1898

ORIGINAL LOG BOOK OF THE "FISH HAWK"

UNITED STATES FISH COMMISSION

STATION NUMBERS

Numbers 1286 to 1335

1286

Specimens Obtained
Skates Flat fish. Sea Robbins
Lemons Star fish, Hermit crabs

TEMPERATURE RECORD.

Instrument used, Blanc Frank

Current number of observation, 1286

Date, Sept 6th 89

Locality, Menemsha Bight Vineyard Sound

Bearings, Gay Head N 1/2 W Cuttyhole N N W
Tarpaulin Cove N N E 1/4 E

Time of day, 11.22 Am ; of tide, Ford

State of sky, b c

Temperature of air, 63

" surface of water, 63

" at depth of fathoms,

" of bottom, 63

Depth, in fathoms, 9

Nature of bottom, Sand

Direction of ~~surface current~~ wind, North

Force of ~~surface current~~ wind 4

Direction of ~~bottom current~~ tide, S E 1/2 E mag 18

Force of bottom current,

Name of vessel, U S Fish Hawk

To what service attached, U S F C

Name and rank of commanding officer, James A Smith
Ensign U S N

Name and position of observer, John Leighton
Ensign U S N

1287

REMARKS.

Specimens Obtained
Lobsters Flat fish, Crabs.
Sea Bottoms Star fish, Hermit Crabs

TEMPERATURE RECORD.

Instrument used, Bean Frank

Current number of observation. 1287

Date, Sept 6th 88

Locality, Menemsha Bight Vineyard Sound

Bearings, Cayhall N 1/4 E Gidstole N X W 7/8 W
Tarpaulin Cove N X E 3/4 E

Time of day, 11.37 Am ; of tide. Ebb

State of sky, Cl

Temperature of air, 62

" surface of water, 65

" at depth of fathoms.

" of bottom, 63

Depth, in fathoms, 8 1/4

Nature of bottom, Sand

Direction of ~~surface current~~ wind, N

Force of ~~surface current~~ wind, 4

Direction of ~~bottom current~~ drift, SE X E 1/2 E 6 Mag 18

Force of bottom current.

Name of vessel, U S Str Fish Hawk

To what service attached, U S F C

Name and rank of commanding officer, James A Smith
Mate U S N

Name and position of observer, [illegible]
Mate U S N

1288

REMARKS.

Specimens Obtained
Skate flat fish sea Robbins
Cancho star fish, Young scup
Sand crabs

TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1288

Date, Sept 6 88

Locality, Vineyard Sound

Bearings, Cuttyhunk W & S Quicks Hole S S W
Tarpaulin Cove S E 3/4 E

Time of day, 11 55 am ; of tide, rising

State of sky, Clear

Temperature of air, 62

" surface of water, 65

" at depth of fathoms,

" of bottom, 63

Depth, in fathoms, 8

Nature of bottom, Sand

Direction of ~~surface current~~ wind, North

Force of ~~surface current~~ wind, 4

Direction of ~~bottom current~~ tide, S S W

Force of bottom current,

Name of vessel, U S Str Fish Hawk

To what service attached, U S F C

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

Name and position of observer, J Templeton
Master U S N

1289

REMARKS.

Specimens Obtained
Winkles / Star fish. Razor fish shells
Scallop shell, Winkle spawn
~~Clam shell~~ stones. Conch, Cowhorn
shells, King Crabs

TEMPERATURE RECORD.

Instrument used, Oyster Dredge

Current number of observation, 1289 21

Date, Sept 13

Locality, Narragansett Bay

Bearings, Conimicut Lt Hse N N E 1/8 E

Warwick Lt S W 1/2 S Allen Rock beacon E 1/2 N

Time of day, 9.55 AM, of tide, Flood 1 2 ft

State of sky, O-C

Temperature of air, 65

" surface of water, 65

" at depth of [illegible] fathoms,

" of bottom, 66

Depth, in fathoms, 2.5

Nature of bottom, Gray Sand

Direction of ~~surface current~~ Wind, W S W

Force of ~~surface current~~ Wind, 2

Direction of ~~bottom current~~ Drift

Force of bottom current,

Name of vessel, U S Fish Hawk

To what service attached, U S F C

Name and rank of commanding officer, James H Sands
Lieut USN

Name and position of observer, [illegible]
Ensn USN

1290

REMARKS.

Specimens Obtained
are Lungfish.

TEMPERATURE RECORD.

Instrument used, Oyster Thermo

Current number of observation. 1290 22

Date, ~~Narragansett Bay~~ Sept 13

Locality. Narragansett Bay

Bearings, Conimicut Lt No N & E 1/4 E

Warwick Lt SW 1/2 W. Allens Rock beacon E & N 1/4 N.

Time of day, 10.10 am ; of tide. Flood

State of sky, vc

Temperature of air, 70

" surface of water, 66

" at depth of fathoms,

" of bottom, 67

Depth, in fathoms, 3

Nature of bottom, mud

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

Force of ~~surface current~~ wind 2

Direction of bottom current.

Force of bottom current.

Name of vessel, U S Str Fish Hawk

To what service attached, U S F C

Name and rank of commanding officer, James Nemitz
Mate USN

Name and position of observer. J Nemitz
Mate USN

1291

REMARKS.

Specimens Obtained
Nothing

TEMPERATURE RECORD.

Instrument used, Dipper Thermometer

Current number of observation, 1291

Date, Sept 13th 88 23

Locality, Narragansett Bay

Bearings, Conimicut to Hog N 26 1/4 E

Warwick Lt S W x W 1/2 W Allens Rock Beacon E x E

Time of day, 10.30 ; of tide. Half Flood

State of sky, Fog

Temperature of air, 70

" surface of water, 66.5

" at depth of fathoms,

" of bottom. 66

Depth, in fathoms, 4

Nature of bottom, Mud

Direction of ~~surface current~~ wind, Leadsman

Force of ~~surface current~~ wind, ——

Direction of bottom current,

Force of bottom current,

Name of vessel, U S Str Fish Hawk

To what service attached, U S F C

Name and rank of commanding officer, James A Smith
Ensign U S N

Name and position of observer, J M Leighton
Ensign U S N

1292

REMARKS.

Specimens Obtained
Nothing

TEMPERATURE RECORD.

Instrument used, Oyster Dredge

Current number of observation, 1292 24

Date, Sept 13th 88

Locality, Narragansett Bay

Bearings, Conimicut Lt Ho N x E 1/4 E

Warwick Lt Hse N x S 1/4 S, Allens Rock Beacon N E x E 1/2 E

Time of day, 10.55 A.M. ; of tide, Flood tide

State of sky, Lc

Temperature of air, 72

" surface of water, 67.5

" at depth of fathoms,

" of bottom, 66

Depth, in fathoms, 6.5

Nature of bottom, Mud

Direction of ~~surface current~~ wind, Calm

Force of ~~surface current~~ wind,

Direction of bottom current,

Force of bottom current,

Name of vessel, U.S. Fish Hawk

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

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

Name and position of observer, J. McLeighton
Mate U.S.N.

1293

REMARKS.

Specimens Obtained
Nothing

TEMPERATURE RECORD.

Instrument used, Oyster Dredge

Current number of observation 1243 25

Date, Sept 13 88

Locality, Stamaquoit Bay

Bearings, Commission St No. North
Nassau St W 1/2 N, Allens Rock Beacon N E

Time of day, 11.10 am; of tide, 3 ∞ Flood

State of sky, Cl

Temperature of air, 72

" surface of water, 67

" at depth of fathoms,

" of bottom, 67

Depth, in fathoms, 4

Nature of bottom, Mud

Direction of ~~surface current~~ wind W S W

Force of ~~surface current~~ wind 2

Direction of bottom current,

Force of bottom current,

Name of vessel, U S Fish Hawk

To what service attached, U S F C

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

Name and position of observer, Huntington
Master U S N

REMARKS.

Specimens Obtained
Flat Fish Spider Crabs
Oyster & scallop shells, Young
scup dead winkles, Hermit
Crab, & Clam shells

TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation. 1294

Date, Sept 13th 88

Locality. Narragansett Bay

Bearings, Eminent Pt Ho N 1/4 W

Warwick Pt N 1/4 E. Mem Rock beacon N 3/4 E

Time of day, 11.33 Am of tide. 3 2nd Flood

State of sky, Bc

Temperature of air, 72

" surface of water, 67

" at depth of fathoms,

" of bottom, 66

Depth, in fathoms, 4

Nature of bottom, Mud

Direction of ~~surface current~~, Wind WNW

Force of ~~surface current~~, Wind 2

Direction of bottom current,

Force of bottom current,

Name of vessel, U S Fish Hawk

To what service attached, U S F C

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

Name and position of observer, J McLaughlin Mate U S N

1295

REMARKS.

Specimens Obtained
Leondro, Squilla Flat fish
1 Star fish Spider Crabs, Hermit
Crabs, Dead Clam shells
Skate Eggs.

TEMPERATURE RECORD.

27

Instrument used, Beam Trawl

Current number of observation. 1295

Date, Sept 13th 98

Locality, Narragansett Bay

Bearings, Eminent to No N 1/4 W

Warwick to N x S 1/4 S. Allens Rock Beacon N E x E

Time of day, 11.52 Am ; of tide, 3 hr Flood

State of sky, Cl

Temperature of air. 71

" surface of water, 67

" at depth of fathoms,

" of bottom. 66

Depth, in fathoms, 3.5

Nature of bottom, Mud

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

Force of ~~surface current~~ wind, 2

Direction of bottom current,

Force of bottom current,

Name of vessel, U S Str Fish Hawk

To what service attached, U S F C

Name and rank of commanding officer. James A Smith
Mate U S N

Name and position of observer, J M Leighton
Mate U S N

1296

REMARKS.

Specimens Obtained
King Crab / Star fish. Spider
Crabs, Scallops, Flat fish
Hermit crabs, Kelp, Young scup

TEMPERATURE RECORD.

Instrument used, Beaum Board 28

Current number of observation, 1296

Date, Sept 13 88

Locality, Narragansett Bay

Bearings, Conimicut Lt Ho N ¾ W

Warwick S W x W ¾ W. Allens Rock beacon N E x E ¾ E

Time of day, 12.03 PM; of tide, 3 hr 2 hr Flood

State of sky, Clear

Temperature of air, 72

" surface of water, 67.5

" at depth of fathoms,

" of bottom, 66

Depth, in fathoms, 8.2

Nature of bottom, Mud

Direction of ~~surface current~~ wind, W x W

Force of ~~surface current~~ wind, 3

Direction of bottom current,

Force of bottom current,

Name of vessel, U S Str Fish Hawk

To what service attached, U S F C

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

Name and position of observer, J McLenighan
Master U S N

1297

REMARKS.

Specimens obtained same as 1296 with the exception of one star fish

TEMPERATURE RECORD.

29

Instrument used, Bessner Trawl

Current number of observation, 1297

Date, Sept 13th 88

Locality, Narragansett Bay

Bearings, Conimicut Pt Ho N x W

Warwick Pt S W x W 1/2 W. Allens Rock Buoy E x N 1/4 N

Time of day, 11.15 AM ; of tide, High Water

State of sky, b c

Temperature of air, 72

" surface of water, 69

" at depth of fathoms,

" of bottom. 66.5

Depth, in fathoms, 4

Nature of bottom, Mud

Direction of ~~surface current~~ Mind S x W

Force of ~~surface current~~ Mind 2

Direction of bottom current,

Force of bottom current,

Name of vessel, U S Fish Hawk

To what service attached, No 676

Name and rank of commanding officer, James A Smith
Mate U S N

Name and position of observer, J M Leighton
Mate U S N

1298

REMARKS.

Specimens Obtained
Black Mussels & Shells
Starfish. Winkles Flat fish

TEMPERATURE RECORD.

Instrument used, Reversing Thermometer 30

Current number of observation, 1298

Date, Sept 13th 88

Locality, Narragansett Bay

Bearings, Eminence Pt Hs N W & N 3/4 N

Warwick Pt S W & W, Allens Rock beacon E 3/4 N

Time of day, 12.38 Pm ; of tide, High Water

State of sky, Dc

Temperature of air, 72

" surface of water, 68.5

" at depth of fathoms,

" of bottom, 66.5

Depth, in fathoms, 5

Nature of bottom, Mud

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

Force of ~~surface current~~ wind, 3

Direction of bottom current,

Force of bottom current,

Name of vessel, U S Fish Hawk

To what service attached, U S F C

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

Name and position of observer, J Mulcrighter Mate U S F C

REMARKS.

Specimens Obtained
Rock sponge & cattop shells
stones. 3 Starfish. blind Razor
fish shells. Few Grills Crabs

TEMPERATURE RECORD.

Instrument used, Negretti & Zambra

Current number of observation, 1299

Date, Sept 13th 88

Locality, Narragansett Bay

Bearings, Conimicut Pt N W by W

Warwick S.W. Allens Rock Beacon E x S

Time of day, 1.30 P.M.; of tide, High Water

State of sky, Bc

Temperature of air, 69

" surface of water, 67

" at depth of fathoms,

" of bottom, 67

Depth, in fathoms, 5.2

Nature of bottom, Mud

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

Force of ~~surface current~~ wind, 3

Direction of bottom current,

Force of bottom current,

Name of vessel, U.S. Fish Hawk

To what service attached, U S F C

Name and rank of commanding officer, James E Lamb
Mate U S N

Name and position of observer, J M Houston
Mate U S N

1800

REMARKS.

Specimens Obtained
Lewisburg 4 - 4 Some Head Skulls

TEMPERATURE RECORD.

Instrument used, Oyster Dredge

Current number of observation. 13

Date, Sept 13th 88

Locality, Narragansett Bay

Bearings, Conimicut Pt Hg W N W

Warwick Ft S 3/4 W. Allen Rock Beacon E 3/4 S

Time of day, 2 PM ; of tide. 1 hr 2 m Ebb

State of sky,

Temperature of air. 72

" surface of water, 66.5

" at depth of fathoms.

" of bottom, 66

Depth, in fathoms, 3.5

Nature of bottom. Sand

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

Force of ~~surface current.~~ Wind 3

Direction of bottom current.

Force of bottom current.

Name of vessel, U S Str Fish Hawk

To what service attached, U S F C

Name and rank of commanding officer, James A Smith
Mate U S N

Name and position of observer,
D Langford
Mate U S N

1301

REMARKS.

Specimens Obtained
Pike fish, King Crabs, Flat fish
Spider Crabs, Hermit crabs
Minnie shrimp, Black Mussel
Conchs, Scallop shells

TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation. 1301

Date, Sept 13th 88

Locality, Narragansett Bay

Bearings, Conimicut Lt No N W 1/4 W

Warwick Lt. S W x W 1/2 W. Allens Rock beacon E x N 1/4 N

Time of day, 2 12 PM ; of tide, 1h 2m Ebb

State of sky,

Temperature of air, 72

" surface of water, 66

" at depth of fathoms,

" of bottom, 66

Depth, in fathoms, 4

Nature of bottom, Mud

Direction ~~of surface current~~ wind, W x W

Force of ~~surface current~~ wind, 3

Direction of bottom current.

Force of bottom current,

Name of vessel, U S Fish Hawk

To what service attached, U S F C

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

Name and position of observer, J M Leighton
Master U S N

1302

REMARKS.

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

TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1302

Date, Sept 13th 88

Locality, Narragansett Bay

Bearings, Conimicut Pt N 30 W x N 1/2 W
Warwick Ledge W x S 1/4 S. Allens Rock Beacon N E x E

Time of day, 2.24 PM ; of tide, 1h 2m Ebb

State of sky, Cl

Temperature of air, 72

" surface of water, 67

" at depth of fathoms,

" of bottom, 65

Depth, in fathoms, 5.5

Nature of bottom, Mud

Direction of surface current,

Force of surface current,

Direction of ~~bottom current~~, Wind W N W

Force of ~~bottom current~~, Wind 3

Name of vessel, U S Fish Hawk

To what service attached, U S F C

Name and rank of commanding officer, James A Smith
Mate U S N

Name and position of observer, J M Longstreet
Mate U S N

1306

REMARKS.

Specimens Obtained
Oyster & clam shells / Clinopsis
/ Squid

TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1303

Date, Sept 13th 88

Locality, Narragansett Bay

Bearings, Conimicut Lt N 65 W & N 3/4 W
Nausett Lt W 1/8 S Allens Rock beacon N E 1/4 E

Time of day, 2.34 pm ; of tide, 1st 2h Ebb

State of sky, Cl

Temperature of air, 72

" surface of water, 67

" at depth of fathoms,

" of bottom, 65

Depth, in fathoms, 5 1/2

Nature of bottom, Mud

Direction of ~~surface current~~ wind, NNW

Force of ~~surface current~~ wind, 3

Direction of bottom current,

Force of bottom current,

Name of vessel, U S Str Fish Hawk

To what service attached, U S F C

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

Name and position of observer, J Merlin Shelton
Private U S N

1304

REMARKS.

Specimens Obtained
Flat fish Hermit crabs
Spider Crabs. Hens Oyster
Shells & stones. Star fish 1

TEMPERATURE RECORD.

Instrument used, Blanc Francis

Current number of observation, 1304

Date, Sept 13th 88

Locality. Narragansett Bay

Bearings, Dominicans Lt Ho N x W 3/4 W
Warwick Lt N 1/2 E. Allens Rock beacon N E 1/2 N

Time of day, 2.46 PM ; of tide, 1st 2d Ebb

State of sky, Cl

Temperature of air, 72

" surface of water, 67

" at depth of fathoms,

" of bottom, 65.5

Depth, in fathoms, 4.5

Nature of bottom, Mud

Direction ~~of surface current~~, Wind W x W

Force of ~~surface current~~, Wind 4

Direction of bottom current,

Force of bottom current,

Name of vessel, No 6 Str Fish Hawk

To what service attached, No 67 L

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

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

1305

REMARKS.

Specimens Obtained
Flat fish, Spider Crabs, Conchs
Hake, Pipe fish, Dead oyster &
Scallop shells

TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1305

Date, Sept 23 88

Locality, Tarrafamate Bay

Bearings, Dominica St Pts S & W 1/4 W
Warwick St W & N, Allens Rock Bearing S & E 1/2 Mile

Time of day, 2.55 PM ; of tide, 1 hr 2 m Ebb

State of sky, Oc

Temperature of air, 73.5

" surface of water, 67

" at depth of fathoms,

" of bottom, 66

Depth, in fathoms, 5

Nature of bottom, Mud

Direction ~~of surface current~~, Mud W by N W

Force of ~~surface current~~, Mud 3

Direction of bottom current,

Force of bottom current,

Name of vessel, U S Str Fish Hawk

To what service attached, U S F C

Name and rank of commanding officer, James A Smith
Lieut U S N

Name and position of observer, J M Leonard
Lieut U S N

1306

REMARKS.

Specimens Obtained
Rhodops & Mandibulatella

TEMPERATURE RECORD.

Instrument used, Negretti & Zambra

Current number of observation, 1006 28

Date, Sept 14 1883

Locality, Providence River

Bearings, Conimicut Lt S & E

Bullocks Lt S 58 E S 3/4 S Nayatt Pt E & E

Time of day, 10 00 ; of tide, 1st 2d flood

State of sky, NL

Temperature of air, 50

" surface of water, 69

" at depth of fathoms,

" of bottom, 64

Depth, in fathoms, 8

Nature of bottom, Mud

Direction of ~~surface current~~ wind, NW

Force of ~~surface current~~ wind, 4

Direction of bottom current,

Force of bottom current,

Name of vessel, U S Str Fish Hawk

To what service attached, U S F C

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

Name and position of observer, J M Longshore Mate U S N

1307

REMARKS.

Specimens Obtained
Star fish flat fish Baite oyster
shell Mussel shells Lumbro
Liohops scallop shell Spider
Crabs, King crabs, Lovell fish

TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1307 39

Date, Sept 17 88

Locality, Providence River

Bearings, Conimicut Lt S E x S 1/4 S

Bullocks Lt S x E 3/4 E Naqut Pt East

Time of day, 11.59 am; of tide, 1.25 Flood

State of sky, Cl

Temperature of air, 66

" surface of water, 64

" at depth of fathoms,

" of bottom, 64

Depth, in fathoms, 7 1/2

Nature of bottom, Sandy

Direction of ~~surface current~~ wind, South

Force of ~~surface current~~ wind, 2

Direction of bottom current,

Force of bottom current,

Name of vessel, U S Fish Hawk

To what service attached, U S F C

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

Name and position of observer, J M Lewis Jr
Mate U S N

1328

REMARKS.

Specimens Obtained
Starfish Gray sculp Hairy Skate
Spider Crabs King Crabs Hermit
Crabs Conchs. Oyster & Clam and
scallop shells

TEMPERATURE RECORD.

40

Instrument used, Beam Trawl

Current number of observation, 1308

Date, Sept 17 88

Locality, Providence River

Bearings, Eminence Ld S 6 3/4 S
Bullocks Ld N & W Arayat Pt E & S

Time of day, 12.06 ; of tide, 1st 2 flood

State of sky, clear

Temperature of air, 52

" surface of water, 64

" at depth of fathoms,

" of bottom, 64.5

Depth, in fathoms, 2

Nature of bottom, Mud bottom shells

Direction of ~~surface current~~ wind, South

Force of ~~surface current~~ wind, 2

Direction of ~~bottom current~~ tide

Force of bottom current,

Name of vessel, U S C & F Fish Hawk

To what service attached, U S F C

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

Name and position of observer, J M Leighton
Mate U S N

1309

REMARKS.

Specimens Optimal
same as 1308 except no starfish

TEMPERATURE RECORD.

41

Instrument used, Beam Trawl

Current number of observation, 1309

Date, Sept 17 88

Locality, Providence River

Bearings, Conimicut Lt - 1 E 3/4 E
Bullocks Point W Stayout Pt E & 1/2 S

Time of day, 7.49 : of tide, 1st Ebb

State of sky, Cloudy

Temperature of air, 68

" surface of water, 66

" at depth of fathoms,

" of bottom, 66

Depth, in fathoms, 8

Nature of bottom, Mud

Direction of ~~surface current~~ Wind, S

Force of ~~surface current~~ Wind, 2

Direction of ~~bottom current~~ Drift,

Force of bottom current,

Name of vessel, U.S. Fish Hawk

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

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

Name and position of observer, J. Merlin Leighton
Chemist U.S.F.C.

1310

REMARKS.

Specimens Obtained
Shells, Crabs, Winkles, flat fish.

TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1310 42

Date, Sept 17 88"

Locality, Providence River

Bearings, Conimicut St S E & S

Rutlocks St Smth. Nayat Pt E & E

Time of day, 7.54 ; of tide, 1st 2h Ebb

State of sky, Cloudy

Temperature of air, 68

" surface of water, 66

" at depth of fathoms,

" of bottom, 66

Depth, in fathoms, 4 1/2

Nature of bottom, Mud

Direction of ~~surface current~~ Wind, S

Force of ~~surface current~~ Wind, 2

Direction of ~~bottom current~~ Drift,

Force of bottom current,

Name of vessel, U S Fish Hawk

To what service attached, U S F C

Name and rank of commanding officer, James Smith
Mate USN

Name and position of observer, J M Leighton
Mate USN

1321

REMARKS.

Specimen Obtained
Spider Crabs Flat fish
Grey scale

TEMPERATURE RECORD.

Instrument used, Bacon Trawl

Current number of observation, 1311 43

Date, Sept 17

Locality, Providence River

Bearings, Conimicut Pt S E 7/8 S

Bullocks Point N x E 1/4 E Sabins Pt N 1/2 W

Time of day, 7.57 ; of tide, 1h 2m Ebb

State of sky, Cloudy

Temperature of air, 68

" surface of water, 66

" at depth of fathoms,

" of bottom, 66

Depth, in fathoms, 4 1/4

Nature of bottom, Mud

Direction of ~~surface current~~ Wind, S

Force of ~~surface current~~ Wind, 2

Direction of ~~bottom current~~ Drift,

Force of bottom current.

Name of vessel, U S Str Fish Hawk

To what service attached, U S F C

Name and rank of commanding officer, James A Lovett Mate USN

Name and position of observer, J M Leighton Mate USN

1112

REMARKS.

Specimens Obtained
Spider Crabs Flat Fish
Oyster & Scallop Shells

TEMPERATURE RECORD.

Instrument used, Beam Bowl

Current number of observation, 1812 44

Date, Sept 17th 87

Locality, Providence River

Bearings, Commercial St S E X S

Bellocks St N E X E 1/4 E Eaton St - Smith

Time of day, 8.04 ; of tide, 1st 2nd Ebb

State of sky, Cloudy

Temperature of air, 68

" surface of water, 66

" at depth of fathoms,

" of bottom, 66

Depth, in fathoms, 5

Nature of bottom, Mud

Direction of ~~surface current~~ wind, Smith

Force of ~~surface current~~ wind, 2

Direction of ~~bottom current~~ drift

Force of bottom current,

Name of vessel, U S S Fish Hawk

To what service attached, U S F C

Name and rank of commanding officer, James A Smith
Mate U S N

Name and position of observer, J H Loughlin
Mate U S N

1313

REMARKS.

Specimens Obtained
Minkels Flat fish Spider
Crabs Oyster & Scallop Shells

TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation. 1813 45

Date, Sept 17 88

Locality, Providence River

Bearings, Conimicut Lt S E x S 1/2 S
Bullocks Lt S E x E 1/4 E Sabins Lt North

Time of day, 8-09 ; of tide, 7 "25 Ebb

State of sky, cloudy

Temperature of air, 68.5

" surface of water, 66.5

" at depth of fathoms,

" of bottom, 66

Depth, in fathoms, 6 1/2

Nature of bottom, Mud

Direction of ~~surface current~~ wind, South

Force of ~~surface current~~ wind, 2

Direction of ~~bottom current~~ tide,

Force of bottom current,

Name of vessel, U S Str Fish Hawk

To what service attached, U S F C

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

Name and position of observer, J Hemphill
Master U S N

1314

REMARKS.

Specimens Obtained
King ~~Crab~~. Flat fish, Lady crab
Hermit & Spider Crabs, Tony shell
~~Sh~~ Winkle Oyster Limpet & Scallop
shells.

TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1314 66

Date, Feb 19 08

Locality, Narragansett Bay

Bearings, Gaspee Point S 6 W to S x W 3/4 W

Warwick Neck W 1/2 N Allens Rock Beacon S 6 x W 1/2 W

Time of day, 9 to 6 ; of tide, 1/2 Ebb

State of sky, Cloudy

Temperature of air, 59

" surface of water, 64

" at depth of fathoms,

" of bottom, 64

Depth, in fathoms, 7 3/4

Nature of bottom, Mud

Direction of ~~surface current~~ Mud, S x W

Force of ~~surface current~~ Wind, 3

Direction of ~~bottom current~~ Wind,

Force of bottom current,

Name of vessel, U S Str Fish Hawk

To what service attached, U S F C

Name and rank of commanding officer, James A Smith
Ensign

Name and position of observer, [illegible]
Ensign

1315

REMARKS.

Specimens Obtained
King & Hermit-Crabs, Head
shells, Clams, Flat fish & callop
1 small star fish.

TEMPERATURE RECORD.

Instrument used, Beam Bowl

Current number of observation, 1315 67

Date, Sept 19 78

Locality, Narragansett Bay

Bearings, Conimicut St Hz N x N x N 3/4 N

Warwick St W 1/2 S. Allens Rock beacon N 63/4 N

Time of day, 10.22 ; of tide. Ebb

State of sky, Cloudy

Temperature of air, 58

" surface of water, 64.5

" at depth of fathoms,

" of bottom. 63

Depth, in fathoms, 6

Nature of bottom, Mud

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

Force of ~~surface current~~ wind 3

Direction of ~~bottom current,~~ Wind

Force of bottom current,

Name of vessel, U S Str Fish Hawk

To what service attached, U S F C

Name and rank of commanding officer, James Smith
Master

Name and position of observer.

J Merrington
Master

1316

REMARKS.

Specimens Obtained
Skate Flatfish Hake
Squillia Bonyscup, Squid
King Crabs, Butterfish, Shell
shells. Hermit-crab, Winkle
stones.

TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1316 68

Date, Sept 19th

Locality, Narragansett Bay

Bearings, Conimicut Pt Ho N W x W 1/4 N

Warwick Ledge N x E 1/4 E Allens Rock beacon N E 1/4 E

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

State of sky, Cloudy

Temperature of air, 68

" surface of water, 65

" at depth of fathoms,

" of bottom, 63

Depth, in fathoms, 5

Nature of bottom, Mud

Direction of ~~surface current~~ wind N N W

Force of ~~surface current~~ wind 2

Direction of ~~bottom current~~ tide,

Force of bottom current,

Name of vessel, U S Str Fish Hawk

To what service attached, U S F C

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

Name and position of observer, J M Leighton
Master U S N

1317

REMARKS.

Specimens Obtained
King crabs Spider & Hermit crabs
Flat fish, Kelp, Head & clam
& oyster shells.

TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1317 69

Date, Sept 19th 86

Locality, Narragansett Bay

Bearings, Conanicut Pt No N W x N

Warwick Pt W & W. Allens Rock beacon N E x E 1/2 E

Time of day, 11.20 am ; of tide, Ebb

State of sky, Cloudy

Temperature of air, 60

" surface of water, 64.5

" at depth of fathoms,

" of bottom, 60

Depth, in fathoms, 6 1/2

Nature of bottom, Sand

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

Force of ~~surface current~~ wind, 2

Direction of ~~bottom current~~ tide,

Force of bottom current,

Name of vessel, U S Fish Hawk

To what service attached, U S F C

Name and rank of commanding officer, James A Lovett
Ensign USN

Name and position of observer, J Mclenighter
Ensign USN

1318

REMARKS.

Specimens Obtained
10 Star fish Flat fish, King crabs
Winkel, Hermit Crabs. Spider
Crabs, Hog chokers

TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1318 70

Date, Sept 19th 88

Locality, Narragansett Bay

Bearings, Conimicut Lt No N W x N

Warwick Lt S W x W 1/4 W Allens Rock beacon E x N

Time of day, 11.35 AM ; of tide, Ebb 3' low

State of sky, Cloudy

Temperature of air, 60

" surface of water, 65

" at depth of fathoms,

" of bottom, 63

Depth, in fathoms, 7

Nature of bottom, Mud

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

Force of ~~surface current~~ wind, 2

Direction of ~~bottom current~~ wind,

Force of bottom current,

Name of vessel, U S Str Fish Hawk

To what service attached, U S F C

Name and rank of commanding officer, James A Smith
Cmdr U S N

Name and position of observer, J W Leighton
Cmdr U S N

1319

REMARKS.

Specimens Obtained
King Crabs, Flat fish, Jelly fish
Hermit + Spider Crabs, Kelp
oyster + scallop shells

TEMPERATURE RECORD.

Instrument used, Beam Trawl.

Current number of observation, 1319 7-1

Date, Sept 19th 89

Locality, Narragansett Bay

Bearings, Conimicut Lt Ho N W 3/4 W

Warwick Lt S W 1/4 W. Allens Rock Beacon E 1/2 S

Time of day, 11.50 AM ; of tide. Ebb 3h 2m

State of sky, Cloudy

Temperature of air, 60

" surface of water, 65

" at depth of fathoms,

" of bottom, 68

Depth, in fathoms, 5

Nature of bottom, Mud & shell

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

Force of ~~surface current~~ wind 2

Direction of ~~bottom current~~ wind

Force of bottom current,

Name of vessel, U S Str Fish Hawk

To what service attached, U S F C

Name and rank of commanding officer, James A Smith
Commander

Name and position of observer, J Templeton

1320

REMARKS.

Specimens Obtained
Sting Ray 2 cup Flat fish 2 Skate
4 Star fish, Spider & hermit Crabs
Mean oyster & scallop shells

TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1320 72

Date, Sept 19th 88

Locality, Providence River

Bearings, Conimicut Lt N x S 1/4 S
Bullocks Lt N N x W 1/4 W Sryat Pt N N E

Time of day, 1.45 Pm ; of tide, Flood 1h 2m

State of sky, Cloudy

Temperature of air, 67

" surface of water, 67.5

" at depth of fathoms,

" of bottom, 65.5

Depth, in fathoms, ~~53~~ 25

Nature of bottom, Mud & Shells

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

Force of ~~surface current,~~ wind 2

Direction of ~~bottom current,~~ Wind East

Force of bottom current, Land

Name of vessel, U S Str Fish Hawk

To what service attached, U S F C

Name and rank of commanding officer, James A Smith
Lieut USN

Name and position of observer, J Templeton
Mate USN

1321

REMARKS.

Specimens Obtained
Hot pink spider crabs
King Crabs skate, Pipe fish
Sculpin, sand oyster & scallop
shell.

TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1321 73

Date, Sept 19th 88

Locality, Providence River

Bearings, Conimicut Lt S 5/8 E

Bullocks Lt N x W Rayat Pt E x S

Time of day, 1.58 PM ; of tide, Flood 1 hr 2 m

State of sky, Cloudy

Temperature of air, 67

" surface of water, 65.5

" at depth of fathoms.

" of bottom, 65

Depth, in fathoms, 6 1/4

Nature of bottom, 1 Gravel & shell

Direction of ~~surface current~~ wind, N x W

Force of ~~surface current~~ wind, 2

Direction of ~~bottom current~~ drift,

Force of bottom current,

Name of vessel, U S Str Fish Hawk

To what service attached, U S F C

Name and rank of commanding officer, James A Smith
Master

Name and position of observer, [illegible]
Master

1322

REMARKS.

Specimens Obtained
Skate flat fish. Hermit Crabs
Dead oyster. Scallops & Mussel shell

TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1322 74

Date, Sept 19th 80

Locality, Providence River

Bearings, Conimicut Lt S 1/4 E

Bullocks Lt SE 3/4 S Nayat Pt E x S 1/2 S

Time of day, 2.22 PM; of tide, 1st Ebb flood

State of sky, Cloudy

Temperature of air, 66

" surface of water, 65.5

" at depth of fathoms,

" of bottom, 64

Depth, in fathoms, 4 3/4

Nature of bottom, Sand & gravel

Direction of ~~surface current~~ wind, W by W

Force of ~~surface current~~ wind, 2

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, N & F

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

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

1323

REMARKS.

Specimens Obtained
Near oyster & scallop shells
On [illegible]

TEMPERATURE RECORD.

Instrument used, Negretti & Zambra

Current number of observation, 1323 75

Date, Sept 24

Locality, Pawcatuck River

Bearings, Carnimicus Lt S x W 1/8 W
Bullocks Lt N W. Napatree Pt S E 1/4 E

Time of day, 11.15 am ; of tide, High Water

State of sky, Oc

Temperature of air, 58

" surface of water, 64

" at depth of fathoms,

" of bottom. 62.5

Depth, in fathoms, 2 3/4

Nature of bottom, Hard Sand

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

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, James A Lovett
Chief Engr

Name and position of observer, J M Knight
Chief Engr

REMARKS

1324

REMARKS.

Specimens Obtained
from water & dredling shells and
& sponges &c.

TEMPERATURE RECORD.

Instrument used, Aspin Range

Current number of observation, 1324 76

Date. Sept 24

Locality, Pow Room

Bearings, Connimicut Lt S ½ E

Bullocks Lt N W ¼ N Nayat Pt S E ¾ E

Time of day, 1.15 PM : of tide. 1° Dr Ebb

State of sky, Partly Cloudy

Temperature of air. 58

" surface of water, 64.5

" at depth of fathoms,

" of bottom, 63

Depth, in fathoms, 2 3/4

Nature of bottom, Hard

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

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. James E Smith
Lieut U S N

Name and position of observer. J M Livingston
Lieut U S N

8325

REMARKS.

Specimens Marine
Dead Oyster & scallop shells
Hermit Crabs & small stones
3 Starfish

TEMPERATURE RECORD.

Instrument used, Negretti & Zambra

Current number of observation, 1325 77

Date, Sept 24 88

Locality, Provo River

Bearings. Connimicut Lt S 7/8 E

Bullocks Lt N W 1/8 W Narragansett Pt S E 1/4 E

Time of day, 1.35 of tide, 1st 2hr Ebb

State of sky, b-c

Temperature of air. 58

" surface of water, 64.5

" at depth of fathoms,

" of bottom, 63

Depth, in fathoms, 3 1/2

Nature of bottom, Hard

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

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, James A Smith Mate U S F

Name and position of observer, Stephen Leslie Mate U S F

1326

REMARKS.

Specimens Obtained
Rock sponges. Head Oyster & scallop
shells.

TEMPERATURE RECORD.

Instrument used, Oyster Dredge

Current number of observation, 1326 — 78

Date, Sept 24 88

Locality, Pawcatuck River

Bearings, Carminicut Lt S 7/8 E

Bullocks Lt N 1/2 W Stay at Pt S E

Time of day, 1 54 PM, of tide, 1 2h Ebb

State of sky, bc

Temperature of air, 58

" surface of water, 62

" at depth of fathoms,

" of bottom, 63

Depth, in fathoms, 2

Nature of bottom, Hard

Direction ~~of surface current~~ mud, NNE

Force of ~~surface current~~ mud, 3

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U S F C

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

Name and position of observer, [illegible] Master U S N

1327

REMARKS.

Specimens Obtained
Blank Musketts and dead Shells.
+ 2 star fish.

TEMPERATURE RECORD.

Instrument used, Oyster Dredge

Current number of observation, 1327 79

Date, Sept 24 84

Locality, Pine River

Bearings, Commencement Pt S 1/4 E

Bullock Pt N 3/4 W Nayatt Pt S E 1/4 S

Time of day, 2.10 PM ; of tide, 1h 2m Ebb

State of sky, Cl

Temperature of air, 58

" surface of water, 64.5

" at depth of fathoms,

" of bottom, 64

Depth, in fathoms, 10 1/2 feet

Nature of bottom, Hard

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

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, James E Smith
Engineer

Name and position of observer, [illegible]
Engineer

1328

REMARKS.

Specimens obtained
dead clams and opte shells.
3 ctenofiles 2 winkels.

TEMPERATURE RECORD.

Instrument used, Oyster Dredge

Current number of observation, 1328 #80

Date, Sept 24 98

Locality, Prin River

Bearings, Terminal Pt S 1/2 E

Bullocks Pt N x W 1/4 W Bayat Pt S E x S

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

State of sky, Clear

Temperature of air, 58

" surface of water, 64.5

" at depth of fathoms,

" of bottom, 64

Depth, in fathoms, 11 feet

Nature of bottom, Sand

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

Force of ~~surface current~~ wind, 3

Direction of bottom current,

Force of bottom current,

Name of vessel, U S Fish Hawk

To what service attached, U S F H

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

Name and position of observer, J M Loughlin
Master U S N

1829

REMARKS.

Specimens Obtained
near Clare Oyster and
Scallop shells.
2 Starfish

TEMPERATURE RECORD.

Instrument used, Negretti & Zambra

Current number of observation, 1329 # 81

Date, Sept 24 [illegible]

Locality, Pearl River

Bearings, Carrimicut Pt. South

Bullocks Pt. N.W. Stargat Pt. S.E. 1/4 E

Time of day, 2.34 ; of tide, 2" 2r Ebb

State of sky, bc

Temperature of air, 58

" surface of water, 64.5

" at depth of fathoms,

" of bottom, 63

Depth, in fathoms, 2 3/4

Nature of bottom, Sand

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

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, James A Smith
Master U.S.F.C.

Name and position of observer, J M Leighton
Master U.S.F.C.

1330

REMARKS.

Specimens Obtained
Clam & Clam & Clam & Oyster shells
Seaweed & grass

TEMPERATURE RECORD.

Instrument used, Porter Dredge

Current number of observation, 1330 #85

Date, Sept 21 88

Locality, Prov River

Bearings, Cuttyhunk Lt S 1/4 W

Bullocks Lt NW & W 1/2 W Nayatt Pt SE & S 1/4 S

Time of day, 3.12 P.M. ; of tide, 1/2 Ebb

State of sky, Clear

Temperature of air, 60

" surface of water, 64

" at depth of fathoms,

" of bottom, 64

Depth, in fathoms, 8 1/2 feet

Nature of bottom, Gravel

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

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, James E Smith
Master U.S.N.

Name and position of observer, J Nelson Johnson
Master U.S.N.

1332

REMARKS.

Specimens Obtained
Bird Nests & Dead Opts. Mille
Can well & Press

TEMPERATURE RECORD.

Instrument used, Oyster Bridge

Current number of observation. 13.3k = 86

Date, August 24

Locality, Pow'Clum

Bearings. Cormicut Dt S½W

Bullockes Dt W½W W¾W Stagat Pt S E½S S¾S

Time of day, 5.24 : of tide. ½ Ebb

State of sky, Clear

Temperature of air, 60

" surface of water, 65

" at depth of fathoms,

" of bottom, 65

Depth, in fathoms, 6 feet

Nature of bottom, Sand

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

Force of surface current, 3

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U S F C

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

Name and position of observer. J M Longhton
Mate U.S.N.

1333

REMARKS.

Specimens Obtained
Examined & Found

TEMPERATURE RECORD.

Instrument used, Oyster Dredge

Current number of observation, 1882 x 87

Date, Sept 24 88

Locality, Prov River

Bearings, Lemmicut Lt S x W

Bullocks Lt N x W 1/2 W Nayat pt S E x E 1/2 S

Time of day, 3.30 ; of tide, 3' Ebb

State of sky, 8

Temperature of air, 60

" surface of water, 65

" at depth of fathoms,

" of bottom, 65.5

Depth, in fathoms, 4 feet

Nature of bottom, Sand

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

Force of ~~surface current~~ wind, 3

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, Yo & Yale

Name and rank of commanding officer, James A Lamb
Lieut. U S N

Name and position of observer, J Hedrington
Lieut U S N

1834

REMARKS.

Dead Oyster & clam shells. Sea weed & grass.

TEMPERATURE RECORD.

Instrument used, Ryder Negretti #88

Current number of observation, 1333

Date, Sept 24 88

Locality. Pawcatuck River

Bearings, Cannonicut Pt S X W 1/4 W
Bullocks Pt N W 1/2 W Naiyat Pt S E X S

Time of day, 3.35 ; of tide. 3 2hr Ebb

State of sky, Clear

Temperature of air, 60

" surface of water, 64.5

" at depth of fathoms,

" of bottom, 64

Depth, in fathoms, 5 feet

Nature of bottom, Sand

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

Force of ~~surface current~~ wind, 4

Direction of ~~bottom current~~ drift

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, No 676

Name and rank of commanding officer, James A Smith
Mate U S N

Name and position of observer, J McLaughlin
Mate U S N

1355

REMARKS.

Recent oyster shells
& Starfish

TEMPERATURE RECORD.

Instrument used, Negretti & Zambra 89

Current number of observation, 1334

Date, Sept 28th 88

Locality, Prow River

Bearings, Carminiac Ck S 1/2 E

Bullocks Ck N W Nazareth S 3/4 E

Time of day, 11.30 am ; of tide, 4" Ex flood

State of sky, Cloudy

Temperature of air, 61

" surface of water, 64

" at depth of fathoms,

" of bottom, 65

Depth, in fathoms, 2 3/4

Nature of bottom, Sand

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

Force of ~~surface current~~ wind, 2

Direction of ~~bottom current~~ wind,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U S F C

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

Name and position of observer, J M Leighton
Mate U S N

1336

REMARKS.

Specimen Obtained
1 star fish & dead Oyster shells

TEMPERATURE RECORD.

Instrument used, Negretti & Zambra

Current number of observation, 1335 '90

Date, Sept 25 '88

Locality, Provo River

Bearings, Cominicutt Pt S x E

Bullwhelks Pt N x W 1/2 W Nagatt Pt SE 1/4 S

Time of day, 11.45 ; of tide, 4 2r flood

State of sky, Cloudy

Temperature of air, 65

" surface of water, 64

" at depth of fathoms,

" of bottom, 64

Depth, in fathoms, 2 3/4

Nature of bottom, Sand

Direction of ~~surface current~~ wind N E

Force of ~~surface current~~ wind 2

Direction of ~~bottom current~~ drift

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U S F C

Name and rank of commanding officer, James A Smith
Mate U S N

Name and position of observer, J Burlingham
Mate U S N

1337

REMARKS.

14-2 19" 6, 1/2
15-1/2 "
5 1/2
20, 6

44 15
53, 58

91-
2 Stonpiles dead Oyster shells
93 dead oyster Shells
101
103
104
118
119