

ORIGINAL LOG BOOK OF THE "FISH HAWK"

UNITED STATES FISH COMMISSION

STATION RECORDS

Numbers 770 to 814

A.

U. S. Fish Commission

Dredging Records

1880.

*W. Redge*

## TEMPERATURE RECORD.

Instrument used, *Reynolds, Zambra <sup>no</sup> ~~24666~~*

Current number of observation, *770.*

Date, *Aug - 6<sup>th</sup> 1880.*

Locality, *~~United States~~ Narragansett Bay*

Bearings, *Beaumont Light S 35 E.*

*7/8 of a mile*

Time of day, *10 a m* ; of tide, *ebb*

State of sky, *cloudy*

Temperature of air, *68*

" surface of water, *66.5 (n.g. - 4000)*

" at depth of fathoms,

" of bottom, *62.5 (n.g. 42666)*

Depth, in fathoms, *8 1/4*

Nature of bottom, *Hard Sand - shells*

Direction of surface current, *wind - NE*

Force of surface current, " *4*

Direction of bottom current, *Drift*

Force of bottom current, *Distance of drift*

Name of vessel, *Fish Hawk*

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

Name and rank of commanding officer,

*Lieut J. L. Lamon U.S. Navy -*

Name and position of observer,

*H. A. Appleton M.K.*

*N.B. All bearings Magnetic.*

*Variation 10° 0' W*

770.  
REMARKS.

10 a.m. - large haul around the same

*Echinarchinus parma*. very abundant.

*Mulinia lateralis* "

*Turbonilla*

*Natica triseriata*

~~*Melampus goulis*~~

~~*Melolita mediolus*~~

*Callista convexa*

*Cyprina Islandica* young.

*Siphonia hyalina*

Small crustacea.

few worms.

*Tellina lineata*

*Eupagurus longicaepus*.

*Loligo Reali*. med.

*Astrangia Danae*

*Eupagurus pollicaris*.

770-775 - similar in  
character.

Trawl

TEMPERATURE RECORD.

Instrument used, *Trawl*  
Current number of observation, *771*  
Date, *Aug - 6* *1880*  
Locality, *Manzanett Bay*  
Bearings, *Benson tail light S 35-E*  
*3/4 of a mile*  
Time of day, *10.30 am*; of tide, *ebb*  
State of sky, *cloudy -*  
Temperature of air, *68*  
" surface of water, *66.5 (71.7 - 40007)*  
" at depth of \_\_\_\_\_ fathoms,  
" of bottom, *62.5 (71.8 - 42366)*  
Depth, in fathoms, *8 1/4*  
Nature of bottom, *sand + shells*  
Direction of surface current, *none NE*  
Force of surface current, *none - 3*  
Direction of bottom current, *with*  
Force of bottom current, *Distance of Drift*  
Name of vessel, *Fish Hawk*  
To what service attached, *U.S. Fish Comm.*  
Name and rank of commanding officer,  
*Lieut J. L. Lawrence U.S.N.*  
Name and position of observer,

*J. C. Van Fleet M.D.*

771.

## REMARKS.

*Rain* *eglantina*.*Lepidetta* *maculata*  
*Pseudopleuronectes americanus*.~~*Merluccius* *peruvianus*~~  
*Cancer* *irrorata* large*Sycotypus* *canaliculatus**Soligo* *Realii*. also eggs with  
young hatching.*Mytilus* *edulis*. large.*Neverita* *duplicata* (dead)*Clicona* *anephera**Astrangia* *Danese*.*Eupagurus* *pallicarius**Cancer* *borealis*. 1 large.*Homarus* *Americanus*.

Dredge -

TEMPERATURE RECORD.

Instrument used, *Reynolds' Zamboni*  
Current number of observation, *772*  
Date, *Aug 6 - 1880*  
Locality, *Hannymussell Bay -*  
Bearings, *Beaver Tail S x E 1 1/4 miles*  
Time of day, *11.35 am*; of tide, *ebb*  
State of sky, *cloudy*  
Temperature of air, *72*  
" surface of water, *69.5 (73-40007)*  
" at depth of fathoms,  
" of bottom, *67 (73 42666)*  
Depth, in fathoms, *8*  
Nature of bottom, *Sand & Shells -*  
Direction of surface current, *Wind N.E.*  
Force of surface current, *Wind - 2*  
Direction of bottom current, *Drift*  
Force of bottom current, *Distance of Drift*  
Name of vessel, *Fish Hawk*  
To what service attached, *U. S. Fish Com.*  
Name and rank of commanding officer,  
*Lieut J. L. Lammens U.S.N.*  
Name and position of observer,

*J. L. Lammens U.S.N.*

772.  
REMARKS.

Simila 770

*Ptilochirus pinguis*  
very abundant.

Journal.

TEMPERATURE RECORD.

Instrument used, *Reynolds's*  
Current number of observation, *773*  
Date, *Aug 6 - 1880*  
Locality, *Navyansett Bay -*  
Bearings, *Beaver Tail Light S x E*  
*1 1/8 miles*  
Time of day, *11.45 am* ; of tide, *ebb*  
State of sky, *cloudy -*  
Temperature of air, *82*  
" surface of water, *69.5 (77.40007)*  
" at depth of \_\_\_\_\_ fathoms,  
" of bottom, *67 (77.42666)*  
Depth, in fathoms, *8*  
Nature of bottom, *sand & shells -*  
Direction of surface current, *wind NE*  
Force of surface current, *wind, 3*  
Direction of bottom current, *Drift*  
*drift in*  
Force of bottom current, *Drift*  
Name of vessel, *Fish Hawk*  
To what service attached, *U.S. Fish Com*  
Name and rank of commanding officer,  
*W. J. Lawrence -*  
Name and position of observer,

*W. J. Lawrence*  
*U.S. Fish Com*

Copeus borealis (2)

Lobster.

Chalina oculata.

~~Pseudo pleuronectes americanus.~~~~Limulus polydora~~

Lophozetta maculata.

Pinnatus evolutus.

Poronotus triacanthus

Lagodon rhomboides

Stentor argyrops.

Zyg. Pecten eglantina juv.

Pecten eglantina ♀ ♂

+ spawning.

Cymodocea rigida juv.

Eupagurus pollicaris.

Loligo Pealii. (young, and med.)

Dredge -

TEMPERATURE RECORD.

Instrument used, *Migetti's gambra*

Current number of observation, *774*

Date, *Aug 6 - 1880*

Locality, *Murrayansett Bay -*

Bearings, *North end of Dutch Island  
one south 1/2 a mile.*

Time of day, *1 pm* ; of tide, *ebb*

State of sky, *bc -*

Temperature of air, *72*

" surface of water, ~~72~~ *72* (<sup>n2</sup>40007)

" at depth of fathoms,

" of bottom, *69* (<sup>n2</sup>42666)

Depth, in fathoms, *10 1/2*

Nature of bottom, *sand + silt mud.*

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

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

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

Force of ~~bottom~~ current, *Drift -*

Name of vessel, *Fish Hawk*

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

Name and rank of commanding officer,

*Lt J. L. Lomen*

Name and position of observer,

*J. C. Stupp*  
*Lieut. M.D.*

774.  
REMARKS.

*Libinia Canaliculata* (Kuge),  
*Microcigna prolifera*.  
*Chalina arbuscula*  
*Atilochirus pinguis* (Cuv.)  
*Eupagurus longicarpus*.

Trawl-

TEMPERATURE RECORD.

Instrument used, *Magnitt's Zamboni*

Current number of observation, *775*

Date, *Aug 6-* 1880

Locality, *Manoagansett Bay -*

Bearings, *North end of Dutch Island*

*bears South One mile. <sup>off:</sup> Block buoy-*

Time of day, *1.35* ; of tide, *ebb*

State of sky, *bc-*

Temperature of air, *79*

" surface of water, *72 (40007)*

" at depth of fathoms,

" of bottom, *68 (42666)*

Depth, in fathoms, ~~*70*~~ *12*

Nature of bottom, *Gravel-sand & Mud.*

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

Force of ~~surface current~~ <sup>*wind*</sup>, *0*

Direction of ~~bottom current~~ <sup>*drift*</sup>,

Force of bottom current, *Distance of Drift*

Name of vessel, *Fish Hawk*

To what service attached, *U S F C*

Name and rank of commanding officer,

*H Z L Turner W.M.*

Name and position of observer,

*J. C. Van Dike M.S.*

- Pinnatus Carolinus*  
 do <sup>Evadne</sup> ~~Carolinus~~.  
*Lautoga omittus*  
*Lautogadellus aderseni*.  
*Stenotritus argyrops*  
*Physa* sp.  
*Lophosetta maculata*  
*Raia eglantria*  
*Sibinia canaliculata*, many large.  
*Sycotypus* " several.  
*Cancer irroratus*  
 " *borealis*.  
*Fuegar carica*  
*Arbacia punctulata*, 1. small.  
*Asterias Forbesii* many, food size.  
*Cibrella sanguinolenta*.  
*Hemarus Americanus*, several young.  
*Micraciona prolifera*  
*Chalina arbuscula*  
*Chione sulphurea*  
*Astrangia Danae*, (abdt.)  
*Metricidium marginatum*.  
*Mytilus edulis*, very many!!!  
 The bottom was a mussel bed  
 with some large stones, about  
10 bushels of mussels came up.

Dredge -

TEMPERATURE RECORD.

Instrument used, *Magnette Jarvis*

Current number of observation, *776*

Date, *Aug 7-*

Locality, *Narragansett Bay -*

Bearings, *Stump - N N E 2 1/2 E*  
*5/8 of a mile - Mag:*

Time of day, *9.45 am*; of tide, *ebb*

State of sky, *Clear -*

Temperature of air, *72*

" surface of water, *67 1/2 (No. 40007)*

" at depth of fathoms,

" of bottom, *5-8 1/2 (No. 2666)*

Depth, in fathoms, *27 1/2*

Nature of bottom, *sand & shells -*

Direction of surface current, *Wind - N*

Force of surface current, *Wind - 1*

Direction of bottom current, *Drift*

Force of bottom current, *Direction of Drift*

Name of vessel, *Fish Hawk*

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

Name and rank of commanding officer,

*Lt Z. L. Linn*

Name and position of observer,

*F. C. Van Fleet M.S.*

776.  
REMARKS.

*Aleyonidium rubrum*

Trawl-

TEMPERATURE RECORD.

Instrument used, *Negretti Zamboni*

Current number of observation, *177*

Date, *Aug 7 - 1880*

Locality, *Narragansett Bay -*

Bearings, *To Dumpling N W by W 1/2 W -*

*5/8 of a mile - mag -*

Time of day, *10.20 am*; of tide, *ebb*

State of sky, *Clear -*

Temperature of air, *72*

" surface of water, *67 1/2 (440007)*

" at depth of fathoms,

" of bottom, *5-8 1/2 (42666)*

Depth, in fathoms, *27 1/2*

Nature of bottom, *Sand + Shells -*

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

Force of ~~surface current~~, *wind 1*

Direction of bottom current,

Force of bottom current,

Name of vessel, *Fish Hawk*

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

Name and rank of commanding officer,

*Lt J. Lawrence*

Name and position of observer,

*Thos Van Dike M.D.*

777  
REMARKS.

*Palaemonetes*

*Pseudosquilla* - *Americanus*

*Pseudosquilla* *deutatus*

*Promethes* *Carolinus*

" " very young.

*Lophosetta* *maculata*

*Lantia* *decolorata*

*Stomatopoda* *argentea* *juv*

*Promethes* *triacanthus*

*Physa* *lenticula*

*Loligo* *Pealii*, <sup>medium</sup> and large  
quantities of eggs. Some  
ripe and hatching.

Trawl.

TEMPERATURE RECORD.

Instrument used, *Negretti Zamboni* -  
Current number of observation, *778*  
Date, *Aug - 7 1880*  
Locality, *Harveyansett Bay -*  
Bearings, *At Dumping N <sup>3</sup>/<sub>4</sub> E - 800 yards -*  
Time of day, *10.40 am*; of tide, *Ebb*  
State of sky, *Clear*  
Temperature of air, *76*  
" surface of water, *70* (*40007*)  
" at depth of \_\_\_\_\_ fathoms,  
" of bottom, *5-8 1/2* (*42666*)  
Depth, in fathoms, *26*  
Nature of bottom, *Gravel & shells -*  
Direction of surface current, *wind N*  
Force of surface current, *wind 1*  
Direction of <sup>*Drift*</sup> bottom current,  
Force of <sup>*Drift*</sup> bottom current,  
Name of vessel, *Fish Hawk*  
To what service attached, *U.S.F.C.*  
Name and rank of commanding officer,  
*Lt Z. L. Linnon*  
Name and position of observer,

*F. C. Van Dusen M.D.*  
H

778.  
REMARKS.

Raja Eglanteria  
Pseudopleuronectes Americana  
Lautogalaxus adspersus.  
Lautoga onitoides  
Physic's Arctis  
Stenotomus cryzops  
Alcyonidium rubrum  
Nemertesia antennina  
Homarus Americana many, <sup>med</sup> small to  
Loligo Pealii, medium

Osledge -

TEMPERATURE RECORD.

Instrument used, Negretti's Zamboni

Current number of observation, 779

Date, Aug 7 1880

Locality, Narragansett Bay

Bearings, Off Dumpling NE

1 1/4 Miles

Time of day, 11 03 ; of tide, ebb

State of sky, Clear

Temperature of air, 78

" surface of water, 68

(4000<sup>43</sup> f)

" at depth of fathoms,

" of bottom, 57 1/2

(4266<sup>72</sup> f)

Depth, in fathoms, 22 1/2

Nature of bottom, Sand & Gravel

Direction of surface current, Mod SW

Force of surface current, Mod 1

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,

Wm L Lumen

Name and position of observer,

J.C. Van Vleet M.S.

779.  
REMARKS.

*Alcyonidium rubrum.*

Trawl -

TEMPERATURE RECORD.

Instrument used, *Reynolds' Galvanometer*

Current number of observation, *780*

Date, *Aug 7 - 1880*

Locality, *Narragansett Bay*

Bearings, *Beaver tail Lt west*

*one mile. Moq:*

Time of day, *11.30*; of tide, *Ebb*

State of sky, *Clear*

Temperature of air, *79*

" surface of water, *69* (*40007*)

" at depth of fathoms,

" of bottom, *5-7 1/2* (*42666*)

Depth, in fathoms, *18*

Nature of bottom, *Sand & shells -*

Direction of surface current, *Wind S W*

Force of surface current, *Wind - 1*

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,  
*W G L Linnon*

Name and position of observer,

*Thos Van Dike M.D.*

780.  
REMARKS.

*Raja eglanteria*

*Pseudorhombus dentatus*

*Pseudopleuronectes americanus*

*Lophopsetta maculata*

*Physiculus leucis*

*Loligo Reali*, many young.

Trawl.

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 781

Date, Aug 7 1880

Locality, Manayunkett Bay -

Bearings, Beacon Point Lt N N W

one mile -

Time of day, ~~12 M~~ 12 M ; of tide, Ebb

State of sky, clear

Temperature of air, 75

" surface of water, 67

~~72~~  
(40407)

" at depth of fathoms,

" of bottom, 5-7

(42666)

Depth, in fathoms, 16

Nature of bottom, Sand.

Direction of surface current, Wind S W

Force of surface current, Wind 1

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,

Lt J. L. Linnon

Name and position of observer,

H. Van Dusen M.D.

781.  
REMARKS.

*P. Eglanteria*  
*Pseudobombus mutatus*  
*Pseudoplenodes americanus*  
*Physcia tenuis*  
*Raphosetta maculata*  
*Stenobius argyrops*  
*Trionotus conell*

Sledge.

TEMPERATURE RECORD.

Instrument used, *Reynolds' Zumbro*

Current number of observation, *782*

Date, *Aug-12/80*

Locality, *Wenyanett Harbor*

Bearings, *Bumer Tail Lt N  $\frac{3}{4}$  N-*

*1  $\frac{1}{4}$  miles -*

Time of day, *9.30*; of tide, *flurd*

State of sky, *Cloudy with rain -*

Temperature of air, *68* (*701*)

" surface of water, *70* (*40007*)

" at depth of fathoms,

" of bottom, *60* (*42660*)

Depth, in fathoms, *16* (~~60~~)

Nature of bottom, *fine shells*

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

Force of ~~surface~~ current, *1*

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,

*H. J. Linneman*

Name and position of observer,

*H. Van Allen m.d.*

REMARKS.

*Myxogaster fuscus.*

Lampl

TEMPERATURE RECORD.

Instrument used, *Reyettei Zambra*  
Current number of observation, *783*  
Date, *Aug - 12 -*  
Locality, *Nunyanette Harbor*  
Bearings, *Brenton Reef Lt ship N x E*  
*one mile*  
Time of day, *10.15* ; of tide, *Flood*  
State of sky, *cloudy - rain*  
Temperature of air, *70*  
" surface of water, *70* (*40007*)  
" at depth of fathoms,  
" of bottom, *55* (*42000*)  
Depth, in fathoms, *17 1/2*  
Nature of bottom, *sand*  
Direction of ~~surface~~ *wind* current, *N*  
Force of ~~surface~~ *wind* current, *2*  
Direction of bottom current,  
Force of bottom current,  
Name of vessel, *Fish Hawk*  
To what service attached, *USAC*  
Name and rank of commanding officer,  
*Lt J L Lamer*  
Name and position of observer,

*J. C. Van Duit M.D.*  
*H*

## REMARKS.

*Pseudorhombus oblongus*  
*Pseudopleuronectes americanus* (Gy.)  
*Lopholatilus maculatus*  
*Physiculus tenuis* ~~*Lopholatilus*~~ *tenuis*  
*Rhina glauca*.

*Bridge-*

TEMPERATURE RECORD.

Instrument used, *N. 3*  
Current number of observation, *784*  
Date, *Aug 12*  
Locality, *Nannyassa Bay*  
Bearings, *Point Judith - N 1/2 S -*  
*4 3/4 miles*  
Time of day, *10.50*; of tide, *flood*  
State of sky, *Cloudy - rain*  
Temperature of air, *71.5*

" surface of water, *71* (*40007*)

" at depth of *2* fathoms,

" of bottom, *53 1/2* (*42666*)

Depth, in fathoms, *20*

Nature of bottom, *sand*

Direction of surface current, *wind - N W*

Force of surface current, *wind - 2*

Direction of bottom current,

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached, *US AC*

Name and rank of commanding officer,

*W. L. Larnier*

Name and position of observer,

*F. C. Van Fleet M.D.*

REMARKS.

Trawl.

TEMPERATURE RECORD.

Instrument used,

N 3

Current number of observation,

785-

Date,

Aug 12

Locality,

Nunungansett Bay.

Bearings,

Bentons Reef 4<sup>th</sup> ship

N 1/2 W. 2 1/2 miles ~~ship~~

Time of day,

11 30

; of tide,

flood

State of sky,

Cloudy - rain -

Temperature of air,

72

" surface of water,

71

(40007)

" at depth of

fathoms,

" of bottom,

54 1/2

(42666)

Depth, in fathoms,

19 1/2

Nature of bottom,

hard

Direction of surface current,

Wind N W

Force of surface current,

Wind 2

Direction of bottom current,

Force of bottom current,

Name of vessel,

Hick Hawk

To what service attached,

U.S.F.C.

Name and rank of commanding officer,

H. Z. Lamer

Name and position of observer,

H. Van Vleet mid.  
11

## REMARKS.

Found Camp in some  
abstraction in 20 fathoms water  
Picked & tried to detach it  
but broke mine rope within  
10 fathoms of haul.

Dredge

TEMPERATURE RECORD.

Instrument used,

N 3

Current number of observation,

786

Date,

Aug 12

Locality,

Narragansett Bay -

Bearings,

Prudence Reef Lt. ship

N  $W \frac{1}{2}$  W -  $4 \frac{1}{2}$  Miles

Time of day,

2.35 p.m. ; of tide, H W

State of sky,

b.c.

Temperature of air,

74

"

surface of water, 71

(40007)

"

at depth of fathoms,

"

of bottom,  $53 \frac{1}{2}$

(42666)

Depth, in fathoms,

19

Nature of bottom,

mud.

Direction of ~~surface-current~~,

mod N W

Force of ~~surface-current~~,

mod 1

Direction of bottom current,

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

W. A. & C.

Name and rank of commanding officer,

Lt Z L Lurmen

Name and position of observer,

F. C. Paul dit M.D.  
#

REMARKS.

Trawl  
TEMPERATURE RECORD.

Instrument used,

N 3

Current number of observation,

787

Date,

Aug 12

Locality,

Nantuxant Bay -

Bearings,

Point's Reef Lt Ship -

nnw 1/2 w - 4 Miles

Time of day,

3 p m ; of tide, ebb

State of sky,

bc

Temperature of air,

74

"

surface of water, 71

(40007)

"

at depth of fathoms,

"

of bottom, 53 1/2

(42666)

Depth, in fathoms,

19

Nature of bottom,

sand & mud

Direction of surface current,

mud n w

Force of surface current,

mod 1

Direction of bottom current,

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

US F C

Name and rank of commanding officer,

Lt Z L Lamer

Name and position of observer,

J. C. Van Fleet M.D.

## REMARKS.

*Pseudopleuronectes Americanus*  
*Sophossetta maculata*  
*Physis Tunis*  
*Oreo cimbrius*  
*Mullus bilinearis*  
*Raja plantaria* ♀ & ♂

Hedge -

TEMPERATURE RECORD.

Instrument used,

N 3

Current number of observation,

788

Date,

Aug 13

Locality,

Wainwright Bay

Bearings,

~~Point~~ Promontory Ref. Lt. S. S. P.

N N W  $3/4$  W - 6 miles

Time of day, 10.40 am

; of tide,

flood

State of sky,

Clear

Temperature of air,

70

" surface of water,

71

(40007)

" at depth of

fathoms,

" of bottom, 54

(42066)

Depth, in fathoms,

18.

Nature of bottom,

fine sandy mud

Direction of ~~surface current~~,

Wind - N W

Force of ~~surface current~~,

Wind - Light -

Direction of bottom current,

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

US FC

Name and rank of commanding officer,

Lt Z L Lamm

Name and position of observer,

H. Van Fleet M.S.

REMARKS.

Otter Trawl

TEMPERATURE RECORD.

Instrument used, *N 3*  
Current number of observation, *789*  
Date, *Aug 13*  
Locality, *Newmanett Bay -*  
Bearings, *Brenton Reef Lt ship*  
*N. N. W.  $\frac{3}{4}$  W.  $5\frac{1}{4}$  miles*  
Time of day, *11.05* ; of tide, *flood*  
State of sky, *Clear -*  
Temperature of air, *70*  
" surface of water, *71 (40007)*  
" at depth of fathoms,  
" of bottom, *54 (42666)*  
Depth, in fathoms, *17 $\frac{1}{2}$*   
Nature of bottom, *Sandy mud*  
Direction of surface current, *Wind n w*  
Force of surface current, *Wind 1*  
Direction of bottom current,  
Force of bottom current,  
Name of vessel, *Fish Hawk*  
To what service attached, *US F.C.*  
Name and rank of commanding officer,  
*Lt J. L. Lamm*  
Name and position of observer,

*J. C. Davenport M.S.*

## REMARKS.

*Physicis tenuis**Radia eglanteria*" *lacina**Pseudopleuronectes americanus**Zoarces anguillariss.**Pseudorhombus dentatus*" *oblongus**Morluonius bilinearis**Leptopsetta maculata.**Physicis tenuis* juv in Pecten*tenuicaetatus.*

Trawl

TEMPERATURE RECORD.

Instrument used,

N 3

Current number of observation,

790

Date,

Aug 13

Locality,

Nantuxsetts Bay

Bearings,

Pt Judith - N N W  $\frac{3}{4}$  W -

8  $\frac{1}{2}$  miles -

Time of day,

11.55 ; of tide, flood

State of sky,

clear

Temperature of air,

70

"

surface of water, 71

(46007)

"

at depth of fathoms,

"

of bottom, 5-4  $\frac{1}{2}$

(42666)

Depth, in fathoms,

16

Nature of bottom,

fine sand

Direction of surface current,

Wind S

Force of surface current,

Wind 1

Direction of bottom current,

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

US F.C.

Name and rank of commanding officer,

H Z L Laumer

Name and position of observer,

J. Van Duit msl.

REMARKS.

*Raia eglanteria*.

*Raia laevis*.

*Loplopsetta maculata*.

*Pseudopleuronectes americanus*.

*Pseudorhombus oblongus*.

Drudge -

TEMPERATURE RECORD.

Instrument used,

N. 3

Current number of observation,

791

Date,

Aug - 13

Locality,

Manzanillo Bay

Bearings,

Pt. Judith - N N W - S

12 1/2 miles -

Time of day, 1.10 p m ; of tide,

flood

State of sky,

Clear -

Temperature of air,

72

" surface of water,

71

(4007)

" at depth of

fathoms,

" of bottom, 60

(42566)

Depth, in fathoms,

20

Nature of bottom,

Sand.

Direction of surface current,

Wind S S W

Force of surface current,

Wind 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,

Lt. Z. L. Lamm

Name and position of observer,

H. Van Duit M.S.

This belongs to 792.

REMARKS.

*Pseudopleuronectes americanus*  
*Lophopsetta maculata.*

*Pseudohombus dentatus.*

*Isurus anguillarid*

*Raia eglanteria.*

*Hippocampus antiquorum.*

Trawl

TEMPERATURE RECORD.

Instrument used,

N 3

Current number of observation,

792

Date,

Aug 13

Locality,

Murrayangetta Bay -

Bearings,

Pt. Judith N. N. W.

12 miles

Time of day,

1.50

; of tide,

H W

State of sky,

Clear

Temperature of air,

72

"

surface of water,

71

(4000)

"

at depth of

fathoms,

"

of bottom,

54

(42000)

Depth, in fathoms,

18

Nature of bottom,

Sand.

Direction of surface current,

Wind S W

Force of surface current,

Wind 2

Direction of bottom current,

Force of bottom current,

Name of vessel,

Hick Hawk

To what service attached,

U. S. C.

Name and rank of commanding officer,

Lt J. L. Larnen

Name and position of observer,

J. C. Van Duit M.S.

REMARKS.

REPLACEMENT SECOND

Dredge  
TEMPERATURE RECORD.

Instrument used, *N 3*  
Current number of observation, *793*  
Date, *Aug 14*  
Locality, *Nanuyaustto Bay -*  
Bearings, *Pt. Judith - N. 20 W 1/2 W*  
*6 miles*  
Time of day, *9 am* ; of tide,  
State of sky, *Cloudy -*  
Temperature of air, *71*  
" surface of water, *69 (40007)*  
" at depth of fathoms,  
" of bottom, *63 (42666)*  
Depth, in fathoms, *19*  
Nature of bottom, *sand*  
Direction of ~~surface~~ current, *Wind S.W.*  
Force of ~~surface~~ current, *Wind - 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,  
*Lt J. L. Lanner*  
Name and position of observer,

*J. C. Van Fleet M.D.*

REMARKS.

Trawl

TEMPERATURE RECORD.

Instrument used,

N 3

Current number of observation,

794

Date,

Aug 14

Locality,

Winnamunnet Bay

Bearings,

At South n r n 1/2 n

5 miles

Time of day,

9.45

; of tide,

State of sky,

cloudy -

Temperature of air,

70

" surface of water,

69

(40007)

" at depth of

fathoms,

" of bottom, 53

(42666)

Depth, in fathoms,

19

Nature of bottom,

sand.

Direction of ~~surface~~ current,

Wind R n

Force of ~~surface~~ current,

Wind 4

Direction of bottom current,

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

U.S.C.

Name and rank of commanding officer,

Sty L Lamer

Name and position of observer,

H. Van Duit M.S.  
11

REMARKS.

*Pseudopleuronectes americanus.*

*Lophopsetta maculata.*

*Pseudorhombus oblongus*

*Phycis tenuis*

*Merluccius bilinearis*

*Zoarces anguillaris*

*Prionotus carolinus.*

*Raia laevis*

.. *Eglantina.*

Usedge

TEMPERATURE RECORD.

Instrument used,

N 3

Current number of observation,

795-

Date,

Aug 14

Locality,

Wanquoanett Bay

Bearings,

Pt Judith N x N  $\frac{1}{2}$  W

4 miles

Time of day, 10.25 ; of tide,

State of sky,

Cloudy

Temperature of air,

71

" surface of water,

~~69~~ 69 (40007)

" at depth of

fathoms,

" of bottom,

53

(42666)

Depth, in fathoms,

19

Nature of bottom,

Sand.

Direction of ~~surface~~ current,

Wind SW

Force of ~~surface~~ current,

Wind 4

Direction of bottom current,

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

U.S.C.

Name and rank of commanding officer,

Lt J. L. Lamer

Name and position of observer,

J. C. Pauldit M.A.

REMARKS.

## Trawl

## TEMPERATURE RECORD.

Instrument used,

N 3

Current number of observation,

796

Date,

Aug 14

Locality,

Nanigansett Bay

Bearings,

Pt Judith. n x n

3 <sup>1</sup>/<sub>4</sub> miles.

Time of day, 11 am ; of tide,

State of sky,

Cloudy -

Temperature of air, 70

" surface of water, 69

(42007)

" at depth of fathoms,

" of bottom, 5-3

(42000)

Depth, in fathoms, 19

Nature of bottom,

mud.

Direction of ~~surface current~~,

Wind s w

Force of ~~surface current~~,

Wind 4

Direction of bottom current,

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

U. S. C.

Name and rank of commanding officer,

Lt J. L. Lumen

Name and position of observer,

H. Van Duit M.S.

REMARKS.

*Pseudopleuronectes americanus*

*Lophoetta maculata.*

*Pseudorhombus dentatus,*

*Phycis tenuis.*

*Raja laevis*

*Pteroplatea maculura?*

:

Dredge

TEMPERATURE RECORD.

Instrument used,

N 7

Current number of observation,

797

Date,

Aug 14

Locality,

Herringanuth Bay

Bearings,

at Indian. N N W  $\frac{3}{4}$  W

2  $\frac{1}{4}$  Miles

Time of day, 11.40 ; of tide,

State of sky,

Cloudy.

Temperature of air,

70

" surface of water, 68  $\frac{1}{2}$

(4007)

" at depth of fathoms,

" of bottom, 55-

(42666)

Depth, in fathoms,

16  $\frac{1}{2}$

Nature of bottom,

sand.

Direction of surface current,

Wind S W

Force of surface current,

Wind 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,

St. J. L. Lumen

Name and position of observer,

H. Van Fleet M.D.

REMARKS.

Shedde

TEMPERATURE RECORD.

Instrument used, *N 3*  
 Current number of observation, *798*  
 Date, *Aug 14*  
 Locality, *Near Nagayest Bay*  
 Bearings, *St Judith N 11/4 W x W 3/4 W - 1 1/4 miles*  
 Time of day, *12.10 PM*; of tide,  
 State of sky, *Cloudy*.  
 Temperature of air, *71*  
 " surface of water, *66* (*40007*)  
 " at depth of fathoms,  
 " of bottom, *59* (*42666*)  
 Depth, in fathoms, *12 1/2*.  
 Nature of bottom, *sands & shells*-  
 Direction of surface current, *mid 2 W*  
 Force of surface current, *mid 3*  
 Direction of bottom current,  
 Force of bottom current,  
 Name of vessel, *Fish Hawk*  
 To what service attached, *U.S.C.*  
 Name and rank of commanding officer,  
*H. J. Tanner*  
 Name and position of observer,

*F. W. Whit M.D.*

REMARKS.

REMARKS.

*Bredge*  
TEMPERATURE RECORD.

Instrument used, *N3*

Current number of observation, *799*

Date, *Aug 14*

Locality, *Manzanilla Bay*

Bearings, *Pt Judith - N 1/2 N*

*1 3/4 miles*

Time of day, *12.30* ; of tide,

State of sky, *cloudy -*

Temperature of air, *70*

" surface of water, *67*

*(40007)*

" at depth of fathoms,

" of bottom, *61*

*(42066)*

Depth, in fathoms, *13*

Nature of bottom, *Black sand*

Direction of surface current, *Wind SW*

Force of surface current, *Wind 3*

Direction of bottom current,

Force of bottom current,

Name of vessel, *Fish Hawk*

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

Name and rank of commanding officer,

*H. J. Lamer*  
Name and position of observer,

*H. Van Duit M.D.*

799.

REMARKS.

~~Platylabus maculosa?~~

Physicis tenuis, juv.

Trawl-

TEMPERATURE RECORD.

Instrument used,

N 3

Current number of observation,

800

Date, Aug 16.

Locality, Narragansett Bay -

Bearings, Poplar Pt. Light -

N N W  $\frac{3}{4}$  W 2  $\frac{1}{4}$  miles -

Time of day, 11 35 am, of tide,

State of sky, Clear

Temperature of air, 63

" surface of water, 70

(40007)

" at depth of fathoms,

" of bottom, 69  $\frac{1}{2}$

(42066)

Depth, in fathoms, 4

Nature of bottom, Sand

Direction of surface current,

Mid N

Force of surface current,

Mid 3

Direction of bottom current,

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

U.S.C.

Name and rank of commanding officer,

Name and position of observer,

W. S. Lawrence

W. S. Lawrence

REMARKS.

*Stenotomus argyrops* juv. <sup>numerous</sup> 2004  
*Prionotus carolinus*.  
*Tautoglabrus adspersus*.

Trawl-

TEMPERATURE RECORD.

Instrument used,

N 3

Current number of observation,

801

Date,

Aug 16

Locality,

Marion's Bay

Bearings,

Poplar Point Light

N x N

2 1/4 Miles

Time of day,

12.20

; of tide,

State of sky,

Clear

Temperature of air,

65

"

surface of water,

71

(40007)

"

at depth of

fathoms,

"

of bottom,

68

(42000)

Depth, in fathoms,

4 1/2

Nature of bottom,

Mud

Direction of ~~surface~~ current,

Mind N E

Force of ~~surface~~ current,

Mind Light Air

Direction of ~~bottom~~ current,

?

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

U.S. Fish Com.

Name and rank of commanding officer,

Name and position of observer,

H. J. Lammie

J. C. S. L. M. S.

## REMARKS.

*Anas cyanbrins*, single specimen  
*Lophopetta maculata*, several small  
*Pseudoflavonectes americanus*  
*Rana* sp. juv.

*Pelecanus carolinus* -  
*Sturnotomus argyrops*  
*Cyanocitta stelleri* juv, several specimens  
 very small (3/4 - 2 inches)

Hawl

**TEMPERATURE RECORD.**

Instrument used,

N 3

Current number of observation,

802

Date,

Aug 16

Locality,

Naugansett Bay

Bearings,

Haystack - West

$\frac{3}{4}$  of a mile

Time of day

2.15

; of tide,

State of sky,

Clear

Temperature of air,

68

"

surface of water,

70.5

(40007)

"

at depth of

fathoms,

"

of bottom,

62

(42666)

Depth, in fathoms,

12  $\frac{1}{2}$

Nature of bottom,

Mud

Direction of surface current,

Mid NE

Force of surface current,

Mid light air!

Direction of bottom current,

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

U.S.C.

Name and rank of commanding officer,

A. J. Lammie

Name and position of observer,

H. Van Fleet m.d.

## REMARKS.

*Pseudorhombus oblongus*

*Raia Eglantaria*

*Armotus Macanthus*

*Pseudopleuronectes americanus*

*Oros aymbius*

*Lycognathus fuscus*

*Lophopsetta maculata*

*Stenotomus argyrops* juv.

*Cottus bispinatus* juv.

Dredge

TEMPERATURE RECORD.

Instrument used,

N 3

Current number of observation,

803

Date,

Aug 16

Locality,

Munganao Bay

Bearings,

Time of day, 3.25 ; of tide,

State of sky,

Clear

Temperature of air,

67

" surface of water,

69

(40007)

" at depth of fathoms,

" of bottom, 60

(42060)

Depth, in fathoms,

20

Nature of bottom,

Sand

Direction of ~~surface~~ current,

Wind - SSE

Force of ~~surface~~ current,

Wind 2

Direction of bottom current,

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

U.S.C.

Name and rank of commanding officer,

Name and position of observer,

A. J. L. Lamer

J. Van Duit M.A.

REMARKS.

Dredge

TEMPERATURE RECORD.

Instrument used,

N 3

Current number of observation,

804

Date,

Aug 17

Locality,

Narragansett Bay

Bearings,

Attyhunk Light NE & E

8 3/4 miles

Time of day,

~~11.30~~

; of tide,

State of sky,

Clear

Temperature of air,

68

"

surface of water,

66

(40007)

"

at depth of

fathoms,

"

of bottom, #59

(42660)

Depth, in fathoms,

~~##2~~ ~~##~~ ~~##~~ ~~##~~ 11 1/4

Nature of bottom,

Sand ~~sh.~~

Direction of surface current,

Wind S.W.

Force of surface current,

Wind 2

Direction of bottom current,

Drift N.W. + S.

Force of bottom current,

Drift 1/4 mile

Name of vessel,

Fish Hawk

To what service attached,

U.S.C.

Name and rank of commanding officer,

Lt. Z. L. Tanner

Name and position of observer,

J. C. Van Dine M.S.

No 805-

Dredge - REMARKS.

805-

Same as 804-

fine sand-

Langley

TEMPERATURE RECORD.

Instrument used,

N 3

Current number of observation,

806

Date,

Aug 17

Locality,

Margamouth Bay -

Bearings,

cuttyhunk<sup>Is</sup> E. N. E.

7  $\frac{3}{4}$  miles -

Time of day, 12 M ; of tide,

State of sky, clear -

Temperature of air, 69

" surface of water, 67

(40007)

" at depth of fathoms,

" of bottom, 56

(42666)

Depth, in fathoms, 14

Nature of bottom,

sand

Direction of ~~surface current~~,

Wind - S.W.

Force of ~~surface current~~,

Wind - 2

Direction of ~~bottom current~~,

Drift N.S.W.

Force of ~~bottom current~~,

Drift  $\frac{1}{2}$  mile

Name of vessel,

Ship Hawk

To what service attached,

U.S.C.

Name and rank of commanding officer,

Name and position of observer,

Lt. Z. L. Tanner

W. H. Stimpert M.D.

REMARKS.

Dredge

TEMPERATURE RECORD.

Instrument used,

N 3

Current number of observation,

508

Date,

Aug 17

Locality,

Wilmington Bay -

Bearings,

Cathlamet Light NE x E  $\frac{3}{4}$  E

7  $\frac{3}{4}$  miles

Time of day, 12.50 pm; of tide,

State of sky,

clear

Temperature of air, 70

" surface of water, 67

(40007)

" at depth of fathoms,

" of bottom, 60

(42666)

Depth, in fathoms,

12  $\frac{1}{4}$

Nature of bottom,

sand

Direction of surface current,

Wind S W

Force of surface current,

Wind 2

Direction of bottom current,

Drift S W x S -

Force of bottom current,

Drift  $\frac{1}{2}$  mile

Name of vessel,

Fish Hawk

To what service attached,

U.S.C.

Name and rank of commanding officer,

Lt. L. Lamer.

Name and position of observer,

McCaullit M.S.

REMARKS.

817. *Stic Lacus punctatus.*

Bridge

TEMPERATURE RECORD.

Instrument used, *U 3*  
Current number of observation, *808*  
Date, *Aug 17*  
Locality, *Narragansett Bay*  
Bearings, *Cathybunk Light NE + E 1/2 E -*  
*8 miles*  
Time of day, *1.20* ; of tide,  
State of sky, *Clear*  
Temperature of air, *70*  
" surface of water, *67 (440007)*  
" at depth of fathoms,  
" of bottom, *60 (42666)*  
Depth, in fathoms, ~~*14*~~ *13*  
Nature of bottom, *Sand*  
Direction of surface current, *Wind S W*  
Force of surface current, *Wind 2*  
Direction of bottom current, *Drift S W x S 1/2 S*  
Force of bottom current, *Drift 1/4 mile*  
Name of vessel, *Fish Hawk*  
To what service attached, *U.S.C.*  
Name and rank of commanding officer,  
*H. L. Lamm*  
Name and position of observer,

*H. C. Van Dike M.S.*

REMARKS.

Wedge

TEMPERATURE RECORD.

Instrument used, *n 3*

Current number of observation, *809*

Date, *Aug 17*

Locality, *Manzanillo Bay*

Bearings, *Cuttyhunk Light - NE x E*

*12 Miles*

Time of day, *1:55* ; of tide,

State of sky, *Clear*

Temperature of air, *70*

" surface of water, *67* (*40007*)

" at depth of fathoms,

" of bottom, *52* (*42000*)

Depth, in fathoms, *21 1/4*

Nature of bottom, *fine sand*

Direction of surface current, *Wind SW*

Force of surface current, *Wind 2*

Direction of bottom current, *Drift N 1/2 S*

Force of bottom current, *Drift 1/4 mile*

Name of vessel, *Fish Hawk*

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

Name and rank of commanding officer,

*H. L. Lamm*

Name and position of observer,

*H. C. M. Lick M.D.*

*S. W.*

REMARKS.

509. *Cymricion regalis* very young,

7c

Trawl  
TEMPERATURE RECORD.

Instrument used, N 3  
Current number of observation, 810  
Date, Aug 17  
Locality, Weymouth Bay -  
Bearings, Littlehampton Light NE x E  
12 1/2 Miles  
Time of day, 2.15 - ; of tide,  
State of sky, Clear  
Temperature of air, 70  
" surface of water, 67 (40007)  
" at depth of fathoms,  
" of bottom, 52 (42666)  
Depth, in fathoms, 21  
Nature of bottom, Sand & Gravel -  
Direction of surface current, Mod S W  
Force of surface current, Mod 2  
Direction of bottom current, Slight W x W  
Force of bottom current, Slight 1/4 Miles  
Name of vessel, ~~U.S. Fish Hawk~~  
To what service attached, U.S.C.  
Name and rank of commanding officer,  
Lt J L Lamm  
Name and position of observer,

J. Van Fleet M.S.

## REMARKS.

Trawl came up with a large  
hole torn in it,

*Pseudopleuronectes americanus*

*Pseudorhombus oblongus*

*Raja radiata*?

*Zoarces anguillaris*

*Santogobius asperus*

*Cottus 188pinosus*

*Phycis Temis*, *P. chues*

L. Dredge

TEMPERATURE RECORD.

Instrument used, *N 3*

Current number of observation, *5411*

Date, *Aug 17*

Locality, *Narrowssett Bay -*

Bearings, *Cuttyhunk Light - E N E 1/2 E.*

*17 1/4 miles*

Time of day, *2 20* ; of tide,

State of sky, *Clear*

Temperature of air, *69.*

" surface of water, *67 (40007)*

" at depth of fathoms,

" of bottom, *53 (42666)*

Depth, in fathoms, *19 1/2*

Nature of bottom, *Sand - fine*

Direction of surface current, *Wind - S W*

Force of surface current, *Wind - 2*

Direction of bottom current, *Wind - S W*

Force of bottom current, *Wind - 1/4 mile*

Name of vessel, *Fish Hawk*

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

Name and rank of commanding officer,

*H. L. Larman*

Name and position of observer,

*F. C. Van Dike M.S.*

REMARKS.

Dredge

TEMPERATURE RECORD.

Instrument used,

N3

Current number of observation,

8126

Date,

Aug 18 - 1885

Locality,

~~off Long Island~~ Atlantic Ocean

Bearings,

Block Island  $NNW \frac{1}{4} W$

20 miles

Time of day, 11.30 am of tide,

State of sky,

b.c.

Temperature of air,

70

"

surface of water,

66

(40007)

"

at depth of

fathoms,

"

of bottom,

46

(42000)

Depth, in fathoms,

28 1/2

Nature of bottom,

hard

Direction of surface current,

mid SE

Force of surface current,

mid 2

Direction of bottom current,

drift NW

Force of bottom current,

1/4 mile

Name of vessel,

Fish Hawk

To what service attached,

USFC

Name and rank of commanding officer,

43rd Laramie

Name and position of observer,

St. Paul Whit M.S.  
H

## REMARKS.

*Echinarachne parva*  
*Sandstans* -  
*Empygaena pubescens* -  
*Neplutius Simpsoni*  
*Epizanthus Americanus* -  
*Natica Nana* -  
*Leptasterias Compta*  
*Asterias vulgaris*  
*Panobolus Montagnei*  
*Orayon vulgaris* -  
*Empygaena Bernhardson*  
*Stelodema un.*

812. *Simanda ferruginea* juv  
*Melucius bilinearis* juv.

Trawl

TEMPERATURE RECORD.

Instrument used, *W 3*

Current number of observation, *813*

Date, *Aug 18*

Locality, *Atlantic Ocean -*

Bearings, *Black Island 22 1/4 N*

*20 miles*

Time of day, *11.55* ; of tide,

State of sky, *b.c*

Temperature of air, *70*

" surface of water, *67* (*40007*)

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

" of bottom, *46* (*42666*)

Depth, in fathoms, *28 1/2*

Nature of bottom, *sand*

Direction of surface current, *mid SE*

Force of surface current, *mid 2*

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

Force of bottom current, *Dist: " 1/4 N -*

Name of vessel, *Fish Hawk*

To what service attached, *USFC*

Name and rank of commanding officer,

Name and position of observer,

*Th. Wauplit M.S.*

## REMARKS.

*Ophioglypha Savaii*  
*Echinarachnium poma.*  
*Pecten tenuicostatus*  
 New Schischouck.  
*Pardalium morbagnii*  
*Epizoanthus Americanus*  
*Neptunia simpsoni*  
*Puccinnum undulatum*  
*Aspina Islandica*  
*Crucibulum striatum*  
*Leptasterias Compta.*  
*Cibicella sanguinolenta*  
*Asterias vulgaris*  
 813 *Limanda ferruginea*  
*Raja erinacea?*  
 " sp.  
*Cottus 18 spinosus*  
*Physiculus, P. Chusa*  
*Zoarces anguillaris*  
*Muriceus bilinearis*  
*Liparis sp. in Pecten tenuicost.*

Trawl -

TEMPERATURE RECORD.

Instrument used, *n z*

Current number of observation, *814*

Date, *Aug 18*

Locality, *Atlantic Ocean -*

Bearings, *Block Island Lgt - n n w  $\frac{1}{4}$  w*  
*18 Miles*

Time of day, *1.0 p.m.* ; of tide,

State of sky, *b.c.*

Temperature of air, *72*

" surface of water, *72* (*40007*)

" at depth of *105* fathoms, *71.* (*10 of 57*) (*20 of 99*)

" of bottom, *46* (*42668*)

Depth, in fathoms, *27  $\frac{1}{2}$*

Nature of bottom, *sand + gravel.*

Direction of surface current, *Wind SE*

Force of surface current, *Wind 2*

Direction of bottom current, *Drift -  $\frac{1}{2}$  S W*

Force of bottom current, *do  $\frac{1}{4}$  W*

Name of vessel, *Fish Hawk*

To what service attached, *USFC*

Name and rank of commanding officer,

*Lt J L Larnon*

Name and position of observer,

*J. C. Van Fleet M.S.*

## REMARKS.

*Pecten tenuicostata* few  
*Asterias vulgaris*  
*Leptasterias conpta* abundant  
*Cribrella sanguinolenta*, few  
*Buccinum undatum* abdt  
*Cyprina Islandica* abdt  
*Echinura chinensis* few  
*Ophioglypha borealis*, one  
*Sp. Lymanida ferruginea*  
*Lophius piscatorius*.  
*Pseudorhombus oblongus*  
*Phycis tenuis*, *P. thius*  
*Raja* sp.  
*Zoarces anguillaris*  
*Cottus 18-spinosus*  
*Morlucius bilinearis*  
*Raja erinacea?*

7<sup>th</sup> 11/4 = 59. Jemel

St. S, S, E, - Pt. J. N 65 W

Brew. H. N # 14 E

$$\begin{array}{r} 239 \\ 19 \frac{1}{2} \end{array}$$

Doc. Van Vliet  
vs. Fish Hawk.

Aug. 17. 1880.

$$\begin{array}{r} 2 \overline{) 57} \\ 28 \frac{1}{2} \end{array}$$

$$\begin{array}{r} 2 \overline{) 55} \\ 27 \frac{1}{2} \end{array}$$