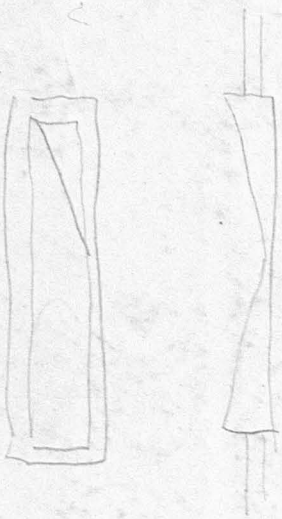
ORIGINAL LOG BOOK OF THE "FISH HAWK"

UNITED STATES FISH COMMISSION

STATION NUMBERS

Numbers 1074 to 1122

927 March



S 25° E North
S 63° W NXE

Race pt W ½ N
Cape Cod ~~S 26 ½ 8~~
S 26 E

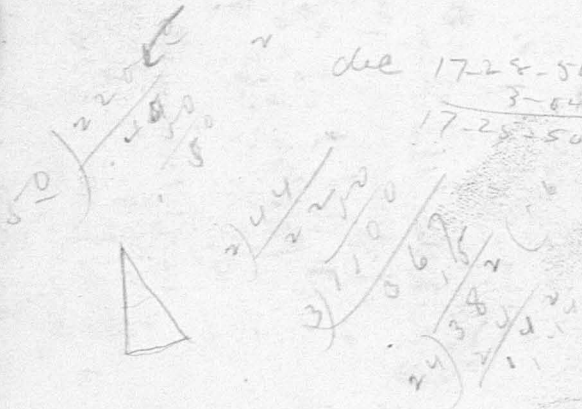
69-45 S 83 ½ E
4-39 44
50
2200
69-50

S 33° E

N by W ½ W

cc S 15° W NW S 24° W
Rec S 75° W NW S 80° W

dec 17-28-54 39.5
3-54 4 2/3
17-28-50 1580
263
184.3



cc S 60° W NE S 54° W
SW ¾ W

70° W
69-30
Sq. T. 5-55.3 + to m. 7.

Ism. 16-05-37 @ 63°-50
dec 17-25

1074

Remarks

Put over 1 Beam Trawl

at 1.10 P.M. in 18 fathoms of water - at 1.30 hove in Trawl - Containing - 2 Dozen Shrimp, 1 small Sturgeon - about one foot long. and 2 doz. small ~~perch~~. Rock fish - several young Menhaden - 1 perch several flounders (2 kinds)

Thus 1st 11 St. 40. N. & W. 1/2. W. 4 3/4

1074

TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1074

Date, March 11 – 1882

Locality, Off Kent Island

Bearings, South point of Kent Island bearing E x N. 1 1/4

Time of day, 1.10 P.M. ; of tide, Ebb

State of sky, Clear

Temperature of air, 51

" surface of water,

" at depth of fathoms,

" of bottom, 41

Depth, in fathoms, 18 – 12 – 11

Nature of bottom, Black mud

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

Force of ~~surface current,~~ Wind 3

Direction of ~~bottom current,~~ Drift S.S.W. 1 mi

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,

1075

REMARKS.

Trawl was put over in 14 fasts of water at 9.45 A.M. At 10 A.M. hove in Trawl - Containing several small Rock also some young Crawfish.

1075

N.Z. 47995

TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1075

Date, Mar 13 1882

Locality, Off Kent Island

Bearings, Sandy Pt. Lt. N.x W. 1/4 W

3.1/2

Time of day, 9.45 A.M. of tide, flood

State of sky, Partly Cloudy

Temperature of air, 45

" surface of water, 43

" at depth of fathoms,

" of bottom, 40

Depth, in fathoms, 14 — 11 —

Nature of bottom, mud

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

Force of ~~surface current~~, Wind 5

Direction of ~~bottom current~~, Drift N.N.W.

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

REMARKS.

Put Oyster Dredge over at 2.20 P.M. in 6 fms of water – at 2.27 have in Dredge – Containing

TEMPERATURE RECORD.

Instrument used, Oyster Dredge

Current number of observation,

Date, Mar 11 / 1882

Locality,

Bearings,

Time of day, 2.20 P.M. of tide,

State of sky, Partly Cloudy

Temperature of air, 28

" surface of water,

" at depth of fathoms,

" of bottom,

Depth, in fathoms, 6 - 7 -

Nature of bottom, Mud

Direction of ~~surface current~~, Wind

Force of ~~surface current~~, Wind

Direction of ~~bottom current~~, Drift N.N

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,

1076

REMARKS.

Beam Trawl was put over at 10.15 in 15 fathoms of water. Hove up Trawl at 10.36 am it containing several small Roale, flounder and 2 small Crumpish

1076.
(N.Z. 47995.)

TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1076

Date, Mar. 13. 1882.

Locality, Off Kent Island

Bearings, Sandy Pt. Lt. N.XW¼W 3'

Time of day, 10.15 am; of tide, flood

State of sky, Partly Cloudy

Temperature of air, 45

" surface of water, 43

" at depth of fathoms,

" of bottom, 40

Depth, in fathoms, 15

Nature of bottom, Mud.

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

Force of ~~surface current~~, Wind 5

Direction of ~~bottom current~~, Drift N.N.E

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,

1077

REMARKS.

Put over Beam Trawl at 10.55 AM in 11 fathoms of water at 11.18 hove up Trawl. it containing several small Rock, Flounder & some small Crawfish

1077

TEMPERATURE RECORD.

Instrument used, Beam Trawl.

Current number of observation, 1077

Date, March 13. 1882

Locality, Off Kent Island

Bearings, Sandy Pt. Lt. N. W. 1/4 W.

2 1/4

Time of day, 10.55 am of tide, Flood

State of sky, Partly Cloudy

Temperature of air, 49

" surface of water, 43

" at depth of fathoms,

" of bottom, 40

Depth, in fathoms, 11 – 12.

Nature of bottom, Blue mud.

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

Force of ~~surface current~~, Wind 5

Direction of ~~bottom current~~, Drift N.W.

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,

1078

REMARKS.

Water Specimens.

Apparatus used;

Depth of specimen	Sp. gravity	temp. corrected
Surface	1.0234	64
5 fms	1.0235	64
10 fms	1.0240	60

Astrophyton Agassizii abundant
Alcyonium carneum rare
Stronglyocentrotus Drobachiensis 1
Asterias vulgaris
Ctenodiscus crispatus
Leptasterias compta
Rossia Hzatki
Cyprina islandica
Fusus decemcostatus
Buccinum undatum
Eupagurus
Pandalus 2
Ophiopholis aculeata
Mysis? 1, Solaster endeca 1 large

Sipho Stimpsoni
Sebastes marinus 4
Glyptocephalus cynoglossus 6
Anomia glabra 1
Hippoglossoides platessoides 1
Tifaras 1 lineatus
Prionotus Carolinus 1
Raia radiata

Triglifa Pingelei many
{All bearings magnetic.}

TEMPERATURE RECORD.

Instrument used, Trawl -

Current number of observation, 1078

Date, Aug 2d 1882

Locality, Cape Cod

Bearings, Nauset Beacons
NW¼N dist 10 m

Time of day, 7-30 Am of tide,

State of sky, b c

Temperature of air, 72°
Sig. service thr -

" surface of water, 63. N.Y. #47996.

" at depth of 5 fathoms, 56° at 10 fms 40

" of bottom, 37 - N.Y. #47995

Depth, in fathoms, 53 = 55.

Nature of bottom, gn. mud fn sand

Direction of ~~surface current~~ Wind, W.S.W. Force 3.

~~Force of surface current~~ Drift, S by W ½ m.

~~Direction of bottom current~~,

~~Force of bottom current~~,

Name of vessel, Fish Hawk

To what service attached, U.S. Fish Commission

Name and rank of commanding officer,
Lieut. J.L. Tanner U.S. Navy.

Name and position of observer,
J.B. Blish.
Midn, U.S. Navy.

1079

REMARKS.

Water Specimens			
Depth	Sp. grav.	Tem.	Corrected to 60
Surface	1.02325	64	
5 fm	1.023	64	

Hippoglossoides platessoides
Raia radiata +
Phycis chuss & tenuis
[illegible]
Astrophyton Agassizii abundant
Lipke decemcostatus live fine
Cyprina islandica dead
Macoma sabulosa
Terebratulina septentrionalis
Saxacara arctica +
Glycimeris siliqua
Eggs of Buccinum undatum
Anomia aculeata
Astarte bus 1 valve
Eggs of a gasteropod
Hippocephalus
Urticina ~~nodosa~~ callosa

1079
Instruments same as 1078

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1079

Date, August 2nd 1882

Locality, Cape Cod

Bearings, Nauset Beacon
NWby W½W d. 8¼ m

Time of day, 8-40 AM; of tide,

State of sky, bc

Temperature of air, 69°

" surface of water, 63.5°

" at depth of 5 fathoms, 56.5 at 10 fms 44

" of bottom, 37

Depth, in fathoms, 59=61.5

Nature of bottom, fine sand

Direction of ~~surface current~~, Wind NNW Force 3

~~Force of surface current~~, Drift ESE 1 mile

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, US Fish Comm.

Name and rank of commanding officer,
Lieut. J. L. Tanner USN

Name and position of observer,
J. B. Bish
Midn USN

1080

REMARKS.

Water Specimens

Depth	Sp. grav.	Temp	Corr. to 60°F
Surf	1.0234	62.5	
5 fms	1.0242	58	
10 fms	1.024	58.5	

Sipho decemcostatus

? Hyax ? Astrophyton very abdt.

Enfagurus

? Asterias vulgaris × very large

Pecten Icelandicus live

Lexicama Norvegica 1 good fair

" arctica

Cyprina Icelandica dead

Glycimeris dead

Cardium Islandicum d.

Sipho Stimpsoni live

Macoma sabulosa

Buccinum undatum {live several 4 dead

Aforpaix occidentalis d

Anomia aculeata

Enfagurus

c Hippasteria phrygiana

c Solaster endeca Raia

c Urticina callosa Glyptocephalus

c Bolocera tuediae Gilossoides

c Ctenodiscus crispatus

Chalina

Merlucius bilinearis

Hippoglossoides platessoides.

Raia radiata

Debastes marinus
Gleffus morrhua
Instruments same as 1078

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1080

Date, Aug. 2nd 1882

Locality, Cape Cod

Bearings, Nauset Beacons
NW by W 1/2 W dist 6 1/2 m

Time of day, 9-40 am of tide,

State of sky, VC

Temperature of air, 69

" surface of water, 61.5

" at depth of 5 fathoms, 56 at 10 fms 45

" of bottom, 37

Depth, in fathoms, 53 = 55 fms

Nature of bottom, fine sand

Direction of ~~surface current~~ wind, WSW Force 2

~~Force of surface current~~ Drift, WNW 1 mile

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U.S. Fish Commission

Name and rank of commanding officer,
Lieut. J. L. Tanner USN

Name and position of observer,
J. B. Blish
Midn USN

1081

REMARKS.

surface	1,0234	62
3 fms	1,0235	61
10 fms	1,0247	53

Cardium Icel 1 d
Glycimeris deliqua 16 d
Cyprina Icel. many d
Spisula ovalis " d
Modiolaria discors? 1 alive
Pecten Island 1 fmv. d
Pyxacara arctica alive
Niccini undatum frag
Masoma sabulosa 3
Sipho decem costatum 4 +
Aspidophoroides monopterygius
Liparoids
Hypto cephalus cynoglossus
Sebastes marinus
Hippoglossoides platessoides
Loaries anguillaris
Ammodytes americanus

Instruments same as 1078
NZ 47998 used for a check on bottom temp.

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1081

Date, Aug 2nd 1882

Locality, Cape Cod

Bearings, Nauset Beacons W by S dist. 5 1/2 mi

Time of day, 10-50 ; of tide,

State of sky, Vc

Temperature of air, 69

" surface of water, 59

" at depth of 5 fathoms, — at 10 fms 40

" of bottom, 39

Depth, in fathoms, 32 = 33.5

Nature of bottom, crs gvl & pebbles

Direction of ~~surface current~~ wind, W S W Force 2

~~Force of surface current~~ Drift, N W by N 1 mile

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

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

Name and rank of commanding officer, Lieut. J. L. Tanner U.S.N.

Name and position of observer, J B Blish Midn U.S.N.

1082

REMARKS.

Depth	Sp grav	Temp
surface	1.0235	62
5 fms	1.0240	57
10 fms	1.0245	58

[illegible]

Glycinura

Lepisula ovalis

Modilo modiolus

Sebastes marinus

Insts. same as 1078

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1082

Date, Aug. 2nd 1882

Locality, Cape Cod

Bearings, Cape Cod Light-House
NW 3/4 N dist 11 1/2 miles

Time of day, 11-45 ; of tide,

State of sky, Vc

Temperature of air, 70

" surface of water, 59

" at depth of 5 fathoms, at 10 fms

" of bottom, 40

Depth, in fathoms, 27 = 28

Nature of bottom, cos gol.

Direction ~~of surface current~~, wind WSW Force 1

~~Force of surface current~~, Drift NW by N 1/4 m

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U.S. Fish Comm

Name and rank of commanding officer,
Lieut. G. L. Tanner, U.S.N.

Name and position of observer,
J. B. Blish
Midn, U.S.N.

1083

REMARKS.

surface 1.0230 66
5 fms 1.0231 64
10 " 1.0229 67.5

Cifrina islandica 3 or 4 valves
Apportais occidentalis frag.
Glycimeris siliqua
Lepho Stimpsonii 1 –
Pecten islandicus 1 fur +
Lepeta coeca?
Eupagurus
Solaster endeca few small
Hebrotes marinus
[illegible]
[illegible]
Glypto alphalus cynoglossus

Instruments same as 1078

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1083

Date, Aug. 2 1882

Locality, Cape Cod

Bearings, Cape Cod Light House
WbyN dist. 15 miles

Time of day, 12-45 PM; of tide,

State of sky, Vc

Temperature of air, 77

" surface of water, 64

" at depth of 5 fathoms, 59? at 10 fms. 42

" of bottom, 38

Depth, in fathoms, 80 = 83.5 fms

Nature of bottom, no specimen on lead or trawl

Direction of ~~surface current~~, Wind WSW Force 1

Force of ~~surface current~~, Drift WSW 1/2 mile

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U.S. Fish Hawk

Name and rank of commanding officer,
Lieut. J.L. Tanner USN

Name and position of observer,
J.B. Blish
Midn USN.

1084

REMARKS.

surface 1.02325 66
5 fms 1.0235 65
10 fms 1.0236 63

c Pentacta frondosa 1 very large
? Bolocera tuediae
Pandalus leptocerus ?
Hyas
Pecten islandicus pur +
Spirula ovalis many –
Glycimeris siliqua 1 –
Cyprina islandica 2 or 3
Sipho Stimpsoni 1 large –
Pecten tenuicostatus frag
Eupagurus
Balanus ? forcatus ? pur
Anomia aculeata
? Solaster endeca several
? Asterias vulgaris 1 large
c Hipasteria phrygina
? Leptasterias compta small
Worms pur
Lepastes marinus
Hippoglossoides platessoides
Prionotus carolinus
Gracus anguillaris

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1084

Date, Aug 2nd 1882

Locality, Cape Cod

Bearings, Cape Cod Light House
WNW 3/8 W dist. 8 miles

Time of day, 2-20 PM; of tide,

State of sky, VC

Temperature of air, 78

" surface of water, 62,5

" at depth of 5 fathoms, at 10 fms, 43,5

" of bottom, 38±

Depth, in fathoms, 36=37,5

Nature of bottom, coarse sand

Direction of ~~surface current~~ wind, WSW Force 2

~~Force of surface current~~ Drift, WSW 1 mile

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U.S. Fish Commission

Name and rank of commanding officer,
Lieut. J. L. Tanner, U.S.N.

Name and position of observer,
J. B. Blish
Mider, U.S.N.

1085

REMARKS.

Depth	Specific gravity	Temp.	Sp. grav. corr. to 60°F
Surface	1.0233	64	
5 fms	1.0233	64	
10 fms	1.0241	60	

c Astroflyton (very abundt)
Pandalus
o Strongylocentrotus drobachiensis (juv.)
o Alcyonium carneum, Eupagurus
o Asterias vulgaris, c Leptasterias compta
c Crivella sanguinolenta (small)
o Hipasteria phrygiana (very large)
o Sklaster endeca
Cyprina islandica (many-)
Cardium islandicum 12)
Saxacava arctica 1+
Buccinum undatum also eggs
Sipho Stimpsoni 1+ juv
Glycimeris siliqua
Pecten tenuicostatus
Astarte lens
Spisula ovalis
Apporhais occident 1-
Pecten islandi 3+
Raia radiata 4
Hippoglossoides platessoides
Mussenoides funiculus 4
Murraenon
Zoarces anguillaris
Cottus octodecimspinosus

Lophopsitta maculata
Limanda ferruginea
Lepto blennius cirrhentinus
Lepto clinus acuticatus

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1085

Date, Aug 8th 1882

Locality, Cape Cod

Bearings, Race Point Light House
S 33° E distant 2 miles

Time of day, 6.15 AM; of tide,

State of sky, vc

Temperature of air, 67

" surface of water, 64

" at depth of 5 fathoms, 61 at 10 fms 43

" of bottom, 39

Depth, in fathoms, 33 = 34.5

Nature of bottom, fn. sand & fn mud

Direction of ~~surface current~~ wind, WSW Force 3

~~Force of surface current~~ Drift, S by E 1 mile

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

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

Name and rank of commanding officer,
Lieut. J. L. Tanner U.S.N.

Name and position of observer,
J. B. Blish
Midn U.S.N.

1086

REMARKS.

1.0231 65

1.0231 64.5

1.023 64

c Astrophyton in immense quantities
c Asterias vulgaris
Pandalus leptocerus
c Ophiopholis aculeata
c Leptasteria compta
? Solaster endeci
? Cribrella sanguinolenta
c Alcyonium carneum
? Pentacta frondosa (1 large)
* Same characteristic same as 1085
Sipho decemcostatus 2 - large
Modiolus modiolus 3 + 1 -
Cardium islandicum 1 valve
Spisula oraris m. - valves
Cyprina islandica m. "
Pecten islandicum 2 +
Margarita obscura 1 +
Saxacava arctica 1 +
Puncturella noachina 1 +
Velutina haliotoidea
Raia radiata
Limanda ferruginea 4
[illegible]
[illegible] 4

33 m
825 W 0.25 mi

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1086

Date, Aug 3d 1882

Locality, Cape Cod

Bearings, Cape Race Point L.H.
S 20° W distant 2 3/4 mile

Time of day, 7.00 am; of tide,

State of sky, VC

Temperature of air, 74

" surface of water, 64

" at depth of fathoms, 10 fms 44

" of bottom, 39.5

Depth, in fathoms, 33 = 34

Nature of bottom, fine sand

Direction of ~~surface current~~ Wind, WSW Force 3

Force of surface current, Drift South 3/4 mile

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, US Fish Comm

Name and rank of commanding officer,
Lt. T. L. Tanner USN

Name and position of observer,
J B Bliss
Midn USN

1087

REMARKS.

Sur 1.0232-63
5 fm 1.0235-61
10 fms 1.0324-58

Dead shells & sponges
o Hippasteria 3 Hyas small fm
Pandalus leptocerus
o Bolocera Fuediae
5 Bolocera sp. nov.? multicornis
Hydroids Bryozoa
o Cribrella sanguinolenta
* No astrophyton
o x Rossia 1
o x Sipho decemcostatus
Cardium island
Mastisula oralis m.
Cyprina islandica many
Pecten tenuicostatus many valves
x Lifeta caeca 1+
Sesacava arctica 1+
Hippoglossoides platessoides
Glyptocephalus cynoglossus
Raia eglanteria
Aspidophoroides monopterygius

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1087

Date, Aug 8 1882

Locality, Cape Cod

Bearings, Cape Cod Light House
SSW distant 7 miles

Time of day, 8.30 ; of tide,

State of sky, Vc

Temperature of air, 84

" surface of water, 62.5

" at depth of 5 fathoms, 46 10 fms 41

" of bottom, 39

Depth, in fathoms, 42 = 44

Nature of bottom, gray sand

Direction of ~~surface current~~ wind, NW Force 2

~~Force of surface current~~ Drift, WSW 1/2 mile

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, US Fish Comm

Name and rank of commanding officer,
Lt L L Lanner USN

Name and position of observer,
J B Bish
Midn USN

1088

REMARKS.

Sur	1,023	64
5	1,0231	63
10	1,0232	63,5

Affortais occiden 8 –
Lipho decemcost 2 –
Terebratulina septentrion 8 +
Buccinum undat 3 – & eggs
Cardium island 1 –
Pecten island 3 + 1 –
" tenuicost 2 + 1 valve
Astarte lens 6 –
Cyprina island 2 –
Lasiacava Norvig 4 valve
Anomia aculeata serval ~~4~~
H Lunatia
Natica clausa 1 –
Macoma sabulosa 1 –
Modiolaria discors? 1 +
? 3 Cephalopods
? Noticina nodosa very many
? Bolocera Tuediae fin
? op. nov. 1
Pandalus borealis ? Hippasteria
? Solaster ? Porania
? Cribrella sanguinolenta
Sponges ? Ophiophole aculeata
Hippolyte Hydroids & Bryozoa
Enchelyopus cimbrius

Centridermycetyx uncinatus many
Cave proctus
Brosmius flavescens
Sebastes marinus
Hippoglossoides platessoides
Raia radiata

Myxlucens vilmicens

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1088

Date, Aug 8th 1882

Locality, Cape Cod

Bearings, Cape Cod Light House
SW 3/4 W dist 9.5 miles

Time of day, 9.50 ; of tide,

State of sky, VC

Temperature of air, 82.5

" surface of water, 62

" at depth of 5 fathoms, 59.5 at 10 fms

" of bottom, 38

Depth, in fathoms, 86 = 90

Nature of bottom, crs sand

Direction of ~~surface current,~~ Wind NW force 3

~~Force of surface current,~~ Drift NW 1 1/2 miles

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, US Fish Comm

Name and rank of commanding officer,
Lt. L. L. Tanner USN

Name and position of observer,
J. B. Bish
Mider USN

1089

REMARKS.

Rus 1.0231 65

5 fms 1.0233 62

10 fms 1.0234 62

Came up Empty.

TEMPERATURE RECORD.

Instrument used, Trawl (failed)

Current number of observation, 1089

Date, Aug 3d 1882

Locality, Cape Cod

Bearings, Cape Cod Lt Ho.
Sw 3/4 W 14 miles

Time of day, 11.10 AM ; of tide,

State of sky, VC

Temperature of air, 78

" surface of water, 63

" at depth of fathoms,

" of bottom, 38.5

Depth, in fathoms, 106 - 110

Nature of bottom, grey mud

Direction of ~~surface current~~, Wind WSW Force 1

~~Force of surface current~~, Drift NW 2/4 W 3/4 mile

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U S Fish Comm

Name and ~~rank of commanding officer~~,
Dr. L. L. Lanner U.S.N.

Name and position of observer, J B Bish
Mdn USN

1090

REMARKS.

Sur 1,0227 66
5 fms 1,0233 60
10 fms 1,0233 62,5
Macrurus Bairdii 1
Lycodes Verrillii 1
Phycis Chuss 10
Myxine glutinosa 1
Enchelyopus cimbrius
Phycis Chuss
Raia Eglanteria
Affortais occidentalis, Sexacara Norvegica
Astarte lens. Yoldia thraciformis, Pecten islandica Mya truncata, Sipho pygmaea.
Dentalium striolatum, D. occidentalis
Yoldia sofotilla, Neaera arctica
Cardium pinulatum, Leda tenuisulcata
Naera sp.
Lycodes Verrillii

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1090

Date, Aug. 3d 1882

Locality, Cape Cod

Bearings, Cape Cod Light House
SW 3/4 W dist 13 3/4

Time of day, 11.50 AM; of tide,

State of sky, VC

Temperature of air, 81,5

" surface of water, 62

" at depth of 5 fathoms, 56 10 fms 52

" of bottom, 38,5

Depth, in fathoms, 106 = 110

Nature of bottom, grey mud

Direction of surface current, WSW Force 1

Force of surface current, Drift WSW 1 mile

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U.S. Fish Comm

Name and rank of commanding officer, Lt. L. L. Lanier U.S.N.

Name and position of observer, [illegible]
Under [illegible]

1091

REMARKS.

Water Specimens

Depth	Sp. grav.	Temp.	Reduced to 60°
Surface	1.0238	75	
5 fms	1.0238	75	
10 "	1.024	74	

Paralichthys oblongus ♀ & ♂

Phycis chuss – abundant

Lent down trawl at 5.50

Arcbaster americanus small, abdt.

Pandalus

Thermometers & hydrometer same as used on Aug 2nd & 3rd

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1091

Date, Aug 11 1882

Locality, Lift off Martha's Vineyard

Bearings, Lat 40° - 03' N
Long 69° - 44' W

Time of day, 5.30 ; of tide,

State of sky, b. c.

Temperature of air, 77

" surface of water, 75

" at depth of 5 fathoms, at 10 fms 62

" of bottom, 46°

Depth, in fathoms, 62 = 65 fms

Nature of bottom, Grey Sand & broken Shells

Direction of ~~surface current~~ Wind, NW Force, 3

~~Force of surface current~~ Drift NW x W Dist 1/2 mile

~~Direction of bottom current~~ Temperature at fms

~~Force of bottom current~~ " "

Name of vessel, Fish Hawk

To what service attached, U S Fish Comm

Name and rank of commanding officer,
Lt. L. L. Lanner, U.S. Navy

Name and position of observer,
J B Blish
Midn USN

1092

REMARKS.

Surface 1.0237 74
5 fms 1.0236 74
10 " 1.0236 75
Send down trawl at 7.09
reached bottom 7.22 up 8.10
Archaster Florae
Pennatula aculeata, Crenoids
Eufogurus small, Pandalus
Worm tubs Schizaster fragilis
Letarches formatus
Macrurus Bairdii
Phycis Chesterii many
" tenuis "
Moneleue sessilcauda
Lycodes Verrillii
Lebastes marinus
Merlucius vilinearis few large
Glyptocephalus cynoglossus
~~Provided~~ — Paralycthius oblongus
Pandalus
Scorpaena dactyloptera
Lophius piscatorius

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1092

Date, Aug 11th 82

Locality, Off Marthas Vineyard

Bearings, Lat 39°-58' N
Long. 69°-42 W

Time of day, 6.54; of tide,

State of sky, VC

Temperature of air, 79

" surface of water, 75

" at depth of fathoms,

" of bottom, 41

Depth, in fathoms, 194 = 202

Nature of bottom, gray sand

Direction of ~~surface current~~ wind, NW Force 3

~~Force of surface current~~ Drift NNW 3/4 mile.

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, US Fish Comm

Name and rank ~~of commanding officer~~,
Lt. L. L. Lanner USN

Name and position of observer,
J. B. Blish
Midn USN

1093

REMARKS.

sur 1.0233 74
5 1.0237 74
10 1.0243 73
Trawl over 9.10, reached bottom 9.26
trawl up 10.20

Halienkan sentecosa 1
Lifaroid. Synaphobranchus pinnatus (few)
Lurenchelys. Mustelus canis
Carefroctus. Plycis tenuis (2)
Macrurus Bairdii many
Glyptocephalus cynoglossus 1
Flounders (colored 2 sides)
Centroscyllum ~~parasiticus~~ fabricii

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1093

Date, Aug 11th 82

Locality, Off Marthas Vineyard

Bearings, Lat 39°-56'-00 N
Long 69°-45-00 W

Time of day, 8.35 ; of tide,

State of sky, VC

Temperature of air, 82

" surface of water, 75

" at depth of fathoms,

" of bottom, 40

Depth, in fathoms, 336 = 349

Nature of bottom, Gray sand + blue mud

Direction of ~~surface current~~ Wind, NW Force 3

~~Force of surface current~~ Drift, NW 1 mile

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U.S. Fish Comm

Name and rank of commanding officer,
Lt. L. L. Lanner USN

Name and position of observer,
J. B. Bliss
Mid USN

1094

REMARKS.

Surf 1.0232 77
5 1.0235 76
10 1.0235 76

Travel over 10.35, reached bottom 10.50
up 11.32
At 11.15 got cart of head
128 = 133 bottom sand
Scofelus 3, Raia radiata 1 jar
Merlucius (1 large) Vilinearis
Phycis chesteri abdt-
" tenuis
Carcprochus

TEMPERATURE RECORD.

Instrument used, Deep-sea Trawl

Current number of observation, 1094

Date, Aug 11, 1882

Locality, Off Marthas Vineyard

Bearings, Lat 39°-57'N
Long 69°-47'W

Time of day, 1010 ; of tide,

State of sky, VC

Temperature of air, 84

" surface of water, ~~40~~ 76

" at depth of fathoms,

" of bottom, 40

Depth, in fathoms, 289 = 301

Nature of bottom, Blue mud

Direction of ~~surface current~~, Wind NW Force 2

~~Force of surface current~~, Drift NW & N 1 mile

~~Direction of bottom current~~, Temp 20 feet 51 x

~~Force of bottom current~~, " 30 " 44 x

Name of vessel, Fish Hawk

To what service attached, U.S. Fish Comm

Name and ~~rank of commanding officer~~,
Lt. L. L. Lanner USN

Name and position of observer,
J B Blist
Mid USN

REMARKS

x Mr. Baillie's aff. arabus

Feb 10 72°
5 75
20 49

1095

REMARKS.

surr.	1.0235	78
5	1.0236	75
10	1.0236	75

Trawl over 12.07 bottom 12.25
wf 1.05
At 1.05 sounding 159 = 165
bottom sand.
Macrurus Bairdii (many)
Scopelus, Phycis chusa
Lycodes Verrillii 1
Urticina nodosa
Schizaster
Synaphobranchus pinnatus 3

** Obs Noon.

TEMPERATURE RECORD.

Instrument used, Dredge Trawl

Current number of observation, 1095

Date, Aug 11 82

Locality,

Bearings, Lat 39°-55'-28" N ** Obs.
Long 69°-47'-00" W

Time of day, 11.55 ; of tide,

State of sky, bc

Temperature of air, 82

" surface of water, 76

" at depth of 5 fathoms, 75½ at 70 72

" of bottom, 40

Depth, in fathoms, 309 = 321

Nature of bottom, soft green mud

Direction of ~~surface current~~ wind, NW Force 2

~~Force of surface current~~ Drift NNW ½ W 3/4 mile

~~Direction of bottom current~~ Temp at 20 49
" 30 47

~~Force of bottom current~~ 50 45

Name of vessel, Fish Hawk

To what service attached, U.S. Fish Comm

Name and rank of commanding officer, Lt. L. L. Lanier USA

Name and position of observer, J B Bligh
Under USA

*Temp. at 30 & 50 fms taken simultaneously using Mr. Baillie's apparatus

1096

REMARKS.

1.0236 70

1.0233 74

1.0236 75

Trawl over 1.55 reached bottom 412

Trawl up 305

Glyptocephalus cynoglossus

Collunculus microps

Lepavoid. Lebastes marinus

Lynaphotranchus pinnatus

Merluccius bilinearis (many)

Phycis chus (many)

Macrurus Bairdii very many)

Acanella Normani

Cavernoctus

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1096

Date, Aug 17, 1882

Locality, Off Martha's Vineyard

Bearings, Lat. 39°-53' N
Long 69°-47' W

Time of day, 1.39 PM; of tide,

State of sky, Vc

Temperature of air, 78

" surface of water, 75½

" at depth of 5 fathoms, 75½ at 10 fms 65

" of bottom, 40

Depth, in fathoms, 305 = 317

Nature of bottom, Green sand

Direction of ~~surface current~~ Wind, NNW Force 3

Force of ~~surface current~~ Drift, NW½N ½ in

Direction of bottom current,

Force of bottom current,

Name of vessel, U.S. Fish Hawk

To what service attached, U.S. Fish Comm

Name and rank of commanding officer,

Lieutenant L. L. Fenner, U.S. Navy

Name and position of observer,

Midshipman J. B. Bleistein
U.S. Navy

1097

REMARKS.

1.0232 74
1.0234 75
1.0233 74

Trawl over 3.20, bottom at 3.32
trawl up 4.15
At 4.05 sounded in 81=85
sand & broken shells
Macrurus carminatus detarches. Scorpaena
Raia radiata. Raia sp.
Phycis chuss
" tenuis
Merlucius bilinearis (abdt
Edoptaster hispidus many
Asterias Fauneri
Cancer borealis Eufagurus
Munnida
Pandalus abdt
Strongylocentrotus many
Halientaea senticosa
Paralacthys oblongus 1

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1097

Date, Aug 11 82

Locality, Off Marthas Vineyard

Bearings, Lat 39°-54' N
Long 69°-44' W

Time of day, 3 10 ; of tide,

State of sky, Nc

Temperature of air, 76

" surface of water, 75 1/2

" at depth of fathoms,

" of bottom, 45

Depth, in fathoms, 152 = 158

Nature of bottom, fine sand

Direction of ~~surface current~~ wind, NNW Force 3

~~Force of surface current~~ Drift, N 1/2 W 1/2 mi

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U S Fish Comm

Name and rank of commanding officer,
Lt. L. L. Lanner USN

Name and position of observer,
J B Bish
Midn USN

1098

REMARKS.

sur 1.0237 74
5 fms 1.0237 74
10 fms 1.0238 73½
Trawl over 4.50 bottom 5.00
trawl 5.43
at 5.43 got sounding 76=79
Phycis chuss Setarchus
P. tenuis
Glyptocephalus cynoglossus
Strongylocentrotus Dvot many
Raia eglantina

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1098

Date, Aug 11 82

Locality, Off Marthas Vineyard

~~Bearings,~~ Lat 39°-53' N
Long 69°-43 W

Time of day, 4,35 ; of tide,

State of sky, Pc

Temperature of air, 78

" surface of water, 75

" at depth of 5 fathoms, 72 at 10 60

" of bottom, 43½

Depth, in fathoms, 150 = 156

Nature of bottom, fine sand

Direction of ~~surface current~~ wind, NW Force 3

~~Force of surface current~~ Drift, N x E 3/4 mi

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U S Fish Comm

Name and rank of commanding officer,
H. L. L. Farmer USN

Name and position of observer,
J B Bloch
Ulidn USN

1099

REMARKS.

Specific Gravity.

		Temp
Surface	1.0224	74
5 fms	1.0225	72
10 "		

Senotomus argyrops
Lophopsetta maculata
Prionotus carolinus

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1099

Date, Aug 18th 1882

Locality, Vineyard Sound

Bearings, Nobska Pt Light House
WSW 1/4 W 1 5/8 mile

Time of day, 11.06 ; of tide, Half flood (East)

State of sky, VC

Temperature of air, 76

" surface of water, 72

" at depth of fathoms,

" of bottom, 71 1/2

Depth, in fathoms, 6

Nature of bottom, Sand & gravel

Direction of ~~surface current~~ Wind, North Force 2

~~Force of surface current~~ Drift, NE x N 1/2 mile

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, US Fish Comm

Name and rank of commanding officer,
Lt. L. L. Lanner USN

Name and position of observer,
J B Bish
Midn USN

1100

REMARKS.

Sur 1.0224 74

5 1.0225 72

Stenotomus argyrofs

Prionotus carolinus

Centrifristis atrarius 2 jur.

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1100

Date, Aug 18 1882

Locality, Vineyard Sound

Bearings, Nobska Pt. Light House

W 8 W 1/4 W 1 1/4 miles

Time of day, 11.47 ; of tide, Flood (east)

State of sky, bc

Temperature of air, 77

" surface of water, 72

" at depth of fathoms,

" of bottom, 71 1/2

Depth, in fathoms, 4 3/4

Nature of bottom, Sand & gravel & shells

Direction of ~~surface current~~, Wind North Force 2

~~Force of surface current~~, Drift NE x N 1/2 mile

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U S Fish Comm

Name and rank of commanding officer, Lt. L. L. Lanner USN

Name and position of observer, J B Ohlick Mdn USN

1101

REMARKS.

Dur 1,0226 73
4 1/2 1,0226 73
Stenotomus argyrops abdt

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1101

Date, Aug 18 - 82

Locality, Vineyard Sound

Bearings, Nobska Pt Lt Ho

W x S dist 1½ mile

Time of day, 12.15 ; of tide, flood

State of sky, Vc

Temperature of air, 78

" surface of water, 72

" at depth of fathoms,

" of bottom, 71

Depth, in fathoms, 5

Nature of bottom, shells

Direction of ~~surface current,~~ Wind North Force 1

Force of ~~surface current,~~ Drift NE 1 mile

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, US Fish Comm.

Name and rank of commanding officer,

Lt. L. L. Lanner USN

Name and position of observer,

J. R. Olish
Midn USN

1102

REMARKS.

Surf. 1,0228 70
1,0229 69
Porionolus carolinus

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1102

Date, Aug 18th 1882

Locality, Vineyard Sound

Bearings, East Chop Lt. Ho.
N W 3/4 W dist 2 1/2

Time of day, 1.10 ; of tide, Slack (high) water

State of sky, oc

Temperature of air, 73

" surface of water, 70

" at depth of fathoms,

" of bottom, 69

Depth, in fathoms, 5

Nature of bottom, coarse sand

Direction of ~~surface current~~, Wind East Force 2

Force of ~~surface current~~, Drift E x S 1/2 mi

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U S Fish Comm

Name and rank of commanding officer,
Lt. L. L. Tanner USN

Name and position of observer,
J W Olish
Mida USN

1103

REMARKS.

surf. 1,022 8 70

5 fms 1,022 8 70

Primotus carolinus

Lophopsetta maculata

Stenotomus argyrops jw many

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1103

Date, Aug 18th 1882

Locality, Vineyard Sound

Bearings, East Chop Lgh Ho.
N. W. by W 2 3/4 miles

Time of day, 1.42 ; of tide, Slack 1 Higher W.

State of sky, O. C.

Temperature of air, 70

" surface of water, 70

" at depth of fathoms,

" of bottom, 69.

Depth, in fathoms, 5

Nature of bottom, Coarse Sand

Direction of ~~surface current~~ wind, N. E. Force 2

Force of surface current,

Direction of ~~bottom current~~ Drift, C & S 1/4 mi

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, US Fish Comm.

Name and rank of commanding officer,
Lt. L. L. Lanner U.S.N.

Name and position of observer,
J B Bish
Mdn USN

1104

REMARKS.

surf. 1,022 8 70

s/a 1,022 8 70

Prionotus carolinus (few)

Stenotomus argyrops (abdt)

Prionotus tria carthus 2

TEMPERATURE RECORD.

Instrument used, Frawl

Current number of observation, 1104

Date, Aug 18th 1882

Locality, Vineyard Sound

Bearings, East Chof Lt. Ho

WNW 1/2 W 4 miles

Time of day, 2 1/2 ; of tide, Slack (end of east)

State of sky, Pc

Temperature of air, 79

" surface of water, 70

" at depth of fathoms,

" of bottom, 69

Depth, in fathoms, 8 1/2

Nature of bottom, shells

Direction of ~~surface current~~ wind, ENE 3

~~Force of surface current~~ Drift, NXW 3/4 W 1/2 mi

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, Wt Fish Comm

Name and rank of commanding officer,

Lt. L. L. Lanner USN

Name and position of observer,

J. W. Bish
Mdn USN

1105

REMARKS.

Surf	1.0226	70
5 fms	1.0228	70
10	1.0228	70

Lophopsetta maculata 2 (1 large)
Stenotomus argyrops (about fm)

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1105

Date, Aug 18 1882

Locality, Vineyard Sound

Bearings, Cape Poge Lt. Ho S x W dist. 4 miles

Time of day, 3.00 ; of tide, beginning of ebb

State of sky, Hc

Temperature of air, 80

" surface of water, 72

" at depth of fathoms,

" of bottom, 71

Depth, in fathoms, 10

Nature of bottom, Coarse sand

Direction of ~~surface current~~ wind, NE 3

Force of ~~surface current~~ wind, NE x E 1/2 E 2 miles

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U.S. Fish Comm

Name and rank of commanding officer, Lt L. L. Sanner USN

Name and position of observer, [illegible] Midn USN

1106

REMARKS.

1,0227 72
1,0228 72
Fantogolabrus adspersus 1
Stenotomus argyrops (abdt)

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1106

Date, Aug 18 82

Locality, Vineyard Sound

Bearings, Cape Poge Lt-Hd

S x W 1/2 W 5 1/2

Time of day, 3.35 ; of tide, beginning of west

State of sky, VC

Temperature of air, 80

" surface of water, 72 1/2

" at depth of fathoms,

" of bottom, 72

Depth, in fathoms, 5

Nature of bottom, sand & shells

Direction of ~~surface current~~ wind, NE Force 3

Force of ~~surface current~~ drift, NE x N 1/4 mile

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U.S. Fish Comm

Name and rank of commanding officer,

Lt. L. L. Lanner USN

Name and position of observer,

[illegible] Fish

Midn USN

1107

REMARKS.

	Specific Gravity	
Surface	1.0244	67
5 fms	44	67
10 "	43	64

Trawl over 6.12 down 6.25
leaving in 6.46 up 6.54
220 fms out
Water Haul

Set trawl lines

TEMPERATURE RECORD.

Instrument used, Trawl (came up empty)

Current number of observation, 1107

Date, Aug 22 1882

Locality, Off Martha's Vineyard

Bearings, Lat 40°-02' N
Long 70°-35' W

Time of day, 6.00 AM; of tide,

State of sky, Vc

Temperature of air, 69½

" surface of water, 71

" at depth of 5 fathoms, 71½ at 10 pm 66

" of bottom, 48

Depth, in fathoms, 111=116

Nature of bottom, grey mud

Direction of ~~surface current~~ Wind, WSW Force 2

~~Force of surface current~~ Drift, NW 1'

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, USF Fish Comm

Name and rank of commanding officer,
Lt. T. L. Tanner USN

Name and position of observer,
J B Bilish
Mida USN

1108

REMARKS.

Specific Gravities

Surface	1.0243	67
5 fms	42	68
10 "	42	68

Trawl over 6.58 down 7.07

Leaving in 7.37 up 7.50 300 fms out

Phycis tenuis (18) Raia erinacia (1)

Paralichthys oblongus (6)

Glyptocephalus cynoglossus (5)

Myxine glutinosa (abdt)

Citharichthys arctifrons (1)

Ophichthys (abdt)

Hyphalonedrus chalybeius

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1108

Date, Aug 22 1882

Locality, Off Martha's Vineyard

Bearings, Lat. 40°-02' N
Long 70°-37'-30" W

Time of day, 6.55 ; of tide,

State of sky, VC

Temperature of air, 69 1/2

" surface of water, 71

" at depth of fathoms,

" of bottom, 48

Depth, in fathoms, 97=101

Nature of bottom, gray mud & fine sand

Direction of ~~surface current~~, Wind WSW Force 2

~~Force of surface current~~, Drift NW 3/4

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U.S. Fish Comm

Name and rank of commanding officer,
Lt L. L. Tanner USN

Name and position of observer,
J. B. Bliah
Midn USN

1109

REMARKS.

Specific Gravities

Surface	1.0243	66
5 fms	43	66
10 "	44	68

Trawl over 8.00 down 8.10
heaving in 8.40 up 8.50 250 fms out
Scorpaena (3) Phycis chuss abdt,
Phycis tenuis (abdt), Glyptocephalus
cynoglossus (few) Paralichthys oblongus
Raia fin & yolk of egg 1

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1109

Date, Aug 22 1882

Locality, Off Martha's Vineyard

Bearings, Lat 40°-03' N
Long 70°-38' W

Time of day, 755 ; of tide,

State of sky, V.C.

Temperature of air, 70 1/2

" surface of water, 71

" at depth of fathoms,

" of bottom, 49

Depth, in fathoms, 85 = 89

Nature of bottom, Gray Sand

Direction of ~~surface current~~ wind North Force 2

~~Force of surface current~~ Drift NNW 1'

Direction of bottom current,

Force of bottom current,

Name of vessel, U S Fish Hawk

To what service attached, U S Fish Comm

Name and rank of commanding officer,
Lieutenant L L Lanner
U.S.N.

Name and position of observer,
J Rosslish
U S Navy

1110

REMARKS.

Specific Gravities

Surface 1.0235 72
5 fms 35 72
10 " 37 71
Trawl over 9.25 down 9.35
heaving in 10.05 up 10.18
Citharichthys 300 fms out
Myxine glutinosa (abdt)
Scorpaena dactyloptera Raia eglanteria
Glyptocephalus cynoglossus (1)
Phycis chuss (abdt)
Paralichthys oblongus

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1110

Date, Aug 22 1882

Locality, Off Martha's Vineyard

Bearings, Lat 40°-02' N
Long 70°-35' W

Time of day, 9.16 ; of tide,

State of sky, Vc

Temperature of air, 75

" surface of water, 72

" at depth of fathoms,

" of bottom, 47

Depth, in fathoms, 96 = 100

Nature of bottom, green mud & fine sand

Direction of ~~surface current~~ Wind, North Force 2

~~Force of surface current~~ Drift, N x W ½ W 1'

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U S Fish Comm

Name and rank of commanding officer,
Lt. L. G. Farmer USN

Name and position of observer,
[illegible]
Midn USN

1111

REMARKS.

Specific Gravities

Surface	1.0239	71
5 fms	40	70
10 "	40	72

Trawl over 10.50 down 1057

Leaving in 11.30 up 11.40 300 fms out.

Paralichthys oblongus few

Raia eglanteria (1) Physis Chesteri

Glyptocephalus cynoglossus (few)

Merlucius bilinearis (few)

Macrurus carminatus

On Trawl Line set for Cephalatilus

Physis tenuis (20) Raia laevis (1)

Raia ocellata (2)

TEMPERATURE RECORD.

Instrument used, Deep Sea Trawl

Current number of observation, 1111

Date, Aug 22 1882

Locality, Off Martha's Vineyard

Bearings, Lat. 40°-01'-33" N obs
Long 70°-35 W

Time of day, 10.45 ; of tide,

State of sky, Vc

Temperature of air, 76

" surface of water, 72 N&Z #46402

" at depth of 5 fathoms, 71

" of bottom, 47

Depth, in fathoms, 119=124

Nature of bottom, fine sand

Direction of ~~surface current~~ wind, NE Force 2

~~Force of surface current~~ Drift NNE½E 1'

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U.S. Fish Comm

Name and rank of commanding officer,
Lt. L. L. Tanner USN

Name and position of observer,
J. B. Blish
Midn U.S.N.

1112

REMARKS.

Specific Gravity

Surface 1.0240 69

41 70

40 69

Trawl 12.55 down 1.05

heaving in 1.30 up 1.45

430 fms out,

Lophius piscatorius (1) Sebastes marinus (1)

Sebastes marinus (stomach of Lophius)

Halibaea senticosa (5) Scopelus [illegible]

Cottunculus microps 1 Macrurus

Raia radiata. Sternoptychid (1)

Phycis chesteri (1) Ophidthys (1)

Glyptocephalus cynoglossus (1)

Merluccius bilinearis (few)

TEMPERATURE RECORD.

Instrument used, Deep-Sea Trawl

Current number of observation, 1112

Date, Aug 22 1882

Locality, Off Martha's Vineyard

Bearings, Lat 39°-56' N
Long 70°-35' W

Time of day, 1243 ; of tide,

State of sky, Vc

Temperature of air, 72

" surface of water, 72

" at depth of 5 fathoms, 72 at 10 fms 65

" of bottom, 43

Depth, in fathoms, 235 = 245

Nature of bottom, Green mud & sand

Direction of ~~surface current~~ Wind, NE Force 1

Force of surface current, Drift NW x N 1'

~~Direction of bottom current~~, Temperature at 20 fms 44

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, USF Fish Comm

Name and rank of commanding officer, Lt. Z. L. Tanner USN

Name and position of observer, J B Bish Midn USN

1113

REMARKS.

Specific Gravities

Surface 1.0240 68

5 fms 40 70

10 " 41 70

Trawl over 1.54 down 2.03

heaving in 2.25 up 2.40

375 fms out

Scorpaena (1) Scopelus (abdt) Phycis chuss (abdt)

Raia Macrurus Bairdii (abdt) Scopelus n.s. (1)

Macrurus carminatus (abdt)

Merlucius bilinearis Sebastes marinus

Halitara senticosa

Synaptobranchus pinnatus

TEMPERATURE RECORD.

Instrument used, Deep Sea Trawl

Current number of observation, 1113

Date, Aug 22 1882

Locality, Off Martha's Vineyard

Bearings, Lat 39°57' N
Long 70°-37' W

Time of day, 1,45 ; of tide,

State of sky, VC

Temperature of air, 75

" surface of water, 72

" at depth of 5 fathoms, 71½ 10 fms 65½

" of bottom, 43

Depth, in fathoms, 184 = 192

Nature of bottom, green mud

Direction of ~~surface current~~ wind, NE Force 2

Force of ~~surface current~~ Drift, North 1'

~~Direction of bottom current~~ Temperature at 20 fms. 49

~~Force of bottom current~~ " 30 " 46

Name of vessel, Fish Hawk

To what service attached, U.S. Fish Comm

Name and rank of commanding officer,
Lt. T. L. Tanner USN

Name and position of observer,
J. B. Bishop
Midn USN

1114

REMARKS.

Trawl over 2.48 down 2.55
heaving in 3.16 up 3.28
300 fms out
Myxine glutinosa (1) Scopelus (few)
Macrurus carminatus abat
" Baindii (few)
Lebastes marinus (1)

TEMPERATURE RECORD.

Instrument used, Deep-Sea Trawl

Current number of observation, 1114

Date, Aug 22 1882

Locality, Off Martha's Vineyard

Bearings, Lat 39°-58' N
Long 70°-38' W

Time of day, 2.40 ; of tide,

State of sky, Vc

Temperature of air, 74

" surface of water, 72

" at depth of 5 fathoms, 71½ 10 fms 65

" of bottom, 43

Depth, in fathoms, 164 = 171

Nature of bottom, Green mud

Direction of ~~surface current~~ wind, NE Force 2

~~Force of surface current~~ Drift N x W 1'

~~Direction of bottom current~~ Temperature, at 50 fms 43°

Force of bottom current, " 50 " 49°

Name of vessel, Fish Hawk

To what service attached, N S Fish Comm

Name and rank of commanding officer,
Lt. L. L. Tanner USN

Name and position of observer,
J. B. Blish
Widen USN

o bottom thermometer
+ N & Z # 47998

1115

REMARKS.

Dredge over 3.35 down 3.44
heaving in 4.11 up 4.20
275 fms out
No fish

TEMPERATURE RECORD.

Instrument used, Rake Dredge

Current number of observation, 1115

Date, Aug 22, 1882

Locality, Off Martha's Vineyard

Bearings, Lat 39° 59' N
Long 70° - 41' W

Time of day, 3.28 ; of tide,

State of sky, VC

Temperature of air, 75

" surface of water, 72 1/2

" at depth of 5 fathoms, 72 at 10 fms 70

" of bottom, 45

Depth, in fathoms, 140 = 146

Nature of bottom, green mud & sand

Direction of ~~surface current~~ Wind, NE Force, 2

~~Force of surface current~~ Drift, W x N 3/4'

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U.S. Fish Comm

Name and rank of commanding officer,
Lt. Z. L. Tanner USN.

Name and position of observer,
J B Blish
Midn USN

1116

REMARKS.

Trawl over 4.26 down 4.33
heaving in 4.53 up 5.00
300 fms out
At 5.00 got sounding in 146 fms
Merlucius vilinearis (few)
Lophius piscatorius (1)
Phycis chesteri Raia eglanteria
Glyptocephalus cynoglossus (1)
Macrurus carminatus (few)
Scorpaena dactyloptera
Pebastes marinus

TEMPERATURE RECORD.

Instrument used, Brawl

Current number of observation, 1116

Date, Aug 22 1882

Locality, Off Martha's Vineyard

Bearings, Lat 39°-59' N
Long 70°-44' W

Time of day, 420 ; of tide,

State of sky, VC

Temperature of air, 77

" surface of water, 72

" at depth of 5 fathoms, 72 10 fms 68

" of bottom, 46

Depth, in fathoms, 138 = 144

Nature of bottom, hard sand & green mud

Direction of ~~surface current~~ wind, SE Force 2

~~Force of surface current~~ Drift NW x W 1'

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, US Fish Comm

Name and rank of commanding officer,
Lt. Z. L. Tanner USN

Name and position of observer,
Jos Welsh
Mid USN

REMARKS

1117

REMARKS.

Trawl over 5.37 down 5.41
heaving in 6.08 up 6.12
2.40 fund out

Paralichthys oblongus (few)
Glyptocephalus cynoglossus (few)
Muraenoides gunellus
Lebastes marinus (few)
Phycis tenuis (few) P. chuss (few)

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1117

Date, Aug 22 1882

Locality, Off Martha's Vineyard

Bearings, Lat 40°-02' N
Long 70°-45 W

Time of day, 5 30 ; of tide,

State of sky, Va

Temperature of air, 78

" surface of water, 72

" at depth of 5 fathoms, 72 10 fms 62

" of bottom, 48

Depth, in fathoms, 85 = 89

Nature of bottom, fine sand

Direction of ~~surface current~~ wind, N Force 3

~~Force of surface current~~ Drift, N x E 1'

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U.S. Fish Comm

Name and rank of commanding officer,
Lt. L. L. Tanner USN

Name and position of observer,
[illegible]
Mider USN

1118

REMARKS.

Trawl over 6,25 down 6,30
heaving in 6,35 up 6,40
240 fms out
Paralichthys oblongus (fm)
Lebastes marinus (fm) Phycis tenuis (5)

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1118

Date, Aug 22 1882

Locality, off Martha's Vineyard

Bearings, Lat 40°-03' N
Long 70°-45' W

Time of day, 6.20 ; of tide,

State of sky, VC

Temperature of air, 74

" surface of water, 72

" at depth of fathoms,

" of bottom, 49

Depth, in fathoms, 67 = 70

Nature of bottom, fine sand

Direction of ~~surface current~~, Wind N Force 2

~~Force of surface current~~, Drift NNW 1/4'

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, US Fish Comm

Name and rank of commanding officer,
Lt. L. L. Tanner USN

Name and position of observer,
J B Clark
Mdte USN

1119

REMARKS.

Trawl over 6.37 down 6.41
heaving in 7.12 up 7.22
215 fms out
At 5.22 got sounding in 56 fms
Large Neptunia decem costata
Archaster Americanus
Physis tenuis (3) Hippoglossoides platessoides
Large Neptunia decem costata
Archaster Americanus

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1119

Date, Aug 26 1882

Locality, Off Nantucket

Bearings, Lat 40°-08' N
Long 68°-45' W

Time of day, 6.32 ; of tide,

State of sky, VC

Temperature of air, 68

" surface of water, 65

" at depth of 5 fathoms, 65

" of bottom, 48

Depth, in fathoms, 93=97

Nature of bottom, sand & broken shells

Direction of ~~surface current~~ wind, NNE Force 3

~~Force of surface current~~ Drift, NE½N 3/4

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, US Fish Comm

Name and rank of commanding officer,
Lt. L. L. Lanner USN

Name and position of observer,
J B Bish
Midn USN

1120

REMARKS.

Trawl over 7.53 down 8.03
heaving in 8.30 up 8.45
Sebastes marinus (few) Zoarcus anguillaris (2)
Macrurus Bairdii (few) Scorpaena (few)
" carminatus (few)
Raia radiata (few) Phycis Chuss (few)
" erinacea (few) " tenuis (few)
" jun. Merluccius bilinearis (few)
— deep-water basket-starfish
(Astrophyton Lamarckii) not before taken by us
Dolium Bairdii (frag)
Neptunea decemcostata
Sipho Stimpsoni
Buccinum undatum
Sipho fuliscens
Addisonia paradoxa
Doris complanata
Hyalinaecia artifex
Serval Diploftreraster multiplex
Brissopsis lyrifera
Bolocera Tuediae
Porania spinulosa
Archaster Agassizii

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1120

Date, Aug 26th 1882

Locality, Off Nantucket

Bearings, Lat 40° 05 N
Long 68°-48' W

Time of day, 7 41 ; of tide,

State of sky, VC

Temperature of air, 69

" surface of water, 65

" at depth of 5 fathoms, 65 at 10 56

" of bottom, 43 1/2

Depth, in fathoms, 186 = 194

Nature of bottom, fine sand & stones

Direction of ~~surface current~~, Wind NNE force 3

~~Force of surface current~~, Drift NW 1 1/2

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, N Atlantic Comm

Name and rank of ~~commanding officer~~, Lt. C. L. Lanier USN

Name and position of observer, J B Schick
Mdn USN

1121

REMARKS.

Trawl over 9.18 down 9.28
heaving in 9.48 up 10.05
550 fms out

Lebastes marinus (few) unknown (surface)
Macrurus Bairdii Merlucius bilinearis
" carminatus
Cottunculus microps
Cyclopterus lumpus (surface)
Large lot Ophiacantha millespina
Lot Bolocera Tuediae
" Hyalinaecia artifex
Dolium Bairdii frag
Pecten vitreus
Urticina callosa
Paramuricea borealis (rare coral)
Antedon dentatum
Poramia grandis, very large
Solaster Earlii
Lophaster furcifex (very rare
& not taken in this region
before)

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1121

Date, Aug 26th 1882

Locality, Off Nantucket

Bearings, Lat 40° 04' N
Long 68° 49' W

Time of day, 9.05 ; of tide,

State of sky, VC

Temperature of air, 65

" surface of water, 65

" at depth of 5 fathoms, 64 10 fms 56

" of bottom, 41 1/2

Depth, in fathoms, 225 = 234

Nature of bottom, fine sand & fossil stone

Direction of ~~surface current~~ winds NNE Force 4

Force of ~~surface current~~ Drift WNW 1'

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, N P Fish Comm

Name and rank of commanding officer, H. L. L. Lanner USN

Name and position of observer, [illegible] Midn USN

1122

REMARKS.

Trawl over 10.38 down 10.50
heaving in 11.23 of 1145
600 fms out

Lebastes marinus (fm) Halopsophyrus viola (1)
Great lot Acanella Normani
with Astrochele Lymani on it
Pecten vitreus on Acanella

TEMPERATURE RECORD.

Instrument used, Trawl

Current number of observation, 1122

Date, Aug 26th 1882

Locality, Off Nantucket

Bearings, Lat 40°-02' N
Long 68°-50' W

Time of day, 10,28 ; of tide,

State of sky, Vc

Temperature of air, 70

" surface of water, 67

" at depth of 5 fathoms, 66 at 10 fms 60

" of bottom, 40½

Depth, in fathoms, 337 = 35'.

Nature of bottom, sand & stones

Direction of ~~surface current~~, Wind NNE Force 4

~~Force of surface current~~, Drift NW 1'

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U.S. Fish Comm

Name and rank of commanding officer,
Lt. L. L. Lawson USN

Name and position of observer, [illegible]
Mister USN