ORIGINAL LOG BOOK OF THE "GRAMPUS"

UNITED STATES FISH COMMISSION

STATION NUMBERS

Numbers 10315 to 10339

1915

10315-339

Grampus

✓

Station No. 10315 Date: Sept 7 1915

Hour: 11 A. M. to . M.

Position: Lat. 43°49' Long. 66°44'

Locality:

Depth: 97 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		54				✓	
50	Hy 95245	50.5				✓	Big
90	" 53742	50.				✓	"

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 meter net	80-0	vertical		

11—5314

NOTES

Some Calanus in vertical haul — little else.

Station No. 10316 Date: Sept 11 1915

Hour: 8.30 A.M. to . M.

Position: Lat. Long.

Locality: 2 miles S.S.W of Libbey Id. St.

Depth: 64 m. Bottom: Sample:

Wind: Direction, W. Force, faint

Sea: smooth. Sky: hazy.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		50.50				✓	
60	old Hg 98245	50.25				✓	Big.

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	60-0	Vertical		
20 net	0			
1/2 m net	0			
Meter net, coarse	30-0			

11—5314

NOTES

Vertical haul, fair haul minute copepods

All other hauls extremely scant, but kept.

Station No. 10317 Date: Sept 15 1915

Hour: 12 noon. M. to . M.

Position: Lat. Long.

Locality: Burnt Coat Hbr. Whistle Buoy.

Depth: 31 m. Bottom: Sample:

Wind: Direction, N. E. Force, light

Sea: smooth Sky: foggy.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		53				✓	
28 m	Hy. 98245	52				✓	Big

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. vertical	28-0	Vertical		
Meter net	20-0	1/2 hr.		
1/2 " "	0	15 min.		
20 net	0	"		

11—5314

NOTES

Vertical haul contained 2 or 3 Calanus, practically nothing.

Meter net—very few Calanus—nothing else.

1/2 m. net, surface, a few fish eggs, little else.

20 net., surface—abundant red micro.

Station No. 10318 Date: Sept 16 191 3

Hour: 12.15 A. M. to 1.15 A. M.

Position: Lat. Long.

Locality: 3 miles S from Michigan St.

Depth: 78 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		56.5				✓	
35	Hy 53742	50.2				✓	Big
70	" 98245	47.8				✓	"

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	50-0	½ hr.		
½ m "	0	"		
20 "	0	"		
½ m net	70-0	vertical		

11—5314

NOTES

Meter net — scant haul Calanus, Sagitta, shrimp + Euthemisto.

½ m, surface — scant haul Calanus etc.

20 net " abundant red micro.

½ m net vertical, fair haul Calanus etc.

Water firing very brilliantly.

Station No. 10319 Date: Sept 20 1915

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

Position: Lat. Long.

Locality: Wood Id. bearing W. 3 miles.

Depth: 54 meters, Bottom shoaling to 38 m. 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		60				✓	
25	H3 53742	51				✓	Big
50	" "	47.3				✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME Down	TIME Up	Speed
1/2 m. (bottom)	35-0	Vertical		
Meter net	25-0	1/2 hr.		
1/2 " "	0			
20 net	0			

11—5314

NOTES

Vertical haul fair catch Calanus + Sagittae.

Meter net, few Calanus + some large eggs.

20 net, abundant reddish micro.

1/2 m., surface, large haul. 1 small lobster, 1 inch long.

Station No. 10320 Date: Sept 29 1915

Hour: 10.30 A. M. to 11.30 A. M.

Position: Lat. 42°25' Long. 70°33

Locality: 10 miles S by E½ E from Gloucester Whistle buoy.

Depth: 82 m. Bottom: Sample:

Wind: Direction, N.W. Force, fresh

Sea: choppy Sky: clear.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		51				✓	
35 m	53742	51.4				✓	Big
70 m	98245	45.				✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME Down	TIME Up	Speed
1/2 m net	70-0	Vertical		
Meter "	50-0	1/2 hr.		
1/2 m "	0			
20 "	0			

11—5314

NOTES

Vertical, fair catch Calanus
Meter net, fair haul Calanus,
Saggitae, small amphipods + young fishes
1/2 m, surface, fair haul minute copepods.
20 net " rich haul reddish micro.

Strong N.W. wind for 2 days.

Surf temp, Gloucester Hbr., 8:15 AM, 49°
" " " Whistle bay 9 AM. 50.5°
(also water sample)

Station No. 10321 Date: Sept 29 1915

Hour: 2 P. .M. to 3.30 P. .M.

Position: Lat. 42°10' Long. 70°22'

Locality:

Depth: 48 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		52.5				✓	
20	Hy. 53742	53.6				✓	Big
40	" 98245	52.5				✓	"

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	40-0	Vertical		
Meter net	25-0	20 min.		
4 ft stramin (bottom).	48-0	1/2 hr.		
1/2 m. net	0	"		
20 net	0	"		

11—5314

NOTES

Vertical haul, rich, minute copepods.

Meter net, Scanty Calanus, Pteropods, Young fish, sagittae.

4 ft stramin, bottom, Rich haul sagittae, Young fish + shrimp.

1/2 m surface, Abundant small copepods

20 net " Rich, red micro.

Station No. 10322 Date: Oct 1 1915

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

Position: Lat. Long.

Locality: Race Point (Cape Cod) bearing NW about 1 mile

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		56.2				✓	
25	N.Y. 98245	55.6				✓	Big.

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	15-0	1/2 hr		
20 net	0	"		
1/2 m "	0	"		

11—5314

NOTES

Meter net contained practically nothing. Not kept.

20 net – ~~many minute copepods, little micro.~~ rich micro.

1/2 m net, many minute copepods, little micro

Station No. 10323 Date: Oct 1st 1915

Hour: 1.30 P.M. to . M.

Position: Lat. 42°17' Long. 70°07'.

Locality: Provincetown monument bearing S.W.

Depth: 87 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		62.5				✓	
40	Hy. 53742	57.8				✓	Big
80	" 98245	42.8				✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS: 11—5314

Mackerel fleet (about 33 vessels) 1 mile N.W. End of station close to fleet.

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
1/2 m net	80-0	Vertical		
Meter net	70-0	1/2 hr		
1/2 m net	0		"	
20 net	0		"	

11—5314

NOTES

Vertical haul, fair catch Calanus + sagittae.

Meter net, fair catch Calanus, Sagittae + young fishes.

1/2 m surface, few Calanus, many Pleurobrachia + few Beroe.

20 net, rich micro.

Station No. 10324 Date: Oct 1 1915

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

Position: Lat. 42°31' Long. 70°19'

Locality: In the "deep hole" of Mass. Bay.

Depth: 158 m. Bottom: Sample:

Wind: Direction, W. Force, light

Sea: smooth Sky: cloudy.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		50.5				✓	
40	Ny. 53742	37.5				✓	Big
80	" 98245	44.8				✓	"
120	" 53742	45.				✓	"
150	" 98245	44.2				✓	"

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	150-0	Vertical		

11—5314

NOTES

Vertical haul, scanty catch Calanus & Euthemisto.

Station No. 10325 Date: Oct 4 1915

Hour: 2 P. M. to . M.

Position: Lat. 43°00 Long. 70°12

Locality:

Depth: 183 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
0		53				✓	
50	98245 Hy	45.5				✓	Big
100	53742 "	43.5				✓	"
175	98245 "	41.8				✓	"

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	175-0	Vertical		

11—5314

NOTES

Vertical haul. Abundant Calanus + a few Sagitta.

Station No. 10326 Date: Oct 4 1915

Hour: 9.30 P. M. to . M.

Position: Lat. 43°24' Long. 69°53'

Locality:

Depth: 155 m. Bottom: Sample:

Wind: Direction, SW Force, fresh

Sea: smooth Sky: clear & dark.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		53.5				✓	
50	98245 Ny.	46				✓	Big.
100	53742 "	42				✓	"
140	98245	42				✓	"

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 meter net	145-0	Vertical		

11—5314

NOTES

Vertical haul, abundant Calanus & shrimp.

Water firing with micro.

Station No. 10327 Date: Oct 9 191 5

Hour: 7.45 A.M. to 8.45 A.M.

Position: Lat. Long.

Locality: Libbey Id bearing N.N.W. 1 1/2 miles

Depth: 62 m. Bottom: Sample:

Wind: Direction, W. Force, light

Sea: smooth Sky: Cloudy

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		49				✓	
30	H 53742	50.5				✓	Big
60	" 98245	50				✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME Down	TIME Up	Speed
1/2 m net	60-0	Vertical		
1 ft #5 net	0	1/2 hr.		
20 net	0			
Meter (coarse)	40-0			

11—5314

NOTES

Vertical haul. Scanty Calanus.

1 ft, surface, Nothing - not kept.

20 net " abundant small reddish plankton

Meter net, 40-0. Scanty Calanus, a few young herring + Pleurobrachia

Station No. 10328 Date: Oct 9 1915

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

Position: Lat. Long.

Locality: Gt. Duck Isd bearing N 1½ miles

Depth: 66 m. Bottom: Sample:

Wind: Direction, N. W. Force, fresh

Sea: smooth Sky: cloudy

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		49				✓	
30	N 53742	57				✓	Big
60	" 98245	50.5				✓	"

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.	60-0	Vertical		
20 net	0	1/2 hr		
1/2 m net	0	"		
Meter net	40-0			

11—5314

NOTES

Vertical haul, Scanty Calanus.

20 net Rich haul red micro.

1/2 m. (surface) Rich haul minute copepods.

Meter net, 40-0, fair haul Calanus + a few young herring.

Station No. 10329 Date: Oct 9 1915

Hour: 8.45 P.M. to 10 P.M.

Position: Lat. Long.

Locality: Matinicus Rk. bearing N by E, 1½ miles

Depth: 69 m. Bottom: Sample:

Wind: Direction, N. Force, light

Sea: smooth Sky: clear & dark.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0	–	50				✓	
30	Hy 53742	51				✓	Big
60	" 98245	48.6				✓	"

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	
1/2 m net	60-0	Vertical		
20 net	0	1/2 hr		
1/2 m net	0		"	
Meter net	40-0		"	

11—5314

NOTES

Vertical haul, rich, Calanus, Sagittae + Pleurobrachia.

20 net, surface, Red micro, Cal. + Sagittae

1/2 m net ", Rich haul Calanus, Sagittae, + pteropods.

Meter net, coarse, Rich + varied haul, Pleurobrachia, Tomopteris, Calanus, Sagittae + pteropods, etc 15 young herring + 2 young Glyptocephalus. (fish picked out.

1

Station No. 10330 Date: Oct 18 1915

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

Position: Lat. Long.

Locality: Off Gloucester, Mass. Eastern Pt N.W. 1½ mi.

Depth: 47 m 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		52.5				✓	

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	25-0	25 min		
1/2 " net	0		"	
20 net "	0		"	

11—5314

NOTES

Meter net scanty Calanus, sagittae + young fishes, especially herring larvae. (4 fishes picked out).

1/2 m. A few Calanus, abundant minute copepods.

20 net Abundant red micro.

Station No. 10331 Date: Oct 22 1915

Hour: 9.45 A.M. to 10.45 A.M.

Position: Lat. Long.

Locality: Gay Head bearing N E. 3 miles.

Depth: 34 m. Bottom: Sample:

Wind: Direction, N W. Force, fresh

Sea: choppy Sky: clear

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		58				✓	
30	N 98245	58.5				✓	

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS: 11—5314

Strong tide made towing difficult. — too fast or too slow all the time

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
1/2 m net vertical	30-0			
Meter net	25-0		1/2 hr	
1/2 m net	0		"	
20 net	0		"	

11—5314

NOTES

Vertical haul, rich catch small red stuff, + 1 young fish.

Meter net. Very scanty – net slimy with micro.

1/2 m net, Rich catch small red stuff + young fishes.

20 net, burst, contents lost.

Station No. 10332 Date: Oct 22 1915

Hour: 1.30 P.M. to 2.30 P.M.

Position: Lat. 40°51' Long. 70°55'

Locality:

Depth: 53 m. Bottom: Sample:

Wind: Direction, W. Force, fresh

Sea: choppy Sky: clear.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		57				✓	
25	Z 53742	57.5				✓	Big
50	" 98245	55.9				✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS: 11—5314

Specimens misdated "Oct 21"

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
1/2 meter net	500	Vertical		
Meter net	45-0	1/2 hr.		
1/2 m net	0	"		
20 net	0	"		

11—5314

NOTES

Vertical haul, Sagittae, Euthemisto, young fishes + small red stuff.

Meter net. Euthemisto, Sagittae, Y.f. + pteropods. (latter 2 picked out)

20 net, fair haul red micro.

1/2 m. Abundant small red stuff, + 3 ctenophores.

Station No. 10333 Date: Oct 22 1915

Hour: 5 P.M. to 6.30 P.M.

Position: Lat. 40° 26' Long. 70° 56

Locality: ~~40° 26'~~

Depth: 82 m. Bottom: Sample:

Wind: Direction, SW Force, fresh

Sea: smooth Sky: clear, bright moon.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		56				✓	
25	77 98245	56.2				✓	
50	77 53742	56.				✓	
80	77 98240	53.7				✓	

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	75-0	Vertical		
Meter net	65-0	1/2 hr.		
20 net	0	"		
1/2 m net	0	"		

11—5314

NOTES

Meter net entirely clogged with brownish green micro, pounds + pounds of it. Scanty, but varied plankton. (4 f. picked out).
20 net, scanty micro

1/2 m net. Rich haul, mostly Euthemisto + Copepods.

Station No. 10334 Date: Oct 22 1915

Hour: 10 P. M. to . M.

Position: Lat. 40° 09' Long. 71° 00'

Locality:

Depth: 165 m. Bottom: Sample:

Wind: Direction, N. W. Force, Stiff + rising

Sea: high choppy Sky: clear.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		60				✓	

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	
None.				

11—5314

NOTES

Just before reaching this station wind came out N.W. strong + squally, with high, rising, choppy sea. Impossible to hold vessel still, so decided not to risk instruments or our last set of nets.

Station No. 10335 Date: Oct 25 1915

Hour: 11.20 A. M. to 12 . M.

Position: Lat. Long.

Locality: Nantucket Sound. Half-moon red buoys N. by W. 1 mile.

Depth: Bottom: Sample:

Wind: Direction, NE. Force, light

Sea: smooth Sky: clear

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		55.5				✓	

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	8-0 m			
1/2 m "	0		1/2 hr	
20 net	0			

11—5314

NOTES

All hauls scanty. No red-feed, but a few young fishes + eggs.

Station No. 10336 Date: Oct 26 191

Hour: 10.30 A.M. to 11.30 A.M.

Position: Lat. Long.

Locality: Whistle buoy N. from Chatham WSW 1 mile.

Depth: 51 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		51				✓	
25	Hy 53742	53				✓	Big
50	Hy 98245	49.2				✓	"

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	50-0	Vertical		
Meter net	40-0	1/2 hr.		
1/2 m net	0			
20 net	0			

11—5314

NOTES

1/2 m net vertical, rich haul Calanus.

Meter net. Abundant Euthemisto + a few young Merluccius.

1/2 m net, surface, abundant Calanus + large Sciaenia.

20 net surface, fair haul red micro.

Station No. 10337 Date: Oct. 26 1915

Hour: 4.15 P.M. to 5.15 P.M.

Position: Lat. Long.

Locality: Race Pt. bearing SE about 2 miles.

Depth: 62 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	~~[illegible]~~	52				✓	
30	Ty. 53742	53				✓	Big.
60	" 98240	54				✓	"

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	60-0	Vertical		
Meter net	40-0	1/2 hr.		
20 net	0		"	
1/2 m net	0		"	

11—5314

NOTES

Vertical haul, rich Calanus.

Meter net too close to can, losing most of its contents — had some young fish, Calanus, Euthemisto & sagittae.

20 net — abundand red micro.

1/2 m net, surface, — a swarm of minute red copepods.

Oct 28, 8 AM, made haul with bottom net just outside Provincetown Hbr. Little but a few young fish.

Station No. 10338 Date: Oct 27 1915

Hour: 12.30 P.M. to 1.30 P.M.

Position: Lat. 42°19' Long. 70°30'

Locality:

Depth: 82 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
0		57.8				✓	
40	7753742	49				✓	Bic
80	" 98245	45.6				✓	"

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	
1/2 meter net	80-0	Vertical		
Meter net	60-0	1/2 hr.		
1/2 m net	0	"		
20 net	0	"		

11—5314

NOTES

Vertical haul – rich, Calanus + pteropods.

Meter net, rich, Calanus, young fish + pteropods.

1/2 m net surface, rich Calanus, small red copepods + fish eggs.

20 net, rich red micro.

Station No. 10339 Date: Oct 27 1915

Hour: 3.30 P.M. to 4 P.M.

Position: Lat. Long.

Locality: Eastern Pt, Gloucester N by W, ½ W. about 4 miles

Depth: 75 m. Bottom: Sample:

Wind: Direction, N.W. Force, faint.

Sea: smooth Sky: clear

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0	~~[illegible]~~	57.5				✓	
35	2453782	47.9				✓	Big
70	" 98245	45.4				✓	"

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	Vertical			

11—5314

NOTES

Vertical haul.
A few Calanus, many small red copepods, few small Euthemisto + few sagittae.

Vertical haul only

Station No. Date: 191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

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

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	

11—5314

NOTES

Station No. Date: 191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

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

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	

11—5314

NOTES

Station No. Date: 191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

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

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	

11—5314

NOTES

Station No. Date: 191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

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

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	

11—5314

NOTES

Station No. Date: 191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

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

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	

11—5314

NOTES

Station No. Date: 191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

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

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	

11—5314

NOTES

Station No. Date: 191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

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

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	

11—5314

NOTES

Station No. Date: 191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

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

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	

11—5314

NOTES

Station No. Date: 191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

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

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	

11—5314

NOTES

Station No. Date: 191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

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

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	

11—5314

NOTES

Station No. Date: 191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

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

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	

11—5314

NOTES

Station No. Date: 191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

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

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	

11—5314

NOTES

Station No. Date: 191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

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

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	

11—5314

NOTES

Station No. Date: 191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

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

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	

11—5314

NOTES

Station No. Date: 191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

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

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	

11—5314

NOTES

Station No. Date: 191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

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

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	

11—5314

NOTES

Station No. Date: 191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

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

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	

11—5314

NOTES

Station No. Date: 191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

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

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	

11—5314

NOTES

Station No. Date: 191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

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

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	

11—5314

NOTES

Station No. Date: 191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

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

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	

11—5314

NOTES

Station No. Date: 191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

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

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	

11—5314

NOTES

Station No. Date: 191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

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

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	

11—5314

NOTES

Station No. Date: 191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

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

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	

11—5314

NOTES

Station No. Date: 191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

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

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	

11—5314

NOTES

Place of inquiry
Region embraced
Source of information

Herring. 1. Number + location of weirs, + names + headquarters of owners
2. Number, names + headquarters of principal net-fishermen.
3. Markets, place, character, names + headquarters of buyers.
4. Names + headquarters of run-boat men, + region covered.
5. Time of active work in weir fishery, + of greatest abundance.
6. Same of net fishery.
7. Character of fish taken at various times in the season, (Size, sexual developement, fat etc.)
8. Time of spawning
9. Location of known spawning grounds.

Cod, Haddock, Hake, Pollock.
1. Location of local spawning-grounds, + time of spawning.
2. Abundance + size of fish generally caught.
3. Season of fishery.
4. Methods of fishing.
5. Markets, + methods of marketing.

Shad + Blue-backs.
1. Is there any river or bay spring fishery?
2. If so, time of run, + average size.
3. Amount of catch, + its disposition.
4. Purse seine fishery; Time,
5. Size of fish, amount, disposition

Poqy. 1. General information

Mackerel. Average time of appearance locally.
2. Character of schools. Abundance
3. Duration of stay.

Flounders 1. Are many flounders taken? Species? Grounds?
How large do they run?
Any short, round forms?

Salmon 1. Taken in local traps? Season + size.

Smelt 1. Abundance, size, season, localities.
Have they decreased?

Sharks. 1. Trouble with, in nets or weirs? What kinds?

Dog-fish 1. Season. Abundance. Damage.

David Greenlaw.