council. Crystals & Clean and  
scallop shells

# TEMPERATURE RECORD.

40

Instrument used, *Ream Fath*

Current number of observation, *1308*

Date, *Sept 17 88*

Locality, *Providence River*

Bearings, *Crimineal Pt S 83 1/4 S*

*Bullocks Pt W 1/2 W 1/2 at Pt C & S*

Time of day, *12.06* ; of tide, *1 1/2 2/3*

State of sky, *clear*

Temperature of air, *52*

" surface of water, *64*

" at depth of fathoms,

" of bottom, *64.5*

Depth, in fathoms, *70 1/2*

Nature of bottom, *fine white sand*

Direction of ~~surface~~ *surface* current, *South*

Force of ~~surface~~ *surface* current, *2*

Direction of ~~bottom~~ *bottom* current, *drift*

Force of bottom current,

Name of vessel, *U.S. Fish Com*

To what service attached, *No 546*

Name and rank of commanding officer, *James L. Smith  
Master*

Name and position of observer, *J. S. Livingston  
Master*



1309

REMARKS.

*Specimens Obtained*

Same as 1308 except no starfish

# TEMPERATURE RECORD.

Instrument used, *Beam Trawl* 41  
Current number of observation, *1809*  
Date, *Aug 27 88*  
Locality, *Providence River*  
Bearings, *Commencement Pt - 183 1/2 E*  
*Bullock's Pt - W Magnet 125 1/2 S*  
Time of day, *7.49* : of tide, *14.50 Ebb*  
State of sky, *Cloudy*  
Temperature of air, *68*  
" surface of water, *66*  
" at depth of fathoms,  
" of bottom, *66*  
Depth, in fathoms, *5*  
Nature of bottom, *Gravel*  
Direction of ~~surface~~ *wind* current,  
Force of ~~surface~~ *wind* current,  
Direction of ~~bottom~~ *drift* current,  
Force of bottom current,  
Name of vessel, *U.S. Fish Com.*  
To what service attached, *26176*  
Name and rank of commanding officer, *James A. Smith*  
*7 rate Surgeon*  
Name and position of observer, *Charles H. Smith*  
*Observer*

1310

REMARKS.

~~Specimens of~~  
Shells, Crabs, Winkles, flat-  
fish.

# TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1310* 42

Date, *Sept 17 88*

Locality, *Providence River*

Bearings, *Cominicut St S E S E*

*Beulahs Pt Smith. Hayat<sup>th</sup> E E E*

Time of day, *7.54* ; of tide, *8<sup>th</sup> 2<sup>nd</sup> ebb*

State of sky, *cloudy*

Temperature of air, *68*

“ surface of water, *66*

“ at depth of fathoms,

“ of bottom, *66 -*

Depth, in fathoms, *4 1/2*

Nature of bottom, *Mud*

Direction of ~~surface~~ *wind* current, *S*

Force of ~~surface~~ *wind* current, *2*

Direction of ~~bottom~~ *drift* current.

Force of bottom current,

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

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James A. Smith*  
*Master U.S.N.*

Name and position of observer, *W. L. S. M. S. M.*  
*Master U.S.N.*

1881

REMARKS.

Specimens of *Thalassidroma*  
Spider Crab Flat fish  
Grouper scup

# TEMPERATURE RECORD.

Instrument used, *Beane Trawl*  
 Current number of observation, *1311* *43*  
 Date, *Sept 17*  
 Locality, *Providence River*  
 Bearings, *Commencement Pt - N 87° E*  
*Puerto Choles Pt - N 60° E*  
*St. Sabine Pt - N 1/2 W*  
 Time of day, *7:57* ; of tide, *1 1/2 Ebb*  
 State of sky, *Cloudy*  
 Temperature of air, *68*  
 " surface of water, *65*  
 " at depth of \_\_\_\_\_ fathoms,  
 " of bottom, *6.6*  
 Depth, in fathoms, *4 1/4*  
 Nature of bottom, *mad*  
 Direction of ~~surface~~ *surface* current, *S*  
 Force of ~~surface~~ *surface* current, *2*  
 Direction of ~~bottom~~ *bottom* current,  
 Force of bottom current,  
 Name of vessel, *U.S. Fish Hawk*  
 To what service attached, *U.S.F.C.*  
 Name and rank of commanding officer, *James L. Smith*  
*Comdr. U.S.N.*  
 Name and position of observer, *J. M. Smith*  
*Master*

412

REMARKS.

Specimens: *Adelphiocentrus*  
Species: *Sargassum* *plumieri*  
*Diptera* & *Coelocentrus*

# TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1312*

Date, *Sept 17<sup>th</sup> 89*

Locality, *Providence River*

Bearings, *Cumminat. Lt. E E X S*

*Bullocks Lt. X E X E 1/4 E Estimated - North*

Time of day, *8.04* ; of tide, *1<sup>st</sup> Ebb*

State of sky, *cloudy*

Temperature of air, *68*

“ surface of water, *66* -

“ at depth of \_\_\_\_\_ fathoms,

“ of bottom, *66*

Depth, in fathoms, *5*

Nature of bottom, *Mud*

Direction of ~~surface current~~, *Drift South*

Force of ~~surface current~~, *2*

Direction of ~~bottom current~~, *Drift*

Force of bottom current,

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

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James A. Smith  
Master U.S.N.*

Name and position of observer, *J. M. Slighton  
Master U.S.N.*



1313

REMARKS.

Specimens Obtained  
Mussels Flat Fish Spider  
Crabs Nystis & Scallop shells

# TEMPERATURE RECORD.

Instrument used, *Beam Trawl*  
Current number of observation, *1313* *25*  
Date, *Sept 17<sup>th</sup> 89*  
Locality, *Providence River*  
Bearings, *Cominicut Lt - S E 1/2 S*  
*Bullocks Lt - S E 1/4 E* *Sabins Lt - North*  
Time of day, *8-09* : of tide, *7<sup>45</sup> Ebb*  
State of sky, *Cloudy*  
Temperature of air, *68.5*  
" surface of water, *66.5*  
" at depth of \_\_\_\_\_ fathoms,  
" of bottom, *66 -*  
Depth, in fathoms, *6 1/2* ✓  
Nature of bottom, *Mud*  
Direction of ~~surface~~ *wind* current, *South*  
Force of ~~surface~~ *wind* current, *2*  
Direction of ~~bottom~~ *drift* current,  
Force of bottom current,  
Name of vessel, *U.S. Fish Hawk*  
To what service attached, *U.S.F.C.*  
Name and rank of commanding officer, *James A. Smith*  
*Master*  
Name and position of observer, *John A. Smith*  
*Master*

1314

REMARKS.

Specimens Obtained:  
King Crab. Flat fish, Lady crab  
Hermit spider crabs, Long shell  
~~W~~ Winkler oyster Luchog & Scallop  
shells.

# TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1314* 66

Date, *Sept 19 08*

Locality, *Narragansett Bay*

Bearings, *Cominac Lt to N X W 2 1/4 W*  
*Narragansett Lt to S X W 1/4 W*

Time of day, *9:56* ; of tide, *1/2 Ebb*

State of sky, *Cloudy*

Temperature of air, *59*

" surface of water, *64*

" at depth of \_\_\_\_\_ fathoms,

" of bottom, *64*

Depth, in fathoms, *7 3/4*

Nature of bottom, *Mud*

Direction of ~~surface~~ *Wind* current, *N X W*

Force of ~~surface~~ *Wind* current, *3*

Direction of ~~bottom~~ *Wife* current,

Force of bottom current,

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

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James H. Smith*  
*Master U.S.N.*

Name and position of observer, *John H. ...*  
*Commander*

1315

REMARKS.

Specimens Obtained  
King + Hermit Crabs. Seal  
shells. Clams. Flat fish & scallop  
small star fish.

# TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1315* 67

Date, *Sept 19 1881*

Locality, *Narragansett Bay*

Bearings, *Linnicutt St N 1/2 N x N 3/4 N*  
*Narragansett S 7/2 S. Allen Rock Beacon N 8 3/4 N*

Time of day, *10.22* ; of tide, *Ebb*

State of sky, *Blandy*

Temperature of air, *58*

" surface of water, *64.5*

" at depth of \_\_\_\_\_ fathoms,

" of bottom, *63*

Depth, in fathoms, *6*

Nature of bottom, *Mud*

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

Force of ~~surface~~ *Wind* current, *3*

Direction of ~~bottom~~ *Wind* current,

Force of bottom current,

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

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *J. M. Smith*  
*Master U.S.N.*

Name and position of observer, *J. M. Smith*  
*Master U.S.N.*

1316

REMARKS.

Specimens Obtained  
Skate Flat fish Haik  
Squilla Gonyceps, Squid  
King Crab, Butter fish, Shell  
shells. Hermit-crab, Winkel  
stones.

# TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation. *1316* *68*

Date, *Sept 19*

Locality, *Starrapunt Bay*

Bearings, *270° 1/4 S. 1/4 E. 1/4 S. 1/4 E. 1/4 S. 1/4 E. 1/4 S. 1/4 E.*

Time of day, *10 50* ; of tide, *Ebb 1/2*

State of sky, *Cloudy*

Temperature of air, *68°*

“ surface of water, *65°*

“ at depth of \_\_\_\_\_ fathoms,

“ of bottom, *63*

Depth, in fathoms, *5*

Nature of bottom, *Mud*

Direction of ~~surface~~ *Wind* current, *N. N. W.*

Force of ~~surface~~ *Wind* current, *1/2*

Direction of ~~bottom~~ *Wind* current,

Force of bottom current,

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

To what service attached, *U.S. Fish Hawk*

Name and rank of commanding officer, *James H. ...*

Name and position of observer, *John ...*



1317

REMARKS.

Specimens Obtained  
King crabs Spider & Hermit crabs  
flat fish. kelp, dead starfish  
& oyster shells.

# TEMPERATURE RECORD.

Instrument used, *Beam Trawl*  
 Current number of observation, *1317* *69*  
 Date, *Sept 19* 88

Locality, *Starragannett Bay*  
 Bearings, *Commercial St No N N x N*  
*Warwick St No N N x N*

Time of day, *11-20 am*; of tide, *ebb*

State of sky, *cloudy*

Temperature of air, *60*  
 " surface of water, *64.5*  
 " at depth of fathoms,  
 " of bottom, *60*

Depth, in fathoms, *6 1/2*

Nature of bottom, *Sand*  
 Direction of ~~surface current~~ *Wind N N W*

Force of ~~surface current~~ *Wind 2*

Direction of ~~bottom current~~

Force of bottom current,

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

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James A. Smith*  
*Master U.S.N.*

Name and position of observer, *W. M. S. S. S.*  
*Master U.S.N.*

1318  
REMARKS.

Specimens Obtained  
10 Star fish, Flat fish, King crabs  
Winkles, Hermit crabs, Spider  
crabs, Hog choker

# TEMPERATURE RECORD.

Instrument used, *Beane Trawl*  
Current number of observation, *1318* *70*  
Date, *Sept 19* *88*  
Locality, *Warramundee Bay*  
Bearings, *Warramundee Lt No 10 S 1/2 W 1/2 N*  
*Warramundee Lt No 10 1/4 W Allen Rock beacon E 1/2 N*  
Time of day, *11.35 AM*; of tide, *Ebb 3/4 Low*  
State of sky, *Cloudy*  
Temperature of air, *60*  
" surface of water, *65*  
" at depth of fathoms,  
" of bottom, *63*  
Depth, in fathoms, *7*  
Nature of bottom, *1 mud*  
Direction of ~~surface~~ *surface* current, *N 1/2 W*  
Force of ~~surface~~ *surface* current, *2*  
Direction of ~~bottom~~ *bottom* current,  
Force of bottom current,  
Name of vessel, *U.S. Fish Hawk*  
To what service attached, *U.S.F.C.*  
Name and rank of commanding officer, *James A. Smith*  
*Captain U.S.N.*  
Name and position of observer, *John H. ...*  
*Captain U.S.N.*

1319  
REMARKS.

Specimens Obtained  
King Cove Flat fish. Full size  
Hermit & Spider Cove, Head  
Oyster & scallop shells.

# TEMPERATURE RECORD.

Instrument used, *Beam Thermometer,*  
Current number of observation, *1319*      *71*  
Date, *Sept 19*      *88*  
Locality, *Narragansett Bay*  
Bearings, *Winnicut Pt No Tr 3/4 W*  
*Narricut Pt S W N. Alton Rock Beacon E 1/2 S*  
Time of day, *11:00 am*; of tide, *Ebb 3/4*  
State of sky, *cloudy*  
Temperature of air, *60*  
    "    surface of water, *65*  
    "    at depth of          fathoms,  
    "    of bottom, *68*  
Depth, in fathoms, *5*  
Nature of bottom, *1 Mud & shell*  
Direction of *French* *N W W*  
~~surface current,~~  
Force of *Wind*  
~~surface current,~~      *2*  
Direction of *Trade*  
~~bottom current,~~  
Force of bottom current,  
Name of vessel, *U.S. Fish Hawk*  
To what service attached, *U.S.F.C.*  
Name and rank of commanding officer, *James A. Smith*  
*Master*  
Name and position of observer, *J. M. Longtin*

1320

REMARKS.

Specimens Obtained  
Young 2 cup Flat fish Skate  
4 Star fish, Spider & hermit crabs  
Head oyster & scallop shells

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1320*

*72*

Date, *Sept 19 88*

Locality, *Providence River*

Bearings, *Cominute Lt or 4 S 1/4 S*

*Bullochs Lt or 1/4 S 1/4 S N at Pt or 2*

Time of day, *1.45 pm*; of tide, *Flood 1/4 S*

State of sky, *Cloudy*

Temperature of air, *67*

" surface of water, *67.5*

" at depth of fathoms,

" of bottom, *60 fms*

Depth, in fathoms, *60 5*

Nature of bottom, *Mud shells*

Direction of ~~surface current~~, *Wind*

Force of ~~surface current~~, *Wind 2*

Direction of ~~bottom current~~, *Wind East*

Force of bottom current, *Sand*

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

To what service attached, *U.S. Fish Hawk*

Name and rank of commanding officer, *James A. Smith  
Comdr USN*

Name and position of observer, *John H. Johnson  
Mate USN*



1321  
REMARKS.

Specimens Obtained  
Flat fish spider crabs  
King crabs skate, Pipe fish  
Sculpin, sea oyster & scallop  
shell.

# TEMPERATURE RECORD.

Instrument used, *Ream Trawl*

Current number of observation. *1321* **73**

Date. *Sept 19 1880*

Locality, *Providence Horn*

Bearings, *Linnicut Lt - S 70 E*

*Rocks Lt - N x N Kayat Pt E x S*

Time of day, *1.58 PM*; of tide. *Flood 1<sup>st</sup> 2<sup>nd</sup>*

State of sky, *Cloudy*

Temperature of air, *67*

" surface of water, *65.5*

" at depth of fathoms,

" of bottom, *65*

Depth, in fathoms, *5 1/2*

Nature of bottom, *Gravel & shell*

Direction of surface current, *N x W*

Force of wind, *2*

Direction of drift.

Force of bottom current.

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

To what service attached, *U.S. F.C.*

Name and rank of commanding officer, *Jesse A. ...*

Name and position of observer, *W. ...*

1322

REMARKS.

Specimens obtained  
Shore of Lake Erie. Gen. in some  
lead cys. Scum & mud shell

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation. *1322*

*74*

Date, *Sept 19<sup>th</sup> 00*

Locality, *Providence River*

Bearings, *Gunpoint E-S 1/4 E*

*Bullocks Pt SE 3/4 S* *Boyet Pt E x S 1/2 S*

Time of day, *2.22 PM*; of tide, *1<sup>st</sup> low*

State of sky, *cloudy*

Temperature of air, *66*

“ surface of water, *65.0*

“ at depth of fathoms,

“ of bottom, *64*

Depth, in fathoms, *4 3/4*

Nature of bottom, *Sand & Gravel*

Direction of ~~surface current~~ *Wind* *at low*

Force of ~~surface current~~, *2*

Direction of bottom current.

Force of bottom current.

Name of vessel, *Fish Hawk*

To what service attached, *No 874*

Name and rank of commanding officer, *James S Smith*  
*Capt USN*

Name and position of observer, *J. H. Johnston*  
*Capt USN*

1323

REMARKS.

*[Faint, illegible handwritten text]*

# TEMPERATURE RECORD.

Instrument used, *Cope's dredge*

Current number of observation. *1323*

*75*

Date. *Sept 24*

Locality. *Providence*

Bearings. *Commencement Pt - S 27° 1/2 W*

*Bullocks Pt - N W. Say at Pt - S E 1/2 E*

Time of day, *11.15* hrs ; of tide, *High water*

State of sky, *bc*

Temperature of air, *58*

" surface of water, *64*

" at depth of \_\_\_\_\_ fathoms,

" of bottom, *62.5*

Depth, in fathoms, *2 3/4*

Nature of bottom, *Hard Sand*

Direction of ~~surface~~ <sup>*wind*</sup> current, *N to E*

Force of ~~surface~~ <sup>*wind*</sup> current, *3*

Direction of bottom current,

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James A. Smith*  
*Captain U.S.N.*

Name and position of observer, *Wm. H. Smith*  
*Captain U.S.N.*

1324  
REMARKS.

Specimens Obtained  
from rocks & shells and  
sponges.

# TEMPERATURE RECORD.

Instrument used, *Dryden Bridge*

Current number of observation. *1324*

*76*

Date. *Sept 24*

Locality, *Pearl River*

Bearings. *Cominicut Lt S 1/2 E*

*Bullocks Lt NW 1/4 N Noyat Pt S E 3/4 E*

Time of day. *1.15 Pm* : of tide. *1<sup>st</sup> Dr Ebb*

State of sky, *Partly Cloudy*

Temperature of air, *58*

“ surface of water, *64.5*

“ at depth of fathoms,

“ of bottom, *63*

Depth, in fathoms, *23 3/4*

Nature of bottom, *Mud*

Direction of surface current, *Wind N N E*

Force of surface current, *3*

Direction of bottom current.

Force of bottom current.

Name of vessel. *Fish Hawk*

To what service attached, *USFCS*

Name and rank of commanding officer. *James S. Smith*

Name and position of observer. *W. H. Smith*



1325

REMARKS.

Specimens of shells

Small Oyster & Scallop shells

Hermit Crabs & small stones

3 1/2

TEMPERATURE RECORD.

Instrument used, *Oyster Snapper*

Current number of observation. *1325* *77*

Date, *Sept 24 88*

Locality, *Pass River*

Bearings. *Cominicut Pt S 7/8 E*  
*Bullheads Pt N 7/8 W Sayat Pt S E 1/4 E*

Time of day, *1.35* of tide. *1<sup>st</sup> Lr Ebb*

State of sky, *b-c*

Temperature of air, *58*

.. surface of water, *64.5*

.. at depth of \_\_\_\_\_ fathoms,

.. of bottom, *63*

Depth, in fathoms, *3 1/2*

Nature of bottom, *Sand*

Direction of ~~surface current~~ *North*

Force of ~~surface current~~ *3*

Direction of bottom current,

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached, *US 76*

Name and rank of commanding officer, *James B. Smith*

*Mate U.S.N.*

Name and position of observer, *John W. ...*  
*Mate U.S.N.*

1326  
REMARKS.

Specimens obtained  
Rocks sponge sea by the scallop  
shells.

# TEMPERATURE RECORD.

Instrument used *Oyster depth*  
 Current number of observation, *1326* 78.  
 Date, *Sept 24 88*  
 Locality, *Provincetown*  
 Bearings, *Luminicut Lt 27 1/2 E*  
*Rattles Lt 4 N 1/2 W 1/2 W 1/2 N 1/2 E*  
 Time of day, *1.54* P.M. of tide, *1 20 Ebb*  
 State of sky, *b c*  
 Temperature of air, *58*  
     "    surface of water, *64*  
     "    at depth of           fathoms,  
     "    of bottom,           *63*  
 Depth, in fathoms, *2*  
 Nature of bottom, *Hard*  
 Direction of surface current, *Wind 1 1/2 E*  
 Force of surface current, *Wind 3*  
 Direction of bottom current,  
 Force of bottom current,  
 Name of vessel, *Light Vessel*  
 To what service attached, *26 76*  
 Name and rank of commanding officer, *Master*  
 Name and position of observer, *Master*

1927  
REMARKS.

Specimens returned  
1 Black Mussel and Dead Shells  
+ 2 Starfish.

# TEMPERATURE RECORD.

Instrument used, *Oyster dredge*

Current number of observation, *1327*

*79*

Date, *Sept 24*

Locality, *Lower River*

Bearings, *Cominicut Pt S 1/4 E*

*Bullock Pt N 3/4 W Sayat Pt S E 1/4 S*

Time of day, *2.10 pm*; of tide, *1<sup>st</sup> Dr Ebb*

State of sky, *bc*

Temperature of air, *58*

" surface of water, *64.5*

" at depth of \_\_\_\_\_ fathoms,

" of bottom, *64*

Depth, in fathoms, *10 1/2 feet*

Nature of bottom, *hard*

Direction of ~~surface~~ <sup>*surface*</sup> current, *N + E*

Force of ~~surface~~ <sup>*wind*</sup> current, *3*

Direction of bottom current,

Force of bottom current,

Name of vessel, *U.S. Fish Com.*

To what service attached, *U.S. Fish Com.*

Name and rank of commanding officer, *James G. Smith*

Name and position of observer, *W. H. C. ...*

*...*

1328

REMARKS.


Specimens obtained  
from clam and water shells.  
3 starfish 2 winkles.

# TEMPERATURE RECORD.

Instrument used, *Oyster package*  
Current number of observation, *1328* = 80  
Date, *Sept 24 98*  
Locality, *Pine River*  
Bearings, *Comincul - S - S 1/2 E*

*Bullocks to NW 1/4 of Ray at N - S E S*  
Time of day, *2.20 PM*; of tide, *Low Ebb*

State of sky, *clear*

Temperature of air, *58*  
" surface of water, *64.05*  
" at depth of          fathoms,  
" of bottom, *64* 

Depth, in fathoms, *11 feet*  
Nature of bottom, *Sand*

Direction of ~~surface~~ <sup>*surface*</sup> current, *N. N. E*  
Force of ~~surface~~ <sup>*surface*</sup> current, *3*

Direction of bottom current,  
Force of bottom current,

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

To what service attached, *U.S.F.*

Name and rank of commanding officer, *James A. Smith  
Master USN*

Name and position of observer, *J. M. McLaughlin  
Master USN*



1829

REMARKS.

Specimens Obtained  
Small Clams, Oysters and  
Scallop shells.

2 Starfish

TEMPERATURE RECORD.

Instrument used, *Oyster dredge*

Current number of observation, *1329* \* *81*

Date, *Sept 24*

Locality, *Proctor's Cove*

Bearings, *Laminical Pt. South*

*Bullocks Pt. NW buoy at Pt. 88 1/4 E*

Time of day, *2.34*; of tide, *2" Dr Ebb*

State of sky, *bc*

Temperature of air, *58*

" surface of water, *64.5*

" at depth of fathoms,

" of bottom, *CF*

Depth, in fathoms, *2 3/4*

Nature of bottom, *Sand*

Direction of ~~surface~~ <sup>*Wind*</sup> current, *NNE*

Force of ~~surface~~ <sup>*Wind*</sup> current, *2*

Direction of bottom current,

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James A. Smith  
Master*

Name and position of observer, *J. M. Smith  
Master*

1330

REMARKS.

Specimens Obtained  
from Clam & head of jet. shells  
removed & preserved

# TEMPERATURE RECORD.

Instrument used, *W. & A. S. & Co.*

Current number of observation, *1330*

*= 85*

Date, *Sept 21*

Locality, *Proctor River*

Bearings, *Commenced at S  $\frac{1}{4}$  W*

*Railroad E - N W  $\frac{1}{2}$  W Stay at 1<sup>st</sup> SE  $\frac{1}{4}$  S*

Time of day, *3.12 P.*

; of tide,  *$\frac{1}{2}$  Ebb*

State of sky, *Clear*

Temperature of air, *60*

" surface of water, *64*

" at depth of

fathoms,

" of bottom, *64*

Depth, in fathoms, *8  $\frac{1}{2}$  fathoms*

Nature of bottom, *Gravel*

Direction of ~~surface current~~ *Wind N N E*

Force of ~~surface current~~ *3*

Direction of bottom current,

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached, *U. S. F. C.*

Name and rank of commanding officer, *James A. Smith*  
*Master*

Name and position of observer, *J. M. Lightfoot*  
*Master*

1832  
REMARKS.

Frederick [unclear] [unclear]  
Lind [unclear] [unclear]  
Sea [unclear] [unclear]

# TEMPERATURE RECORD.

Instrument used, *Cyber Bridge*  
Current number of observation. *13.3k* = *86*  
Date, *Sept 24*  
Locality, *Poor's Cove*  
Bearings, *Conimicut Pt S 1/2 W*  
*Bullheads Pt S W 1/4 N Sayat Pt S 1/4 S*  
Time of day, *3.24* : of tide, *1/2 Ebb*  
State of sky, *Clear*  
Temperature of air, *60*  
" surface of water, *65*  
" at depth of \_\_\_\_\_ fathoms,  
" of bottom, *60-*  
Depth, in fathoms, *6 feet*  
Nature of bottom, *Sand*  
Direction of ~~surface current~~ *Small*, *Not S*  
Force of surface current, *3*  
Direction of bottom current,  
Force of bottom current,  
Name of vessel, *Fish Hawk*  
To what service attached, *USFS*  
Name and rank of commanding officer, *James A. Smith*  
*Master*  
Name and position of observer, *J. M. Smith*  
*Master*

1333  
REMARKS.

Specimen obtained  
from  
Sealed glass

# TEMPERATURE RECORD.

Instrument used, *Oyster dredge*  
Current number of observation, *4332* *x 87*  
Date, *Sept 24* *18*  
Locality, *Pro River*  
Bearings, *Levee cut S 8 x W*  
*Reel 100 ft x W x W 1/8 W drag at 150 ft x 8 1/2 S*  
Time of day, *3.30* : of tide, *3' Dr Ebb*  
State of sky, *b*  
Temperature of air, *60*  
" surface of water, *65*  
" at depth of \_\_\_\_\_ fathoms,  
" of bottom, *65.10*  
Depth, in fathoms, *4 fathoms*  
Nature of bottom, *Sand*  
Direction of ~~surface~~ current, *NNE*  
Force of ~~surface~~ current, *1/3*  
Direction of bottom current,  
Force of bottom current,  
Name of vessel, *Fish Hawk*  
To what service attached, *No 1/2*  
Name and rank of commanding officer, *Comdr. J. M. [unclear]*  
Name and position of observer, *Wm. [unclear]*  
*Comdr. [unclear]*



1834  
REMARKS.

Lead Oyster & clam shells. See  
over of page.

# TEMPERATURE RECORD.

Instrument used, *Oyster Hygrometer* #88

Current number of observation. *1333*

Date, *Sept 24*

Locality, *Parr River*

Bearings, *Cominicut Lt S x W 1/4 W*

*Bullheads Lt N x W 1/4 N Sayat Pt S x S*

Time of day, *3.35* ; of tide, *3/2<sup>nd</sup> Ebb*

State of sky, *Clear*

Temperature of air, *60*

" surface of water, *64.5*

" at depth of \_\_\_\_\_ fathoms,

" of bottom, *64*

Depth, in fathoms, *5 feet*

Nature of bottom, *Sand*

Direction of ~~surface~~ *wind* current, *N N E*

Force of ~~surface~~ *wind* current, *3*

Direction of ~~bottom~~ *surface* current, \_\_\_\_\_

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached, *2676*

Name and rank of commanding officer, *James A. Smith*  
*Master USN*

Name and position of observer, *J. M. [unclear]*  
*Master USN*

1885  
REMARKS.

head oyster shells  
& Staphid

# TEMPERATURE RECORD.

Instrument used, *Cylinder and glass* 89

Current number of observation, *1334*

Date, *Sept 28<sup>th</sup> 88*

Locality, *Provo River*

Bearings, *Laminian R - 170 E*

*Bulletin of the U.S. Navy at 12 1/4 S*

Time of day, *11:30 am* : of tide, *4" Or Flood*

State of sky, *Cloudy*

Temperature of air, *61*

" surface of water, *64*

" at depth of fathoms,

" of bottom, *65*

Depth, in fathoms, *2 3/4*

Nature of bottom, *Hard*

Direction of ~~surface current~~ *wind N E*

Force of ~~surface current~~ *wind 2*

Direction of ~~bottom current~~ *wind*

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached, *26 1/2 E*

Name and rank of commanding officer, *James A. Smith  
Master*

Name and position of observer, *J. M. Lighton  
Master*

1336  
REMARKS.

Specimens Obtained  
1 star fish & dead Oyster shells

# TEMPERATURE RECORD.

Instrument used, *Oyster dredge*  
Current number of observation, *1335* '90  
Date, *Sept 25* 89  
Locality, *Provo River*  
Bearings, *Laminated - Lt - S x E*  
*Bullhead Lt - N x W / 10 N* *Hayat SE 1/4 S*  
Time of day, *11.45* : of tide, *4 2/3* *flood*  
State of sky, *cloudy*  
Temperature of air, *65*  
" surface of water, *64*  
" at depth of \_\_\_\_\_ fathoms,  
" of bottom, *64*  
Depth, in fathoms, *2 1/4*  
Nature of bottom, *Sand*  
Direction of ~~surface current~~ *wind* *N E*  
Force of ~~surface current~~ *wind* *2*  
Direction of ~~bottom current~~ *drift*  
Force of bottom current,  
Name of vessel, *Fish Hawk*  
To what service attached, *U S F C*  
Name and rank of commanding officer, *James A Smith*  
*Master*  
Name and position of observer, *J. M. Livingston*  
*Master*

~~1527~~

REMARKS.

14 - 2      19"      6 1/2  
 15 - 1/4      "  
 5 1/2  
 -----  
 20.6

44 15-  
 53, 58

91-

2 *Stapida* dead oyster shells

93 dead oyster shells

- 101
- 103
- 104
- 118
- 119

17  
 ---  
 67  
 84

121  
 ---  
 20  
 37

|||||

4

Wilmington River to Chesapeake Bay