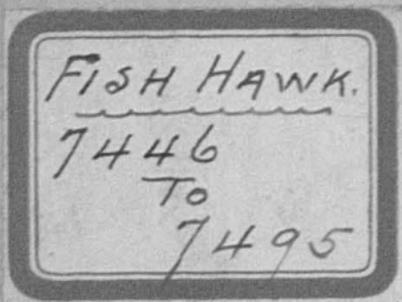


7446-7495

Copied
from Jan 30 to March 12, 1903

Fish Hawk



RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7446*
 Date, *Jan 30, 1903*
 Time of day, *10.30am*; of tide, $\frac{1}{2}$ ebb
 Locality, *Lower Jew fish Bush Lake Fla*
 Exact position, *2 3/4 miles N. W of Jew Fish Bush.*
 Depth, *8 feet*
 Nature of bottom, *Sandy*
 Dredging instrument used, *Small seine dredge*
 Direction of drift, *East*; distance, $\frac{1}{16}$ mile
 Temperature of air, *76* Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0221* temp., *24* Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7450*
 Barometer reading, *29.92*
 State of sky, *Clear*
 Direction of wind *N. N. E.*; force, *3*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,
 V. E. West

NOTES RELATING TO STATION NO. 7476

2 Species of fish
1 Mollusk

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. 74 # 7
 Date, Jan 30. 1903
 Time of day, 11.05 am ; of tide, $\frac{3}{4}$ ebb
 Locality, Lower Jewfish Bush Lake Fla
 Exact position, $2\frac{3}{4}$ m. N. W. of West end
of Lower Matecumbe Key.
 Depth, $8\frac{1}{2}$ feet
 Nature of bottom, soft mud over rocks
 Dredging instrument used, Small scrape dredge
 Direction of drift, N. E. ; distance, $\frac{1}{16}$ mile
 Temperature of air, 76 Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0221 temp. 24.5 Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7450
 Barometer reading, 29.91
 State of sky, Clear
 Direction of wind N. N. E. ; force, 2
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,
 11-1068 V. E. Wash

NOTES RELATING TO STATION NO. 7447

Nothing in dredge

LEWIS & CLARK
RECORD OF DREDGING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7448*
 Date, *Jan. 30, 1903*
 Time of day, *11.35 am.* of tide, *3/4 ebb.*
 Locality, *Lower Jewish Bush Lake Fla*
 Exact position, *1 m. S.W. of Southern Little Peters Key*
 Depth, *8 feet*
 Nature of bottom, *Sandy*
 Dredging instrument used, *Small scrape dredge*
 Direction of drift, *East* ; distance, *46 miles*
 Temperature of air, *76* Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0224* temp. *14.5* Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7450*
 Barometer reading, *29.91*
 State of sky, *Clear*
 Direction of wind *N.N.E.* ; force, *2*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,
 11-1068 *V. R. West*

NOTES RELATING TO STATION NO. 7448

2 Sheeps wool sponges
2 yellow sponges

TEMPERATURE AND DETAILS
RECORD OF BREDDING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7449*
 Date, *Jan 30, 1903*
 Time of day, *1:35 P.M.*; of tide, *Low water*
 Locality *Lower Jewfish Bush lake Fla*
 Exact position, *1 3/4 m. N.E. + E of*
Jewfish Bush
 Depth, *10 feet*
 Nature of bottom, *barry*
 Dredging instrument used, *Small scrape dredge*
 Direction of drift, *SW.*; distance, *1/6 mile*
 Temperature of air, *78* Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0224* temp. *24.5* Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7450*
 Barometer reading, *29.96*
 State of sky, *Clear*
 Direction of wind *N-N.E.*; force, *2*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,

NOTES RELATING TO STATION NO. 7449

2 Commercial sponges

Crabs

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7450*
 Date, *Jan. 30, 1903*
 Time of day, *2.05 P.M.*; of tide, *Low water*
 Locality, *Lower Jewfish Bush Lake Fla*
 Exact position, *N. W. X N. of Jewfish Bush.*
 Depth, *8 feet*
 Nature of bottom, *barry*
 Dredging instrument used, *Small scrape dredge*
 Direction of drift, *West*; distance, *46 miles*
 Temperature of air, *77* Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0224* temp., *25* Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7450*
 Barometer reading, *29.98*
 State of sky, *Clear*
 Direction of wind *N. W*; force, *3*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,

NOTES RELATING TO STATION NO. 7450

2 species of fringe sponges

RECORD OF BREEDING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7451*
 Date, *Feb 4, 1903*
 Time of day, *8.55 am*; of tide, *3/4 ebb*
 Locality, *Lignum Vitae Lake Fla*
 Exact position, *1 1/4 m. N. 1/2 W. of northern end of Lignum Vitae Key*
 Depth, *8 feet*
 Nature of bottom, *Sandy*
 Dredging instrument used, *Small scrape dredge*
 Direction of drift, *North*; distance, *1/6 mile*
 Temperature of air, *76* Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0232* temp. *24.5* Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7450*
 Barometer reading, *29.84*
 State of sky, *partly Cloudy*
 Direction of wind *South*; force, *4*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,
 11-1068 *V. E. West*

NOTES RELATING TO STATION NO. 7451

1 Crab
Coral
few dead shells

RECORD OF DREDGING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. 7452

Date, Feb. 4, 1902

Time of day, 9.25 am ; of tide, $\frac{3}{4}$ ebb

Locality, Lignum Vitae Lake Fla

Exact position, $1\frac{1}{2}$ m. S. A. W. $\frac{1}{2}$ W

of the Southern Linn Key

Depth, 8 feet

Nature of bottom, very

Dredging instrument used, Small scrape dredge

Direction of drift, N. W ; distance, 40 miles

Temperature of air, 76 Fahr. therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0226 temp. 24.5 Celsius.

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 29.85

State of sky, partly cloudy

Direction of wind South ; force, 4

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name and position of observer,

11-1068

V. E. West

NOTES RELATING TO STATION NO. 7452

Gorgonians
Several non-commercial
sponges. tunicates

RECORD OF DREDGING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. 7453
 Date, Feb. 4, 1903
 Time of day, 10.30 am; of tide, Low water
 Locality, Barnes Lake Fla
 Exact position, $1\frac{1}{2}$ m. N. N. W. of
 Barnes Key
 Depth, 8 feet
 Nature of bottom, bay
 Dredging instrument used, small scrape dredge
 Direction of drift, N. W ; distance, 46 miles
 Temperature of air, 77 Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0229 temp., 25 Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7450
 Barometer reading, 29.86
 State of sky, Clear
 Direction of wind South ; force, 4
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,

Name and position of observer,

11-1068

V. E. West

NOTES RELATING TO STATION NO.

NOTES RELATING TO STATION NO. 7453

Acridium

gorgoman

non commercial sponges

RECORD OF BEDDING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7454*

Date, *Feb 4, 1903*

Time of day, *11.05 am*; of tide, *Low water*

Locality, *Barens Lake Fla*

Exact position, *1 3/4 m. n. n e. 1/2 of*
Little Rabbit-Key

Depth, *6 feet*

Nature of bottom, *sand and grass*

Dredging instrument used, *Small scrape dredge*

Direction of drift, *n. n. w*; distance, *1/6 mil*

Temperature of air, *78* Fahr. therm. No.,

“ of surface water, “

“ at depth of fathoms, “

“ at bottom, “

Density at surface, *1.0225* temp. *25.5* Celsius.

“ at depth of fathoms, “

“ at bottom, “

Number of salinometer, *7450*

Barometer reading, *29.87*

State of sky, *Clear*

Direction of wind *South*; force, *3*

Rain,

Direction of surface current, ; force,

“ of bottom “ ; force,

Name and position of observer,

NOTES RELATING TO STATION NO. 7454

2 species of coral
1 Small fish
Grass

RECORD OF BREEDING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7455*
 Date, *Feb 4, 1903*
 Time of day, *11.40 am*; of tide, *Low water*
 Locality, *Barnes Lake Fla*
 Exact position, *1 3/4 m. NW. of*
North Twin Key
 Depth, *7 feet*
 Nature of bottom, *Sand & grass*
 Dredging instrument used, *Small corop dredge*
 Direction of drift, *S. S. E.*; distance, *46 miles*
 Temperature of air, *78* Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0234* temp. *25* Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7450*
 Barometer reading, *29.87*
 State of sky, *Clear*
 Direction of wind *South*; force, *3*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,
 11-1068 *V. E. West*

NOTES RELATING TO STATION NO. 7455

Acidism

2 small sponges

RECORDED AND INDEXED
DIVISION OF BIOLOGY

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7452*
 Date, *Feb 4, 1903*
 Time of day, *1.50 P.M.*; of tide, *1/4 flood*
 Locality *Lignum Vitae Lake Fla*
 Exact position, *1 1/8 M. S. E. of*
Eagle nest Key
 Depth, *8 1/2 feet*
 Nature of bottom, *Sand & grass*
 Dredging instrument used, *Small scrapedredge*
 Direction of drift, *N. E.*; distance, *1/6 mile*
 Temperature of air, *79* Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0222* temp. *25* Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7450*
 Barometer reading, *29.85*
 State of sky, *partly cloudy*
 Direction of wind *South*; force, *3*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,

V. E. West

NOTES RELATING TO STATION NO. 7456

Nothing in dredge

RECORD OF DREDGING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7457*
 Date, *Feb. 4, 1903*
 Time of day, *2, 15 PM*; of tide, *4 flood*
 Locality *Lignum Vitae Key Fla*
 Exact position, *2 3/4 miles N. N. W. of Shell Key*
 Depth, *9 feet*
 Nature of bottom, *barry*
 Dredging instrument used, *Small scrape dredge*
 Direction of drift, *SW.* ; distance, *1/6 mile*
 Temperature of air, *78* Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0217* temp. *25* Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7450*
 Barometer reading, *29.85*
 State of sky, *partly cloudy*
 Direction of wind *South* ; force, *3*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,

V. S. West

NOTES RELATING TO STATION NO. 7451

1 Small bivalve

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7458*
 Date, *Feb. 5, 1903*
 Time of day, *8.35 am*; of tide, *Low water*
 Locality, *bottom Key lake Fla*
 Exact position, *1 1/2 miles N.E. x E*
of Shell Key
 Depth, *8 feet*
 Nature of bottom, *mud*
 Dredging instrument used, *Small scrape dredge*
 Direction of drift, *N.E.*; distance, *1/2 mile*
 Temperature of air, *77* Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0224* temp. *25* Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7450*
 Barometer reading, *29.93*
 State of sky, *partly clear*
 Direction of wind *N. S. W.*; force, *2*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,
 11-1068 *V. E. West*

NOTES RELATING TO STATION NO. 7458

1 shrimp

RECORD OF BREEDING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7459*
 Date, *Feb. 5, 1903.*
 Time of day, *9.00 am*; of tide, *Low water*
 Locality, *Bottom Key Lake Fla*
 Exact position, *1 M. S. E. 4 N. of West Key*
 Depth, *5 1/2 feet*
 Nature of bottom, *barry*
 Dredging instrument used, *Small scrape dredge*
 Direction of drift, *North*; distance, *1/6 mile*
 Temperature of air, *77* Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0224* temp., *25* Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7450*
 Barometer reading, *29.95*
 State of sky, *partly cloudy clear*
 Direction of wind *O. D. W.*; force, *2*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,
 11-1068 *V. E. West*

NOTES RELATING TO STATION NO. 7459

- 1 crab
- 1 fish
- 2 small pipe fish
- 1 sheeps wool sponge
- 3 yellow sponge
- 18 small grass sponges
- 2 sea caps
- 1 glove sponge

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. 7460
 Date, Feb. 5, 1903
 Time of day, 9.45 am ; of tide, 2/3 flood
 Locality, Cotton Key Lake Fla
 Exact position, 2 m. S. S. E. 2/3 of East Key
 Depth, 5 feet
 Nature of bottom, barry
 Dredging instrument used, Small scrape dredge
 Direction of drift, N. E. ; distance, 76 miles
 Temperature of air, 77 Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface 1.0210 temp., 25 Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7450
 Barometer reading, 29.95
 State of sky, Cloudy
 Direction of wind S. S. W. ; force, 2
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,
 V. G. West

NOTES RELATING TO STATION NO. 7460

4 grass sponges

1 sea cap

1 fuizer sponge

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. 2461

Date, Feb. 5, 1903

Time of day, 10, AM; of tide, 1/4 flood

Locality, Cotton Key Lake Fla

Exact position, 2 m E + S. 1/2 S. of East Key

Depth, 7 feet

Nature of bottom, Sand + rock

Dredging instrument used, Small scrape dredge

Direction of drift, East; distance, 1/6 mile

Temperature of air, 78 Fahr. therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0210 temp., 25 Celsius.

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 29.97

State of sky, Cloudy

Direction of wind N. N. W; force, 2

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name and position of observer,

11-1068

V. E. West

NOTES RELATING TO DIVISION NO.

NOTES RELATING TO STATION NO. 7461

Nothing in dredge

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7462*
 Date, *Feb. 18, 1903*
 Time of day, *2, 20 P.M.*; of tide, $\frac{1}{2}$ ebb
 Locality, *Hawk Channel Fla*
 Exact position, *2 m. S. W. & W. of S. E*
point of Long Key
 Depth, *2 1/2 fathoms*
 Nature of bottom, *Hard Sand & grass*
 Dredging instrument used, *Oyster dredge*
 Direction of drift, *SW.*; distance, *4 m*
 Temperature of air, *62* Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0249* temp. *20.* Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7450*
 Barometer reading, *30.17*
 State of sky, *Cloudy*
 Direction of wind *N. N. E.*; force,
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,

NOTES RELATING TO STATION NO. 7462

gastropods
sea urchins
file fish
sponge

REMBERTSON AND DENGLER
RECORD OF DREDGING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. 7463
 Date, Feb. 18. 1903
 Time of day, 2.40 P.M.; of tide, $\frac{1}{2}$ ebb
 Locality, Hawk Channel Fla
 Exact position, 1 $\frac{1}{2}$ m. S. + W of S.E. point of Long Key
 Depth, 2 $\frac{1}{2}$ fathoms
 Nature of bottom, barry
 Dredging instrument used, Oyster dredge
 Direction of drift, SW.; distance, $\frac{1}{4}$ mile
 Temperature of air, 62 Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0249 temp., 21 Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7450
 Barometer reading, 30.17
 State of sky, Cloudy
 Direction of wind N. N. E.; force, 5
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,
 11-1068 V. G. West

NOTES RELATING TO STATION NO. 7463

Gorgonian
2 species of shrimp
Several non-commercial
sponges
Astrophidarian basket
starfish
7 large sand dollars
Several small crabs

TEMPERATURE AND DENSITY
RECORD OF DREDGING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7464*
 Date, *Feb. 18. 1903*
 Time of day, *3.35 P.M.*; of tide, *3/4 ebb*
 Locality, *Hawk Channel*
 Exact position, *1/8 m. E + S. of West end of Lower Matecumbe Key*
 Depth, *3 fathoms*
 Nature of bottom, *very*
 Dredging instrument used, *Cyprus dredge*
 Direction of drift, *SW.*; distance, *1/4 mile*
 Temperature of air, *65* Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0254* temp *20.5* Celsius.
 " at depth of fathoms, "
 " at bottom, *1.0250* " *20.5*
 Number of salinometer, *7450*
 Barometer reading, *30.12*
 State of sky, *Cloudy*
 Direction of wind *N. E.*; force, *5*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,

Name and position of observer,

11-1068

W. C. West

NOTES RELATING TO STATION NO. 7464

acidium

gorgonian

gastropods

Crabs

Several varieties of sponges

1 small fish

1 astrophidean

1 shrimp

coral

bivalves

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7465*
 Date, *Feb. 18. 1903*
 Time of day, *4, 05 PM* ; of tide, *3/4 ebb*
 Locality, *Hawk Channel*
 Exact position, *1/2 m. S.S. W 1/2 W of Indian Key*
 Depth, *2 1/2 fathoms*
 Nature of bottom, *Hard sand shells & ^{grass}*
 Dredging instrument used, *Syster dredge*
 Direction of drift, *West* ; distance, *4 mile*
 Temperature of air, *65* Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0252* temp., *19.5* Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7450*
 Barometer reading, *30.12*
 State of sky, *Cloudy*
 Direction of wind *N. E.* ; force, *5'*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,

Name and position of observer,

11-1068

V. E. West

NOTES RELATIVE TO STATION NO.

NOTES RELATING TO STATION NO. 7465

3 small fish

1 large star fish

several sand dollars

crabs

gastropods

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *74626*
 Date, *Feb. 19, 1903*
 Time of day, *8.50 am.*; of tide, $\frac{1}{2}$ *flood*
 Locality, *Hawk Channel Sea*
 Exact position, $1\frac{1}{2}$ *m. E of Sea Table*
 Key
 Depth, $2\frac{1}{2}$ *fathoms*
 Nature of bottom, *hard*
 Dredging instrument used, *Cyprus dredge*
 Direction of drift, *SW*; distance, $\frac{1}{8}$ *mile*
 Temperature of air, *61* Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0250* temp. *20.5* Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7450*
 Barometer reading, *30.20*
 State of sky, *Cloudy*
 Direction of wind *North*; force, *4*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,

NOTES RELATING TO STATION NO. 7466

1 glove sponge
1 finger sponge
several sand dollars
several sea urchins
several small crabs
1 small fish
bivalve
gastropods
Holothurian
several brittle stars

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7467*
 Date, *Dec. 19, 1903*
 Time of day, *12.30 P.M.* of tide, *High Water*
 Locality, *Grecian shores Hawk Channel ^{#1a}*
 Exact position, *44 m. W & N. of Elbow*
Reef beacon
 Depth, *2 3/4 fathoms*
 Nature of bottom, *hard covered with sand*
 Dredging instrument used, *Cyber dredge*
 Direction of drift, *West-* ; distance, *4 m*
 Temperature of air, *70* Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0253* temp. *20.5* Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7410*
 Barometer reading, *30.23*
 State of sky, *Cloudy*
 Direction of wind *N-E* ; force, *5*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,

V. G. West

NOTES RELATING TO STATION NO. 7467

3 species of fish
several species of crabs
several bivalves

Gastropods
Small star-fish
Worms

Sea urchins
Sand dollars
Hothimian

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. 7468
 Date, Feb. 19, 1903
 Time of day, 1:00 PM ; of tide, High Water
 Locality, Guian Shoals Hawk Channel
 Exact position, 2 M. S. S. W. from Basin Hill Beacon
 Depth, 2½ fathoms
 Nature of bottom, Sand & grass
 Dredging instrument used, Cyclis dredge
 Direction of drift, West ; distance, ½ mile
 Temperature of air, 70 Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0253 temp., Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7450
 Barometer reading, 30.23
 State of sky, Cloudy
 Direction of wind N. E. ; force, 5'
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,
 T. G. West

NOTES RELATING TO STATION NO. 7468

Several sponges

Gastropods

Bivalves

Several sea urchins & sand
dollars

1 Small file fish

Several crabs

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7469*

Date, *Feb 19, 1903*

Time of day, *1.20 P.M.*; of tide, *High water*

Locality, *Greens Shoals Hawk Channel*

Exact position, *4 m. NW x S. of Basin*
Hill Beacon

Depth, *2 fathoms*

Nature of bottom, *Sand & grass*

Dredging instrument used, *Oyster dredge*

Direction of drift, *West*; distance, *1/8 mile*

Temperature of air, *69* Fahr. therm. No.,

“ of surface water, “

“ at depth of fathoms, “

“ at bottom, “

Density at surface, *1.0250* temp. *20.5* Celsius.

“ at depth of fathoms, “

“ at bottom, “

Number of salinometer, *7450*

Barometer reading, *30.20*

State of sky, *Cloudy*

Direction of wind *N. E.*; force, *5*

Rain,

Direction of surface current, ; force,

“ of bottom “ ; force,

Name and position of observer,

NOTES RELATING TO STATION NO. 74 69

Sponges

brachiopods

gastropods

Several species of crabs

3 murex shells

1 small file fish

1 worm

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7470*
 Date, *Feb. 25, 1903*
 Time of day, *10,30 am*; of tide, *3/4 ebb.*
 Locality, *West Cowpens Is.*
 Exact position, *3/4 W. 1/4 S of Pigeon Key*
 Depth, *7 feet*
 Nature of bottom,
 Dredging instrument used,
 Direction of drift, ; distance,
 Temperature of air, *70* Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0204* temp., Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7450*
 Barometer reading, *30.02*
 State of sky, *Cloudy*
 Direction of wind, *N.E.*; force, *4*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,

NOTES RELATING TO STATION NO. 7470

TEMPERATURE AND DENSITY
RECORD OF DRILLING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7471*Date, *Feb. 25, 1903*Time of day, *10.40 am*; of tide, *3/4 ebb*Locality, *West. Cowpens Fla*Exact position, *1/2 m. S.W. x W 1/2 W. of**Pigeon Key*Depth, *7 1/2 ft*Nature of bottom, *Soft mud*

Dredging instrument used,

Direction of drift, ; distance,

Temperature of air, *70* Fahr. therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, *1.0210* temp., *21* Celsius.

" at depth of fathoms, "

" at bottom, "

Number of salinometer, *7450*Barometer reading, *30.02*State of sky, *partly cloudy*Direction of wind *E. N. E.*; force, *4*

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name and position of observer,

11-1068

T. E. West

NOTES RELATING TO STATION NO. 7471

RECORD OF DREDGING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. 7472

Date, *Jul. 25, 1903*

Time of day, *11.00 am*; of tide, *Low Water*

Locality, *East Bouquens Fla*

Exact position, *1 3/4 m. S.W. + S of Pigeon Key.*

Depth, *6 1/2 ft.*

Nature of bottom,

Dredging instrument used,

Direction of drift, ; distance,

Temperature of air, *71* Fahr. therm. No.,

“ of surface water, “

“ at depth of fathoms, “

“ at bottom, “

Density at surface, *1.0199* temp., *21* Celsius.

“ at depth of fathoms, “

“ at bottom, “

Number of salinometer, *7049*

Barometer reading, *30.02*

State of sky, *partly cloudy*

Direction of wind *E. N E* ; force, *4*

Rain,

Direction of surface current, ; force,

“ of bottom “ ; force,

Name and position of observer,

NOTES RELATING TO STATION NO. 7472

RECORD OF BREEDING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7473*
 Date, *Feb. 25, 1903*
 Time of day, *11.20 am*; of tide, *Low water*
 Locality, *East Cowpens Fla*
 Exact position, *1/2 m. S.W. of Pigeon Key*
 Depth, *7 fath*
 Nature of bottom, *Soft mud*
 Dredging instrument used,
 Direction of drift, ; distance,
 Temperature of air, *71* Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0202* temp., *21* Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7449*
 Barometer reading, *30.02*
 State of sky, *partly cloudy*
 Direction of wind ; force,
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,

NOTES RELATING TO STATION NO. 7473

TEMPERATURE AND DENSITY
RECORD OF BEDDING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7474*

Date, *March 6, 1903*

Time of day, *9.15 am*; of tide, *1/2 flood*

Locality, *Biscayne Bay Fla*

Exact position, *3/4 m. W. of Rubicon Key*

Depth, *8 feet*

Nature of bottom, *Soft sand & grass*

Dredging instrument used, *Small scrape dredge*

Direction of drift, *S. S. W.*; distance, *76 miles*

Temperature of air, *75* Fahr. therm. No.,

“ of surface water, “

“ at depth of fathoms, “

“ at bottom, “

Density at surface, *1.0233* temp., *24.5* Celsius.

“ at depth of fathoms, “

“ at bottom, “

Number of salinometer, *7450*

Barometer reading, *30.04*

State of sky, *partly cloudy*

Direction of wind *East*; force, *4*

Rain,

Direction of surface current, ; force,

“ of bottom “ ; force,

Name and position of observer,

NOTES RELATING TO STATION NO. 7474

Nothing in dredge

TEMPERATURE AND DENSITY
RECORD OF DREDGING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7475*
 Date, *March. 6. 1903*
 Time of day, *11:50 am*; of tide, *3/4 flood*
 Locality, *Key Biscayne Bay Fla.*
 Exact position, *1 3/4 N. + E. of Adams Key.*
 Depth, *7 1/2 ft*
 Nature of bottom, *Hard sand*
 Dredging instrument used, *Small scrape dredge*
 Direction of drift, *East*; distance, *1/6 mile*
 Temperature of air, *76* Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0230* temp., *25* Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7450*
 Barometer reading, *30.06*
 State of sky, *partly cloudy*
 Direction of wind *East*; force, *4*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,
 11-1068 *V. E. West*

NOTES RELATING TO STATION NO. 74 15

1 file fish
Several wasps
1 dead glove sponge

RECORD OF BREEDING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7476*
 Date, *March 6, 1903*
 Time of day, *11:00 P.M.*; of tide, *3/4 flood*
 Locality, *Key Biscayne Bay Fla*
 Exact position, *4. m. E.N.E. of*
Turkey Point
 Depth, *8 1/2 feet*
 Nature of bottom, *Hard sand*
 Dredging instrument used, *Small scrape dredge*
 Direction of drift, *W. N. W.*; distance, *76 miles*
 Temperature of air, *76* Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0732* temp., *25* Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7450*
 Barometer reading, *30.05*
 State of sky, *partly cloudy*
 Direction of wind, *East*; force, *4*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,
 11-1068 *V. G. West*

NOTES RELATIVE TO STATION NO.

NOTES RELATING TO STATION NO. 7476

- 1 large finger sponge
- 2 species of shrimp
- 2 species of corals
- amphipods

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7477*

Date, *March 6, 1903*

Time of day, *1.45 PM*; of tide, *High water*

Locality, *Key Biscayne Bay Fla*

Exact position, *1/2 m. SW. W*
of Sando Key

Depth, *10 1/2 ft*

Nature of bottom, *soft sand & grass*

Dredging instrument used, *Small scrape dredge*

Direction of drift, *N. N. E.*; distance, *1/2 mile*

Temperature of air, *76* Fahr. therm. No.,

“ of surface water, “

“ at depth of fathoms, “

“ at bottom, “

Density at surface, *1.0232* temp., *25* Celsius.

“ at depth of fathoms, “

“ at bottom, “

Number of salinometer, *7450*

Barometer reading, *30.05*

State of sky, *partly cloudy*

Direction of wind *East*; force, *4*

Rain,

Direction of surface current, ; force,

“ of bottom “ ; force,

Name and position of observer,

NOTES RELATING TO STATION NO. 7477

3 species of crabs

RECORD OF BREEDING
TEMPERATURE AND DENSITY

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. 7478
 Date, March 6, 1903
 Time of day, 2.15 P.M.; of tide, High water
 Locality, Key Biscayne Bay Fla
 Exact position, 1 1/4 M. S. of middle
 of Feather bed Bank
 Depth, 9 1/2 ft
 Nature of bottom, Hard Sand
 Dredging instrument used, Small scrape dredge
 Direction of drift, West ; distance, 1/16 mile
 Temperature of air, 76 Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0232 temp., 25 Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7450
 Barometer reading, 30.03
 State of sky, partly clear
 Direction of wind East ; force, 4
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,

11-1068

V. E. West

NOTES RELATING TO STATION NO.

NOTES RELATING TO STATION NO. 7478

Small crabs

egg migs

RECORD OF BEDDING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. 7479

Date, March 6, 1903

Time of day, 2.45 P.M.; of tide, High water

Locality, Key Biscayne Bay Fla

Exact position, 2 m. N. W. + N. of sands

Key
Depth, 9 feet

Nature of bottom, sand + grass

Dredging instrument used, small scrape dredge

Direction of drift, N. E. ; distance, 40 miles

Temperature of air, 76 Fahr. therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0239 temp., 25 Celsius.

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 30.03

State of sky, partly cloudy

Direction of wind East ; force, 4

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name and position of observer,

11-1068

V. G. Neel

NOTES RELATING TO STATION NO.

NOTES RELATING TO STATION NO. 7476

Small shells
1 pipe fish

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. 7480

Date, March 6. 1903

Time of day, 4.00 P.M. ; of tide, High water

Locality, Key Biscayne Bay Fla

Exact position, $1\frac{3}{4}$ m. W.N.W. $\frac{3}{4}$ W of
N. point of sands Key

Depth, 9 ft

Nature of bottom, Hard sand

Dredging instrument used, Small scrape dredge

Direction of drift, East ; distance, 56 mile

Temperature of air, 75 Fahr. therm. No.,

“ of surface water, “

“ at depth of fathoms, “

“ at bottom, “

Density at surface, 1.0234 temp., 75 Celsius.

“ at depth of fathoms, “

“ at bottom, “

Number of salinometer, 7450

Barometer reading, 30.02

State of sky, partly clear

Direction of wind East- ; force, 4

Rain,

Direction of surface current, ; force,

“ of bottom “ ; force,

Name and position of observer,

NOTES RELATING TO STATION NO. 7490

7 shrimps
several bivalves

TEMPERATURE AND DEPTH
RECORD OF BREEDING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. 7481

Date, March 1903

Time of day, 7.10 am ; of tide, $\frac{3}{4}$ ebb

Locality, Key Biscayne Bay Fla

Exact position, 1 m. n of Feather Bed
Bank

Depth, 11 ft

Nature of bottom, Sand & grass

Dredging instrument used, Oyster dredge

Direction of drift, N. W. ; distance, $\frac{1}{2}$ mile

Temperature of air, 76 Fahr. therm. No.,

“ of surface water, “

“ at depth of fathoms, “

“ at bottom, “

Density at surface, 1.0234 temp., 24 Celsius.

“ at depth of fathoms, “

“ at bottom, “

Number of salinometer, 7450

Barometer reading, 30.04

State of sky, partly clear

Direction of wind E. N. E. ; force, 4

Rain,

Direction of surface current, ; force,

“ of bottom “ ; force,

Name and position of observer,

11-1068

V. E. West

NOTES RELATING TO DIVISION NO.

NOTES RELATING TO STATION NO. 7482

Several bivalves
& species of crabs

LEMBERTLOBE AND ORELLA
RECORD OF BREEDING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. 7482
 Date, March 1, 1903
 Time of day, 7:40 am ; of tide, $\frac{3}{4}$ eb
 Locality, Key Biscayne Bay Fla
 Exact position, $3\frac{1}{2}$ m. S. W. & W $\frac{1}{2}$ W
 of Soldier Key
 Depth, $10\frac{1}{2}$ feet
 Nature of bottom, bay
 Dredging instrument used, Cyster dredge
 Direction of drift, West ; distance, $\frac{1}{4}$ mile
 Temperature of air, 76 Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0236 temp. 23.5 Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7450
 Barometer reading, 30.04
 State of sky, partly clear
 Direction of wind S.W. & E. ; force, 4
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,
 V. E. West

NOTES RELATING TO STATION NO. 482

- 2 species of non commercial sponges
- 1 species of shrimp
- 1 sea-anemone
- 1 small holothurians
- 1 file fish
- several brinches
- Hermit crabs
- Gastropods
- Coral

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7483*
 Date, *March 7, 1903*
 Time of day, *8.15 am* ; of tide, *3/4 ebb*
 Locality, *Key Biscayne Bay Fla*
 Exact position, *3 m. W 1/2 S of Soldier Key*

 Depth, *10 fath*
 Nature of bottom, *Sand and grass*
 Dredging instrument used, *Oyster dredge*
 Direction of drift, *West* ; distance, *1/2 mile*
 Temperature of air, *75* Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0232* temp., *24* Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7450*
 Barometer reading, *30.05*
 State of sky, *partly clear*
 Direction of wind *S. N. E* ; force, *4*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,
 V. G. West

NOTES RELATING TO STATION NO. 7493

Nothing at decay

RECORD OF BREEDING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. 7484
 Date, March 7, 1903
 Time of day, 8.35 am ; of tide, $\frac{3}{4}$ ebb.
 Locality, Key Biscayne Bay Fla
 Exact position, $\frac{1}{4}$ m. S.W. $\frac{1}{2}$ S of
Cape Florida
 Depth, $11\frac{1}{2}$ ft
 Nature of bottom, Sand & grass
 Dredging instrument used, Cyprus dredge
 Direction of drift, West ; distance, $\frac{1}{8}$ mile
 Temperature of air, 75 Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0224 temp., 24 Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7450
 Barometer reading, 30.05
 State of sky, partly clear
 Direction of wind S.W. E. ; force, 4
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,

Name and position of observer,

V. E. West

NOTES RELATING TO STATION NO. 2484

1 tunicate
brittle stars
gastropods
Several crabs
bivalves

TEMPERATURE AND DENSITY
RECORD OF BREDDING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. 7455
 Date, March 7, 1903
 Time of day, 9:10 am ; of tide, Low water
 Locality, Key Biscayne Bay Fla
 Exact position, 3 m. S. W x W of Cape Florida
 Depth, 11 $\frac{1}{2}$ feet
 Nature of bottom, Sand & grass
 Dredging instrument used, Oyster dredge
 Direction of drift, N. W. ; distance, $\frac{1}{4}$ mile
 Temperature of air, 70 Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0212 temp., 24 Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7450
 Barometer reading, 30.05
 State of sky, partly cloudy
 Direction of wind S. W. E. ; force, 4
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,
 V. E. Nest

NOTES RELATING TO STATION NO. 7485

brittle stars
1 full fish
gastropods
11 small eel

RECORD OF BREEDING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7486*
 Date, *March 7, 1903*
 Time of day, *9.30 am* ; of tide, *Low water*
 Locality, *Key Biscayne Bay Fla*
 Exact position, *3 M. W. S. of Cape Florida*
 Depth, *10 1/2 feet*
 Nature of bottom, *Sand & grass*
 Dredging instrument used, *Cyclic dredge*
 Direction of drift, *N. W.* ; distance, *1/2 mile*
 Temperature of air, *75* Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0213* temp., *24* Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7450*
 Barometer reading, *30.06*
 State of sky, *partly cloudy*
 Direction of wind *S. N. E.* ; force,
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,
 V. E. Nest

NOTES RELATING TO STATION NO. 7486

bivalves

gastropods

1 small file fish

hermit crabs

TEMPERATURE AND DENSITY
RECORD OF BEDDING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. 7487
 Date, March. 10. 1903
 Time of day, 7.25 am ; of tide, $\frac{3}{4}$ ebb
 Locality, Key Biscayne Bay Fla
 Exact position, 1. m. W. of Feather bed
 Bank
 Depth, 11 $\frac{1}{2}$ feet
 Nature of bottom, Barry
 Dredging instrument used, small scrape dredge
 Direction of drift, S. W. ; distance, $\frac{1}{6}$ mile
 Temperature of air, Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0231 temp., 23 Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7450
 Barometer reading, 30.06
 State of sky, partly cloudy
 Direction of wind East ; force, 4
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,
 11-1068 V. E. Nest

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, Fahr. therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, temp., Celsius.

" 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 and position of observer,

NOTES RELATING TO STATION NO. 7487

2 Small hermit crabs

TEMPERATURE AND DENSITY
RECORD OF DREDGING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7488*
 Date, *March 10, 1903*
 Time of day, *8 am* ; of tide, *3/4 ebb* *lake*
 Locality, *Biscayne Bay Fla. Bellow*
 Exact position, *2 m. S.W. of S.W. end*
of Feathered Bluffs
 Depth, *7 1/2*
 Nature of bottom, *Sandy*
 Dredging instrument used, *Small scrape dredge*
 Direction of drift, *West* ; distance, *76 miles*
 Temperature of air, *74* Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0230* temp., *23* Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *2450*
 Barometer reading, *30.10*
 State of sky, *partly cloudy*
 Direction of wind *East* ; force, *4*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,
V. E. West

NOTES RELATING TO STATION NO. 7488

2 Small Loggerhead sponges

Crabs

1 pipe fish

1 worm

TEMPERATURE AND DENSITY
RECORD OF DREDGING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. 7489

Date, March. 10. 1903

Time of day, 8.25 am; of tide, 3/4 eb.

Locality, Billies Lake Biscayne Bay Fla

Exact position, 2 1/2 m. N.E. of Turkey
point

Depth, 5 feet

Nature of bottom, Hard sand

Dredging instrument used, Small scrapedredge

Direction of drift, West-; distance, 4/8 miles

Temperature of air, 74 Fahr. therm. No.,

“ of surface water, “

“ at depth of fathoms, “

“ at bottom, “

Density at surface, 1.0244 temp. 25 Celsius.

“ at depth of fathoms, “

“ at bottom, “

Number of salinometer, 7450

Barometer reading, 30.10

State of sky, partly cloudy

Direction of wind East; force, 4

Rain,

Direction of surface current, ; force,

“ of bottom “ ; force,

Name and position of observer,

NOTES RELATING TO STATION NO. 7489

Nothing in dredge

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *2490*
 Date, *March. 10, 1903*
 Time of day, *8.45 am*; of tide, *$\frac{3}{4}$ ebb.*
 Locality, *Cutter Bank Biscayne Bay Fla*
 Exact position, *$2\frac{1}{8}$ m. E. $\frac{1}{2}$ S of Turkey Point*
 Depth, *7 fath*
 Nature of bottom, *Sandy*
 Dredging instrument used, *Small scrape dredge*
 Direction of drift, *West*; distance, *$\frac{1}{6}$ mile*
 Temperature of air, *74* Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0246* temp., *73* Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7450*
 Barometer reading, *30.10*
 State of sky, *partly cloudy*
 Direction of wind *East-*; force, *4*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,
 11-1068 *V. E. Nees*

NOTES RELATING TO STATION NO. 7490

1 small crab

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. 7491
 Date, March 10, 1903
 Time of day, 10, 35 am.; of tide, 2/4 ebb.
 Locality, Card Sound Fla
 Exact position, 1 m. N. N. E. 1/2 E. of
Pumpkin Key
 Depth, 10 1/2 ft.
 Nature of bottom, Hard Sand
 Dredging instrument used, Small scrapedredge
 Direction of drift, West-; distance, 1/6 mile
 Temperature of air, 75 Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0229 temp. 24 Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7450
 Barometer reading, 30.12
 State of sky, partly cloudy
 Direction of wind East-; force, 4
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,

NOTES RELATING TO STATION NO. 7491

Nothing in dredge

TEMPERATURE AND DEPTH
RECORD OF BREDDING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. 7492
 Date, March. 10. 1903.
 Time of day, 11.00 am ; of tide, $\frac{3}{4}$ ebb.
 Locality, Cord. Sound. Fla
 Exact position, $\frac{1}{2}$ m. S.W $\frac{1}{2}$ W. of
Pumpkin Key
 Depth, $11\frac{1}{2}$ feet
 Nature of bottom, Soft sand & grass
 Dredging instrument used, Small scrape dredge
 Direction of drift, West ; distance, $\frac{1}{6}$ mile
 Temperature of air, 75 Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0222 temp., 24 Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7450
 Barometer reading, 30.12
 State of sky, partly clear
 Direction of wind East ; force, 4
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,
 11-1068 V. E. Nest

NOTES RELATING TO STATION NO.

NOTES RELATING TO STATION NO. 7492

2 hermit crabs

1 pipe fish

1 small fish

RECORD OF BREEDING

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. 7493
 Date, March 10, 1903
 Time of day, 11:10 am ; of tide, Low water
 Locality, Cad Sound Fla
 Exact position, 1 1/2 m. N. of Pumpkin
Key
 Depth, 10 feet
 Nature of bottom, Sony
 Dredging instrument used, Small scrape dredge
 Direction of drift, West ; distance, 1/2 mile
 Temperature of air, 75 Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0222 temp., 24 Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7450
 Barometer reading, 30.12
 State of sky, partly cloudy
 Direction of wind East ; force, 4
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,
 11-1068 G. E. West

NOTES RELATING TO STATION NO. 7493

3 species of sponges

actinium

Several species of coral

1 pipe fish

2 species of shrimp

1 worm

RECORD OF DREDGING

TEMPERATURE AND DENSITY

Station No. *7494*
 Date, *March 12, 1903*
 Time of day, *9.30 am* of tide, *1/2 ebb*
 Locality, *Hawk Channel*
 Exact position, *1/8 mi. N.E. of*
Southern end of Rants Bay
 Depth, *9 feet*
 Nature of bottom, *Hard sand & grass*
 Dredging instrument used, *Small scrape dredge*
 Direction of drift, *East* ; distance, *1/6 mile*
 Temperature of air, *73* Fahr. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0252* temp., *23* Celsius.
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7450*
 Barometer reading, *30.01*
 State of sky, *partly cloudy*
 Direction of wind *E. N.E.* ; force, *4*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name and position of observer,

NOTES RELATING TO STATION NO. 7494

- 1 sand dollar
- 3 species of Non Commercial sponges.
- 2 bivalves

RECORD OF DREDGING,
TEMPERATURE AND DENSITY.

Station No. 7495
 Date, March, 12, 1903
 Time of day, 9:40 am; of tide, $\frac{1}{2}$ ebb
 Locality, Hawk Channel Fla
 Exact position, $\frac{5}{8}$ m. S x N of Southern
 Rugged Key
 Depth, 12 $\frac{1}{2}$ feet
 Nature of bottom, Hard sand
 Dredging instrument used, Small scrape dredge
 Direction of drift, East; distance, 76 miles
 Temperature of air, 73 therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0250 temp., 23
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7450
 Barometer reading, 30.01
 State of sky, partly cloudy
 Direction of wind, S. N. E.; force, 4
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name of vessel, Fish Hawk
 Service to which attached, Fish Commission
 Name and rank of commanding officer, J. L. Smith
 Roakman USN.
 Name and position of observer,
 V. E. West

NOTES RELATING TO STATION NO. 7495-

Nothing in dredge