GRAMPUS

ORIGINAL LOG BOOK OF THE "GRAMPUS"

UNITED STATES FISH COMMISSION

STATION NUMBERS

Numbers 10340 to 10390

10340 - 10390

JULY 19 1916

To

AUG 21 1916

Station No. 10340 Date: July 19 1916

Hour: 5.30 A.M. to 6.30 A.M.

Position: Lat. Long.

Locality: 3 miles S by E from Eastern Pt. Gloucester.

Depth: 50 m Bottom: Sample:

Wind: Direction, S. Force, light

Sea: smooth Sky: hazy.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 53.5 | | | 11.95 | ✓ | |
| 25 | R. 149 | 6.7 | 18 | -22 | 6.48 | ✓ | Big |
| 50 | R 153 | 5.4 | 16 | -21 | 5.19 | ✓ | " |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| | Fahrenheit temp, approx. | | | | | |
| 0 | 535 | | | | | |
| 25 | 44. | | | | | |
| 50 | 42 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| 20 net | Surface | ½ hr | | 1½ miles |
| ½ m. " | " | " | | |
| 1 m. | 30–0 | " | | |
| ½ m. quant. | 45–0 | | | |

11—5314

NOTES

20 net - sparse micro, some calanus

½ m. fish eggs + Calanus

1 m. Rich Calanus (2 qt.) young fish sagittae. 3 large Aurelia.

½ m quant. Rich Calanus

Did not use bottom net on account of uncertain bottom.

Station No. 10341 Date: July 19 191 6

Hour: 9.15 A.M. to 10.50 A.M.

Position: Lat. 42° 48' 30" Long. 70° 27' 30"

Locality: West of Stellwagen Bank

Depth: 83 m. Bottom: Sample:

Wind: Direction, SSW Force, light

Sea: smooth Sky: clear

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 61.5 | | | 16.39 | ✓ | |
| 25 | R 148 | 5.35 | 17.5 | -26 | 5.09 | ✓ | |
| 50 | R.149 | 4.15 | 16.5 | -24 | 3.91 | ✓ | |
| 80 | R. 153 | 3.9 | 15.5 | -23 | 3.67 | ✓ | |
| | ** 80 m W.S. lost. | | | | | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| ft. | temp | approx | | | | |
| 0 | 61.5 | | | | | |
| 25 | 41.5 | | | | | |
| 50 | 39.5 | | | | | |
| 80 | 39. | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| 1/2 m net vertical | 80-0 | | | |
| 20 net | .0 | 1/2 hr | | |
| 1/2 m net | 0 | 1/2 hr. | | |
| Bottom net | 83-0 | 1/2 hr | | |
| Meter net | 30-0 | 20 min | | |

11—5314

NOTES

1/2 m net vertical Rich Calanus

20 net surface Rich micro

1/2 m. " Very scanty.

Bottom net Very rich Sagittae, Calanus and young fishes.

Meter net Very rich Calanus & young fishes

The Calanus swarm occupied the upper layers & the Sagittae the lower.

Sorted bottom net haul (3 qts) 1/2 cal & 1/2 sagittae, with a few shrimp & many y.f. Sorted out the latter, & kept 1 qt of the remainder.

Station No. 10342 Date: July 19 1916

Hour: 1.30 P. M. to 2.25 P. M.

Position: Lat. Long.

Locality: Race Pt S by E 1/4 E distant 4 1/2 miles

Depth: 60 m. Bottom: Sample:

Wind: Direction, S Force, fresh

Sea: smooth Sky: clear.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 63 | | | 17.22 | ✓ | |
| 30 | R 149 | 7.95 | 19 | -22 | 7.73 | ✓ | |
| 60 | R. 148 | 6.40 | 18 | -26 | 6.14 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| F. | temp approx. | | | | | |
| 0 | 63 | | | | | |
| 30 | 46 | | | | | |
| 60 | 43.5 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| 20 net | 0 | 1/2 hr. | | |
| 1/2 m net | 0 | " | | |
| 1/2 m " vertical | 55-0 | | | |
| Bottom net | 60-0 | 1/2 hr. | | |

11—5314

NOTES

20 net, surface fair micro

1/2 m net " Rich fish eggs

1/2 m net vertical Very rich Calanus + young fish

Bottom net Rich Calanus Sagitta + young fish

Did not use meter net, as I was already swamped with Calanus and the Bottom net gave very fair sample from the bottom up.

Station No. 10343 Date: July 20 1916

Hour: 2 P. M. to 3 P. M.

Position: Lat. Long.

Locality: Provincetown Habor

Depth: 30—0 Bottom: Sand Sample:

Wind: Direction, S Force, light

Sea: smooth Sky: clear.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| | none | — | | | | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| | | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| Bottom net | 30-0 | 15 min | | |
| " " | 15-0 | " | | |
| towed by launch. | | | | |
| 1/2 m net towed by launch | 0 | 15 min | | |

11—5314

NOTES

Bottom net, towed mostly on bottom, yeilded in the 30 m haul a few sagittae + young fishes. In the 15 m. haul, a swarm of Calanus + young fishes were taken, together with a very rich plankton (Fishes sorted out).

Surface haul very sparse

Station No. 10344 Date: July 22 1916

Hour: 9.15 A. M. to 10.45 A. M.

Position: Lat. Long.

Locality: 6 miles NE by E from Highland Light

Depth: 48 fath 88 m. Bottom: Sample:

Wind: Direction, S. Force, light

Sea: smooth Sky: fog to clearing.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 60.5 | | | 15.83 | ✓ | |
| 25 | R. 149 | 5.2 | 20 | -29 | 4.91 | ✓ | |
| 50 | 148 | 4.4 | 20 | -33 | 4.07 | ✓ | |
| 80 | 153 | 4.5 | 20 | -31 | 4.19 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| ft. temp approx. | | | | | | |
| 0 | 60.5 | | | | | |
| 25 | 41.5 | | | | | |
| 50 | 40 | | | | | |
| 80 | 40 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| ½ m. vertical | 80-0 | | | |
| ½ m net | 0 | ½ hr. | | |
| 20 net | 0 | " | | |
| meter net | 40-0 | 15 min. | | |
| Bottom net | Bto 0 | 20 min | | |

11—5314

NOTES

Vertical haul very rich in Calanus + young fishes

½ m. net Many eggs, few Cal.

20 net Rich micro + eggs

Meter net Swarm Cal + young fishes — 6 qts in 15 minutes.

Bottom net. Scanty sagittae, Cal + young fishes.

Station No. 10345 Date: July 22 1916

Hour: 3.15 P. M. to 4.30 P. M.

Position: Lat. 41°52 Long. 69°40'

Locality:

Depth: 150 m. (82 fath) Bottom: Sample:

Wind: Direction, SSW Force, light

Sea: smooth Sky: thick fog.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 550 | | | 10. | ✓ | |
| 50 | R 149 | 4.44 | 13.5 | -17 | 4.27 | ✓ | |
| 100 | 148 | 4.05 | 13 | -20 | 3.85 | ✓ | |
| 150 | 153 | 4.23 | 13 | -18 | 4.05 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| 4 temp approx. | | | | | | |
| 0 | 50 | | | | | |
| 50 | 40 | | | | | |
| 100 | 39.5 | | | | | |
| 150 | 39.5 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| ½ m net vertical | 150-0 | | | |
| 20 net | 0 | ½ hr | | |
| ½ m net | 0 | " | | |
| Meter net | 100-0 | " | | |

11—5314

NOTES

½ m net vertical fair haul Calanus

20 net. Rich red micro

½ m net Fair Calanus + fish eggs

Meter net Fair Calanus + young fish.

6 P.M. surface temp up to 52°, fog lifting somewhat. Saw 2 large finback whales.

Station No. 10346 Date: July 22 1916

Hour: 10.15 P. M. to 11.30 P. M.

Position: Lat. 41° 27' Long. 69° 22'

Locality:

Depth: 34 fath 62 m. Bottom: coarse sand + shells Sample:

Wind: Direction, SW Force, light

Sea: smooth Sky: thick fog + rain

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 45 | | | 7.22 | ✓ | |
| 30 | 148 | 6.5 | 10 | -09 | 6.41 | ✓ | |
| 60 | 153 | 4.6 | 11 | -12 | 4.48 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| F. temp appar | | | | | | |
| 0 | 45 | | | | | |
| 30 | 43.5 | | | | | |
| 60 | 40.5 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| 1/2 m net, vertical | 62-0 | | | |
| 20 net | 0 | 20 min | | |
| 1/2 m net | 0 | " | | |
| 1 m net | 30-0 | " | | |

11—5314

NOTES

Vertical haul, rich copepods (hit bottom + brought up sand.

20 net Rich copepods + some micro.

1/2 m net Rich copepods

1 m net Rich copepods + some young fishes

Water fining considerably

Station No. 10347 Date: July 23 191

Hour: 7.15 A.M. to 8.20 A.M.

Position: Lat. 41°06' Long. 68°51'

Locality: Georges Bank.

Depth: 43 fath. (78 meters) Bottom: Bottom uneven Sample:

Wind: Direction, SW Force, fresh

Sea: smooth Sky: fog.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 52.5 | | | 11.39 | ✓ | |
| 30 | R 151 | 10.98 | 15° | -07 | 10.91 | — | |
| 60 | 153 | 9.70 | 15° | -10 | 9.60 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| F. temp approx | | | | | | |
| 0 | 52.5 | | | | | |
| 30 | 52 | | | | | |
| 60 | 49.5 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| 1/2 m net Vertical | 60-0 | | | |
| 1/2 m net | 0 | 1/2 hr. | | |
| 20 net | 0 | " | | |
| meter net | 50-0 | " | | |

11—5314

NOTES

Vertical haul — practically nothing but green diatoms + 1 jelley fish

1/2 m surface — diatoms, a few pods + 1 jelley fish.

20 net mostly green diatoms.

Meter net — Many jelley fish, some pods, + 16 young haddock.

Only samples left of 1/2 m surface and meter net hauls
Sample of jelley fish left for Bigelow.

The 16 young haddock measured as follows:

| | |
|---|---|
| 5 cm | 4.7 cm. |
| 3.4 | 4.1 |
| 4.5 | 5 |
| 4.5 | 3.6 |
| 5.5 | 2.6 |
| 4.4 | 4 |
| 4.7 | 3.8 |
| 6.2 | 3.5 |

Station No. 10348 Date: July 23 1916

Hour: 1 P .M. to 3 P .M.

Position: Lat. 40°49' Long. 68°21'

Locality: Georges Bank.

Depth: 28 fath = 57 meters Bottom: White sand Sample:

Wind: Direction, SW Force, light

Sea: smooth. Sky: fog to clear.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 53 | | | 11.67 | ✓ | |
| 25 | R 151 | 11.55 | 22 | -20 | 11.35 | — | |
| 50 | R 153 | 11.38 | 17 | -11 | 11.27 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| 4 temp approx. | | | | | | |
| 0 | 53 | | | | | |
| 25 | 53 | | | | | |
| 50 | 52.5 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| 1/2 m net vertical | 45-0 | | | |
| 20 net | 0 | 1/2 hr. | | |
| 1/2 m net | 0 | " | | |
| Meter net | 30-0 | " | | |
| Otter trawl | Bottom-0 | 20 min | | |
| Bottom net | " " | " | | |

11—5314

NOTES

Vertical haul mostly diatoms (left)
20 net " " " "
1/2 m net " " scant, thrown away.
Meter net, 3 qal jelly fish, 22 small haddock x 1 small butterfish
Otter trawl, 3 skates x 1 dimanda, left.
Bottom net filled with sand, contents lost but net saved.

Note that the haddock were pelagic.

Station No. 10349 Date: July 24 1916

Hour: 5.30 A. M. to 7.30 A. M.

Position: Lat. 40°15' Long. 68°05'

Locality: " "

Depth: 190 m Bottom: Sample:

Wind: Direction, S. Force, light

Sea: smooth Sky: clear

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 63.5 | | | 17.50 | L | |
| 30 | R. 148 | 10.59 | 20 | -23 | 10.36 | L | |
| 80 | 151 | 7.4 | 20 | -24 | 7.16 | L | |
| 130 | 148 | 6.98 | 17 | -19 | 6.79 | L | |
| 180 | 153 | 7. | 21 | -28 | 6.79 | L | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| Fleet approx. | | | | | | |
| 0 | 63.5 | | | | | |
| 30 | 57. | | | | | |
| 80 | 45.5 | | | | | |
| 130 | 44.5 | | | | | |
| 180 | 44.5 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| 1/2 m net vertical | 180-0 | | | |
| 20 net | 0 | 1/2 hr. | | |
| 1/2 m net | 0 | " | | |
| Helgoland net | 130-0 | " | | |
| Meter net | 60-180 | eternity. | | |

11—5314

NOTES

Vertical haul Rich Calanus

20 net fair haul red mice.

1/2 m net; surface scanty, 1 small salp.

Helgoland net Beroe + Calanus, a few Euthemisto + fish eggs.

Meter net was lost, by getting turn on wire – then clip slipped down, cutting off bridle as it dragged.

Between temperatures + nets at this station Mr. Blake harpooned a swordfish 325 cm long. ♀ rd very immature, 1 bucket silver hake + squid in stomach. Another swordfish seen at end of station

6 sword fishermen in company.

~~Shark~~

Station No. 10350 Date: July 24 1916

Hour: 9 A . M. to 11 A . M.

Position: Lat. 40°23' Long. 68°15'

Locality:

Depth: 65 fath. Bottom: sand + mud Sample:

Wind: Direction, S Force, light

Sea: smooth Sky: cloudy.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| | None | | | | | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| | | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| 6 line trawl, 300 hooks baited with salt bluebacks | 65 fath. | | | |

11—5314

NOTES

Trial for tile fish resulted in nothing but 2 squirrel hake, one silver hake + 1 dogfish. No sharks seen as trawl was hauled. Barren bottom, no fish here.

Station No. 10351 Date: July 24 1916

Hour: 4.30 P. M. to 6 P. M.

Position: Lat. 40° 06' Long. 68° 57'

Locality:

Depth: 182 m. Bottom: Sample:

Wind: Direction, S Force, light

Sea: smooth Sky: cloudy

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | . | 60 | | | 15.56 | ✓ | |
| 30 | R 151 | 10.8 | 18 | -14 | 10.66 | ✓ | |
| 80 | ~~R~~ 151 | 4.93 | 11 | -11 | 4.82 | ✓ | |
| 130 | 148 | 6.15 | 18 | -26 | 5.89 | ✓ | |
| 180 | 153 | 7.30 | 19 | -23 | 7.07 | ✓ | |

Note: at 80 m. #149 confirmed reading of #151

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| 4. | temp approx. | | | | | |
| 0 | 60 | | | | | |
| 30 | 57.5 | | | | | |
| 80 | 41 | | | | | |
| 130 | 43 | | | | | |
| 180 | 45 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| 20 net | 0 | 1/2 hr | | |
| 1/2 m " | 0 | " | | |
| P meter net | 160-0 | " | | |

11—5314

NOTES

20 net scant micro & Cal.

1/2 m net, surface fair cal.

P. meter net. fair haul Calanus Euthemisto & Beroe.

Note Having lost our meter net at the last station, rigged up another, but found that the 2 we have, have a circumference of 2 meters, instead of 3.14 meters, so this net will hereafter be called "P. meter net", meaning pseudo-, petit, or punk.

Station No. 1035-2 Date: July 24 1916

Hour: 8 P.M. to 11.30 P.M.

Position: Lat. 40°00' Long. 68°44°

Locality:

Depth: Bottom: Sample:
about 900 fathoms (chart)

Wind: Direction, S.W. Force, light

Sea: smooth Sky: broken clouds

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 62.5 | | | 16.95 | ✓ | |
| 50 | R 148 | 4.65 | 18 | -29 | 4.36 | ✓ | |
| 50 | 149 | 5. (later) | 18 | -26 | 4.74 | | |
| 100 | 148 | 7.8 | 18 | -23 | 7.57 | ✓ | |
| 200 | 153 | 7.8 | 18 | -20 | 7.60 | ✓ | |
| 300 | 149 | 5.9 | 18 | -23 | 5.67 | ✓ | |
| 400 | 148 | 5.3 | 18 | -28 | 5.02 | ✓ | |
| 500 | 153 | 4.25 | 15 | -22 | 4.03 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down Depth | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| 4 letup approx. | | | | | | |
| 0 | 62.5 | | 200 | 46 | | |
| 50 | 40.5 | | 300 | 42.5 | | |
| 50 | 46.0 | | 400 | 41.5 | | |
| 100 | 46 | | 500 | 39.5 | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| 1/2 m net vertical | 500-0 | | | |
| 20 net | 0 | 1/2 hr. | | |
| 1/2 " | 0 | " | | |
| Meter net | 500-0 | 1 hour | | |

11—5314

NOTES

The vertical haul contained mostly salpae & some shrimp.

Surface hauls mostly salpae.

Meter net contained several Myctophids, shrimp, salpae, and 2 bucketsful of some huge form close to Pyrosoma. The latter, which was in fragments, probably consisted of two individuals. A section of one of them was 10 inches in diameter. Portions were preserved in formalin.

Station No. 10353 Date: July 25 1916

Hour: 5:45 A M. to 8 A .M.

Position: Lat. 40°14' Long. 69°08'

Locality:

Depth: 60 fath Bottom: sand. Sample:

Wind: Direction, S. Force, light

Sea: smooth Sky: fog.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 59 | | | 15. | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| | | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| 6 line trawl, 300 hooks baited with salt bluebacks | | | | |
| 1 ft net | 0 | 1/2 hr. | | |

11—5314

NOTES

Total catch on trawl, 2 white hake + 2 squirrel hake.

1 ft net mostly small Euthemisto with a few Calanus + Animalocera.

Quite a large school of blackfish at this sta.

10354 ✓

Station No. ~~10534~~ Date: July 25 191

Hour: 10.45A. M. to 12 . M.

Position: Lat. 40° 26' Long. 69° 24'

Locality:

Depth: 76 m. Bottom: Sample:

Wind: Direction, S. Force, light

Sea: smooth Sky: fog + rain.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 56.5 | | | 13.61 | ✓ | |
| 30 | R.148 | 8.92 | 18 | -21 | 8.71 | ✓ | |
| 70 | 153 | 6.30 | 18 | -23 | 6.07 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| H. temp. Approx. | | | | | | |
| 0 | 56.5 | | | | | |
| 30 | 48 | | | | | |
| 70 | 43.5 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| 1/2 m. net vertical | 70-0 | | | |
| 20 net | 0 | 1/2 hr | | |
| 1/2 m net | 0 | " | | |
| P. Meter net | 60-0 | " | | |
| | | | | |

11—5314

NOTES

Vertical haul, fair Calanus + sagitta

20 net red micro

1/2 m net Scanty Calanus

Meter net. Rich diatoms, also Calanus Euthemisto + shrimp.

Small sword-fish + large shark seen at this station.

Station No. 10355 Date: July 25 1916

Hour: 6 P. M. to 7.30 P. M.

Position: Lat. 40°43' Long. 69°53'

Locality:

Depth: 36 m Bottom: Sample:

Wind: Direction, S.W Force, light

Sea: smooth Sky: fog.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 53.5 | | | 11.95 | ✓ | |
| 30 | R. 148 | 11.08 | 15 | -11 | 10.97 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| 4. bottle approx | | | | | | |
| 0 | 53.5 | | | | | |
| 30 | 52. | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| P. Meter net | 16-0 | 20 min. | | |
| Sled net, bottom | 0 | 20 min. | | |
| 20 net | 0 | ½ hr. | | |
| ½ m " | 0 | ½ hr. | | |

11—5314

NOTES

The meter net + bottom net together brought up 1 bucket of jelly fish, 3 small haddock + 2 small puffers.

Many fish eggs on surface.

Station No. 10356 Date: July 26 1916

Hour: midnight. M. to 1.10 A. M.

Position: Lat. 40° 57' Long. 70° 18'

Locality:

Depth: 32 m Bottom: Sample:

Wind: Direction, SW. Force, light.

Sea: smooth Sky: fog.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 61 | | | 16.11 | ✓ | |
| 30 | R 148 | 12.3 | 18 | -16 | 12.14 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| 4. temp approx. | | | | | | |
| 0 | 61 | | | | | |
| 30 | 54 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| 1/2 m net | 0 | 1/2 hr. | | |
| 20 net | 0 | " | | |
| P. Meter net | 30-0 | " | | |
| " " | 10-0 | 20 min. | | |

11—5314

NOTES

1/2 m net, rich Calanus Sagittae + fish eggs.

20 net rich red micro.

P. Meter net 30-0. Rich Sagitta + fish eggs
" " 10-0 " Calanus " " "

Water firing brightly.

Station No. 10357 Date: July 26 1916

Hour: 7.25 A. M. to 8 A. M.

Position: Lat. 41° 11' Long. 70° 44'

Locality: Off No Man's Land.

Depth: 29 m. Bottom: Sample:

Wind: Direction, SW Force, light

Sea: smooth Sky: cloudy + hazy.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | 64 | | | | 17.78 | ✓ | |
| 25 | R. 148 | 14.4 | 18 | -12 | ~~13.36~~ 14.28 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| T. temp. approx. | | | | | | |
| 0 | 64 | | | | | |
| 25 | 58 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| P. Meter net | 20-0 | 20 | min | |
| 20 net | 0 | " | | |
| ½ m net | 0 | " | | |

11—5314

NOTES

P. Meter net, swarm small fish eggs & some small fry.

20 net, abundant red micro

½ m surface, fish eggs.

Station No. 10358 Date: July 27 1916

Hour: 9.30 A.M. to 11 A.M.

Position: Lat. Long.

Locality: Vineyard Sd. off. Cottage City

Depth: 20 m Bottom: gravel + mud Sample:

Wind: Direction, SW. Force, light

Sea: smooth Sky: fog.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 64.5 | | | 18.05 | ✓ | |
| 18 | R.148 | 18.18 | 18 | -05 | 18.13 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| 4. temp approx | | | | | | |
| 0 | 64.5 | | | | | |
| 18 | 64.5 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| 1/2 m net vertical | 18-0 | | | |
| 1 " net | 8-0 | 1/2 hr. | | |
| 1/2 m " | 0 | " | | |
| 20 " | 0 | " | | |

11—5314

NOTES

This station was made for the benefit of several of the workers at Woods Hole, and the townet collections were turned over to them.

Station No. 10359 Date: July 28 1916

Hour: 11.15 A M. to 12.. M.

Position: Lat. 41° 18' Long. 71° 20

Locality: South of Newport R.I.

Depth: Bottom: Sample:

Wind: Direction, NE, Force, fresh

Sea: smooth Sky: clear

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 62 | | | 16.67 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| | | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| Meter net | 5-0 | 20 min | | |
| 20 net | 0 | " | | |
| ½ m net | 0 | " | | |

11—5314

NOTES

Meter net, Rich fish eggs, & red micro.

20 net. Rich, red micro.

½ m net — Rich haul fish eggs.

Station No. 10360 ✓ Date: July 28 1916

Hour: 6.45 P. M. to 7.15 P. M.

Position: Lat. Long.

Locality: Long Id. Sd. off Gardiners Bay

Depth: Bottom: Sample:

Wind: Direction, E Force, light

Sea: smooth Sky: clear.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 65.5 | | | 18.6 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| | | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| Meter net | 5-0 | 20 min | | |
| ½ m " | 0 | " | | |
| 20 net " | 0 | " | | |

11—5314

NOTES

Station No. 10361 Date: July 29 1916

Hour: 5.30 A. M. to 6.00 A. M.

Position: Lat. Long.

Locality: 3 miles W from Stratford Shoal, Long Id. Sound.

Depth: 27 m Bottom: Sample:

Wind: Direction, NE Force, light

Sea: smooth Sky: hazy.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 68 | | | 20 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| Meter net | 20-0m | 20 min | | |
| 20 net | 0 | " | | |
| 1/2 m net | 0 | " | | |

11—5314

NOTES

Station No. 10362 Date: Aug 1 1916

Hour: 9 A. M. to 10.30 A.M.

Position: Lat. 40°22 Long. 73°38'

Locality:

Depth: 25 m. Bottom: Sample:

Wind: Direction, NE. Force, fresh

Sea: smooth Sky: clear

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 70 | | | 21.1 | ✓ | |
| 22 | R. 148 | 12.45 | 19 | -17 | 12.28 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| F temp approx | | | | | | |
| 0 | 70 | | | | | |
| 22 | 54.5 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| Bottom net | 25-0 | 1/2 hr. | | |
| P. Meter net | 10-0 | " | | |
| 20 net | 0 | " | | |
| 1/2 m net | 0 | " | | |
| Scallop dredge | 25 | 1/4 hr. | | |

11—5314

NOTES

Bottom net + Meter net yielded rich hauls of young fishes

20 net + 1/2 m net on surface, very scanty.

Scallop dredge contained
1 silver hake
6 sand dollars
1 slice watermelon.

Station No. 10363 Date: Aug 1 1916

Hour: 3 P. M. to 4 P. M.

Position: Lat. 40° 13 Long. 73° 21'

Locality:

Depth: 32 m Bottom: shells & sand Sample:

Wind: Direction, calm Force,

Sea: smooth Sky: clear

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 69. | | | 20.5 | ✓ | |
| 30 | R. 148 | 8.32 | 15 | -17 | 8.15 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| 4 temp approx | | | | | | |
| 0 | 69 | | | | | |
| 30 | 47 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| ½ m net vertical | 30-0 | | | |
| Bottom net | 32-0 | ½ hr. | | |
| P. Meter net | 20-0 | " | | |
| 20 net | 0 | " | | |
| ½ m net | 0 | " | | |
| Clam dredge | 32 | 10 minutes | | |

11—5314

NOTES

½ m vertical, fair haul Calanus

Bottom net, rich haul Calanus, Euthemisto + schizopods

Meter net, fair haul Calanus + Euthemisto

20 net, fair haul micro

½ m net (surface) practically nothing

Clam dredge, a few sand dollars.

Between this + the next station passed 3 large schools of bonitos, 20 or 30 sharks + 1 large hammerhead.

A barn swallow + a nuthatch came on board.

Station No. JR 364 Date: Aug 1 191

Hour: 7.15 P. M. to 8.30 P. M.

Position: Lat. 40°01' Long. 72°56'

Locality:

Depth: 45 m. Bottom: Sample:

Wind: Direction, calm Force,

Sea: smooth Sky: clear.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 71.3 | | | 21.8 | ✓ | |
| 40 | R. 148 | 5.75 | 15 | -21 | 5.54 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| F. temp. approx | | | | | | |
| 0 | 71.5 | | | | | |
| 40 | 42.5 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| 20 net | 0 | 1/2 hr. | | |
| 1/2 m " | 0 | " | | |
| P. Meter net | 40-0 | " | | |
| Scallop dredge | 45 | 10 min | | |

11—5314

NOTES

20 net, rich micro

1/2 m net scanty haul.

Meter net Swarm of Calanus + many young fishes

Scallop dredge. 19 large scallops
6 small "
1/4 bushel sand dollars
1 skate
1 small flounder (left)

Nearly calm all night, vessel hardly drifting
4.30 Am put over scallop dredge for 1/2 hr, hardly mooving, + brought up 6 large scallops, 4 small scallops, + 2 large + 1 small quohog.

Put over clam dredge 5.30 Am, dragged 10 minutes, getting 1 quohog, 2 scallops, and many quohog + sea-clam shells.

Station No. 10365 Date: Aug 2 191

Hour: 6.45 A M. to 7.45 A. M.

Position: Lat. 39°41' Long. 72°39'

Locality:

Depth: 61 m. Bottom: Sample:

Wind: Direction, calm Force,

Sea: smooth Sky: clear

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 68.5 | | | 20.3 | ✓ | |
| 20 | R 149 | 14.08 | 22 | -17 | 13.91 | ✓ | |
| 40 | " 148 | 5.28 | 21 | -34 | 4.94 | ✓ | |
| 60 | " 153 | 5:10 | 20 | -30 | 4.80 | | |
| " | " 148 | 5: | 13 | -18 | 4.82 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| T. temp approx | | | | | | |
| 0 | 68.5 | | | | | |
| 20 | ~~41.5~~ | 57 | | | | |
| 40 | 41.5 | | | | | |
| 60 | 41 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| 20 net | 0 | ½ hr. | | |
| ½ m " | 0 | " | | |
| Meter net | 50-0 | " | | |
| ½ m vertical | 60-0 | | | |

11—5314

NOTES

20 net very scanty
½ m " " "
Meter net Swarm of Calanus
½ m vertical fair haul Calanus.

Much floating rockweed.

Station No. 10366 Date: Aug 2 1916

Hour: 2.45 P. M. to . M.

Position: Lat. 39°40' Long. 72°23'

Locality:

Depth: 91 m. Bottom: gr. mud + sand Sample:

Wind: Direction, SSE Force, light

Sea: smooth Sky: clear

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 67 | | | 19.4 | ✓ | |
| 30 | R 149 | 17.7 | 23 | -12 | 17.58 | ✓ | |
| 60 | 148 | 6.2 | 20 | -31 | 5.89 | ✓ | |
| 90 | 153 | 6.08 | 20 | -28 | 5.80 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| H. temp approx. | | | | | | |
| 0 | 67 | | | | | |
| 30 | 64 | | | | | |
| 60 | 43 | | | | | |
| 90 | 43 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| Set 6 line trawl 300 hooks, for tile-fish (salt bluebacks bait). | | | | |

11—5314

NOTES

Catch, 1 squirel hake
1 small eel (kept)

Good bottom, but water very cold.

Station No. 10367 Date: Aug 2 191

Hour: 8.30 P.M. to 9.15 P.M.

Position: Lat. 39°34' Long. 72°01'

Locality:

Depth: 239 m Bottom: Sample:

Wind: Direction, Drifting rapidly towards shelf, South Force, light

Sea: smooth Sky: clear.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 67.5 | | | 19.72 | ✓ | |
| 50 | R. 148 | 8.25 | 15 | -17 | 8.08 | ✓ | |
| 100 | " 149 | 11.04 | 17 | -12 | 10.92 | ✓ | |
| 150 | " 148 | 10.83 | 18 | -18 | 10.65 | ✓ | |
| 200 | " 153 | 8.12 | 20 | -24 | 7.88 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| ft temp approx | | | | | | |
| 0 | 67.5 | | | | | |
| 50 | 47 | | | | | |
| 100 | 52 | | | | | |
| 150 | 51.5 | | | | | |
| 200 | 46.5 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| No nets. | | | | |

11—5314

NOTES

Station No. 10368 ✓ Date: Aug 2 191 6

Hour: 10.45 P. M. to 1 A. M.

Position: Lat. 39°33' Long. 71°53'

Locality:

Depth: overboard Bottom: Sample:

Wind: Direction, S by E Force, fresh

Sea: moderate chop. Sky: Clear.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 68 | | | 20 | ✓ | |
| 100 | R 148 | 11.42 | 20 | -21 | 11.21 | ✓ | |
| 200 | 153 | 8.80 | " | -22 | 858 | ✓ | |
| 300 | 149 | Temp. lost. | | | | ✓ | |
| 400 | 148 | 5.50 | " | -32 | 5.18 | ✓ | |
| 500 | 153 | 4.94 | 18 | -26 | 4.68 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| ✓ temp approx | | | | | | |
| 0 | 68 | | | | | |
| 100 | 52.5 | | | | | |
| 200 | 48 | | | | | |
| 300 | | | | | | |
| 400 | 42 | | | | | |
| 500 | 41 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| P. Meter net | 450-0 | 1 hour | | |
| 20 net | 0 | ½ " | | |
| ½ m net | 0 | " | " | |

11—5314

NOTES

P. meter net, fair haul myctophids + gulf stream plankton

20 net scanty micro.

½ m net very scanty.

Station No. 10369 Date: Aug 3 191

Hour: 5.15 A. M. to . M.

Position: Lat. 39°21' Long. 72°29'

Locality:

Depth: 137 m. Bottom: Blue clay with green mud sand & shells Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 71 | | | 21.7 | 0 | |
| 90 | R 148 | 8.17 | 16 | -19 | 7.98 | 0 | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| F. temp approx | | | | | | |
| 0 | 71 | | | | | |
| 90 | 46.5 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| Scallop dredge | 137-0 | ½ hr | very | slowly |
| Bottom net ½ m " | 137-0<br>0 | ½ hr.<br>20 min | | |
| Trawl for tilefish. | | [illegible] 1 hr. | | |

11—5314

NOTES

Scallop dredge. — mud, sand + dead shells, — 3 quohogs. many stars

Bottom net. fair Calanus haul ½ m net skanty, but fair no of tile-fish eggs.

Tile-fish set, 11 tilefish, as follows.

| | | | |
|---|---|---|---|
| Hard | ♀ | 16 Kilo | 108 cm. |
| Ripe | " | 7 " | 81 |
| | " | 8.5 | 88 |
| | " | 7.5 | 84 |
| | " | 7.5 | 85 |
| | " | 8. | 86 |
| | " | 7 | 80 |
| | " | 8 | 77 |
| | " | 8 | 83 |
| | " | 7.5 | 86 |
| | " | 7 | 82 |

Salted bluebacks poor bait — fish just played with it + hooked foul! Very good ground.

No sharks seen. Many Physalia

Station No. 10370 Date: Aug 3 191

Hour: 1.45 P. M. to 4.25 P. M.

Position: Lat. 38°55' Long. 72°54'

Locality:

Depth: 118 m Bottom: gy & gn sand Sample:

Wind: Direction, SE Force, light

Sea: smooth Sky: clear

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 71 | | | 21.7 | ✓ | |
| 25 | 149 | 9.3 | 27 | -36 | 8.94 | ✓ | |
| 50 | 148 | 5.45 | 27 | -46 | 4.99 | ✓ | |
| 100 | 153 | 9.82 | 27 | -35 | 9.47 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| F. temp approx. | | | | | | |
| 0 | 71 | | | | | |
| 25 | 48.5 | | | | | |
| 50 | 42 | | | | | |
| 100 | 49.5 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| 20 net | 0 | 15 min | | |
| ½ m net | 0 | " | " | |
| Bottom net | 118-0 | ½ hr | | |
| Meter net | 50-0 | 20 min | | |
| Otter trawl | 118-0 | 15 min. | | |

11—5314

NOTES

20 net Scanty
½ m net nothing
Bottom net Swarm Calanus
Meter net ~~[illegible]~~ " "

Otter trawl

4 P. oblongus
many crabs, stars + quahog shells.

Caught Hammerhead Shark 9.9 ft long at end of this station.

Got eggs of Pseudopleuronectes oblongus

Station No. 10371 Date: Aug 3 191

Hour: 6.30 P. M. to 7 P. M.

Position: Lat. 38° 54' Long. 73° 06'

Locality:

Depth: 84 m. Bottom: green sand Sample:

Wind: Direction, SSW Force,

Sea: Sky:

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 72 | | | 22.2 | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| F. boat approx. | | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| 1/2 m net | 0 | 20 | min | |
| Otter trawl | 84-0 | | " | |

11—5314

NOTES

1/2 m net very scanty.

Otter trawl. Quahog shells, 1 large + 1 small scallop.

Many starfish + crabs.

Station No. 10372 Date: Aug 3 191

Hour: 10.45 P.M. to 12 . Midnight

Position: Lat. 38° 53' Long. 73° 20'

Locality:

Depth: 75 m Bottom: Sample:

Wind: Direction, SW Force, light

Sea: smooth Sky: clear.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 11 cm | | | | | | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| | | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| Scallop dredge | 75 m | 15 min | | |
| Otter trawl | " | 1/2 hr. | | |

11—5314

NOTES

Scallop dredge 33 large + 8 small scallops
1 large mussel
Many scallop shells
A few stars + crabs

Otter trawl 62 large 5 small scallops
4 P. oblongus
1 squirrel hake

Station No. 10373 ✓ Date: Aug 4 191

Hour: 2.15 A M. to . M.

Position: Lat. 38° 57' Long. 73° 35'

Locality:

Depth: 62 m. Bottom: gr mud & sand Sample:

Wind: Direction, SW Force, light

Sea: smooth Sky: clear

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 70 | | | 21.1 | ✓ | |
| 60 | R 148 | 4.7 | 13 | -18 | 4.52 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| F. temp approx. | | | | | | |
| 0 | 70 | | | | | |
| 60 | 40.5 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| 1/2 m net | 0 | 20 min | | |
| 20 " " | 0 | " | | |
| Bottom net | 60-0 | 1/2 hr. | | |
| Scallop dredge | [illegible] | 10 min. | | |

11—5314

NOTES

20 net, rich micro
1/2 m net very scanty
Bottom net, Calanus swarm.

Scallop dredge 14 large scallops
1 small "
1/2 bushel dead shells
+ sand dollars.
1 silver hake.

Station No. 10374 Date: Aug 4 191

Hour: 5 A. M. to 5.30 A. M.

Position: Lat. 38°58' Long. 73°55'

Locality:

Depth: 46 m. Bottom: Sample:

Wind: Direction, SW by S. Force, light

Sea: smooth Sky: clear.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| | None | | | | | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| | | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| Scallop dredge | | 15 min. | | |

11—5314

NOTES

Dredge - 2 bushels sponge + sand dollars.

Station No. 10375 Date: Aug 4 191

Hour: 8 Am. M. to 8:45 A. M.

Position: Lat. 38°59' Long. 74°08'

Locality:

Depth: 41 m. Bottom: Sample:

Wind: Direction, Calm Force,

Sea: smooth Sky: clear.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 71.5 | | | 21.9 | ✓ | |
| 40 | R 148 | 6.38 | 15 | -20 | 6.18 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| 4 temp approx | | | | | | |
| 0 | 71.5 | | | | | |
| 40 | 43.5 | | | | | |

Color of water: Transparency:

REMARKS: 11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| Bottom net | 41-0 | ½ hr. | | |
| ½ m net | 0 | 20 min | | |
| 20 net | 0 | " | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

11—5314

NOTES

Bottom net, rich copepods, Euthemisto + young fishes

½ m net scanty.

20 net "

Station No. 10376 Date: Aug 7 191

Hour: 2.30 P. M. to 4 P. M.

Position: Lat. Long.

Locality: Cape May harbor.

Depth: @ 10 m. Bottom: mud. Sample:

Wind: Direction, SW Force, light

Sea: smooth Sky: clear.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | at vessel | 78 | | | 25.6 | ✓ | |
| 0 | at inlet | 76 | | | 24.4 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| | | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| 1/2 m net | 0 | 1/2 hr | | |
| 20 net | 0 | " | | |
| Bottom net | 5=0 | " | | |

11—5314

NOTES

All nets nothing but a swarm of ctenophores

Aug. 8, 8 AM to 11 AM, a number of seine haules made at the inlet yielded numerous intermediate sizes of young fishes and swarms of Mnemiopsis.

Station No. 377 Date: Aug 10 1916

Hour: 7.30 A. M. to 4.30 P. M.

Position: Lat. off Cape May — see log. Long.

Locality: (H) SE by E 1/4 E from Cold Spring Jetties 7.2 miles

Depth: 16 in. Bottom: 1 ft. Sample:

Wind: Direction, NE Force, fresh

Sea: smooth Sky: cloudy.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 71.5 | | | 21.9 | ✓ | |
| 15 | R. 148 | 15.9 | 20 | -13 | 15.77 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| 4. temp approx. | | | | | | |
| 0 | 71.5 | | | | | |
| 15 | 60.5 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| Clam dredge | 16 | 10 min. | | |
| Bottom net | 16-0 | 35 " | | |
| 1/2 m " | 0 | 30 min | | |
| 20 net | 0 | " | " | |
| Otter trawl | 16-0 | 20 " | | |

11—5314

NOTES

Clam dredge. 1 king crab, 1 sea robin a few dead quohog + sea clam shells.

Bottom net. Little but ctenophores

1/2 m net Ctenophores + fish eggs

20 net Fair haul micro.

Otter trawl, 1 Sophopsetta
Sea robins, rib. ♂ 4, hard ♂ 1
" ♀ 2
1 Paralichthys dentatus.
Sea-clam shells.

For sub-stations 10377 A to N inclusive see log.

Station No. 10378 Date: Aug 11 1916

Hour: 9.45 A. M. to 10.30 A. M.

Position: Lat. Long.

Locality: Meerays Shoal, off Cape May

Depth: 14 m. Bottom: Sand & shells Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 70 | | | 21.1 | ✓ | |
| 14 | R148 | 21.1 | 22 | -08 | 21.02 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| ∴ temp approx. | | | | | | |
| 0 | 70 | | | | | |
| 14 | 70 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| Otter trawl | 14-0 m | ½ hr. | | |
| 20 net | 0 | 20 min | | |
| ½ m " | 0 | " | | |

11—5314

NOTES

Otter trawl — Red & gray worm tubes
23 sea robins
1 puffer
5. P. dentatus
1. Lephopsetta
1 Skate

20 net, fair micro
½ m net. very scanty.

For sub-stations A to D see log.

Station No. 10379 Date: Aug 11 191

Hour: 4.40 P. M. to 6. P. M.

Position: Lat. Long.

Locality: 1 mile S.W. from 5 fathom bank lightship.

Depth: 27 m. Bottom: Sample:

Wind: Direction, calm Force,

Sea: ground swell Sky: clear.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 74.5 | | | 23.6 | ✓ | |
| 25 | R148 | 11.05 | 18 | -18 | 10.87 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| 4. temp approx. | | | | | | |
| 0 | 74.5 | | | | | |
| 25 | 5-2 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| Bottom net | 27-0 | 20 min | | |
| 1/2 m net | 0 | " | | |
| 20 net | 0 | " | | |
| Scallop dredge | 27-0 | 25 min | | (slow) |

11—5314

NOTES

Bottom net. Swarm ctenophores, & 1 Clione.

1/2 m net Scanty.
20 net "

Scallop dredge, 1 bush sand dollars, stars & dead sea-clam shells.

Station No. 10380 Date: Aug 12 1916

Hour: 1 A. M. to 2.30 A. M.

Position: Lat. Long.

Locality: 38° 27' 74° 25'

Depth: 42 m. Bottom: Sample:

Wind: Direction, WSW Force, fresh

Sea: choppy Sky: cloudy.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 74.5 | | | 23.6 | ✓ | |
| 20 | R. 148 | 6.98 | 19 | -27 | 6.71 | ✓ | |
| 40 | R 153 | 6.94 | 18 | -22 | 6.72 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| F temp approx | | | | | | |
| 0 | 74.5 | | | | | |
| 20 | 44.5 | | | | | |
| 40 | 44.5 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| Bottom net | 35-0 | ½ hr. | | |
| ½ m net | 0 | " | | |
| 20 net | 0 | " | | |

11—5314

NOTES

Bottom net, rich copepods & young fish
½ m net Swarm ctenophores
20 net Scanty

Station No. 10381 Date: Aug 12 191 6

Hour: 6.35 A. M. to 8.45 A. M.

Position: Lat. 38° 09' Long. 74° 12'

Locality:

Depth: 69 m. Bottom: grn sand & mud Sample:

Wind: Direction, SW Force, light

Sea: choppy Sky: cloudy

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 74.5 | | | 23.6 | ✓ | |
| 20 | R 149 | 17.17 | 24 | -16 | 17.01 | ✓ | |
| 30 | 148 | 4.4 | 17 | -29 | 4.11 | ✓ | |
| 40 | 148 | 4.5 | 22 | -37 | 4.13 | ✓ | |
| 65 | 153 | 4.4 | 21 | -34 | 4.06 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| F. temp approx | | | | | | |
| 0 | 74.5 | | | | | |
| 20 | 63 | | | | | |
| 30 | 40 | | | | | |
| 40 | 40 | | | | | |
| 65 | 40 | | | | | |

Color of water: Transparency:

REMARKS: 11—5314

Much gulfweed

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| Scallop dredge | 69 | 15 min. | | |
| Bottom net | 69-0 | 20 min | | |
| Meter net | 25-0 | " | | |
| 20 net | 0 | " | | |
| 1/2 m net | 0 | " | | |

11—5314

NOTES

Scallop dredge, 6 scallops, 1 basket stars, few quahog shells.

Bottom net, swarm Calanus + Euthemisto

Meter net Scanty, small pods + salps.

20 net scanty

1/2 m net many small black pods.

Station No. 10382 Date: Aug 12 1916

Hour: 11.30 A. M. to 4.00 P. M.

Position: Lat. 37°5'5' Long. 74°08'

Locality:

Depth: 120 m. Bottom: Sample:

Wind: Direction, N. W. Force, fresh

Sea: smooth Sky: clear.

TEMPERATURES

| Depth | Thermometer Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 76 | | | 24.4 | ✓ | |
| 40 | R 149 | 7.35 | 24 | -33 | 7.02 | ✓ | |
| 80 | 148 | 5.10 | 23 | -39 | 4.71 | ✓ | |
| 120 | 153 | 7.05 | 22 | -30 | 6.75 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| H. temp. approx | | | | | | |
| 0 | 76 | | | | | |
| 40 | 45 | | | | | |
| 80 | 41 | | | | | |
| 120 | 44.5 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| Bottom net | 120-0 | ½ hr. | | |
| Meter net | 50-0 | " | | |
| 20 net | 0 | " | | |
| ½ m net | 0 | " | | |
| Otter trawl | 128 | 10 min. | | |

Set trawl for tilefish, 2 hrs.

11—5314

NOTES

Bottom net, fair haul Cal + Euthemista

Meter net fair haul Calanus

20 net Very scanty

½ m net. A few large eggs (Peristedion)

Otter trawl; 1 lobster, 31 cm.
4 4 spot flounders
4 Peristedion (rifs)
2 Urophycis
Crabs, stars, sponges, 1 large salp + some small crustaceans.

Trawl — good tile-fish bottom, but nothing taken except 1 small Urophycis + 1 silver hake.

Station No. 10383 Date: Aug 12 1916

Hour: 4.45 P. M. to 5-30 P. M.

Position: Lat. 37° 52 Long. 74° 04'

Locality:

Depth: 175 ms Bottom: Sample:

Wind: Direction, N. W. Force, light

Sea: smooth. Sky: clear

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 76.5 | | | 24.7 | ✓ | |
| 25 | 148 | 13.68 | 23 | -24 | 13.44 | ✓ | |
| 50 | 153 | 5.2 | 21 | -32 | 4.88 | ✓ | |
| 100 | 149 | 5.7 | 17.5 | -23 | 5.47 | ✓ | |
| 150 | 148 | 11.45 | 16 | -13 | 11.32 | ✓ | |
| 175 | 153 | 9.94 | 19 | -19 | 9.75 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| F. temp apprx | | | | | | |
| 0 | 76.5 | | | | | |
| 25 | 56.5 | | | | | |
| 50 | 41.5 | | | | | |
| 100 | 42.5 | | | | | |
| 150 | 52.5 | | | | | |
| 175 | 50 | | | | | |

Color of water: Transparency:

REMARKS: 11—5314

Humpback whale close by.

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| No nets. | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

11—5314

NOTES

Station No. 10384 Date: Aug 12 1916

Hour: 6.15 P. M. to 9 P. M.

Position: Lat. 37° 46' Long. 74° 00'

Locality:

Depth: — Bottom: Sample:

Wind: Direction, WNW Force, fresh

Sea: light chop. Sky: clear.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 76.5 | | | 24.7 | ✓ | |
| 50 | 149 | 9.82 | 25 | -31 | 9.51 | ✓ | |
| 100 | 148 | 10.64 | 25 | -34 | 10.30 | ✓ | |
| 150 | 153 | 11.30 | 25 | -29 | 11.01 | ✓ | |
| 250 | 149 | 9.50 | 20 | -21 | 9.29 | ✓ | |
| 350 | 148 | 6.48 | 18 | -26 | 6.22 | ✓ | |
| 500 | 153 | 5.03 | 20 | -30 | 4.73 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| ~~Depth~~ Current approx | | | | | | |
| 0 | 76.5 | | | | | |
| 50 | 49.5 | | | | | |
| 100 | 51 | | | | | |
| 150 | 52.5 | | | | | |
| 250 | 49 | | | | | |
| 350 | 43.5 | | | | | |
| 500 | 41 | | | | | |

Color of water: Transparency:

REMARKS: 11—5314

School of porpoises + blackfish in company.

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| Bottom net | 500-0 | | | |
| Meter net | 200-0 | | | |
| 20 net | 0 | | | |
| 1/2 m net | 0 | | | |
| | | | | |

11—5314

NOTES

Bottom net - Myctophids, Salpa etc

Meter net Salpa & schizopod etc.

20 net Scanty micro.

1/2 m net Small salps.

Station No. 10385 Date: Aug 13 1916

Hour: 5.30 A. M. to 9.15 A. M.

Position: Lat. 37°28' Long. 74°25'

Locality:

Depth: 140 m. Bottom: Sample:

Wind: Direction, N.W. Force, light

Sea: smooth Sky: cloudy.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 76 | | | 24.4 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| | | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| Trawl for tile fish | | 2 hours. | | |
| 1 ft net on surface. | | | | |
| Otter trawl | 140 | 15 min. | | |
| | | | | |
| | | | | |
| | | | | |

11—5314

NOTES

Trawl yielded nothing — many baits gone.

Otter trawl, 2 jelly fish, some small stars + salps.

Physalia + gulf-weed abundant.

An attempt was made to set for tile fish at 1.30 P.M., but heavy squall prevented, lost 1 tub trawl.

Station No. 10386 Date: Aug 13 1916

Hour: 4.30 P. M. to 5 P. M.

Position: Lat. 37° 03' Long. 74° 58'

Locality:

Depth: 62 m. Bottom: Sample:

Wind: Direction, NE Force, Stiff

Sea: rough Sky: cloudy.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| Too rough to risk instruments. | | | | | | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| Meter net | 45-0m | | 1/2 hr. | |
| 1/2 m net | 0 | | 25 min. | |

11—5314

NOTES

Meter net, Swarm of Clione, Euthemisto + Cofepods.

1/2 m net. Small dark green pods + young fishes.

Station No. 10387 Date: Aug 21 1916

Hour: 12.30 P. M. to 2 P. . M.

Position: Lat. Long.

Locality: Off Cape Henry light buoy 1-2 mile

Depth: 13 m. Bottom: sand. Sample:

Wind: Direction, W Force, light

Sea: smooth Sky: clear.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 74 | | | 23.3 | ✓ | |
| 12 | R.148 | 23.3 | 24 | -.08 | 23.22 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| A. temp approx | | | | | | |
| 0 | 74 | | | | | |
| 12 | 74 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| 20 net | 0 | 1/2 hr. | | |
| 1/2 m net | 0 | " | | |
| Bottom net | 12-0 | " | | |
| Otter trawl | 12-0 | 15 min | | |

11—5314

NOTES

20 net. rich green micro

1/2 m net Scanty.

Bottom net. Rich y.f. + Crustaceans.

Otter trawl 7 blue crabs.
2 young sea robins
1 Sophopsetta.

1 small shark seen.
Very few ctenophores.

Station No. 10388 Date: Aug 21 1916

Hour: 3.15 P. M. to 3.20 P. M.

Position: Lat. 36° 51' Long. 75° 38

Locality:

Depth: Bottom: Sample:

Wind: Direction, W. Force, light

Sea: smooth Sky: clear.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| | None | | | | | | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| | | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| Otter trawl | | 10 min | | - |

11—5314

NOTES

Saw several boats fishing for sea-bass & croakers, but getting nothing. Put over otter trawl 10 min, & got 14 croakers & several sea-robins.

Station No. 10389 Date: Aug 21 191

Hour: 4.15 P.M. to 5:45 P.M.

Position: Lat. 36°50' Long. 75°27'

Locality: 15 miles E from Cape Henry light buoy.

Depth: 19 m. Bottom: Sample:

Wind: Direction, S Force, light

Sea: smooth Sky: clear.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 75 | | | 23.9 | ✓ | |
| 10 | R 148 | 23.45 | 26 | -13 | 23.32 | ✓ | |
| 18 | 153 | 22.40 | 25.5 | -09 | 22.31 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| F. temp approx | | | | | | |
| 0 | 75 | | | | | |
| 10 | 74 | | | | | |
| 18 | 72.5 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| Bottom net | 18-0 | 45 | min. | |
| 20 net | 0 | " | | |
| 1/2 m net | 0 | " | | |
| Otter trawl | 18 | 10 | min. | |
| | | | | |
| | | | | |

11—5314

NOTES

Bottom net. A few ctenophores + young fish.

20 net fair haul micro

1/2 m net. A few medusae, y.f. + ctenophores.

Otter trawl. 5 croakers + 3 sea-robins — net torn.

Station No. 10390 Date: Aug 21 191

Hour: 8.15 P.M. to 9.45 P.M.

Position: Lat. 36°49' Long. 75°14'

Locality: "

Depth: 26m. Bottom: Sample:

Wind: Direction, S. Force, fresh

Sea: smooth Sky: clear.

TEMPERATURES

| Depth | Thermometer—Make and No. | Reading | Stem Temp. | Correction | Corrected Temp. | W. Sample | Bottle used |
|---|---|---|---|---|---|---|---|
| 0 | | 75 | | | 23.9 | ✓ | |
| 12 | 148 | 23.5 | 24 | -08 | 23.42 | ✓ | |
| 25 | 153 | 16.73 | 24 | -18 | 16.55 | ✓ | |

CURRENTS

| Depth | Hour | Tide | Time down | Revolutions | Speed | Direction |
|---|---|---|---|---|---|---|
| 4. temp approx | | | | | | |
| 0 | 75 | | | | | |
| 12 | 74.5 | | | | | |
| 25 | 62 | | | | | |

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

| Description | Depth | TIME | | Speed |
|---|---|---|---|---|
| | | Down | Up | |
| Bottom net | 26-0 | ½ hr. | | |
| 20 net | 0 | " | | |
| ½ m net | 0 | " | | |
| Otter trawl | 26 | 10 min. | | |

11—5314

NOTES

Bottom net. A few ctenophores, medusae, worms etc.

20 net. fair haul micro

½ m net scanty.

Otter trawl, 2 squids, 1 Loligopsetta. Smooth, barren bottom.