

ORIGINAL LOG BOOK OF THE "FISH HAWK"

UNITED STATES FISH COMMISSION

STATION NUMBERS

Numbers 7446 to 7495

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7446

Date, Jan 30, 1903

Time of day, 10:30 A.M.; of tide, $\frac{1}{2}$ ebb

Locality, Lower Jefferson Bush Lake, Fla

Exact position, $2\frac{3}{4}$ mi. N. W. of Jew-

fish Bush

Depth, 8 feet

Nature of bottom, *barry*

Dredging instrument used, Small scrape dredge

Direction of drift, East : distance, $\frac{1}{2}$ mi

Temperature of air, 76 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0221 temp., 29

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 2992

State of sky, Clear

Direction of wind, N. N. E.; force, 3

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, James A. Smith

Boatswain, U. S. N.

Name and position of observer,

Vernon C. West.

NOTES RELATING TO STATION NO. 2926

2 species of fish

1 mollusk

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7447

Date, Jan 30, 1903

Time of day, 11:05 A. M.: of tide, $\frac{3}{4}$ ebb

Locality, Lower Jamaica Reach Lake, Fla.

Exact position, $2\frac{3}{4}$ mi. N. W. of West

end of Lower Matecumbe Key

Depth, $3\frac{1}{2}$ feet

Nature of bottom, Soft mud over rocks

Dredging instrument used, small scrape dredge

Direction of drift, S E. : distance, $\frac{1}{4}$ mile

Temperature of air, 76 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0221 temp., 29.5

" 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 of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith

Boatsman, U. S. N.

Name and position of observer,

Vernon E. West.

NOTES RELATING TO STATION NO. 2777

Nothing on charge

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *7448*Date, *Jan. 30, 1903*Time of day, *11:30 A.M.*; of tide, *3/4*Locality, *Lower Jewish Bush Lake, Fla.*Exact position, *1 mi. S. & W. of Southern**Little Peters Keys*Depth, *8 feet*Nature of bottom, *hard*Dredging instrument used, *Small scrape dredge*Direction of drift, *East*; distance, *1/2 mi.*Temperature of air, *76* therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, *1.0220* temp., *24.5*

" at depth of fathoms, "

" at bottom, "

Number of salinometer, *7453*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 of vessel, *U.S. Fish Com.*Service to which attached, *U.S. Fish Commission*Name and rank of commanding officer, *James A. Smith**Boatsman, U.S.N.*

Name and position of observer,

Wm. C. Meade

NOTES RELATING TO STATION NO. 2448

2 sharp wood sponges

2 yellow sponges

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *7449*
 Date, *Jan 30, 1913*
 Time of day, *1:35 P.M.*; of tide, *Low Water*
 Locality, *Lower Jarvis Bush Lake, Fla.*
 Exact position, *1/2 mi. N. E. & E. of Jarvish Bush.*
 Depth, *15 feet.*
 Nature of bottom, *Sand*
 Dredging instrument used, *Small scrape dredge*
 Direction of drift, *S W.*; distance, *1/2 mi.*
 Temperature of air, *78* therm. No.,
 " of surface water, ..
 " at depth of .. fathoms. ..
 " at bottom. ..
 Density at surface, *1.0220* temp., *25*
 " at depth of .. fathoms. ..
 " at bottom. ..
 Number of salinometer, *7450*
 Barometer reading, *29.90*
 State of sky, *Clear*
 Direction of wind, *N. N. E.*; force, *2*
 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, *James A. Smith*
 Boatswain, U. S. N.
 Name and position of observer,
 Vernon C. West.

NOTES RELATING TO STATION NO. 202

2 commercial sponges
noted.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7450
 Date, Jan. 30 1913
 Time of day, 2:05 P. M.: of tide, Low Water
 Locality, Lower portion Bush Lake, Fla.
 Exact position, 1 mi. N. W. & N. of Jewfish
 Bush
 Depth, 8 feet
 Nature of bottom, sandy
 Dredging instrument used, small scrape dredge
 Direction of drift, West : distance, 1/2 mi.
 Temperature of air, 77 therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0224 temp., 25
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7950
 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 of vessel, Fish Hawk
 Service to which attached, Fish Co. service on
 Name and rank of commanding officer, James A. Smith
 Boatsman, U. S. N.
 Name and position of observer,
 Vernon C. West.

NOTES RELATING TO STATION NO. 240.

2 specimens of *Hydrobia ulvae*

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7451

Date, Feb 24, 1913

Time of day, 8:55 A.M.; of tide, $\frac{3}{4}$ ebb

Locality, Lignum Vitae Bay, Fla.

Exact position, 1 1/4 mi. N. W. of Lignum Vitae

Depth, 8 feet

Nature of bottom, sandy

Dredging instrument used, Small scrape dredge

Direction of drift, North; distance, 1/2 mi.

Temperature of air, 72 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0232 temp., 27.5

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7453

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 of vessel, U.S. Fish Com.

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

Name and rank of commanding officer, Boatswain, U.S.N.

Name and position of observer,

Vernon C. West

NOTES RELATING TO STATION NO. 555

1. 10/10/55

2. 10/10/55

3. 10/10/55

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. *7452*
 Date, *Feb 4 1913*
 Time of day, *2:20 P.M.*; of tide, *3/4 ebb*
 Locality, *Big Horn Water Lake, Iowa*
 Exact position, *1/2 mi. S. W. of Lake*
South Iowa Ferry
 Depth, *2 fathoms*
 Nature of bottom, *fine sand*
 Dredging instrument used, *Small dredge*
 Direction of drift, *N. W.*; distance, *1/2 mi.*
 Temperature of air, *76* therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.022* temp., *55*
 " 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 of vessel, *Fish Hawk*
 Service to which attached, *Fish Commission*
 Name and rank of commanding officer, *James A. Smith*
Boatman, U.S.A.
 Name and position of observer,
Vernon C. West

NOTES RELATING TO STATION NO. 7511

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. *7453*
 Date, *July 4, 1883.*
 Time of day *10:15 A.M.*; of tide, *Low*
 Locality, *Beaufort Harbor*
 Exact position, *1 1/2 miles N. N. W. of Beaufort*
 Depth, *2 fathoms*
 Nature of bottom, *fine sand*
 Dredging instrument used, *beam trawl*
 Direction of drift, *N. W.*; distance, *1/2 mile*
 Temperature of air, *77* therm. No.,
 " of surface water, " "
 " at depth of fathoms, " "
 " at bottom, " "
 Density at surface, *1.0227* temp. "
 " at depth of fathoms, " "
 " at bottom, " "
 Number of salinometer, *7453*
 Barometer reading, *29.86*
 State of sky, *Clear*
 Direction of wind, *South*; force, *7*
 Rain,
 Direction of surface current, : force,
 " of bottom " : force,
 Name of vessel, *U.S.S. Fish Hawk*
 Service to which attached, *U.S. Fish Commission*
 Name and rank of commanding officer, *James A. Smith*
Ensign
 Name and position of observer,
Wm. C. Coker

NOTES RELATING TO STATION NO. 7

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. *7750*
 Date, *July 4, 1902*
 Time of day, *11:00 A.M.*; of tide, *low water*
 Locality, *Rames Lane, Fla.*
 Exact position, *1/4 mi. N. W. Cor. of Little Rabbit Key*
 Depth, *6 fms.*
 Nature of bottom, *sand & shells*
 Dredging instrument used, *small seine dredge*
 Direction of drift, *N. N. W.*; distance, *1/2 mi.*
 Temperature of air, *78* therm. No.,
 " of surface water, " "
 " at depth of fathoms, " "
 " at bottom, " "
 Density at surface, *1.025* temp., *78*
 " at depth of fathoms, " "
 " at bottom, " "
 Number of salinometer, *7750*
 Barometer reading, *29.87*
 State of sky, *b, c, d*
 Direction of wind, *South*; force, *3*
 Rain,
 Direction of surface current, : force,
 " of bottom " : force,
 Name of vessel, *U.S.S. Fish Hawk*
 Service to which attached, *U.S. Commission*
 Name and rank of commanding officer, *J. W. Smith, Lt. Comdr.*
 U.S. Navy
 Name and position of observer,

NOTES RELATING TO STATION NO. 7-1-11

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. *7435*
 Date, *Feb. 4, 1903*
 Time of day, *11:45 A.M.*; of tide, *Low water*
 Locality, *Barnes Lake, N. C.*
 Exact position, *3 miles N. W. of ...*
 Depth, *7 fms.*
 Nature of bottom, *Sand & gravel*
 Dredging instrument used, *Small scrape dredge*
 Direction of drift, *S. S. W.*; distance, *1/2 mi*
 Temperature of air, *78* therm. No.,
 " of surface water, " "
 " at depth of fathoms, " "
 " at bottom, " "
 Density at surface, *1.0234* temp., *23*
 " at depth of fathoms, " "
 " at bottom, " "
 Number of salinometer, *743*
 Barometer reading, *29.87*
 State of sky, *Clear*
 Direction of wind, *South*; force, *3*
 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, *James A. ...*
Boatsman, U. S. N.
 Name and position of observer,

NOTES RELATING TO STATION NO.

1000000000

1000000000

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *7456*
 Date, *Feb. 4, 1903*
 Time of day, *1:00 P. M.*; of tide, *1/2 flood*
 Locality, *Deep water channel, Port of New York*
 Exact position, *1 1/4 miles E. S. E. of Cape West Pier*
 Depth, *12 fathoms*
 Nature of bottom, *fine sand & mud*
 Dredging instrument used, *small dredge*
 Direction of drift, *N. E.*; distance, *1/2 mile*
 Temperature of air, *79* therm. No.,
 " of surface water, " "
 " at depth of fathoms, " "
 " at bottom, " "
 Density at surface, *1.022* temp., *25*
 " at depth of fathoms, " "
 " at bottom, " "
 Number of salinometer, *7455*
 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 of vessel, *U. S. Fish Com.*
 Service to which attached, *U. S. Commission*
 Name and rank of commanding officer, *James H. Smith*
 Boatswain, U. S. N.
 Name and position of observer,
 Vernon E. West.

NOTES RELATING TO STATION NO. 200

200

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. *7457*
 Date, *July 4, 1893*
 Time of day, *2:15 P.M.*; of tide, *1/4 flood.*
 Locality, *off Cape Fear, N.C.*
 Exact position, *2 3/4 miles N. W. W. of Cape Fear*
Light
 Depth, *9 fathoms*
 Nature of bottom, *heavy*
 Dredging instrument used, *Clay*
 Direction of drift, *S. W.* : distance, *1/2 mile*
 Temperature of air, *78* therm. No.,
 " of surface water, " "
 " at depth of fathoms, " "
 " at bottom, " "
 Density at surface, *1.0217* temp., *25*
 " at depth of fathoms, " "
 " at bottom, " "
 Number of salinometer, *1411*
 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 of vessel, *Fish Hawk*
 Service to which attached, *U.S. Fish Commission*
 Name and rank of commanding officer, *J. M. Smith*
 Boatswain, U.S.N.
 Name and position of observer, *Wm. H. Smith*

NOTES RELATING TO STATION NO. 1

1. 1000

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *7422*
 Date. *Feb 1900*
 Time of day. *8:35*; of tide, *Low water*
 Locality, *Coast of Maryland*
 Exact position. *North of Annapolis*
 Depth, *8 fms*
 Nature of bottom. *fine sand*
 Dredging instrument used, *Small dredge*
 Direction of drift, *N. E.*; distance, *4 miles*
 Temperature of air. *77* therm. No.,
 " of surface water. " "
 " at depth of fathoms. " "
 " at bottom, " "
 Density at surface. *1.024* temp., *25*
 " at depth of fathoms. " "
 " at bottom. " "
 Number of salinometer, "
 Barometer reading. *29.83*
 State of sky. *P. C.*
 Direction of wind, *S. S. W.*; force. *2*
 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, *James E. Smith*
 Name and position of observer, *James E. Smith*

NOTES RELATING TO STATION NO. 22

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7458
 Date, Feb. 5, 1905
 Time of day, 9:40 A.M.; of tide, low water
 Locality, Indian River, Fla.
 Exact position, 1 mi. S. of Ft. Pierce
 Depth, 5 ft.
 Nature of bottom, fine sand
 Dredging instrument used, dredge
 Direction of drift, S. E. ; distance, 1/2 mi.
 Temperature of air, 77 therm. No.,
 " of surface water, " "
 " at depth of fathoms, " "
 " at bottom, " "
 Density at surface, 1.025 temp., 72
 " at depth of fathoms, " "
 " at bottom, " "
 Number of salinometer, 500
 Barometer reading, 29.95
 State of sky, Partly cloudy
 Direction of wind, S. E. W. ; force, 2
 Rain,
 Direction of surface current, : force,
 " of bottom " : force,
 Name of vessel, Fish Hawk
 Service to which attached, U. S. Fish Commission
 Name and rank of commanding officer, B. T. ...
 Name and position of observer,

NOTES RELATING TO STATION NO.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *1000*
 Date, *Jan 5*
 Time of day, *9:00 A.M.* : of tide, *low*
 Locality, *off Cape Cod*
 Exact position, *2 miles east of Cape Cod*
 Depth, *10*
 Nature of bottom, *fine sand*
 Dredging instrument used, *dredge*
 Direction of drift, *N. E.* : distance, *1/2*
 Temperature of air, *77* therm. No.,
 " of surface water, ..
 " at depth of .. fathoms, ..
 " at bottom, ..
 Density at surface, *1.025* temp.,
 " at depth of .. fathoms, ..
 " at bottom, ..
 Number of salinometer, *1000*
 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 of vessel, *U.S.S. Fish Hawk*
 Service to which attached, *U.S. Fish Commission*
 Name and rank of commanding officer, *J. W. Smith*
 Boatman U.S.N.
 Name and position of observer,
 Vernon Hunt

NOTES RELATING TO STATION NO.

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 27

Date, March 5 1882

Time of day, 11.45 A.M. : of tide, $\frac{1}{4}$ ebb

Locality, Western Key Lake, Fla.

Exact position, - 1.5 miles S. of Key West

Depth, 7 feet

Nature of bottom, sand & rocks

Dredging instrument used, dredge

Direction of drift, East ; distance, $\frac{1}{2}$ mile

Temperature of air, 78 therm. No.,

" of surface water, " "

" at depth of fathoms, " "

" at bottom, " "

Density at surface, 1.0213 temp., 27

" at depth of fathoms, " "

" at bottom, " "

Number of salinometer, 1000

Barometer reading, 29.97

State of sky, Cloudy

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

Rain.

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, U. S. Fish Commission

Name and rank of commanding officer, James W. Smith
 Rear Admiral U. S. N.

Name and position of observer, W. C. Wood

NOTES RELATING TO STATION NO.

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. *2002*
 Date, *July 18*
 Time of day, *2.20 P.M.*; of tide, *1/2 ebb*
 Locality, *Hawk Channel, Fla.*
 Exact position, *2 mi. S.W. & W. of S. E. point of Long Key*
 Depth, *2 1/2 fathoms*
 Nature of bottom, *Hard sand & g.*
 Dredging instrument used, *Oyster dredge*
 Direction of drift, *S.W.*; distance, *1/4 mi.*
 Temperature of air, *62* therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0249* temp., *25.5*
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *1750*
 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 of vessel, *U.S.S. Fish Hawk*
 Service to which attached, *U.S. Fish Com.*
 Name and rank of commanding officer,
Robert H. ...
 Name and position of observer,

NOTES RELATING TO STATION NO. ...

[Faint, illegible handwritten notes]

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 2812

Date. 17

Time of day, 2:45 P.M.; of tide, $\frac{1}{2}$ ebb.

Locality, Hawk Channel, Fla.

Exact position, $\frac{1}{4}$ mi. S. & W. of S. S.

point of Long Key.

Depth, $2\frac{1}{2}$ fathoms

Nature of bottom.

Dredging instrument used, Trawl dredge

Direction of drift, S. W.; distance, $\frac{1}{4}$ mi.

Temperature of air, 62 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0247 temp., 21

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 2055

Barometer reading, 30.17

State of sky, Cloudy

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

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, U. S. Fish Com.

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

Name and rank of commanding officer, J. B. ...

Name and position of observer, J. B. ...

NOTES RELATING TO STATION NO. 1121

9:00 a.m.
- 100 yds of 100 yds
covered with sand and sponge
with spittle on - 100 yds
from sand sponge
in water

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7457
 Date, Feb. 18, 1953
 Time of day, 3:35 P.M.; of tide, $\frac{3}{4}$ ebb.
 Locality, Hawk Channel
 Exact position, 1.4 miles E. & S. of
 West end of Lower Matecumbe Key
 Depth, 3 fathoms
 Nature of bottom, sand
 Dredging instrument used, Oyster dredge
 Direction of drift, S.W. ; distance, 4 miles
 Temperature of air, 65 therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0254 temp., 20.5
 " 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 of vessel, Fish Hawk
 Service to which attached, Fish Commission
 Name and rank of commanding officer, James A. Smith
 Boatman, U.S.N.
 Name and position of observer,
 W. A. Smith

NOTES RELATING TO STATION NO. 7484

a column

g. or s. sponges
gastropods
bryozoans

several varieties of sponges

1 small fish

1 small crustacean

1 shrimp

coral

tridacna

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7465
 Date, Feb. 18, 1912
 Time of day, 4:55 P.M.: of tide, $\frac{3}{4}$ ebb
 Locality, Hawk Channel
 Exact position, 1 1/2 miles S. of N. H. of
 B. ...
 Depth, 2 1/2 fathoms
 Nature of bottom, Hard sand, at 200 yds.
 Dredging instrument used, Oyster dredge
 Direction of drift, West; distance, 1/4 mi.
 Temperature of air, 65, therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0252, temp., 19.5
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 745.
 Barometer reading, 30.12
 State of sky, Cloudy
 Direction of wind, N. E. ⁵; force, 5
 Rain,
 Direction of surface current, : force.
 " of bottom " : force.
 Name of vessel, Hawk
 Service to which attached, Fish Commission
 Name and rank of commanding officer, James H. S.
 Boutwell U. S. N.
 Name and position of observer,

NOTES RELATING TO STATION NO. 2438

Some green
stone at the
south end of
crabs
geology

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *7466*
 Date, *Feb. 19, 1903*
 Time of day, *8:50 A.M.*; of tide, $\frac{1}{2}$ *flood*
 Locality, *Hawk Channel, Fla.*
 Exact position, $\frac{1}{4}$ *mi E of Tea Table*
Key.
 Depth, $2\frac{1}{2}$ *fathoms*
 Nature of bottom, *fine*
 Dredging instrument used, *Cyclone dredge*
 Direction of drift, *S. W.* : distance, $\frac{1}{2}$ *mi.*
 Temperature of air, *61* therm. No.,
 " of surface water, " "
 " at depth of fathoms, " "
 " at bottom, " "
 Density at surface, *1.0250* temp., *20.5*
 " 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 of vessel, *Fish Hawk*
 Service to which attached, *Fish Commission*
 Name and rank of commanding officer, *James H. ...*
U.S.N.
 Name and position of observer,
 Vernon C. West.

NOTES RELATING TO STATION NO. 2840

1. ...
2. ...
3. ...
4. ...
5. ...
6. ...
7. ...
8. ...
9. ...
10. ...

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *7457*
 Date, *Feb. 19, 1903*
 Time of day, *12 30* : of tide, *High*
 Locality, *Green Shoals, Hawk Channel, Fla.*
 Exact position, *4 1/4 S. W. of Elbow Reef beacon*
 Depth, *2 3/4 fathoms*
 Nature of bottom, *Sandy covered with shells*
 Dredging instrument used, *Oyster dredge*
 Direction of drift, *West* : distance, *1/2 mi.*
 Temperature of air, *70* therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0253* temp., *20.5*
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7450*
 Barometer reading, *30.23*
 State of sky, *B. C.*
 Direction of wind, *N. E.* ; force, *5*
 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, *James A. ...*
 Boatman, U. S. N.
 Name and position of observer,

NOTES RELATING TO STATION NO. 1507

3. The water level was 1.5 ft above the
ground surface. The water was clear and
the bottom was composed of fine sand and
silt. The water temperature was 65°F.
The wind was light and the sky was
partly cloudy. The water was collected
at a depth of 1 ft from the surface.
The water was filtered through a Whatman
No. 541 filter paper. The filtrate was
preserved in a clean glass bottle.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *7468*
 Date, *Feb. 19, 1913*
 Time of day, *1 50 P. M.*: of tide. *High Water*
 Locality, *Greenwich Harbor*
 Exact position, *2 mi. S. S. W. from Basin Hill Beacon*
 Depth, *2 1/2 fathoms*
 Nature of bottom, *sand & green*
 Dredging instrument used, *Oyster dredge*
 Direction of drift, *West*: distance, *1/2 mi.*
 Temperature of air, *73* therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0253* temp., *20.5*
 " 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 of vessel, *Fish Hawk*
 Service to which attached *Fish Commission*
 Name and rank of commanding officer, *James H. Smith*
 Boatswain, U. S. N.
 Name and position of observer,
 Vernon C. Went

NOTES RELATING TO STATION NO. 2468

several sponges

gastropods

brachiopods

several small mollusks and shells

remains of a sea urchin

several corals

...

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7469

Date, *Aug 19, 1902*Time of day, *1:20 P.M.*; of tide, *High Water*Locality, *Greenan Shoals, Hawk Channel*Exact position, *1/4 mi S.W. x E. of Basin**Hill Beacon*Depth, *2 fathoms*Nature of bottom, *sand & green*Dredging instrument used, *Oyster dredge*Direction of drift, *West*; distance, *1/8 mi*Temperature of air, *69* therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

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

" at depth of fathoms, "

" at bottom, "

Number of salinometer, *7750*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 of vessel, *Fish Hawk*Service to which attached, *Fish Hawk*Name and rank of commanding officer, *James Smith**1st Lt. U.S.N.*

Name and position of observer,

W. H. Smith

NOTES RELATING TO STATION NO. 111

11
11/11/11

9. 11. 11
Removal species of ...
3 minutes ...
1 removal ...
...

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7471
 Date, Feb. 25, 1913
 Time of day, 10:30 A. High tide, $\frac{3}{4}$ ebb
 Locality West of Cape, Fla.
 Exact position. 3 1/2 miles from Cape
 Depth, 2 ft.
 Nature of bottom, soft mud
 Dredging instrument used,
 Direction of drift, : distance,
 Temperature of air, 70 therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0209 temp., 21
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7451
 Barometer reading, 30.02
 State of sky, Partly cloudy
 Direction of wind, S. by E. ; 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,
 B. T. ... U. S. N.
 Name and position of observer,
 V. ... U. S. N.

NOTES RELATING TO STATION NO. 29 11

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7471
 Date, Feb. 25, 1913
 Time of day, 10:45 A.M.; of tide, 3 ebb.
 Locality, West of Cape, Fla.
 Exact position, 4 mi. S.W. of Cape
 Twp.
 Depth, 7 1/2 fms.
 Nature of bottom, soft mud
 Dredging instrument used,
 Direction of drift, ; distance,
 Temperature of air, 70 therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0213 temp., 21
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7450
 Barometer reading, 30.12
 State of sky, Partly cloudy
 Direction of wind, S.W. ; 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, James A. Smith
 Boatman, U. S. N.
 Name and position of observer,

NOTES RELATING TO STATION NO. 2007

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7472

Date, Feb 25, 1913

Time of day, 11:00 A.M.; of tide, Low Water

Locality, East Croppers, Fla.

Exact position, 1/4 mi. S.W. of E. P. Light

Depth, 6 1/2 ft.

Nature of bottom, soft mud

Dredging instrument used,

Direction of drift, ; distance,

Temperature of air, 71 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0195 temp., 21

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7049

Barometer reading, 30.02

State of sky, Partly cloudy

Direction of wind, S.W. ; force, 3

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, James H. Smith
Boatswain, U. S. N.

Name and position of observer,

NOTES RELATING TO STATION NO. 2-10

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7473
 Date, Feb. 20, 1902
 Time of day, 11:20 A.M.: of tide, low water
 Locality, East Bay, Fla.
 Exact position, behind the Pier
 Depth, 7 fms.
 Nature of bottom, soft mud
 Dredging instrument used,
 Direction of drift, : distance.
 Temperature of air, 71 therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0202 temp., 71
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7098
 Barometer reading,
 State of sky, Partly S.
 Direction of wind, S.W. : 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, Lt. Comdr.
 B. H. ...
 Name and position of observer,
 Vernon S. ...

NOTES RELATING TO STATION NO. 7973

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *7474*Date, *March 11 1887*Time of day, *9:30 A.M.*; of tide, *Low*Locality, *Peconic Bay, L.I.*Exact position, *3 miles from Peconic*

Depth,

Nature of bottom, *fine sand & shells*Dredging instrument used, *Small dredge*Direction of drift, *S. by E.*; distance, *1/2 mile*Temperature of air, *75* therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, *1.0252* temp., *27*

" at depth of fathoms, "

" at bottom, "

Number of salinometer, *7474*Barometer reading, *30.00*State of sky, *Partly cloudy*Direction of wind, *East*; force, *4*

Rain,

Direction of surface current, : force,

" of bottom " : force.

Name of vessel, *Truck Hawk*Service to which attached, *U.S. Fish Commission*Name and rank of commanding officer, *James B. Smith,
Boatswain, U.S.N.*

Name and position of observer,

Vernon E. Went

NOTES RELATING TO STATION NO. 7

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7475

Date, March 6, 1902

Time of day, 11:30 A.M. : of tide, $\frac{3}{4}$ ebb

Locality, Key West Bay, Fla.

Exact position, $\frac{1}{4}$ mi. N. & E. of AdamsDepth, $7\frac{1}{2}$ fms.

Nature of bottom, F. m. s.

Dredging instrument used, Small beam dredge

Direction of drift, S. ; distance, 1/2 mi.

Temperature of air, 76 therm. No.,

" of surface water, "

" at depth of fathoms. "

" at bottom, "

Density at surface, 1.0230 temp., 25°

" at depth of fathoms. "

" at bottom. "

Number of salinometer, 74

Barometer reading, 30.03

State of sky, Partly cloudy

Direction of wind, S.W. ; force, 3

Rain,

Direction of surface current. : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, U.S. Fish Commission

Name and rank of commanding officer, James D. Smith, Lt.

Rear Admiral U.S.N.

Name and position of observer,

Vernon S. Smith

NOTES RELATING TO STATION NO. 2485.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *7476*
 Date, *March 6, 1913*
 Time of day, *1:00 P.M.*; of tide, *$\frac{3}{4}$ flood*
 Locality *Plymouth Sound*
 Exact position, *3 mi. E. N. E. of Tuckers Point*
 Depth, *2 1/2 fms.*
 Nature of bottom, *fine sand*
 Dredging instrument used, *small dredge*
 Direction of drift, *W. N. W.*; distance, *1/2 mi.*
 Temperature of air, *76* therm. No.,
 " of surface water, ..
 " at depth of .. fathoms, ..
 " at bottom, ..
 Density at surface, *1.023* temp., *21.5*
 " at depth of .. fathoms, ..
 " at bottom, ..
 Number of salinometer, *7455*
 Barometer reading, *30.05*
 State of sky, *Partly cloudy*
 Direction of wind, *East*; force, *1*
 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, *Robertson, S. S. 1st Lt.*
 Name and position of observer, *W. C. ...*

NOTES RELATING TO STATION NO. 25124

1. The first of the specimens
to be examined is
a specimen of the
amphibian.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 77
 Date, March 6, 1903
 Time of day 1:45 P.M.: of tide, High water
 Locality, Key Biscayne Reef, Fla.
 Exact position, 1 1/2 mi. S. of tip of land
 Key
 Depth, 10 1/2 ft.
 Nature of bottom, Soft mud + shells
 Dredging instrument used, Small dredge
 Direction of drift, N. W. S. : distance, 1/2 mi.
 Temperature of air, 76 therm. No.,
 " of surface water, " "
 " at depth of fathoms, " "
 " at bottom, " "
 Density at surface, 1.0232 temp., 25
 " at depth of fathoms, " "
 " at bottom, " "
 Number of salinometer, 7451
 Barometer reading, 30.05
 State of sky, Partly cloudy
 Direction of wind, E. S. E. : force, 4
 Rain,
 Direction of surface current, : force,
 " of bottom " : force,
 Name of vessel, Fish Hawk
 Service to which attached, U. S. Fish Commission
 Name and rank of commanding officer, Lt. Comdr. W. S. M.
 Name and position of observer, Wm. S. Mott

NOTES RELATING TO STATION NO. 2900

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *7478*
 Date, *March 6, 1913*
 Time of day, *2:15 P.M.*; of tide, *High water*
 Locality, *Key Biscayne Bay, Fla.*
 Exact position, *1/2 mile S of middle of*
Frederick Street
 Depth, *8 fms.*
 Nature of bottom, *Tram.*
 Dredging instrument used, *Small dredge*
 Direction of drift, *West*; distance, *1/2 mi.*
 Temperature of air, *73* therm. No.,
 " of surface water, " "
 " at depth of fathoms, " "
 " at bottom, " "
 Density at surface, *1.0222* temp., *22.5*
 " at depth of fathoms, " "
 " at bottom, " "
 Number of salinometer, *7451*
 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 of vessel, *Fish Hawk*
 Service to which attached, *U.S. Commission*
 Name and rank of commanding officer, *Boatswain U.S.N.*
 Name and position of observer, *Wm. S. H. H.*

NOTES RELATING TO STATION NO. 26

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *700*
 Date, *March 6, 1888*
 Time of day, *2:45 P.M.*: of tide, *High water*
 Locality, *Key Biscayne Bay, Fla.*
 Exact position, *1/2 mi. N.W. x N. of Bunde Key*
 Depth, *9 ft.*
 Nature of bottom, *sand & green*
 Dredging instrument used, *Smith escape dred*
 Direction of drift, *N. E.* : distance *1/2 mi.*
 Temperature of air, *76* therm. No.,
 " of surface water, " "
 " at depth of fathoms, " "
 " at bottom, " "
 Density at surface, *1.0239* temp., *25*
 " at depth of fathoms, " "
 " at bottom, " "
 Number of salinometer, *74*
 Barometer reading, *30.0*
 State of sky, *Partly clear*
 Direction of wind, *SW* : force, *1*
 Rain,
 Direction of surface current, : force,
 " of bottom " : force,
 Name of vessel, *U.S.S. Fish Hawk*
 Service to which attached,
 Name and rank of commanding officer,
 Lt. J. H. ...
 Name and position of observer,

NOTES RELATING TO STATION NO. 2422

.....

2

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *7901*
 Date. *March 1, 1902*
 Time of day, *5:50 P.M.*; of tide, *High water*
 Locality, *Key West Bay, Fla.*
 Exact position, *1 3/4 mi. W. N. W. of Key West*
N. point of Key West Bay
 Depth, *9 ft.*
 Nature of bottom, *Hard sand.*
 Dredging instrument used, *Small dredge*
 Direction of drift, *East*; distance, *10 mi.*
 Temperature of air, *75* therm. No.,
 " of surface water, ..
 " at depth of .. fathoms, ..
 " at bottom, ..
 Density at surface, *1.0237* temp., *25*
 " at depth of .. fathoms, ..
 " at bottom, ..
 Number of salinometer, *7901*
 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 of vessel, *U.S.S. Fish Hawk*
 Service to which attached, *Fish Commission*
 Name and rank of commanding officer, *James A. Smith*
Warrant Officer
 Name and position of observer,
 Vernon S. Wright

NOTES RELATING TO STATION NO. 2111

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 7401
 Date, March 7, 1903
 Time of day, 7:00 A. M.; of tide, $\frac{3}{4}$ ebb
 Locality, Key Biscayne Key, Fla.
 Exact position, 1 mi. N. of Key Biscayne
 Depth, 11 ft
 Nature of bottom, sand & gravel
 Dredging instrument used, beam trawl
 Direction of drift, N. W. ; distance, $\frac{1}{2}$ mi.
 Temperature of air, 76 therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0237 temp., 72
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7450
 Barometer reading, 30.27
 State of sky, P. C.
 Direction of wind, S. W. E. ; force, 7
 Rain,
 Direction of surface current, : force,
 " of bottom " : force,
 Name of vessel, Fish Hawk
 Service to which attached, U. S. Fish Commission
 Name and rank of commanding officer, Boatswain, U. S. N.
 Name and position of observer,

NOTES RELATING TO STATION NO. 2000

Several breaks
& species of sea.

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7422
 Date, March 7, 1912
 Time of day, 7:45 A.M. of tide, 3/4 ebb.
 Locality, Fryingpan Bay, Pa.
 Exact position, 1/2 mi. S.W. 1/4 W.
 of Fryingpan Bay
 Depth, 10 1/2 ft.
 Nature of bottom, Sand.
 Dredging instrument used, Oyster dredge
 Direction of drift, West; distance, 1/2 mi.
 Temperature of air, 72 therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0233 temp., 52.5
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7453
 Barometer reading, 30.04
 State of sky, Partly cloudy
 Direction of wind, C.N.E.; force, 7
 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. W. Smith
 Name and position of observer, J. W. Smith

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *7443*
 Date, *March 2, 1933*
 Time of day, *8:00 a.m.*; of tide, *3/4 ebb*
 Locality, *Key West Bay, Fla.*
 Exact position, *3 mi. S. of Key West*
Key
 Depth, *10*
 Nature of bottom, *mud & grass*
 Dredging instrument used, *Hydraulic dredge*
 Direction of drift, *N. by E.*; distance, *1/2 mi.*
 Temperature of air, *75* therm. No.,
 " of surface water, ..
 " at depth of .. fathoms, ..
 " at bottom, ..
 Density at surface, *1.0232* temp., *37*
 " at depth of .. fathoms, ..
 " at bottom, ..
 Number of salinometer, *7459*
 Barometer reading, *30.05*
 State of sky, *Partly clear*
 Direction of wind, *E. N. E.*; force, *7*
 Rain.
 Direction of surface current, .. : force.
 " of bottom " " : force.
 Name of vessel, *U.S.S. Fish Hawk*
 Service to which attached, *Fish Commission*
 Name and rank of commanding officer, *Commander J. W. ...*
 U.S.N.
 Name and position of observer, *W. ...*

NOTES RELATING TO STATION NO. 74

Handwritten notes, illegible due to blurriness.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *7444*
 Date, *March 7, 1903*
 Time of day, *8:35 A.M.*; of tide, *3/4*
 Locality, *Key Biscayne Bay, Fla.*
 Exact position, *4 1/4 mi. S.W. 1/2 S. of Cape*
Hemlock.
 Depth, *1 1/2 fms.*
 Nature of bottom, *sand & grass*
 Dredging instrument used, *Oyster dredge*
 Direction of drift, *West*; distance, *1/2 mi.*
 Temperature of air, *75* therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0239* temp., *27*
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7700*
 Barometer reading, *30.00*
 State of sky, *Partly clear*
 Direction of wind, *E. 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, *John S. ...*
 U.S.N.
 Name and position of observer, *Wm. S. ...*

NOTES RELATING TO STATION NO.

1. *[Faint handwritten notes]*
2. *[Faint handwritten notes]*
3. *[Faint handwritten notes]*
4. *[Faint handwritten notes]*
5. *[Faint handwritten notes]*

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. *7705*

Date, *Aug 10 1885*

Time of day, *9 15 A.M.*; of tide, *Low*

Locality, *Key West Harbor Fla.*

Exact position, *3 mi. S.W. of Key West Fla.*

A. Gordon

Depth, *11 1/2 ft*

Nature of bottom, *Sand & grass*

Dredging instrument used, *Oyster dredge*

Direction of drift, *N.W.*; distance, *1/2 mi.*

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

“ of surface water, “

“ at depth of fathoms, “

“ at bottom, “

Density at surface, *1.0212* temp., *24*

“ at depth of fathoms, “

“ at bottom, “

Number of salinometer, *3000*

Barometer reading, *30.05*

State of sky, *Partly cloudy*

Direction of wind, *E. 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, *James A. Smith*
Boatswain, U.S.N.

Name and position of observer, *Vernon E. Henshaw*

NOTES RELATING TO STATION NO. 2-10

1. ...
2. ...
3. ...
4. ...
5. ...

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *7486*
 Date. *March 7, 1902*
 Time of day. *9:30 A.M.* of tide, *Low water*
 Locality, *Key Biscayne Bay, Fla.*
 Exact position. *3 mi. N. & S. of Cape*
Fleming
 Depth. *10 1/2 ft.*
 Nature of bottom. *sand & gravel*
 Dredging instrument used, *Oyster dredg*
 Direction of drift, *N. W.* : distance, *1/2 mi*
 Temperature of air. *75* therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface. *1.0213* temp., *27*
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer. *7450*
 Barometer reading. *30.06*
 State of sky. *Partly cloudy*
 Direction of wind, *S. W. 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, *13001, U.S.N.*
 Name and position of observer.

NOTES RELATING TO STATION NO. 2815

1. The area
is a small
pond with
a few reeds
and a few
trees.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7427

Date, March 10, 1903

Time of day, 7:25 P. M.; of tide, $\frac{3}{4}$ ebb.

Locality, Key Biscayne, Fla.

Exact position, 1 mi. W. of Feather
PointDepth, $1\frac{1}{2}$ fms.

Nature of bottom, Sand

Dredging instrument used, Small scrape dredge

Direction of drift, S. W. ; distance, $\frac{1}{2}$ mi.

Temperature of air, 74 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0231 temp., 23

" 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 of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. ...
Lieut. Comdr.Name and position of observer,
Wm. E. ...

NOTES RELATING TO STATION NO. 2427

Small amount of water

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *7428*
 Date, *March 10, 1905*
 Time of day, *2:00 P.M.*; of tide, *3/4 ebb*
 Locality, *Piscagua Bay, San Pedro de Macoris, Dominican Republic*
 Exact position, *2 miles S of S.W. end of North West Bank.*
 Depth, *76 ft.*
 Nature of bottom, *Mud*
 Dredging instrument used, *Small scrape dredge*
 Direction of drift, *West*; distance, *1/2 mi.*
 Temperature of air, *77* therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0250* temp., *25*
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7450*
 Barometer reading, *30.16*
 State of sky, *Partly cloudy*
 Direction of wind, *East*; force, *7*
 Rain,
 Direction of surface current, : force,
 " of bottom " : force,
 Name of vessel, *U.S.S. Hawk*
 Service to which attached, *U.S. Geol. Surv.*
 Name and rank of commanding officer, *James B. ...*
Boatman, U.S.N.
 Name and position of observer,

NOTES RELATING TO STATION NO. 242

Small amount of water in
can
1 pipe
1 wheel

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *74-9*
 Date, *March 10, 1905*
 Time of day, *8:35 A.M.* : of tide, *3/4 ebb*
 Locality *Bilbes Lake, Biscayne Bay, Fla.*
 Exact position, *2 1/2 m N. E. of ... Point*
 Depth, *8 ft.*
 Nature of bottom, *Hard sand*
 Dredging instrument used *... dredge*
 Direction of drift, *West* : distance, *1/2 m*
 Temperature of air, *74* therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0245* temp., *25*
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7455*
 Barometer reading, *30.10*
 State of sky, *Partly cloudy*
 Direction of wind, *East* ; force, *5*
 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, *James A. Smith*
 Therapist, U. S. N.
 Name and position of observer,
 Vernon C. Went

NOTES RELATING TO STATION NO. 2409.

Handwritten notes, possibly "A. B. C. D. E. F. G. H. I. J. K. L. M. N. O. P. Q. R. S. T. U. V. W. X. Y. Z."

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *7490*
 Date, *March 10, 1913*
 Time of day, *8:45 A.M.*; of tide, *3/4 ebb*
 Locality, *Cutter Bank, Buzzards Bay, Vt.*
 Exact position, *2 1/2 miles S. of ...*
 Depth, *7*
 Nature of bottom, *fine sand*
 Dredging instrument used, *Lucas - Swape dredge*
 Direction of drift, *West*; distance, *1/2 mile*
 Temperature of air, *74* therm. No.,
 " of surface water, ..
 " at depth of .. fathoms, ..
 " at bottom, ..
 Density at surface, *1.0273* temp., *23*
 " at depth of .. fathoms, ..
 " at bottom, ..
 Number of salinometer, *7450*
 Barometer reading, *30.10*
 State of sky, *Partly cloudy*
 Direction of wind, *East*; force, *2*
 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, *James B. ...*
 Reverend, U.S.N.
 Name and position of observer, *Walter H. F.*

NOTES RELATING TO STATION NO. 7777

1. 2. 3. 4. 5.

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7491

Date, March 10, 1923

Time of day, 10 55 A.M. of tide $\frac{3}{4}$ ebb.

Locality, Canal Sound, Fla.

Exact position, 1 mi. N. x E. $\frac{1}{2}$ S. of Penn. Sta.
Key Sand.Depth, 13 $\frac{1}{2}$ ft.

Nature of bottom, Hard sand.

Dredging instrument used, Long beam dredge.

Direction of drift, West ; distance, 1/2 mi.

Temperature of air, 75 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0222 temp., 27

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 30.12

State of sky, Partly cloudy

Direction of wind, East ; force, 6

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. S. ...
Boatman, U.S.N.Name and position of observer,
H. S. ...

NOTES RELATING TO STATION NO. 7771

Handwritten notes, mostly illegible due to fading.

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. *7492*
 Date, *March 10, 1913*
 Time of day, *11:00 A. M.*; of tide, *$\frac{3}{4}$ ebb*
 Locality, *Cand Sound, Fla.*
 Exact position, *1 $\frac{1}{2}$ mi. S. W. $\frac{1}{2}$ W. of Pimpton Key*
 Depth, *11 $\frac{1}{2}$ ft*
 Nature of bottom, *Soft sand & gravel*
 Dredging instrument used, *Small dredge*
 Direction of drift, *West*; distance, *$\frac{1}{2}$ mi.*
 Temperature of air. *75* therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface. *1.0222* temp., *27*
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7456*
 Barometer reading. *30.12*
 State of sky. *Partly clear*
 Direction of wind, *East*; force. *7*
 Rain,
 Direction of surface current, : force.
 " of bottom " : force.
 Name of vessel, *Hugh Hancock*
 Service to which attached, *Fish Commission*
 Name and rank of commanding officer, *J. A. ...*
 Name and position of observer, *Wm. C. ...*

NOTES RELATING TO STATION NO. 200

to ...
...
... feet

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7492
 Date, March 25, 1902
 Time of day, 11:10 A.M.; of tide Low water
 Locality, Card Sound, Fla.
 Exact position, 1/2 m. N. of Pumpkin Key
 Depth, 10 ft
 Nature of bottom, Bay
 Dredging instrument used, Small 2 or 3 ft dredge
 Direction of drift, West; distance, 1/2 mi.
 Temperature of air, 75 therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0232 temp., 24
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 2410
 Barometer reading, 30.12
 State of sky, Partly cloudy
 Direction of wind, East; force, 1/2
 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. S. A. Smith,
 Lieutenant, U. S. N.
 Name and position of observer,
 Vernon E. Hunt.

NOTES RELATING TO STATION NO. 27-51

3 species of *Amphispiza*
alpestris

several species of *Corvus*
1 *Speotyto*
2 *Spizella*
1 *Junco*

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *7494*
 Date, *March 12, 1923*
 Time of day, *9:20 A.M.*; of tide, *1/2 ebb*
 Locality, *Hawk Channel*
 Exact position, *1/2 mi. N. E. x E. of southern end of Sams Key.*
 Depth, *9 ft.*
 Nature of bottom, *Hard sand & grass*
 Dredging instrument used, *Small dredge*
 Direction of drift, *East*; distance, *1/6 mi.*
 Temperature of air, *73* therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0252* temp., *23*
 " 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 of vessel, *Fish Hawk*
 Service to which attached, *Fish Commission*
 Name and rank of commanding officer, *James B. ...*
Boatswain, U. S. N.
 Name and position of observer,
Vernon C. West.

NOTES RELATING TO STATION NO. 7494

1 sand dollar

3 species of non-commercial sponges

2 univalves

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. *7495-*
 Date, *March 12, 1903*
 Time of day, *9:40 A.M.*; of tide, *1/2 ebb.*
 Locality, *Hawk Channel, Fla.*
 Exact position, *1/2 mi. E. & S. of bottom*
Rugged Key
 Depth, *12 1/2 ft*
 Nature of bottom, *Hard sand.*
 Dredging instrument used, *Small dredge*
 Direction of drift, *East*; distance, *1/2 mi.*
 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, *E. 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, *James A. Smith*
 Boatsman U.S.N.
 Name and position of observer,
 Vernon E. West,

NOTES RELATING TO STATION NO. 7425

Nothing on ridge