

ORIGINAL LOG BOOK OF THE "FISH HAWK"

UNITED STATES FISH COMMISSION

STATION NUMBERS

1891
Numbers 1639 to 1659

in am Parcton

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No.

Date,

Time of day, : of tide,

Locality,

Exact position,

Depth,

Nature of bottom,

Dredging instrument used,

Direction of drift, : distance,

Temperature of air, therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, temp.,

" at depth of fathoms, "

" at bottom, "

Number of salinometer,

Barometer reading,

State of sky,

Direction of wind, ; force,

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, '

Service to which attached,

Name and rank of commanding officer,

Name and position of observer,

NOTES RELATING TO STATION NO. 1

One dye fouled &
lost

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *2*Date, *14 Jan*Time of day, *11 AM*; of tide, *Ebb*Locality, *Off Cape Fear*

Exact position,

Depth, *6.5*Nature of bottom, *coral*Dredging instrument used, *dredge*

Direction of drift, ; distance,

Temperature of air,

therm. No.,

" of surface water,

" at depth of fathoms,

" at bottom,

Density at surface, *24.16*temp., *51*" at depth of *5.5* fathoms,

" at bottom,

Number of salinometer, *5249*Barometer reading, *30.25*State of sky, *Clear*Direction of wind, *NE.*; force,

Rain,

Direction of surface current, *SE*; force,

" of bottom " ; force,

Name of vessel,

Service to which attached,

Name and rank of commanding officer,

Name and position of observer, *Ferrand on*
Port Side main deck

NOTES RELATING TO STATION NO.

Specimens of Coral, Sponge
Scolopend, Urilins, Geryonia
& cell spawn attached
to sponge coral & Geryonia

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *2*

Date,

Time of day, *11.20* ; of tide,Locality, *500 yds. to U.S.V. of ...*

Exact position,

Depth,

Nature of bottom,

Dredging instrument used,

Direction of drift, ; distance,

Temperature of air, therm. No.,

“ of surface water, “

“ at depth of fathoms, “

“ at bottom, “

Density at surface, temp.,

“ at depth of fathoms, “

“ at bottom, “

Number of salinometer,

Barometer reading,

State of sky,

Direction of wind, ; force,

Rain,

Direction of surface current, ; force,

“ of bottom “ ; force,

Name of vessel,

Service to which attached,

Name and rank of commanding officer,

Name and position of observer,

NOTES RELATING TO STATION NO.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *2*
 Date, *14 Jan*
 Time of day, *11.45 PM*; of tide, *ebb*
 Locality, *Off Cape Fear*
 Exact position,

 Depth, *8*
 Nature of bottom, *Coral*
 Dredging instrument used, *dredge*
 Direction of drift, *S*; distance,
 Temperature of air, *54* therm. No. *545*
 " of surface water, *52* "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *23.5* temp.,
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *5384*
 Barometer reading, *30.24*
 State of sky, *Clear*
 Direction of wind, *North*; force, *light*
 Rain,
 Direction of surface current, *SW*; force,
 " of bottom " ; force,
 Name of vessel,
 Service to which attached,
 Name and rank of commanding officer,
 Name and position of observer,

NOTES RELATING TO STATION NO.

All sample, 1 full load.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 3
 Date, 14 Jan
 Time of day, 2:45 PM of tide Early flood
 Locality, Off Cape Fear
 Exact position,

 Depth, 8 f
 Nature of bottom, Coral
 Dredging instrument used, Dredge
 Direction of drift, W ; distance,
 Temperature of air, 64 therm. No., F-54
 " of surface water, 52 " 5355
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 23.5 temp., 52.4
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 5385
 Barometer reading, 30.24
 State of sky, Clear
 Direction of wind, W ; force,
 Rain,
 Direction of surface current, W ; force,
 " of bottom " ; force,
 Name of vessel,
 Service to which attached,
 Name and rank of commanding officer,

 Name and position of observer,

NOTES RELATING TO STATION NO.

B Star Fish, Sand & Stone

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 4Date, 14 Jan 89Time of day, 3:10 PM; of tide, FloodLocality, Off Cape Fear

Exact position,

Depth, 7Nature of bottom, RockDredging instrument used, Small dredgeDirection of drift, SW; distance,Temperature of air, 53 therm. No., 5454" of surface water, " 5385

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.024 temp., 52

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 5385Barometer reading, 30.24State of sky, ClearDirection of wind, W; force, light

Rain,

Direction of surface current, W; force,

" of bottom " ; force,

Name of vessel,

Service to which attached,

Name and rank of commanding officer,

Name and position of observer,

NOTES RELATING TO STATION NO.

~~Dredge fouled
Sponge, Coral, etc.~~

Winyah Bay S. Carolina

To be plotted

A ^{specimens of large} _{shell-}

643

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 1639 (old 1700)

Date, Jan 3rd 1891

Time of day, 10 a.m.; of tide, 1st of flood

Locality, 1/2 mile N of wharf on South

Exact position, Islands

Winyah Bay South Carolina

Depth, 4 fathoms

Nature of bottom, Hard sandy bottom

Dredging instrument used, 7 ft Trawl and small oyster dredge

Direction of drift, ; distance,

Temperature of air, 54° therm. No. #

" of surface water, 46° " 1041

" at depth of fathoms, "

" at bottom, 48 1/2 "

Density at surface, 1000.8 } temp., 46°

" at depth of fathoms, "

" at bottom, 1008.4 } " 48

Number of salinometer, 7066

Barometer reading, 30.19

State of sky, Clear

Direction of wind, N ; force, 2

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, USFC

Name and rank of commanding officer, R Platt

St ugn

Name and position of observer, C H Cleveland

Mate ugn

~~17~~

NOTES RELATING TO STATION NO. 1700

Travel was torn badly &
about a speck of small
cystine was obtained

Winyah Bay So Carolina

643

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 1640 (1701)
Date, Jan 5, 1891
Time of day, 10.45 AM; of tide, 1st of Flood
Locality, Winyah Bay - Same
Exact position, Locality as 1700 litta
near Inlet
Depth, 5 fathoms and 2 ft
Nature of bottom, coarse brown sand
Dredging instrument used, Large & small
Oyster dredges
Direction of drift, ; distance,
Temperature of air, 48 therm. No., 7066
" of surface water, 47 " 1041
" at depth of fathoms, "
" at bottom, 50' " 7066
Density at surface, 10012 for fresh temp., 47
" at depth of fathoms, "
" at bottom, 10154 10135 " 50
Number of salinometer, 7046
Barometer reading, 30.19
State of sky, Clear
Direction of wind, N ; force, 2
Rain,
Direction of surface current, ; force,
" of bottom, " ; force,
Name of vessel, Fish Hawk
Service to which attached, U S F C
Name and rank of commanding officer, R Platt
Lieut. U S F C
Name and position of observer, C H Cleveland
Mate U S F C

NOTES RELATING TO STATION NO. 1701

about 3 bushel of small
dead oyster shells and
some large old ones
a little dead coral,
a few small oysters alive
and covered with small
barnacles

Winyah Bay So Carolina

643

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 1641 1702
Date, Jan 3rd 1891
Time of day, 11 am ; of tide, 1st of Flood
Locality, Winyah Bay So Carolina
Exact position, as 1701
Depth, 4 fathoms + 3 feet
Nature of bottom, hard shells
Dredging instrument used, Large & small
Oyster dredge used
Direction of drift, ; distance,
Temperature of air, 46 therm. No., 7066
" of surface water, 47 " 1041
" at depth of fathoms, "
" at bottom, 49.5 " 7041
Density at surface, 1.0012 ^{for} temp., 47°
" at depth of fathoms, "
" at bottom, 1.0134-1.0115 ^{cor} " 49.5
Number of salinometer, 7046 surface 7050 bottom
Barometer reading, 30.19
State of sky, Clear
Direction of wind, N ; force, 2
Rain,
Direction of surface current, ; force,
" of bottom " ; force,
Name of vessel, U. S. F. C. S. "Fishhawk"
Service to which attached, U. S. F. Com
Name and rank of commanding officer, R. Platt
Lieut. signor
Name and position of observer, C. H. Cleveland
Mate sign

NOTES RELATING TO STATION NO. 1702

about 4 bushel small
oysters same character
as 1701

Winyah Bay So. Carolina

643

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 1642 (1703)
Date, Jan 3rd 1891
Time of day, 11.30 am ; of tide, Flood
Locality, Winyah Bay directly
East of wharf on South Island
Exact position, 400 yards distant
Depth, 5 fathoms + 1 foot
Nature of bottom, hard bottom
Dredging instrument used, Large & small
oyster dredges
Direction of drift, ; distance,
Temperature of air, 48 therm. No., 7066
" of surface water, 48 " 1041
" at depth of fathoms, "
" at bottom, "
Density at surface, 1.0052 ^{for} fresh temp., 48
" at depth of fathoms, "
" at bottom, 10124 ^{cor} 1.0105 " 50
Number of salinometer, 7046-7050
Barometer reading, 30.19
State of sky, Clear
Direction of wind, N ; force, 2
Rain,
Direction of surface current, ; force,
" of bottom " ; force,
Name of vessel, Fishhawk
Service to which attached, U S F C
Name and rank of commanding officer, R P. Platt
Lieut. U S F C
Name and position of observer, C H Cleveland
Mate U S F C

NOTES RELATING TO STATION NO. 1703

About one bushel small
oysters and dirt shells
and gravel

Winyah Bay So Carolina

643

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 1643 (1704)
Date, Jan 3rd 1891
Time of day, 11.50 am; of tide, Flood
Locality, Winyah Bay - 600 yds
west of upper wharf on Tulee and
Exact position, 400 yds S S W of wreck buoy
Depth, 5 faths & 1 foot
Nature of bottom, hard sandy bottom
Dredging instrument used, Large & small
Oyster dredges
Direction of drift, ; distance,
Temperature of air, 56 therm. No., 7066
" of surface water, 49 " 7041
" at depth of fathoms, "
" at bottom, 50.5 " 7041
Density at surface, 10094 ^{prac} fresh temp., 49
" at depth of fathoms, cor "
" at bottom, 10200 1.018 " 50
Number of salinometer, 37046 & 7041
Barometer reading, 30.19
State of sky, Clear
Direction of wind, N ; force, 2
Rain,
Direction of surface current, ; force,
" of bottom " ; force,
Name of vessel, Fishhawk
Service to which attached, U. S. F. C.
Name and rank of commanding officer, R. Platt
Lieut. U.S.N.
Name and position of observer, C. H. Cleveland
Mate U.S.N.

NOTES RELATING TO STATION NO. 1704

Sand and deer skulls
and horn mud

Winyah Bay So Carolina

643

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 1644 (1705)
Date, Jan 3rd 1891
Time of day, 12 ; of tide, Flood
Locality, Winyah Bay So Carolina
Exact position, identically over the
first position 1700
Depth, 4 fathoms + 5 feet
Nature of bottom, hard
Dredging instrument used, large + small
Oyster dredges
Direction of drift, ; distance,
Temperature of air, 56.5 therm. No., 7066
" of surface water, 50 " 7041
" at depth of fathoms, "
" at bottom, 51 " 7041
Density at surface, 10082 ^{proc} fresh temp., 50
" at depth of fathoms, { cor "
" at bottom, 10192 { 1.017 " 51
Number of salinometer, 7046 & 7041^b
Barometer reading, 30.19
State of sky, Clear
Direction of wind, N ; force, 2
Rain,
Direction of surface current, ; force,
" of bottom " ; force,
Name of vessel, Fish Hawk
Service to which attached, U.S.F.C.
Name and rank of commanding officer, R. P. Platt
Lieut. U.S.N.
Name and position of observer, C. H. Cleveland
Dredger

NOTES RELATING TO STATION NO.

Large Oyster Dredge was disconnected, by getting caught on the bottom and about 1/2 bushel gravel & sand was retained in the small Oyster dredge

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 1645
 Date, July 16 1891
 Time of day, 10.05 ; of tide, Flood
 Locality, Cooper River. S.C. Co. 5
 Exact position, Inside mouth of river 1/4 mile
300 yds from marsh. south side
 Depth, 2 fms 4 ft.
 Nature of bottom, Soft.
 Dredging instrument used, Cyber dredge + Sme B.D
 Direction of drift, up river ; distance, 400 yds.
 Temperature of air, 62° therm. No., 7060
 " of surface water, 49° " 7041
 " at depth of fathoms, " "
 " at bottom, 51° " "
 Density at surface, 1.0226 } 1.0206 temp., 49°
 " at depth of fathoms } " "
 " at bottom, 1.0228 } 1.0209 " 51°
 Number of salinometer, 7046
 Barometer reading, 30.24
 State of sky, b.c.
 Direction of wind, South. ; force, 2
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name of vessel, Stmr Fish Hawk
 Service to which attached, Fish Commission
 Name and rank of commanding officer, R. Platt
Lieut U.S.N.
 Name and position of observer, J. T. Smith
mate U.S.N.

NOTES RELATING TO STATION NO. 1645-

Quantity of ^{Blue} mud & sand.
Small quantity of gorgonias
" " " sponge
and a few dead shells

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 1646

Date, Jan 16 1891

Time of day, 10.16^{am}; of tide, Flood.Locality, Cooper River S.C. bb 8Exact position, 300 yds above Light House
wharf lower entrance.

Depth, 5 fthm

Nature of bottom, Hard clay.

Dredging instrument used, Dredge with Sme B.S.

Direction of drift, Up river; distance, 200 yds

Temperature of air, 64, therm. No., 7050

" of surface water, 50 " 7041

" at depth of fathoms, "

" at bottom, 50 "

Density at surface 10224 } ^{cor} 1.0205 temp., 50°

" at depth of fathoms, ✓ "

" at bottom, 10226 } 1.0207 " 50

Number of salinometer, 7046

Barometer reading, 30.24

State of sky, B.C.

Direction of wind, South; force, 2

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Star Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, R. Platt

Lieut. U.S.N.

Name and position of observer, S. J. L. Smith

Master U.S.N.

NOTES RELATING TO STATION NO. 1646

Quantity of Sand.

Gorgonias.

Small no of Crabs. In some

Quantity of small dead
shells and sponge

1 Starfish

Pinnas

5

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 1647
 Date, Jan. 16 1891
 Time of day, 10.30 ; of tide, Flood
 Locality, Cooper River S.C. bl. S.
 Exact position, about 400 yds off L H whf.
inside entrance to river
 Depth, 4 fms 4 ft.
 Nature of bottom, Hard Clay
 Dredging instrument used, Dredge Sme B S.
 Direction of drift, 200 yds ; distance, up stream
 Temperature of air, 58 therm. No., 7050
 " of surface water, 51° " 7041
 " at depth of — fathoms, " "
 " at bottom, 50° " "
 Density at surface, 10266 } 1.02479 ^{cor} temp., 51°
 " at depth of — fathoms, " "
 " at bottom, 10266 } 1.02470 " 50°
 Number of salinometer, 7046
 Barometer reading, 30.24
 State of sky, B.C.
 Direction of wind, South ; force, 2
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name of vessel, Fish Hawk
 Service to which attached, U.S. Fish Com
 Name and rank of commanding officer, R. Platt.
Lieut U.S.N.
 Name and position of observer,
S. J. C. Smith
Matr U.S.N.

Contents of Dredges

NOTES RELATING TO STATION NO. 1647

Quantity of Sand mixed
with mud.

Stone Crab

Blue Crabs

Sea Cucumbers.

Gorgonias

Sponges.

lot of dead shells, some

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 1648.

Date, Jan 16 1891.

Time of day, 10 45 ; of tide, Flood

Locality,

Exact position, Just below Will. wharf. in Calitogue pond. 800 yds off.

Depth, 8 fms 2 ft

Nature of bottom, soft.

Dredging instrument used, Dredge.

Direction of drift, ^{Top the Sound}; distance, 400 yds.

Temperature of air, 56° therm. No., 7057

“ of surface water, 53° “ 7041

“ at depth of fathoms, “

“ at bottom, 52 “

Density at surface, 10228 } 1.0211 ^{Cor} temp., 53°

“ at depth of fathoms, ✓ “

“ at bottom, 10228 } 1.021 “ 52

Number of salinometer, 7046

Barometer reading, 30.24

State of sky, B. c.

Direction of wind, South ; force, 2

Rain,

Direction of surface current, ; force,

“ of bottom “ ; force,

Name of vessel, Fish Hawk

Service to which attached, U.S.F.C.

Name and rank of commanding officer, R. Platt
Lieutenant

Name and position of observer,
S. J. G. Smith
mate U.S.N.

Contents of dredge

NOTES RELATING TO STATION NO. 1648

large quantity of Blue
mud + clay + little sand
few dead shells.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 1649
 Date, Jan 16 1891
 Time of day, 11.00 am; of tide, Flood
 Locality, Calibogue Sound S.C.
 Exact position, Calibogue Sound. Southern
 Beacon right abeam. about in mid
 stream
 Depth, 7 fms
 Nature of bottom, soft
 Dredging instrument used, Dredge
 Direction of drift, up Sound; distance, 200 yds.
 Temperature of air, 57° therm. No., 7050
 " of surface water, 49.5 " 7041
 " at depth of fathoms, " "
 " at bottom, 50° " "
 Density at surface, 10226 } 1.0206^{cor} temp., 49.5
 " at depth of fathoms, " "
 " at bottom, 10234 } 1.0215 " 50°
 Number of salinometer, 7046
 Barometer reading, 30.23
 State of sky, Cloudy.
 Direction of wind, South; force, 2
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name of vessel, Fish Hawk
 Service to which attached, U.S. Fish Com.
 Name and rank of commanding officer, R. Platt
 Lieut. U.S.N.
 Name and position of observer,
 S. J. C. Smith
 Mate U.S.N.

NOTES RELATING TO STATION NO. 16289

Small quantity of sponge
dead *Folias* shells.

Suidia Starfish (several)

Hydroids

ordinary red starfish

Ptenogonids

—w small dead shells

Small flatfish

Contents of Dredge

NOTES RELATING TO STATION NO. 1650

~~For~~

Number of Starfish

" " Blue Crabs.

lot of sponges

Dead Periwinkle shell

Sea Cucumbers.

few small dead shells.

lumps of coal + few
stones + 1 piece Phosphate rock.

young Stone Crabs

few live nererita's

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. *1651*
 Date *Jan. 16 1891*
 Time of day, *1143* ; of tide, *Flood*,
 Locality, *Cacibogue Sound*
 Exact position, *Off south end of May River, middle of the sound.*
 Depth, *10 fms.*
 Nature of bottom, *Hard.*
 Dredging instrument used, *Dredge.*
 Direction of drift, *up the sound*, distance, *300 yds.*
 Temperature of air, *61* ° therm. No., *7050*
 " of surface water, *49.5* ° " *7041*
 " at depth of — fathoms, " "
 " at bottom, *51* ° " "
 Density at surface, *1.0226* } *cor* *1.0206* temp., *49.5* °
 " at depth of — fathoms, } " "
 " at bottom, *1.0226* } *1.0207* " *51* °
 Number of salinometer, *7046*
 Barometer reading, *30.21*
 State of sky, *cloudy*
 Direction of wind, *South* ; force, *3*.
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name of vessel, *Fish Hawk*
 Service to which attached, *U.S. Fish Com.*
 Name and rank of commanding officer, *R. Platt*
Lieut U.S.N.
 Name and position of observer, *S. J. L. Smith*
Mate U.S.N.

NOTES RELATING TO STATION NO. 1651

Contents of Dredge.

Large quantity of sponge.
several devil crabs.

live Periwinkles.

live drillmanus

.. " *Manippei* - Stone Crab
number of gorgonias.

large quantity of seed oysters
about one year old.

lot of gravel

live sea squirts

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 1652.

Date, Jan 21 - 91.

Time of day, 8.50 ; of tide, Ebb $\frac{1}{2}$.

Locality, Skene Creek S.C.

Exact position, Opposite Seabrook village
Boydson.

Depth, 5 fms

Nature of bottom, Blue clay. Hard.

Dredging instrument used, Dredge.

Direction of drift, ^{toward J.R.} _{Sound} ; distance, 100 yds

Temperature of air, 56 therm. No., 7057

" of surface water, 50 " 7041

" at depth of — fathoms, " "

" at bottom, 51 " "

Density at surface, 1.0234 ^{51 col 15} temp., 50°

" at depth of — fathoms, " "

" at bottom, 1.0235 ^{51 col 16} " 51°

Number of salinometer, 7046

Barometer reading, 30.73

State of sky, Cloudy

Direction of wind, S.S.E ; force, 1

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, U.S. Fish Com

Name and rank of commanding officer, R. Platt
Lieut USNName and position of observer,
S. J. Smith
Matr USN

NOTES RELATING TO STATION NO. 1652

Contents of Dredge.

Blue mud - small
quantity of dead oyster
shells.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *1653*
 Date, *Jan. 21 1891*
 Time of day, *9.10 am*; of tide, *Ebb*
 Locality, *Port Royal Sound* ^{*Opp Skull Creek*}
 Exact position, *Hilton Head Pr. just open to eastward.*
 Depth, *5 fms.*
 Nature of bottom, *Hard*
 Dredging instrument used, *Dredge*
 Direction of drift, *down stream*; distance, *100 yds*
 Temperature of air, *53°* therm. No., *7059*
 " of surface water, *49.5°* " *7041*
 " at depth of fathoms, " "
 " at bottom, *49°* " "
 Density at surface *10245* (*1.02255*) temp., *49.5°*
 " at depth of fathoms, " "
 " at bottom, *10245* (*1.02251*) " *49°*
 Number of salinometer, *7046*
 Barometer reading, *30.23*
 State of sky, *cloudy*
 Direction of wind, *S. S. E*; force, *1*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name of vessel, *Fish Hawk*
 Service to which attached, *U. S. F. C.*
 Name and rank of commanding officer, *P. Pratt*
Lieut. U. S. N.
 Name and position of observer, *S. J. C. Smith*
mate U. S. N.

Contents of dredge

NOTES RELATING TO STATION NO. 165B

Dredge came up empty.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 1654.
 Date, Jan. 21. 1891
 Time of day, 9:25 am ; of tide, $\frac{5}{8}$ Ebb
 Locality, Chesapeake River, S.C.
 Exact position, off Mackay's Creek. in line of
 S. E. point of Daw's Island. In mid channel
 Depth, 4 fms
 Nature of bottom, Hard
 Dredging instrument used, Dredge
 Direction of drift, down stream ; distance, 100 yds
 Temperature of air, 52° therm. No., 7059
 " of surface water, 49° " 7041
 " at depth of — fathoms, " "
 " at bottom, 50° " "
 Density at surface, 1.0244 { 1.0224^{cor} temp., 49°
 " at depth of — fathoms, " "
 " at bottom, 1.0246 { 1.0227 " 50°
 Number of salinometer, 7046
 Barometer reading, 30.23
 State of sky, Cloudy
 Direction of wind, S S E ; force, 1
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name of vessel, Fish Hawk
 Service to which attached, U.S. Fish Com
 Name and rank of commanding officer, R. Platt
 Lieut. U.S.N.
 Name and position of observer,
 S. J. C. Smith
 Mate U.S.N.

NOTES RELATING TO STATION NO. 1654.

Contents of dredge.

Dredge empty, as the bottom
is very fine sand.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 1655
 Date, Mch. 4 '91
 Time of day, 9:15 Am; of tide, First of Flood
 Locality, North Edisto River, S.C.
 Exact position, at the Entrance to
 Russell Creek.
 Depth, 5 fms 2 ft
 Nature of bottom, Hard.
 Dredging instrument used, Dredge.
 Direction of drift, up Edisto; distance, 100 yds
 Temperature of air, 64 therm. No., 7066
 " of surface water, 58 " 7041
 " at depth of fathoms, "
 " at bottom, 58° " 7041
 Density at surface, 1.0216. ^{1.0205} temp., 58°
 " at depth of fathoms, ^{1.0213} "
 " at bottom, 1.0224. ^{1.0213} " 58°
 Number of salinometer, 7053
 Barometer reading, 30.01
 State of sky, Cloudy to overcast
 Direction of wind, South; force, 1
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name of vessel, U.S.F.C. Fish Hawk
 Service to which attached, U.S. Fish Com.
 Name and rank of commanding officer, R. Platt
 Lieut U.S.N.
 Name and position of observer,
 S. J. C. Smith
 Mate U.S.N.

NOTES RELATING TO STATION NO. 1655

Contents of Dredge

- 1 Blue Crab.
- 1 Gorgonian

NOTES RELATING TO STATION NO. 1656

Contents of Dredge

Dead shells. oyster

" " Periwinkles
Bloody seams

Gorgonias. yellow with shells.

1 Blue Crab

2 live Periwinkles

Annelids

3 brittle stars (few)

Quantity of Hydroids

several pieces Phosphate Rock

small broken dead shells

Funicates. -

The tooth part of the dredge
was broken in the centre
so ceased dredging.

Caprellas.

Amphipods.

Took specimen of bottom
water here

To be plotted on
Tracings of large scale
with photostereor

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 1657 (See angles in Sounding)
Date, Mch 13, Bark A No 2
Time of day, 10:50 AM; of tide, 3/4 flood
Locality, Charleston Harbor
Exact position,

Depth, 4 Fms
Nature of bottom, Soft
Dredging instrument used, Beam Trawl 7 ft.
Direction of drift, up stream; distance, 200 yds.

Temperature of air, 63° therm. No., 7079
" of surface water, 58° " 7041
" at depth of fathoms, "
" at bottom, 58° "

Density at surface, 1.0238 temp., 58°
" at depth of fathoms, "
" at bottom, 1.0238 " 58°

Number of salinometer, 7046
Barometer reading, 29.87
State of sky, overcast
Direction of wind, South; force, 4

Rain, -
Direction of surface current, ; force,
" of bottom " ; force,

Name of vessel, Fish Hawk
Service to which attached, U.S. Fish Com
Name and rank of commanding officer, R. Platt,
Sient USN

Name and position of observer,
S. J. C. Smith
make USN

NOTES RELATING TO STATION NO. 1657

Contents of Net.

Net empty.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *1658. See Boundary Book A?*
 Date, *Mch. 13 1891*
 Time of day, *11.10 am*; of tide, *3/4 Flood.*
 Locality, *Charleston Harbor*
 Exact position,

 Depth, *7 fms*
 Nature of bottom, *Soft Sticky*
 Dredging instrument used, *7 ft Beam trawl net*
 Direction of drift, ; distance,
 Temperature of air, *63°* therm. No., *7079*
 " of surface water, *58°* " *7041*
 " at depth of fathoms, " "
 " at bottom, *58* " "
 Density at surface, *1.0236* temp., *58°*
 " at depth of fathoms, "
 " at bottom, *1.0238* " *58*
 Number of salinometer, *7046*
 Barometer reading, *29.86*
 State of sky, *Overcast*
 Direction of wind, *S. S. W.*; force, *4*
 Rain, *Drizzling*
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name of vessel, *Fish Hawk*
 Service to which attached, *Fish Com.*
 Name and rank of commanding officer, *R. Platt*
Lieut. U.S.N.
 Name and position of observer,
S. J. C. Smith =
Master U.S.N.

NOTES RELATING TO STATION NO. 1658

Contents of Trawl

- Small quantity of blue mud.
- 1 Blue Crab.
- 1 Small Flounder
- Tongue Sole. Several.
- Goby
- few small Lady Crabs
- " " Earl's Hakes.
- " " Shrimp.
- 1 " Sand Star fish
- " Hermit Crabs

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 1659. *See sounding book A2*

Date, Mch. 13 91

Time of day, 11.30 am ; of tide, 7/8 Flood.

Locality, Charleston Harbor.

Exact position,

Depth, 7 Fth 5 feet.

Nature of bottom, Soft sticky

Dredging instrument used, 7 ft Beam Trawl

Direction of drift, ; distance,

Temperature of air, 62° therm. No., 7079

" of surface water, 57.5° " 7041

" at depth of fathoms, "

" at bottom, 58° " "

Density at surface, 1.0238 temp., 57.5°

" at depth of fathoms, "

" at bottom, 1.0238 " 58°

Number of salinometer, 7046

Barometer reading, 29.86

State of sky, overcast.

Direction of wind, S. S. W ; force, 5

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, U.S. Fish Com.

Name and rank of commanding officer, R. Platt
Lieut USN

Name and position of observer,
S. J. G. Smith
Master USN

NOTES RELATING TO STATION NO. _____

1659

Contents of Trawl.

Lot of Forgonias

Sponges

Small Crabs.

Tongue Sole

1 Spider Crab

6 Stake

1 Stone Crab

Shrimp (a number)

worms.

Amphipods

American Sole.

Dead Shells different
Kinds.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No.

Date,

Time of day, ; of tide,

Locality,

Exact position,

Depth,

Nature of bottom,

Dredging instrument used,

Direction of drift, ; distance,

Temperature of air, therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, temp.,

" at depth of fathoms, "

" at bottom, "

Number of salinometer,

Barometer reading,

State of sky,

Direction of wind, ; force,

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel,

Service to which attached,

Name and rank of commanding officer,

Name and position of observer,

NOTES RELATING TO STATION NO.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No.

Date,

Time of day, ; of tide,

Locality,

Exact position,

Depth,

Nature of bottom,

Dredging instrument used,

Direction of drift, ; distance,

Temperature of air, therm. No.,

“ of surface water, “

“ at depth of fathoms, “

“ at bottom, “

Density at surface, temp.,

“ at depth of fathoms, “

“ at bottom, “

Number of salinometer,

Barometer reading,

State of sky,

Direction of wind, ; force,

Rain,

Direction of surface current, ; force,

“ of bottom “ ; force,

Name of vessel,

Service to which attached,

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NOTES RELATING TO STATION NO.

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TEMPERATURE AND DENSITY.

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Time of day, ; of tide,

Locality,

Exact position,

Depth,

Nature of bottom,

Dredging instrument used,

Direction of drift, ; distance,

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" at bottom, "

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Nature of bottom,

Dredging instrument used,

Direction of drift, ; distance,

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Nature of bottom,

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Nature of bottom,

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Nature of bottom,

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Barometer reading,

State of sky,

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Rain,

Direction of surface current, ; force,

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Direction of wind, ; force,

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State of sky,

Direction of wind, ; force,

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Density at surface, temp.,

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Number of salinometer,

Barometer reading,

State of sky,

Direction of wind, ; force,

Rain,

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" of bottom " ; force,

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Number of salinometer,

Barometer reading,

State of sky,

Direction of wind, ; force,

Rain,

Direction of surface current, ; force,

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