

RESOURCE SURVEY REPORT
Catch Summary
NOAA Fisheries Service
Northeast Fisheries Science Center
Spring Multispecies
Bottom Trawl Survey
Cape Hatteras -Gulf of Maine
14 March – 13 May 2018

Submitted to: NOAA, NEFSC

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MA 02543.

Date: 2018

Resource Survey Report

Bottom Trawl Survey

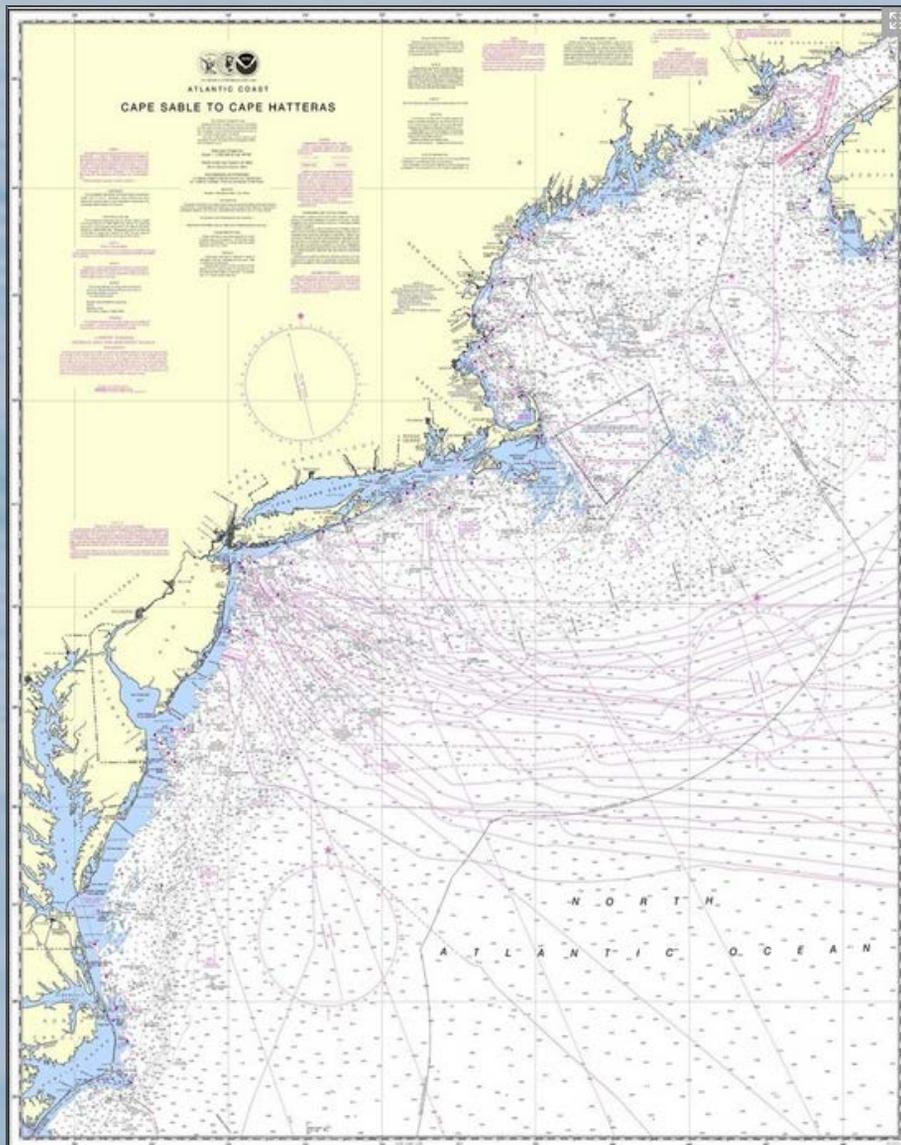


Cape Hatteras – Gulf of Maine

14 March – 13 May 2018

NOAA Ship *Henry B. Bigelow* (FSV 225)

NOAA Fisheries Service
Northeast Fisheries Science Center
Woods Hole, MA 02543



NOAA FISHERIES SERVICE
Northeast Fisheries Science Center
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NEFSC

Significant Changes to the NEFSC Multispecies Bottom Trawl Survey

Significant changes in survey methodology were implemented, beginning with the 2009 Spring Multispecies Bottom Trawl Survey, which have significant implications for the use of these data. Prior to 2009, multispecies bottom trawl surveys were conducted primarily on the NOAA Ship *Albatross IV*. In 2009, the survey was conducted on the NOAA Ship *Henry B. Bigelow*, which is equipped with an autotrawl winch system that equalizes port and starboard warp tensions throughout the duration of survey tows.

The survey bottom trawl sampling gear was also changed. Prior to 2009, the survey was conducted with a standardized Yankee 36 bottom trawl and 450kg Euronet, polyvalent trawl doors. Beginning in 2009, the is conducted using a standardized 400 x 12cm, 4-seam bottom trawl and 2.2m², 550kg, Poly-Ice oval trawl doors. The survey bottom trawl gear was designed and tested in collaboration between the NEFSC and regional fishing industry, fishery managers and academic stakeholders through the mid-Atlantic and New England Trawl Advisory Panel.

The standard survey towing speed was decreased from 3.8kn to 3.0kn, speed measured over ground, beginning in 2009. This towing speed was selected after extensive towing speed and warp to depth ratio trials conducted on the NOAA Ship *Henry B. Bigelow*. The standard tow duration was also changed from 30 minutes (timed from winch lock to winch reengage) to 20 minutes of actual time on-bottom (measured in real-time by acoustic trawl mensuration equipment). The decrease of both the towing speed and duration resulted in a decrease of average tow distance from 1.9nm to 1.0nm.

Station allocation also changed significantly due to an increase of available vessel time from 48 to 60 sea days and a reduction of inshore sampling by the NOAA Ship *Henry B. Bigelow*. As a result, station density was increased in offshore strata. Inshore areas of the mid-Atlantic will continue to be sampled by the Northeast Area Monitoring and Assessment Program (NEAMAP) Southern New England/Mid-Atlantic Near Shore Trawl Survey.

In 2008, the NEFSC conducted an extensive study to estimate the relative catchability of the NOAA Ship *Albatross IV*, sampling with the standard Yankee 36 survey bottom trawl following historical protocols, and the NOAA Ship *Henry B. Bigelow*, sampling with the standard 400 x 12cm, 4-seam survey bottom trawl following revised protocols. Results of this study were peer reviewed in August 2009 and can be found in the NEFSC reference document 10-05: [Estimation of Albatross IV to Henry B. Bigelow Calibration Factors](#).

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Catch Summary

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Spring Multispecies Bottom Trawl Survey

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Due to delays coming out of the shipyard, NOAA Ship *Henry B. Bigelow* began the 2018 spring bottom trawl survey on March 14, 2018, nine days behind schedule. Once underway, significant weather delays and additional mechanical issues resulted in the loss of approximately 12 additional sea-days. Since the weather and mechanical delays occurred over the course of Legs I through III, reductions to sampling increased as the survey progressed. The majority of reductions occurred in the northern portion of the survey region and no stations south of Cape Hatteras were sampled in an effort to increase the northward progress of the survey.

Attached are station and catch summaries and a series of geographical plots of commercially and recreationally important species caught during the Northeast Fisheries Science Center's (NEFSC) 2018 spring bottom trawl survey aboard the NOAA Ship *Henry B. Bigelow*. Details regarding NEFSC bottom trawl survey standard operating procedures can be found in the NEFSC reference document 14-06: [NEFSC Bottom Trawl Survey Protocols for the NOAA Ship Henry B. Bigelow](#).

Because of the 20-minute tow duration, and random selection of station locations, catches can be light compared with commercial tows. Also, vessel operations are on a 24-hour basis and catches have not been adjusted for day/night differences. Nevertheless, these data can provide fishermen with useful information about the distribution and relative abundance of species inhabiting the survey area (Cape Hatteras to the Gulf of Maine).

The data are now summarized from audited catch files generated from the Fisheries Scientific Computer System (FSCS).

For further information contact Philip Politis (508-495-2171; Philip.Politis@noaa.gov), NOAA Fisheries Service, Northeast Fisheries Science Center, 166 Water Street, Woods Hole, MA 02543. To view this report, go to the [Ecosystems Surveys Branch website](#).

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Table 1. Number of planned stations, representative stations and percent sampled in the Southern New England strata of the 2018 spring bottom trawl survey. The Southern New England region is general and not necessarily defined by stock region.

GENERAL REGION	STRATA	STATIONS PLANNED PER STRATA	REPRESENTATIVE STATIONS	PERCENT SAMPLED
Southern New England	1010	7	5	0.71
Southern New England	1020	8	4	0.50
Southern New England	1030	4	3	0.75
Southern New England	1040	3	3	1.00
Southern New England	1050	5	4	0.80
Southern New England	1060	8	6	0.75
Southern New England	1070	4	3	0.75
Southern New England	1080	3	3	1.00
Southern New England	1090	5	3	0.60
Southern New England	1100	9	5	0.56
Southern New England	1110	4	3	0.75
Southern New England	1120	3	3	1.00
Southern New England	3020	3	3	1.00
Southern New England	3050	3	3	1.00
Southern New England	3080	3	3	1.00
Southern New England	3110	3	3	1.00
Southern New England	3140	3	3	1.00
Southern New England	3450	3	2	0.67
Southern New England	3460	4	2	0.50

Table 2. Number of planned stations, representative stations and percent sampled in the Mid-Atlantic strata of the 2018 spring bottom trawl survey. The Mid-Atlantic region is general and not necessarily defined by stock region.

GENERAL REGION	STRATA	STATIONS PLANNED PER STRATA	REPRESENTATIVE STATIONS	PERCENT SAMPLED
Mid-Atlantic	1610	5	4	0.80
Mid-Atlantic	1620	3	3	1.00
Mid-Atlantic	1630	3	2	0.67
Mid-Atlantic	1640	3	3	1.00
Mid-Atlantic	1650	7	7	1.00
Mid-Atlantic	1660	3	2	0.67
Mid-Atlantic	1670	3	3	1.00
Mid-Atlantic	1680	3	2	0.67
Mid-Atlantic	1690	7	5	0.71
Mid-Atlantic	1700	5	5	1.00
Mid-Atlantic	1710	3	3	1.00
Mid-Atlantic	1720	3	3	1.00
Mid-Atlantic	1730	6	3	0.50
Mid-Atlantic	1740	5	4	0.80
Mid-Atlantic	1750	3	3	1.00
Mid-Atlantic	1760	3	3	1.00
Mid-Atlantic	3170	3	3	1.00
Mid-Atlantic	3200	4	4	1.00
Mid-Atlantic	3230	3	3	1.00
Mid-Atlantic	3260	3	3	1.00
Mid-Atlantic	3290	3	3	1.00
Mid-Atlantic	3320	3	3	1.00
Mid-Atlantic	3350	3	3	1.00
Mid-Atlantic	3380	3	3	1.00
Mid-Atlantic	3410	5	5	1.00
Mid-Atlantic	3440	4	4	1.00
South of Cape Hatteras	7520	3	0	0.00
South of Cape Hatteras	8500	3	0	0.00
South of Cape Hatteras	8510	3	0	0.00
South of Cape Hatteras	8520	3	0	0.00
South of Cape Hatteras	8530	3	0	0.00

Table 3. Number of planned stations, representative stations and percent sampled in the Georges Bank strata of the 2018 spring bottom trawl survey. The Georges Bank region is general and not necessarily defined by stock region.

GENERAL REGION	STRATA	STATIONS PLANNED PER STRATA	REPRESENTATIVE STATIONS	PERCENT SAMPLED
Georges Bank	1130	10	5	0.50
Georges Bank	1140	4	3	0.75
Georges Bank	1150	3	2	0.67
Georges Bank	1160	14	11	0.79
Georges Bank	1170	4	4	1.00
Georges Bank	1180	4	3	0.75
Georges Bank	1190	9	5	0.56
Georges Bank	1200	6	2	0.33
Georges Bank	1210	4	4	1.00
Georges Bank	1220	4	4	1.00
Georges Bank	1230	6	3	0.50

Table 4. Number of planned stations, representative stations and percent sampled in the Gulf of Maine strata of the 2018 spring bottom trawl survey. The Gulf of Maine region is general and not necessarily defined by stock region.

GENERAL REGION	STRATA	STATIONS PLANNED PER STRATA	REPRESENTATIVE STATIONS	PERCENT SAMPLED
Cape Cod	3560	4	2	0.50
Cape Cod Bay	3590	4	2	0.50
Cape Cod Bay	3600	3	3	1.00
Cape Cod Bay	3610	3	2	0.67
Gulf of Maine	1240	8	4	0.50
Gulf of Maine	1250	5	2	0.40
Gulf of Maine	1260	6	3	0.50
Gulf of Maine	1270	5	3	0.60
Gulf of Maine	1280	7	2	0.29
Gulf of Maine	1290	10	4	0.40
Gulf of Maine	1300	3	2	0.67
Gulf of Maine	1340	7	2	0.29
Gulf of Maine	1351	4	2	0.50
Gulf of Maine	1360	12	6	0.50
Gulf of Maine	1370	7	3	0.43
Gulf of Maine	1380	8	3	0.38
Gulf of Maine	1390	5	2	0.40
Gulf of Maine	1400	4	2	0.50
Mass Bay	3640	3	2	0.67
Mass Bay	3650	3	2	0.67
Mass Bay	3660	3	2	0.67

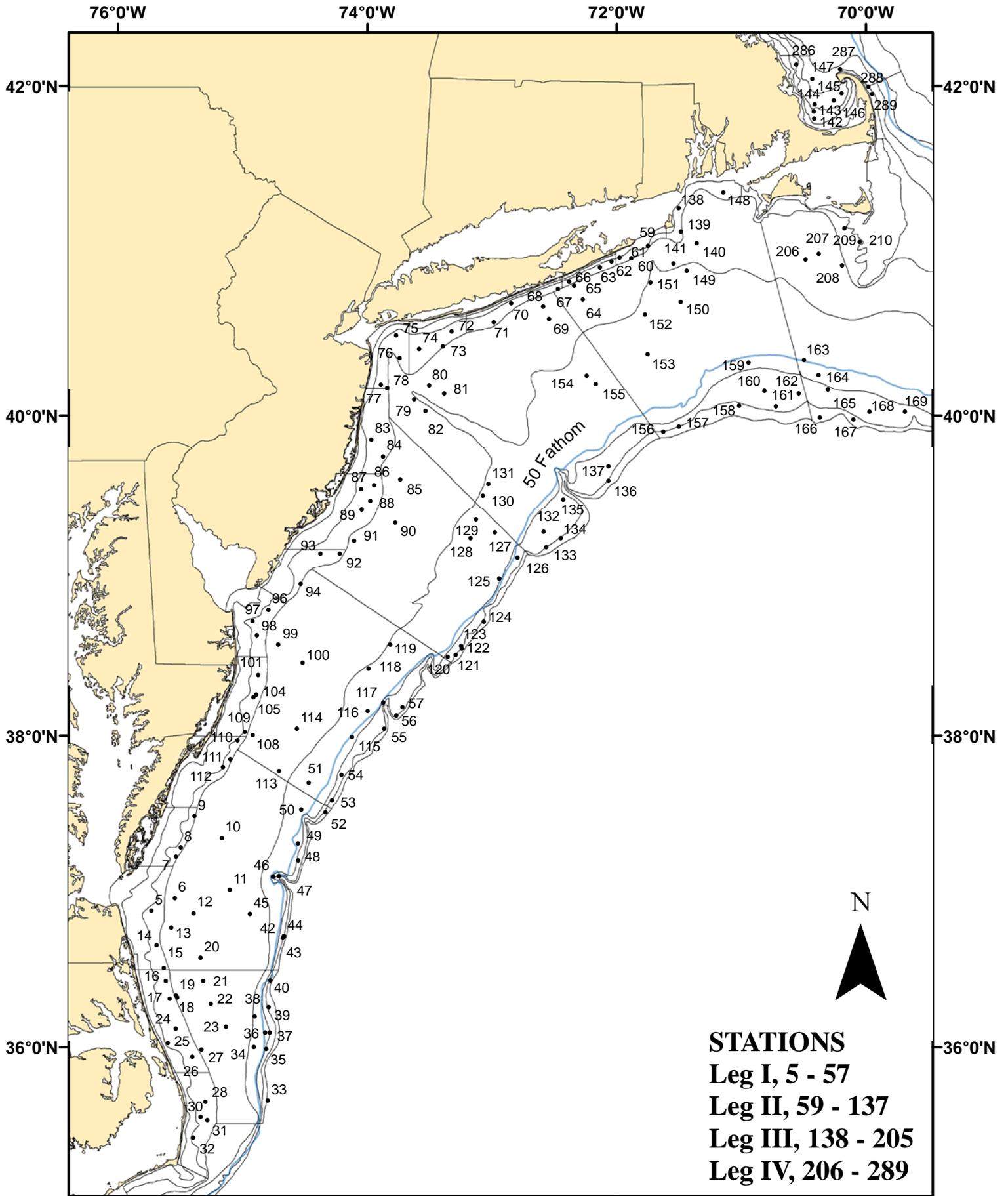


Figure 1. Trawl hauls made from NOAA FSV *Henry B. Bigelow*, during NOAA Fisheries Service, Northeast Fisheries Science Center's spring bottom trawl survey, 14 March - 13 May 2018

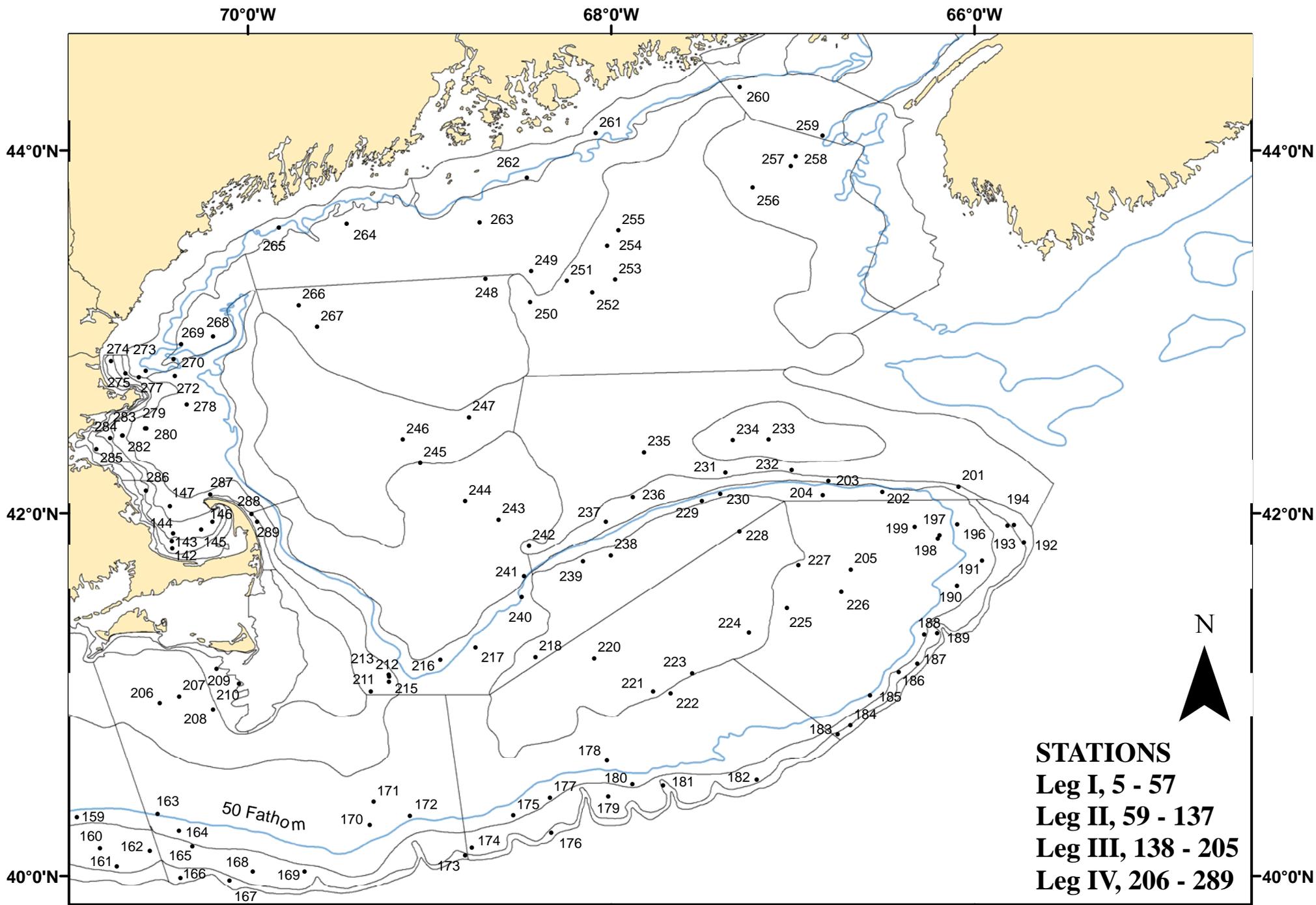


Figure 2. Trawl hauls made from NOAA FSV *Henry B. Bigelow*, during NOAA Fisheries Service, Northeast Fisheries Science Center's spring bottom trawl survey, 14 March - 13 May 2018

NEFSC SPRING BOTTOM TRAWL SURVEY 2018
STATION REPORT

STATION	START TRAWL (GMT)	SET LAT	SET LON	END LAT	END LON	TOW DUR (min)	TOW DIST (nm)	Depth Mean (m)
5	3/14/2018 20:00	36.88246483	-75.73125717	36.88716883	-75.75138333	20.03700355	1.0051	19.51
6	3/14/2018 23:08	36.96297983	-75.54409333	36.97776067	-75.5346035	20.0449452	0.9933	27.07
7	3/15/2018 2:04	37.23275433	-75.53461167	37.24762067	-75.5241865	20.06396933	1.0172	22.36
8	3/15/2018 3:49	37.28762867	-75.49652033	37.29948533	-75.48144533	20.03007553	1.0111	21.65
9	3/15/2018 6:35	37.4889785	-75.38702967	37.47698283	-75.40092883	20.02238543	0.9784	21.77
10	3/15/2018 9:26	37.3478765	-75.16756467	37.332644	-75.17387367	20.02729758	0.9633	31.04
11	3/15/2018 12:38	37.01653667	-75.10304833	37.00064683	-75.10764733	20.05436697	0.9749	40.23
13	3/15/2018 16:36	36.8671115	-75.39382817	36.87006717	-75.37284083	20.07837437	1.0203	29.71
14	3/15/2018 19:06	36.77597867	-75.57314267	36.761334	-75.58292983	20.0797245	0.9908	25.03
15	3/15/2018 21:02	36.66088467	-75.6892425	36.646649	-75.69909583	19.99291582	0.9771	19.36
16	3/15/2018 23:32	36.51395883	-75.63194367	36.515677	-75.65277433	20.02610247	1.0121	26.22
17	3/16/2018 1:41	36.4302405	-75.6161245	36.41578017	-75.60621517	20.01505065	0.9876	25.61
18	3/16/2018 3:39	36.31670467	-75.58429467	36.33313833	-75.58694067	20.0410373	0.9896	26.46
19	3/16/2018 5:28	36.32318383	-75.52435267	36.32375417	-75.52486683	1.014804817	0.0361	25.38
20	3/16/2018 6:02	36.33420833	-75.53507783	36.32172433	-75.52299767	20.02385225	0.9494	25.52
21	3/16/2018 9:03	36.5784765	-75.33744067	36.56531083	-75.35070133	20.02870275	1.0131	36.23
22	3/16/2018 11:52	36.4304795	-75.31740783	36.41483267	-75.32397917	20.00277093	0.9892	34.62
23	3/16/2018 13:44	36.28300083	-75.25591933	36.28224917	-75.2352775	20.00605048	1.0017	33.57
24	3/16/2018 15:57	36.1341215	-75.133568	36.13423033	-75.15416433	20.0669851	0.9967	35.37
25	3/16/2018 18:48	36.120621	-75.5355705	36.10469867	-75.5447705	20.06413882	1.0495	26.17
26	3/16/2018 20:14	36.025688	-75.60146017	36.01137933	-75.59198733	20.06238943	0.9762	24.1
27	3/16/2018 22:56	35.938717	-75.40371667	35.954998	-75.39968533	20.21784998	0.9907	25.07
28	3/17/2018 0:35	35.98317133	-75.33098717	35.96650117	-75.32917583	20.04321457	0.999	34.78
29	3/17/2018 6:15	35.64341367	-75.29875217	35.65917383	-75.30523983	20.01318452	0.9932	25.14
30	3/17/2018 8:26	35.54424583	-75.33851383	35.5586145	-75.328665	20.01571808	0.9844	28.17
31	3/17/2018 10:30	35.523931	-75.2833675	35.51001	-75.29457267	20.0046647	0.9962	26.45
32	3/17/2018 12:48	35.40731217	-75.39646583	35.42340083	-75.392802	20.00292793	0.9791	22.89
33	3/17/2018 18:22	35.65153333	-74.79870983	35.66532033	-74.80893683	20.10785565	1.0339	-
34	3/17/2018 21:14	36.00108867	-74.9103245	36.0176975	-74.9138325	20.06892078	1.0067	77.26
35	3/18/2018 1:59	35.989059	-74.810988	36.00503633	-74.80936533	20.01245112	0.96	139.23
36	3/18/2018 4:11	36.09274533	-74.81958517	36.07614367	-74.81918767	20.05657202	0.9909	107.66
37	3/18/2018 6:36	36.092911	-74.783501	36.076194	-74.78490283	20.05590547	0.9997	238.92
38	3/18/2018 9:50	36.20124167	-74.90410833	36.21757367	-74.90121217	20.02320037	1.0084	66.01
39	3/18/2018 12:20	36.26112833	-74.79264033	36.24590017	-74.79522567	19.99787062	0.9165	120.9
40	3/18/2018 15:41	36.43080433	-74.77781883	36.44446817	-74.7688855	19.28725623	0.9315	182.59

NEFSC SPRING BOTTOM TRAWL SURVEY 2018
STATION REPORT

STATION	START TRAWL (GMT)	SET LAT	SET LON	END LAT	END LON	TOW DUR (min)	TOW DIST (nm)	Depth Mean (m)
42	3/18/2018 18:23	36.70530417	-74.67744533	36.721326	-74.67069667	20.06842412	1.0154	155.73
43	3/18/2018 20:46	36.717054	-74.66811733	36.71243033	-74.67130617	6.019221867	0.3207	215.6
44	3/18/2018 22:49	36.71927867	-74.66891117	36.70336533	-74.6762	20.00916743	1.0401	181.5
45	3/19/2018 1:51	36.86205033	-74.94184	36.84584433	-74.941484	20.00811733	0.9699	38.84
46	3/19/2018 5:18	37.101571	-74.75713	37.08658917	-74.76197117	20.02812592	0.9761	125.52
47	3/19/2018 9:22	37.10732767	-74.710515	37.100314	-74.72857283	20.01922167	1.0029	191.65
48	3/19/2018 12:03	37.20762733	-74.55411817	37.22365717	-74.54954517	20.0011833	0.9839	127.62
49	3/19/2018 13:38	37.31335933	-74.55654667	37.31962883	-74.574908	19.98280273	0.9654	98.87
50	3/19/2018 16:07	37.52950833	-74.53068433	37.51592283	-74.54350833	20.06730252	1.0131	69.76
51	3/19/2018 18:58	37.70010117	-74.46887417	37.687387	-74.48357433	20.08083548	1.0306	64.69
52	3/19/2018 21:35	37.513902	-74.33496567	37.52780167	-74.32255933	20.11623008	1.0156	232.62
53	3/20/2018 0:17	37.58844417	-74.28258217	37.6016385	-74.270652	20.01338228	0.9725	229.59
54	3/20/2018 2:18	37.75211867	-74.20691267	37.7665605	-74.19988983	20.01670752	0.979	136.45
55	3/20/2018 6:25	38.04670833	-73.86435833	38.0626475	-73.860012	20.02118532	1.0124	197.33
56	3/20/2018 9:45	38.1282095	-73.76664817	38.14087667	-73.753035	20.01198438	0.9938	241.18
57	3/20/2018 12:24	38.1820555	-73.71794367	38.19431617	-73.70398833	19.99558388	0.9978	144.81
59	3/28/2018 22:17	41.035787	-71.74784583	41.02325133	-71.76154417	19.9877153	0.9771	28.53
60	3/29/2018 0:15	40.96147383	-71.88356733	40.95984117	-71.90442183	19.9978496	0.9524	31.4
61	3/29/2018 1:43	40.96728367	-71.97652767	40.96006533	-71.99639067	20.00281712	1.0007	26.49
62	3/29/2018 3:02	40.9441205	-72.04122583	40.93771367	-72.06260867	19.99991785	1.0446	26.23
63	3/29/2018 4:20	40.90748183	-72.13465233	40.90065083	-72.155154	20.03989987	1.0152	26.9
64	3/29/2018 6:20	40.71089	-72.2720815	40.704667	-72.2924135	20.04630452	0.9962	47.68
65	3/29/2018 8:03	40.7979065	-72.34192333	40.79124833	-72.36214183	20.01365125	1.0012	34.09
66	3/29/2018 9:29	40.82060967	-72.381762	40.8060855	-72.3914525	19.99758295	0.975	28.65
67	3/29/2018 11:04	40.77398567	-72.4701825	40.7804675	-72.44983533	20.00853405	1.0032	32.14
68	3/29/2018 13:00	40.67040383	-72.589451	40.66376167	-72.56924417	20.0111843	1.0026	38.81
69	3/29/2018 15:10	40.59402917	-72.541605	40.5968275	-72.5200985	20.08170802	0.992	43.35
70	3/29/2018 17:50	40.68876017	-72.84648533	40.678122	-72.8640205	20.05063663	1.0206	25.98
71	3/29/2018 19:30	40.57310567	-72.9855925	40.56590417	-73.00564767	20.0144181	1.0116	25.49
72	3/29/2018 21:56	40.51702183	-73.32419433	40.51478017	-73.34583783	19.99891642	0.9981	24.38
73	3/29/2018 23:34	40.4272145	-73.394078	40.42728333	-73.41530767	20.00294477	0.9712	27.81
74	3/30/2018 1:25	40.40959783	-73.5843985	40.406843	-73.60522167	20.00624592	0.9687	23.65
75	3/30/2018 3:24	40.49287567	-73.76924533	40.49015117	-73.79045767	20.0284134	0.9816	26.14
76	3/30/2018 5:12	40.354043	-73.74062233	40.3391615	-73.73175683	20.01450132	0.9791	26.14
77	3/30/2018 7:58	40.18822767	-73.8908045	40.19253483	-73.869883	20.0097175	0.9949	25.43

NEFSC SPRING BOTTOM TRAWL SURVEY 2018
STATION REPORT

STATION	START TRAWL (GMT)	SET LAT	SET LON	END LAT	END LON	TOW DUR (min)	TOW DIST (nm)	Depth Mean (m)
78	3/30/2018 10:02	40.1706065	-73.8402975	40.15733283	-73.8526975	20.0219854	0.9775	27.69
79	3/30/2018 12:45	40.10204467	-73.6245575	40.108968	-73.644362	20.011451	1.0015	44.73
80	3/30/2018 15:03	40.18443217	-73.50364283	40.16908183	-73.511705	20.0130345	0.99	41.53
81	3/30/2018 17:07	40.13643933	-73.38365717	40.12076983	-73.39179833	20.1020884	1.0063	40.76
82	3/30/2018 19:28	40.030549	-73.53312417	40.0146925	-73.5396835	19.9976055	0.9974	44.93
83	3/30/2018 22:27	39.85405283	-73.9677455	39.8376735	-73.967135	19.99889637	0.9818	23.69
84	3/31/2018 0:45	39.74754967	-73.87322583	39.74135133	-73.89318567	20.00146822	0.9947	28.51
85	3/31/2018 2:59	39.60670533	-73.73506767	39.592948	-73.747457	20.00303185	1.0038	26.56
86	3/31/2018 4:55	39.571169	-73.94473683	39.55911417	-73.95983117	20.00154068	1.0042	25.6
87	3/31/2018 6:14	39.54446567	-74.04864417	39.53676317	-74.0674705	20.01691692	0.99	22.93
88	3/31/2018 8:07	39.470991	-73.97593617	39.4546615	-73.97703583	20.00937328	1.0052	25.57
89	3/31/2018 9:26	39.41891683	-74.04508517	39.40970117	-74.06292683	20.01005027	1.0015	26.36
90	3/31/2018 11:54	39.33871783	-73.7763405	39.32240333	-73.77037433	20.00611713	1.0143	37.9
91	3/31/2018 14:16	39.22663367	-74.10522183	39.21499383	-74.120933	20.01025057	1.0118	27.28
92	3/31/2018 15:46	39.14567917	-74.22044583	39.13555533	-74.23748367	20.07632417	0.9947	23.39
93	3/31/2018 17:23	39.143355	-74.37573767	39.1359735	-74.39472217	20.06400127	0.9865	23.36
94	3/31/2018 19:21	38.95671267	-74.53489683	38.94489633	-74.550049	20.00818402	1.0012	19.34
95	3/31/2018 22:05	38.955116	-74.53637867	38.94884383	-74.54491883	11.09459605	0.5446	20.14
96	4/1/2018 1:03	38.79300833	-74.79312517	38.78407883	-74.81086683	20.0164984	0.9873	19.21
97	4/1/2018 2:46	38.72470467	-74.920783	38.70843533	-74.91474567	20.01611813	1.0133	26.12
98	4/1/2018 4:58	38.63548167	-74.8864995	38.648926	-74.89855567	20.02531767	0.9827	22.27
99	4/1/2018 7:05	38.57433083	-74.7152185	38.56086217	-74.7271275	20.02356888	0.981	21.35
100	4/1/2018 9:40	38.461384	-74.51968233	38.47818067	-74.519702	20.01575325	1.0054	38.66
101	4/1/2018 12:29	38.38401983	-74.87485483	38.3673965	-74.87199267	20.01399232	1.0076	20.65
104	4/1/2018 14:02	38.258404	-74.89099967	38.2568335	-74.89325167	2.9315248	0.1409	21.47
105	4/1/2018 14:44	38.24168467	-74.91359583	38.25237433	-74.897299	20.02036857	0.999	23.05
108	4/1/2018 17:33	38.0030085	-74.91948067	38.0169325	-74.9076245	20.0407206	1.0031	31.39
109	4/1/2018 18:56	38.0231785	-74.9833445	38.01194133	-74.998327	20.0503544	0.9759	17.02
110	4/1/2018 20:08	37.9708375	-75.04164	37.9565865	-75.051138	19.99854632	0.9861	19.8
111	4/1/2018 22:05	37.849955	-75.0987885	37.838166	-75.11336283	19.99378038	0.9879	27.86
112	4/1/2018 23:21	37.80037483	-75.15737967	37.78795533	-75.17085883	20.01040777	0.9798	20.64
113	4/2/2018 2:23	37.7749535	-74.707401	37.78245883	-74.68840683	20.00686307	1.0079	48.53
114	4/2/2018 4:59	38.04442683	-74.56458183	38.0323875	-74.54968783	20.01416307	1.008	39.8
115	4/2/2018 7:43	37.9910055	-74.12355933	37.99840767	-74.10479367	20.01131767	0.9921	106.08
116	4/2/2018 9:49	38.15679067	-73.997775	38.1709305	-73.985837	20.01423462	1.0144	81.21

NEFSC SPRING BOTTOM TRAWL SURVEY 2018
STATION REPORT

STATION	START TRAWL (GMT)	SET LAT	SET LON	END LAT	END LON	TOW DUR (min)	TOW DIST (nm)	Depth Mean (m)
117	4/2/2018 12:04	38.21178983	-73.87146917	38.22087717	-73.8588485	16.74338113	0.8142	124.12
118	4/2/2018 14:40	38.4257655	-73.99074467	38.41522433	-74.00695183	20.00291682	0.9892	58.76
119	4/2/2018 17:49	38.57437217	-73.81541467	38.58541217	-73.80059617	20.05130498	0.9598	59.77
120	4/2/2018 22:02	38.5000755	-73.3558385	38.51214533	-73.34092817	19.99784963	1.008	120.28
121	4/3/2018 0:20	38.51065783	-73.291155	38.52361067	-73.27728	20.00401142	1.0138	193.09
122	4/3/2018 2:31	38.55106817	-73.242296	38.56325183	-73.2275605	20.01492612	1.0048	206.34
123	4/3/2018 4:14	38.56938383	-73.24681217	38.55532883	-73.25862817	20.01278447	1.0096	157.44
124	4/3/2018 7:05	38.7191925	-73.06554933	38.73383083	-73.054789	20.01665152	1.01	195.23
125	4/3/2018 9:45	38.98958633	-72.94185117	38.99691567	-72.92251933	19.99071562	1.0033	90.45
126	4/3/2018 11:37	39.11845967	-72.79529967	39.13268983	-72.783136	20.00562538	1.0215	118.36
127	4/3/2018 13:45	39.27662283	-72.97689433	39.26366233	-72.99143483	20.01148433	1.029	72.96
128	4/3/2018 15:42	39.24058833	-73.17255217	39.25452567	-73.1609465	20.05783162	0.9907	62.62
129	4/3/2018 17:31	39.35735833	-73.12924617	39.37164417	-73.11784267	20.05901158	1.0039	61.94
130	4/3/2018 19:19	39.50514283	-73.0737765	39.51738867	-73.05930317	19.97468343	0.9949	66.28
131	4/3/2018 20:46	39.576245	-73.02817033	39.585603	-73.01064083	19.98078127	0.9876	67.64
132	4/4/2018 0:34	39.2811075	-72.585298	39.270651	-72.56799383	20.00097628	1.0199	142.18
133	4/4/2018 2:36	39.18268117	-72.564218	39.19276883	-72.54670367	20.0077173	1.0143	198.16
134	4/4/2018 4:25	39.24009583	-72.44845933	39.2481135	-72.42994133	20.02282667	0.9873	203.44
135	4/4/2018 6:56	39.48284533	-72.42915333	39.49720067	-72.41726733	20.0187684	1.0203	121.87
136	4/4/2018 10:42	39.5980455	-72.065113	39.58694783	-72.080615	20.02051858	0.9766	194.17
137	4/4/2018 12:53	39.6864205	-72.06579617	39.66965667	-72.0694935	20.01064875	1.0189	151.47
138	4/14/2018 17:30	41.26578267	-71.50239167	41.2817995	-71.494898	20.060433	1.0135	44.37
139	4/14/2018 19:34	41.12406267	-71.4845795	41.1202375	-71.48483817	4.6146058	0.2283	28.02
140	4/14/2018 22:07	41.052382	-71.3585705	41.03613933	-71.3540425	20.00783397	0.9953	47.69
141	4/15/2018 0:40	40.93138383	-71.5441125	40.9468705	-71.53678283	20.00691722	0.9891	56.16
142	4/15/2018 21:05	41.80509433	-70.41593517	41.813963	-70.397554	20.07425728	0.9813	22.94
143	4/15/2018 23:56	41.88947167	-70.412004	41.898089	-70.393291	20.017985	0.9829	33.88
144	4/16/2018 1:38	41.846654	-70.41866867	41.85495767	-70.3989475	20.00840703	1.0132	29.5
145	4/16/2018 3:59	41.91141867	-70.25740317	41.919699	-70.23801983	20.07307383	0.9958	36.32
146	4/16/2018 6:02	41.954769	-70.194964	41.9628475	-70.1755125	20.02250212	1.0019	33.43
147	4/16/2018 12:30	42.040655	-70.42967217	42.048274	-70.4112535	20.0070113	0.9442	54.07
148	4/17/2018 20:30	41.36126767	-71.1455815	41.35119333	-71.16281483	20.00562808	0.9837	31.66
149	4/18/2018 0:52	40.88520233	-71.43906567	40.87965267	-71.46018083	20.01316523	1.015	62.23
150	4/18/2018 3:45	40.696722	-71.487239	40.6995635	-71.508505	19.99051558	0.9861	68.54
151	4/18/2018 7:01	40.81471933	-71.72820733	40.80337983	-71.7444	19.98078127	1.0057	57.29

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STATION REPORT

STATION	START TRAWL (GMT)	SET LAT	SET LON	END LAT	END LON	TOW DUR (min)	TOW DIST (nm)	Depth Mean (m)
152	4/18/2018 9:45	40.61997483	-71.77350783	40.62981483	-71.79142225	20.00278347	1.0082	60.99
153	4/18/2018 13:17	40.3770985	-71.75186217	40.38107683	-71.772642	20.01146522	0.9797	76.05
154	4/18/2018 17:39	40.24474217	-72.23977167	40.2412455	-72.26079617	19.99591613	1.0068	62.04
155	4/18/2018 19:57	40.19328167	-72.16736717	40.19106883	-72.1890885	20.02038523	1.0048	68.62
156	4/19/2018 0:33	39.89997717	-71.62621967	39.89699283	-71.647369	20.00518372	0.9914	203.19
157	4/19/2018 2:58	39.9332985	-71.50051433	39.9272205	-71.520422	20.0017167	0.9881	188.84
158	4/19/2018 7:20	40.0600605	-71.01675317	40.05850633	-71.0383915	20.0134512	1.0014	216.57
159	4/19/2018 10:37	40.3238885	-70.94150717	40.30690783	-70.9412335	20.05427197	1.0146	102.04
160	4/19/2018 12:58	40.15249483	-70.81438117	40.14270433	-70.79661067	19.99091562	1.0052	133.62
161	4/19/2018 15:05	40.055581	-70.72234933	40.06041	-70.742685	19.99363007	0.9853	136.64
162	4/19/2018 18:03	40.13811683	-70.53976733	40.152227	-70.52819483	20.0719496	0.9975	120.4
163	4/19/2018 20:49	40.34125817	-70.4970965	40.34093167	-70.47551483	20.02398558	0.9871	90.92
164	4/19/2018 23:03	40.24885783	-70.37969983	40.25346783	-70.3587625	20.01669505	0.9976	100.82
165	4/20/2018 1:11	40.16272267	-70.30552383	40.1664145	-70.3266725	20.00538013	0.9969	115.93
166	4/20/2018 4:07	39.989624	-70.37092033	39.99103683	-70.3917855	20.02699663	0.9793	278.2
167	4/20/2018 7:21	39.97620383	-70.10175617	39.98074117	-70.12188317	20.1025868	0.9804	222.34
168	4/20/2018 10:25	40.024125	-69.97292683	40.03201117	-69.9913745	20.02723593	0.9739	149.85
169	4/20/2018 13:16	40.0232805	-69.68775567	40.027115	-69.70880167	20.01748252	0.996	124.03
170	4/20/2018 17:32	40.28270683	-69.32919333	40.29066083	-69.348863	19.99824968	1.0213	82.78
171	4/20/2018 19:50	40.40935717	-69.30844617	40.41797317	-69.32694483	20.02816827	0.9917	76.06
172	4/20/2018 22:20	40.33213867	-69.10874367	40.3397245	-69.12832733	20.02276882	1.0011	88.79
173	4/21/2018 1:46	40.11482283	-68.80380633	40.12250133	-68.82246583	19.99104895	1.0175	265.92
174	4/21/2018 3:56	40.15794	-68.76806917	40.16602417	-68.7872325	20.00693243	1.0032	155.17
175	4/21/2018 6:46	40.33435	-68.53988883	40.33503967	-68.56191317	20.03251977	1.0108	103.33
176	4/21/2018 10:32	40.239053	-68.330679	40.25102267	-68.31551333	20.11685655	1.0009	199.13
177	4/21/2018 12:56	40.43251983	-68.336757	40.43793383	-68.3578805	20.00135192	1.0248	104.58
178	4/21/2018 16:27	40.63980317	-68.0233345	40.63851733	-68.001414	20.12419062	1.0005	86.77
179	4/21/2018 18:44	40.43775283	-68.0163525	40.4246845	-68.00191433	19.99624948	1.0239	140.45
180	4/21/2018 21:02	40.50517783	-67.88367683	40.509185	-67.90488667	20.09777182	0.9936	105.42
181	4/22/2018 1:22	40.50061517	-67.71457467	40.48411033	-67.71275633	20.02026855	0.994	284.85
182	4/22/2018 5:05	40.5306195	-67.19973333	40.5191775	-67.21605017	20.00601053	1.0242	167.57
183	4/22/2018 9:10	40.78026	-66.7537965	40.76710683	-66.76723583	20.02430232	1.0007	235.1
184	4/22/2018 11:51	40.8307375	-66.68335967	40.818597	-66.69890483	20.0022501	1.0135	190.21
185	4/22/2018 14:30	40.99492317	-66.5756845	41.00799733	-66.56120233	20.02105197	1.0152	93.7
186	4/22/2018 16:51	41.126009	-66.41783283	41.134402	-66.39828567	20.08010787	1.0137	119.53

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STATION REPORT

STATION	START TRAWL (GMT)	SET LAT	SET LON	END LAT	END LON	TOW DUR (min)	TOW DIST (nm)	Depth Mean (m)
187	4/22/2018 18:56	41.17231933	-66.3157465	41.18619533	-66.30268783	19.99091562	1.0217	159.38
188	4/22/2018 21:24	41.332795	-66.27716867	41.31547167	-66.27807133	20.05027155	1.0354	108.44
189	4/22/2018 23:44	41.33831567	-66.20595117	41.354227	-66.19873167	20.0078182	1.0062	139.24
190	4/23/2018 2:17	41.59839117	-66.09622533	41.60507133	-66.076142	20.01865082	0.9831	95.84
191	4/23/2018 4:18	41.73716717	-65.959673	41.75405183	-65.959968	20.01491803	1.0105	106.44
192	4/23/2018 7:50	41.83736467	-65.72827833	41.85275167	-65.7369025	19.99904977	0.9994	221.89
193	4/23/2018 10:15	41.93286	-65.818727	41.91851317	-65.806708	20.0234522	1.0125	168.51
194	4/23/2018 12:53	41.93541533	-65.7824215	41.94816183	-65.79620617	20.0059838	0.9821	192.49
196	4/23/2018 16:41	41.93946467	-66.09523617	41.9543125	-66.10632467	20.02514007	1.0162	92.71
197	4/23/2018 18:40	41.87907667	-66.193195	41.87625833	-66.18979883	4.709075883	0.2205	84.34
198	4/23/2018 19:56	41.86069317	-66.20309417	41.86031367	-66.18060217	20.00276698	1.0063	83.33
199	4/23/2018 22:04	41.9226355	-66.3296835	41.9179445	-66.30762367	20.01986852	1.0243	81.1
201	4/24/2018 1:57	42.146617	-66.08865567	42.13873867	-66.10757317	20.05943913	0.9631	209.15
202	4/24/2018 5:14	42.11644	-66.507713	42.12804133	-66.49126967	20.0235126	1.0087	84.22
203	4/24/2018 8:08	42.176735	-66.804517	42.17637233	-66.78186483	20.01033425	1.0085	185.04
204	4/24/2018 10:16	42.09856317	-66.83532267	42.08584083	-66.82035167	20.00960157	1.0109	69.7
205	4/24/2018 13:30	41.689234	-66.68136483	41.70022783	-66.66518567	19.99829527	0.9815	67.36
206	5/1/2018 21:31	40.952629	-70.4848035	40.93976933	-70.471476	20.02011363	0.9784	46.77
207	5/1/2018 23:43	40.99096867	-70.3782675	40.99054283	-70.40028083	19.9972989	1.001	41.19
208	5/2/2018 2:01	40.9180065	-70.191964	40.93455283	-70.1955645	20.00653385	1.0058	30.71
209	5/2/2018 4:36	41.14265633	-70.173109	41.1261995	-70.17710267	20.01758495	1.001	26.81
210	5/2/2018 7:26	41.06047333	-70.049702	41.0674255	-70.06695867	16.58739312	0.8881	24.14
211	5/2/2018 15:29	41.01850133	-69.32318233	41.01121917	-69.31742967	10.53363455	0.5085	49.19
212	5/2/2018 22:44	41.10128733	-69.2228135	41.10329867	-69.223543	3.04203085	0.1186	54.84
213	5/2/2018 23:44	41.1089055	-69.224872	41.1239455	-69.22997233	18.5209962	0.9271	54.22
215	5/3/2018 2:26	41.072559	-69.22418333	41.05706217	-69.22151567	20.02026855	0.9431	54.3
216	5/3/2018 5:29	41.19418033	-68.94084417	41.17897683	-68.949838	20.01358337	0.9972	106.65
217	5/3/2018 7:58	41.259611	-68.7468445	41.25289817	-68.766975	20.0074506	0.9953	78.04
218	5/3/2018 11:10	41.20738517	-68.41714433	41.21226683	-68.39627517	20.0017167	0.9903	54.08
220	5/3/2018 16:18	41.2007345	-68.09336733	41.18471683	-68.09396017	20.00665052	0.9584	50.86
221	5/3/2018 19:26	41.0179565	-67.7690275	41.0214045	-67.79016317	20.01358455	0.98	53.71
222	5/3/2018 22:06	41.00824217	-67.67308183	41.01886567	-67.655553	20.02411893	1.0179	62.65
223	5/4/2018 0:23	41.118275	-67.55506083	41.13316233	-67.54535767	20.01505088	0.9928	56.84
224	5/4/2018 3:12	41.34436133	-67.24198133	41.35577017	-67.2255405	20.00878407	1.0079	52.07
225	5/4/2018 7:18	41.47706817	-67.03240717	41.46750433	-67.05049183	20.02078115	0.9962	64.16

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STATION	START TRAWL (GMT)	SET LAT	SET LON	END LAT	END LON	TOW DUR (min)	TOW DIST (nm)	Depth Mean (m)
226	5/4/2018 10:29	41.56908783	-66.73392217	41.55932533	-66.75250317	20.01945182	1.0201	73.44
227	5/4/2018 13:27	41.7145845	-66.96970883	41.71292117	-66.992588	20.02358105	1.0314	62.69
228	5/4/2018 16:08	41.9013195	-67.2944285	41.89074017	-67.27675767	20.00891742	1.0133	50.92
229	5/4/2018 19:06	42.0686055	-67.50150783	42.06312333	-67.52256983	20.00505037	0.9951	73.75
230	5/4/2018 21:15	42.10743667	-67.40006233	42.1022315	-67.420989	20.00183338	0.9835	83.41
231	5/5/2018 0:52	42.226538	-67.37165733	42.22061567	-67.39259233	20.04543773	0.9945	243.37
232	5/5/2018 4:56	42.24029567	-67.00683	42.23654	-66.98542983	20.00970083	0.9794	233.52
233	5/5/2018 14:20	42.40588017	-67.13431417	42.40521817	-67.15686333	20.01044467	0.9978	365.69
234	5/5/2018 17:47	42.401677	-67.33083817	42.3910755	-67.31390933	20.02248063	0.9833	345.84
235	5/5/2018 22:21	42.33579967	-67.818735	42.34129783	-67.797089	20.00527732	1.0167	196.28
236	5/6/2018 2:13	42.09015967	-67.880808	42.08115317	-67.86154333	19.99051772	1.0149	204.57
237	5/6/2018 4:49	41.95258117	-68.02945383	41.93681083	-68.0350705	20.01278447	0.9776	181.52
238	5/6/2018 7:46	41.76813183	-68.002116	41.76213517	-68.013005	13.55747292	0.6212	38.5
239	5/6/2018 10:10	41.7360895	-68.1555945	41.73653217	-68.177487	20.00678387	0.9818	51.08
240	5/6/2018 13:23	41.53839333	-68.4921075	41.55544933	-68.48936433	20.11948123	1.0296	84.65
241	5/6/2018 15:35	41.653713	-68.47977117	41.64149783	-68.49464933	19.9977163	0.9911	147.61
242	5/6/2018 18:35	41.81968983	-68.4536215	41.80343883	-68.45782483	20.03211973	0.9886	211.31
243	5/6/2018 22:13	41.96416333	-68.619677	41.95350983	-68.63679617	20.00682523	0.9956	169.99
244	5/7/2018 0:39	42.06699	-68.80436183	42.06639633	-68.82665267	19.98878297	0.9961	152.54
245	5/7/2018 4:09	42.27802483	-69.05160633	42.276786	-69.02927633	20.00291682	0.9949	203.23
246	5/7/2018 7:16	42.4061645	-69.1473775	42.4059155	-69.16993133	20.01800718	0.9994	226.93
247	5/7/2018 11:04	42.52859633	-68.78357883	42.5141525	-68.7946555	20.01838257	0.9941	203.86
248	5/7/2018 17:10	43.29305783	-68.692813	43.29705983	-68.67147433	20.0217854	0.9631	160.64
249	5/7/2018 21:03	43.33554183	-68.44074033	43.3213565	-68.45181983	20.01851838	0.977	191.5
250	5/8/2018 0:29	43.16198767	-68.44673267	43.17109117	-68.46583983	20.00963257	0.9988	204.78
251	5/8/2018 3:20	43.2819315	-68.24413733	43.26922783	-68.25911533	20.01463412	1.0015	191.78
252	5/8/2018 6:25	43.2163365	-68.10418767	43.22140833	-68.125787	20.0119975	0.9932	204.99
253	5/8/2018 9:21	43.28771233	-67.97870917	43.29085167	-67.956649	20.02772265	0.9817	237.35
254	5/8/2018 12:22	43.47361667	-68.02369383	43.461322	-68.039137	20.01306443	0.9976	215.89
255	5/8/2018 14:50	43.56008183	-67.9605515	43.56621833	-67.98112833	20.0143013	0.9757	225.5
256	5/8/2018 19:53	43.7960395	-67.22208067	43.80575333	-67.20163817	20.00518372	1.062	174.39
257	5/8/2018 22:20	43.914801	-67.0118005	43.90851667	-67.018118	9.617680917	0.46	165.57
258	5/9/2018 0:25	43.96859117	-66.984113	43.95285917	-66.99243433	20.0329462	1.0067	168.7
259	5/9/2018 3:17	44.07957917	-66.83686883	44.0685875	-66.81893567	20.01504452	1.0141	150.92
260	5/9/2018 7:55	44.347692	-67.29326117	44.34610233	-67.270448	20.12942447	1.0051	141.67

NEFSC SPRING BOTTOM TRAWL SURVEY 2018
STATION REPORT

STATION	START TRAWL (GMT)	SET LAT	SET LON	END LAT	END LON	TOW DUR (min)	TOW DIST (nm)	Depth Mean (m)
261	5/9/2018 14:13	44.09557567	-68.0851975	44.08398783	-68.100418	20.00493368	0.9597	102.2
262	5/9/2018 19:49	43.8491695	-68.46468	43.8357045	-68.4530515	19.58905672	0.9477	130.77
263	5/10/2018 0:50	43.60155833	-68.72483883	43.61283617	-68.70761517	20.07558575	1.0059	153.16
264	5/10/2018 6:33	43.5952805	-69.45645933	43.61154583	-69.45418783	20.04000865	0.9777	151.64
265	5/10/2018 10:11	43.574175	-69.82968767	43.577571	-69.8079965	20.00985025	0.98	109.82
266	5/10/2018 14:51	43.14627067	-69.71989917	43.16314217	-69.72144917	20.00750063	1.013	131.27
267	5/10/2018 17:40	43.02771517	-69.61895	43.01723917	-69.63675483	19.99718292	1.0032	145.16
268	5/10/2018 22:22	42.975129	-70.19165983	42.97291333	-70.16949833	20.00865072	0.9851	160.25
269	5/11/2018 0:53	42.93201767	-70.36751817	42.949015	-70.36498083	20.00691722	1.0234	134.65
270	5/11/2018 3:38	42.84767083	-70.40938933	42.85450233	-70.4303045	20.01118432	1.0079	133.87
272	5/11/2018 6:31	42.75848	-70.40248667	42.772621	-70.413639	20.01158435	0.9832	91.51
273	5/11/2018 8:49	42.787019	-70.5627455	42.78260417	-70.54042483	20.00430813	1.018	101.57
274	5/11/2018 11:04	42.83795917	-70.75422583	42.82193617	-70.74789133	20.03551047	0.9974	33.28
275	5/11/2018 12:52	42.77272283	-70.67387117	42.75628783	-70.668895	20.01747112	1.0071	48.81
277	5/11/2018 14:59	42.74971283	-70.6007515	42.75495517	-70.62226817	20.0127232	1.0041	74.45
278	5/11/2018 17:53	42.59853117	-70.33740267	42.60689417	-70.357048	20.00585618	1.0017	92.05
279	5/11/2018 20:47	42.4674885	-70.55889483	42.467488	-70.55890983	0.025469217	-	56.54
280	5/11/2018 21:21	42.46752867	-70.5656655	42.46754317	-70.54357067	20.00798398	0.9786	56.65
282	5/11/2018 23:50	42.427572	-70.68979817	42.41640483	-70.67241783	21.4997993	1.0216	67.25
283	5/12/2018 1:04	42.42885117	-70.69180483	42.41854967	-70.67455133	20.00460047	0.9824	66.84
284	5/12/2018 3:35	42.41353117	-70.75860883	42.399045	-70.7478	20.00651718	1.0019	47.51
285	5/12/2018 6:12	42.3550375	-70.8352775	42.36946717	-70.82547267	20.007984	0.9671	29.4
286	5/12/2018 10:42	42.1266335	-70.56089733	42.11144117	-70.56913233	19.53558508	0.9789	31.88
287	5/12/2018 13:48	42.10170717	-70.20704933	42.09622633	-70.2283965	20.01028422	1.0062	64.72
288	5/12/2018 17:08	41.99430883	-69.98103733	41.98014267	-69.96974417	20.00067977	0.9892	27.68
289	5/12/2018 19:06	41.95167467	-69.9501655	41.93655667	-69.94261033	20.09265042	0.9634	26.12

NOAA FISHERIES SERVICE-NEFSC SPRING BOTTOM TRAWL SURVEY 2018
CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

STATION	ATLANTIC COD	HADDOCK	POLLOCK	WHITE HAKE	SILVER HAKE	REDFISH	GOOSEFISH	SPINY DOGFISH	YELLOWTAIL FLOUNDER	WINTER FLOUNDER	AMERICAN PLAICE	WITCH FLOUNDER	WINDOWPANE FLD	SUMMER FLOUNDER	SCUP	BLACK SEA BASS	ATLANTIC HERRING	ATLANTIC MACKEREL	WINTER SKATE	LITTLE SKATE	BUTTERFISH	AMERICAN LOBSTER	LOLIGO	ILLEX	TOTAL [2] OTHER	TOTAL ALL
5	0	0	0	0	0	0	0	471	0	0	0	0	0	0	0	0	0	0	89	13	0	0	0	0	25	598
6	0	0	0	0	0	0	0	142	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	12	155
7	0	0	0	0	0	0	0	51	0	0	0	0	0	1	0	0	0	0	28	13	0	0	0	0	11	104
8	0	0	0	0	0	0	0	58	0	0	0	0	0	1	0	0	1	0	238	1	0	0	0	0	92	391
9	0	0	0	0	0	0	0	151	0	0	0	0	1	1	0	0	0	0	29	13	0	0	0	0	4	199
10	0	0	0	0	0	0	0	85	0	0	0	0	6	1	0	0	0	0	22	19	0	0	0	0	14	147
11	0	0	0	0	0	0	0	313	0	0	0	0	0	11	0	0	0	0	0	0	2	0	0	0	9	335
13	0	0	0	0	0	0	9	44	0	0	0	0	0	0	0	0	8	2	54	0	0	0	0	0	17	134
14	0	0	0	0	0	0	0	186	0	0	0	0	1	0	0	0	14	0	46	0	0	0	0	0	57	304
15	0	0	0	0	0	0	0	187	0	0	0	0	0	0	0	0	1	0	18	0	0	0	0	0	4	210
16	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	120	0	0	0	0	0	35	172
17	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	84	3	0	0	0	0	29	136
18	0	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	3	45	0	0	0	0	0	107	183
19 ^[1]	0	0	0	0	0	0	0	11	0	0	0	0	0	3	0	0	0	0	10	0	0	0	0	0	4	28
20	0	0	0	0	0	0	0	245	0	0	0	0	0	0	0	0	0	3	4	0	0	0	0	0	25	277
21	0	0	0	0	0	0	0	685	0	0	0	0	1	3	0	0	0	0	31	9	0	0	1	0	46	776
22	0	0	0	0	0	0	0	1281	0	0	0	0	0	9	0	0	0	0	0	2	0	0	2	0	23	1317
23	0	0	0	0	0	0	0	1510	0	0	0	0	0	2	0	0	0	3	23	0	1	0	1	0	36	1576
24	0	0	0	0	0	0	0	2145	0	0	0	0	0	0	0	0	0	17	8	0	3	0	2	0	3	2178
25	0	0	0	0	0	0	0	372	0	0	0	0	0	0	0	0	0	0	27	0	0	0	0	0	633	1032
26	0	0	0	0	0	0	0	1015	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	9	1031
27	0	0	0	0	0	0	0	317	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	23	349
28 ^[1]	0	0	0	0	0	0	0	204	0	0	0	0	0	1	0	0	0	9	35	1	0	0	0	0	45	295
29	0	0	0	0	0	0	16	12	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	281	311
30	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3627	3645
31	0	0	0	0	0	0	4	6	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	333	345
32	0	0	0	0	0	0	0	24	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	75	102
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	62	7	124	208
34	0	0	0	0	0	0	45	12054	0	0	0	0	0	23	0	0	0	0	0	0	27	0	13	0	260	12422
35	0	0	0	0	0	0	52	2025	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	1	3006	5120
36	0	0	0	0	0	0	5	231	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	1	419	674
37	0	0	0	0	3	0	18	658	0	0	0	0	0	0	0	0	0	0	0	0	3	0	14	1	5524	6221
38	0	0	0	0	0	0	7	739	0	0	0	0	0	14	1	1	0	0	0	1	6	0	15	0	363	1147
39	0	0	0	0	0	0	4	1591	0	0	0	0	0	8	0	0	0	0	0	0	17	0	119	4	643	2386
40	0	0	0	0	0	0	0	1264	0	0	0	1	0	0	0	0	0	0	0	0	19	0	287	6	1115	2692
42	0	0	0	0	0	0	22	971	0	0	0	0	0	18	0	1	0	0	0	0	12	0	33	1	989	2047
43 ^[1]	0	0	0	0	0	0	0	158	0	0	0	0	0	2	0	0	0	0	0	0	1	0	2	1	77	241

NOAA FISHERIES SERVICE-NEFSC SPRING BOTTOM TRAWL SURVEY 2018
CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

STATION	ATLANTIC COD	HADDOCK	POLLOCK	WHITE HAKE	SILVER HAKE	REDFISH	GOOSEFISH	SPINY DOGFISH	YELLOWTAIL FLOUNDER	WINTER FLOUNDER	AMERICAN PLAICE	WITCH FLOUNDER	WINDOWPANE FLD	SUMMER FLOUNDER	SCUP	BLACK SEA BASS	ATLANTIC HERRING	ATLANTIC MACKEREL	WINTER SKATE	LITTLE SKATE	BUTTERFISH	AMERICAN LOBSTER	LOLIGO	ILLEX	TOTAL [2] OTHER	TOTAL ALL	
44 ^[1]	0	0	0	0	0	0	0	413	0	0	0	0	0	0	0	0	0	0	0	0	3	0	5	3	585	1009	
45	0	0	0	0	0	0	0	462	0	0	0	0	0	6	0	0	0	0	0	14	0	0	1	1	41	525	
46	0	0	0	0	1	0	6	11285	0	0	0	4	0	27	0	0	0	0	0	0	42	0	18	0	197	11580	
47	0	0	0	0	2	0	18	1413	0	0	0	1	0	7	0	0	0	0	0	0	7	0	34	0	261	1743	
48	0	0	0	0	2	0	0	56	0	0	0	0	0	4	0	1	0	0	0	0	2	0	81	8	99	253	
49	0	0	0	0	1	0	0	35	0	0	0	0	0	0	0	0	0	136	0	0	3	1	19	2	55	252	
50	0	0	0	0	1	0	9	56	0	0	0	0	0	1	0	0	0	1	0	0	0	0	10	0	19	97	
51	0	0	0	0	0	0	7	4484	0	0	0	0	0	7	10	6	0	0	0	0	13	0	0	2	0	287	4816
52	0	0	0	0	44	0	12	337	0	0	0	0	0	2	0	0	0	0	0	0	0	0	17	3	195	610	
53	0	0	0	0	12	0	6	277	0	0	0	3	0	10	0	0	0	0	0	0	0	0	0	1	88	397	
54	0	0	0	0	6	0	0	183	0	0	0	0	0	9	0	2	0	0	0	0	9	0	37	1	28	275	
55	0	0	0	0	1	0	0	117	0	0	0	0	0	4	0	0	0	0	0	0	0	0	7	1	2362	2492	
56	0	0	0	0	38	0	30	606	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	3	104	785	
57	0	0	0	0	6	0	4	175	0	0	0	0	0	8	0	0	0	1	0	0	25	0	131	10	55	415	
59	0	0	0	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	6	6
60	0	0	0	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0	6	27	0	0	0	0	1	38	
61	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	49	0	0	0	0	1	53	
62	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	2	53	0	0	0	0	2	60	
63	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	6	79	0	0	0	0	1	88	
64	0	0	0	0	21	0	10	183	0	1	0	0	1	0	0	0	0	0	68	317	0	0	0	0	5	606	
65	0	0	0	0	1	0	0	4	0	3	0	0	1	0	0	0	0	0	18	149	0	0	0	0	5	181	
66	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	9	25	0	0	0	0	3	38	
67	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	17	0	9	5	0	0	0	0	5	37	
68	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	6	18	0	0	0	0	13	41	
69	0	0	0	0	0	0	0	44	0	4	0	0	0	0	0	0	0	0	13	15	0	0	0	0	8	84	
70	0	0	0	0	0	0	0	0	0	6	0	0	1	0	0	0	0	0	0	26	0	0	0	0	2	35	
71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
72	0	0	0	0	0	0	0	0	0	4	0	0	2	0	0	0	0	0	9	23	0	0	0	0	3	41	
73	7	0	0	0	0	0	0	0	0	4	0	0	3	1	0	0	0	0	6	186	0	0	0	0	0	207	
74	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	4	220	0	0	0	0	6	237	
75	0	0	0	0	5	0	0	3	0	2	0	0	8	2	0	0	0	0	76	321	0	1	0	0	184	602	
76	0	0	0	0	3	0	0	0	0	1	0	0	7	0	0	0	0	0	37	455	0	0	0	0	81	584	
77	0	0	0	0	1	0	0	14	0	1	0	0	2	0	0	0	0	0	10	135	0	0	0	0	8	171	
78	0	0	0	0	1	0	12	114	0	2	0	0	3	1	0	0	0	0	11	44	0	0	0	0	7	195	
79 ^[1]	0	0	0	0	0	0	5	772	0	1	0	0	1	3	0	0	0	0	14	82	0	4	0	0	55	937	
80	0	0	0	0	0	0	0	179	0	1	0	0	0	0	0	0	0	0	0	23	0	0	0	0	21	224	
81	0	0	0	0	0	0	0	440	0	0	0	0	0	3	0	0	0	0	44	39	0	0	0	0	9	535	

NOAA FISHERIES SERVICE-NEFSC SPRING BOTTOM TRAWL SURVEY 2018
CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

STATION	ATLANTIC COD	HADDOCK	POLLOCK	WHITE HAKE	SILVER HAKE	REDFISH	GOOSEFISH	SPINY DOGFISH	YELLOWTAIL FLOUNDER	WINTER FLOUNDER	AMERICAN PLAICE	WITCH FLOUNDER	WINDOWPANE FLDR	SUMMER FLOUNDER	SCUP	BLACK SEA BASS	ATLANTIC HERRING	ATLANTIC MACKEREL	WINTER SKATE	LITTLE SKATE	BUTTERFISH	AMERICAN LOBSTER	LOLIGO	ILLEX	TOTAL [2] OTHER	TOTAL ALL
82	0	0	0	0	0	0	0	1194	2	0	0	0	0	1	0	0	0	0	2	17	0	0	0	0	8	1224
83	0	0	0	0	0	0	0	48	0	5	0	0	3	0	0	0	44	0	0	10	0	0	0	0	1	111
84	0	0	0	0	0	0	0	36	0	1	0	0	5	2	0	0	11	0	0	122	0	0	0	0	6	183
85	0	0	0	0	0	0	0	372	0	0	0	0	4	0	0	0	43	3	8	42	0	0	0	0	16	488
86	0	0	0	0	0	0	0	10	0	0	0	0	8	1	0	0	0	0	0	42	0	0	0	0	2	63
87	0	0	0	0	0	0	0	4	0	0	0	0	3	0	0	0	0	0	5	71	0	0	0	0	5	88
88	0	0	0	0	0	0	0	265	0	0	0	0	2	4	0	0	0	0	27	57	0	0	0	0	118	473
89	0	0	0	0	0	0	0	215	0	0	0	0	2	0	0	0	0	0	16	64	0	0	0	0	7	304
90	0	0	0	0	0	0	0	176	0	0	0	0	1	0	0	0	7	22	0	27	0	0	0	0	15	248
91	0	0	0	0	0	0	0	717	0	0	0	0	0	1	0	0	0	1	0	21	0	0	0	0	7	747
92	0	0	0	0	0	0	0	72	0	0	0	0	1	0	0	0	0	0	4	8	0	0	0	0	16	101
93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	24	31
94	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	21	49
96	0	0	0	0	0	0	0	3	0	0	0	0	4	1	0	0	1	0	5	33	0	0	0	0	29	76
97	0	0	0	0	6	0	0	18	0	4	0	0	0	7	0	0	0	0	0	57	0	0	0	0	49	141
98	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	8	35	0	2	0	0	34	90
99	0	0	0	0	0	0	0	136	0	0	0	0	2	2	0	0	0	0	9	19	0	0	0	0	4	172
100	0	0	0	0	0	0	0	425	0	0	0	0	5	4	0	0	0	0	13	98	0	0	0	0	11	556
101	0	0	0	0	0	0	0	98	0	0	0	0	2	0	0	0	32	33	16	8	0	0	0	0	11	200
104 ^[1]	0	0	0	0	0	0	0	37	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0	7	48
105	0	0	0	0	0	0	0	153	0	0	0	0	0	0	0	0	0	0	8	4	0	0	0	0	28	193
108	0	0	0	0	0	0	0	63	0	0	0	0	0	1	0	0	2	7	8	11	0	0	0	0	49	141
109	0	0	0	0	0	0	0	46	0	0	0	0	0	1	0	0	23	3	42	0	0	0	0	0	0	115
110	0	0	0	0	0	0	0	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	101
111	0	0	0	0	0	0	0	99	0	0	0	0	0	0	0	0	16	0	7	9	0	0	0	0	1	132
112	0	0	0	0	0	0	0	58	0	0	0	0	0	2	0	0	36	0	36	7	0	0	0	0	0	139
113	0	0	0	0	1	0	0	261	0	0	0	0	3	8	0	0	0	0	7	78	0	0	0	0	39	397
114	0	0	0	0	0	0	0	466	0	0	0	0	1	8	0	0	0	1	18	42	0	0	1	0	2	539
115	0	0	0	0	5	0	18	1024	0	0	0	0	0	22	18	27	0	2	5	6	2	1	6	0	42	1178
116	0	0	0	0	3	0	0	287	0	0	0	0	0	20	0	7	0	0	6	44	0	0	1	0	1753	2121
117	0	0	0	0	8	0	11	174	0	0	0	0	0	83	1	363	0	0	0	0	2	2	43	1	127	815
118	0	0	0	0	0	0	0	516	0	0	0	0	0	6	0	0	0	0	0	22	0	0	1	0	28	573
119	0	0	0	0	1	0	9	275	0	0	0	0	0	6	0	2	0	0	0	41	0	0	1	0	18	353
120	0	0	0	0	8	0	6	99	0	0	0	0	0	32	30	3	0	28	0	0	22	0	119	5	15	367
121	0	0	0	0	20	0	0	318	0	0	0	1	0	0	0	0	0	0	0	0	2	0	4	0	51	396
122	0	0	0	0	49	0	4	132	0	0	0	1	0	0	0	0	0	0	0	0	1	0	2	1	71	261
123	0	0	0	0	12	0	2	99	0	0	0	0	0	0	0	0	0	1	0	0	301	0	22	1	24	462

NOAA FISHERIES SERVICE-NEFSC SPRING BOTTOM TRAWL SURVEY 2018
CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

STATION	ATLANTIC COD	HADDOCK	POLLOCK	WHITE HAKE	SILVER HAKE	REDFISH	GOOSEFISH	SPINY DOGFISH	YELLOWTAIL FLOUNDER	WINTER FLOUNDER	AMERICAN PLAICE	WITCH FLOUNDER	WINDOWPANE FLDR	SUMMER FLOUNDER	SCUP	BLACK SEA BASS	ATLANTIC HERRING	ATLANTIC MACKEREL	WINTER SKATE	LITTLE SKATE	BUTTERFISH	AMERICAN LOBSTER	LOLIGO	ILLEX	TOTAL [2] OTHER	TOTAL ALL
124	0	0	0	0	14	0	3	121	0	0	0	0	0	0	0	0	0	0	0	0	66	0	48	6	62	320
125	0	0	0	0	16	0	0	180	0	0	0	0	0	24	99	80	0	0	0	1	18	0	6	0	405	829
126	0	0	0	0	9	0	0	99	0	0	0	0	0	12	51	159	0	0	0	0	33	0	19	0	259	641
127	0	0	0	0	2	0	13	520	0	0	0	0	0	2	0	0	0	0	0	12	0	0	0	0	34	583
128	0	0	0	0	0	0	16	921	0	0	0	0	0	4	0	2	0	0	0	7	0	0	0	0	15	965
129	0	0	0	0	2	0	0	578	0	0	0	0	0	2	0	0	109	26	10	31	0	0	0	0	10	768
130	0	0	0	0	1	0	0	667	0	0	0	0	0	4	0	0	3	1	0	42	0	0	0	0	15	733
131	0	0	0	0	2	0	0	777	0	0	0	0	0	7	0	0	38	0	7	39	0	0	0	0	20	890
132	0	0	0	0	37	0	0	137	0	0	0	0	0	23	1	10	0	0	0	4	23	0	2	0	55	292
133	0	0	0	0	40	0	0	105	0	0	0	0	0	0	0	0	0	0	0	0	1	0	5	0	37	188
134	0	0	0	0	3	0	4	42	0	0	0	0	0	0	0	0	0	0	0	0	352	0	15	1	26	443
135	0	0	0	0	10	0	16	1389	0	0	0	0	0	5	227	2	0	0	0	0	2	0	6	0	55	1712
136	0	0	0	0	48	0	15	63	0	0	0	0	0	22	1	0	0	2	9	0	1153	0	138	4	157	1612
137	0	0	0	0	6	0	25	23	0	0	0	0	0	19	0	0	0	1	0	0	649	0	119	1	55	898
138	0	0	0	0	1	0	2	0	0	1	0	0	1	0	0	0	0	0	0	10	0	5	0	0	11	31
139 ^[1]	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	4
140	0	0	0	0	0	0	0	0	0	10	0	0	0	2	0	0	0	0	10	6	1	0	0	0	22	51
141	0	0	0	0	64	0	0	32	0	2	0	0	1	1	0	0	0	0	36	301	0	0	0	0	20	457
142 ^[1]	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	7	7	0	2	0	0	13	31
143	0	0	0	0	1	0	0	0	0	5	0	0	1	0	0	0	3	0	0	9	0	6	0	0	257	282
144	0	0	0	0	1	0	0	0	0	6	0	0	1	0	0	0	0	0	0	14	0	2	0	0	163	187
145	0	0	0	0	1	0	0	0	0	1	0	0	3	0	0	0	0	0	0	5	0	2	0	0	23	35
146	0	0	0	0	7	0	0	0	0	7	0	0	5	0	0	0	0	0	0	19	0	0	0	0	81	119
147	0	2	0	0	26	0	0	0	2	9	1	0	3	0	0	0	10	0	0	54	0	54	0	0	57	218
148	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	43	0	0	0	0	4	50
149	3	0	0	0	36	0	0	0	1	0	0	0	2	2	0	0	0	0	129	412	0	0	0	0	26	611
150	0	0	0	0	79	0	2	481	0	0	0	0	1	0	0	2	32	0	213	150	0	4	0	0	55	1019
151	15	0	0	0	40	0	0	673	0	2	0	0	1	5	0	0	0	0	41	278	0	4	0	0	30	1089
152	0	0	0	0	10	0	6	888	1	0	0	0	0	10	1	1	127	1	39	73	1	0	0	0	63	1221
153	0	0	0	0	18	0	17	156	0	0	0	0	0	7	0	0	48	4	66	26	0	0	0	0	38	380
154	0	0	0	0	1	0	9	825	0	0	0	0	0	16	0	0	15	356	18	20	0	0	0	0	18	1278
155	0	0	0	0	3	0	7	754	0	0	0	3	0	31	0	0	2	2	10	62	0	0	0	0	80	954
156	0	0	0	0	27	0	3	386	0	0	0	0	0	0	0	0	0	0	1	1	0	0	3	0	61	482
157	0	0	0	0	16	0	33	21	0	0	0	1	0	0	0	0	0	0	0	1	0	0	4	0	23	99
158	0	0	0	0	3	0	25	12	0	0	0	0	0	0	0	0	0	0	0	0	4	0	6	0	27	77
159	0	0	0	0	13	0	99	474	0	0	0	0	0	216	46	0	0	0	137	0	16	0	5	0	406	1412
160	0	0	0	0	4	0	11	45	0	0	0	0	0	9	0	2	0	0	0	0	206	0	23	0	53	353

NOAA FISHERIES SERVICE-NEFSC SPRING BOTTOM TRAWL SURVEY 2018
CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

STATION	ATLANTIC COD	HADDOCK	POLLOCK	WHITE HAKE	SILVER HAKE	REDFISH	GOOSEFISH	SPINY DOGFISH	YELLOWTAIL FLOUNDER	WINTER FLOUNDER	AMERICAN PLAICE	WITCH FLOUNDER	WINDOWPANE FLDR	SUMMER FLOUNDER	SCUP	BLACK SEA BASS	ATLANTIC HERRING	ATLANTIC MACKEREL	WINTER SKATE	LITTLE SKATE	BUTTERFISH	AMERICAN LOBSTER	LOLIGO	ILLEX	TOTAL [2] OTHER	TOTAL ALL
238 ^[1]	12	61	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	33	21	0	3	5	0	17	154
239	33	238	0	0	2	0	0	0	0	4	3	0	0	0	0	0	2	11	88	22	0	0	0	0	11	414
240	10	117	0	1	56	0	0	0	0	0	1	0	0	0	0	0	22	3	1	7	0	0	0	0	130	348
241	11	57	0	5	580	0	0	0	0	0	19	0	0	0	0	0	1	0	6	2	0	0	1	0	208	890
242	0	102	0	5	178	4	20	0	0	0	1	2	0	0	0	0	2	0	0	0	0	0	0	0	190	504
243	0	21	0	6	78	4	27	9	0	0	3	2	0	0	0	0	2	0	0	0	0	0	0	0	86	238
244	15	10	0	1	133	91	51	3	0	0	1	17	0	0	0	0	0	0	0	0	0	0	0	0	59	381
245	0	95	0	12	97	72	46	7	0	0	10	8	0	0	0	0	2	0	0	0	0	0	0	0	31	380
246	0	20	0	7	146	21	51	16	0	0	2	2	0	0	0	0	1	0	0	0	0	0	0	0	26	292
247	8	35	23	82	556	54	71	11	0	0	5	14	0	0	0	0	0	0	0	0	0	0	0	0	91	950
248	9	251	0	15	214	46	37	11	0	0	53	16	0	0	0	0	2	0	0	0	0	14	0	0	90	758
249	0	21	0	7	212	3	32	12	0	0	23	11	0	0	0	0	2	1	0	0	0	32	0	0	39	395
250	0	138	0	26	120	12	68	0	0	0	28	5	0	0	0	0	6	9	0	0	0	5	0	0	74	491
251	0	74	0	9	249	8	29	6	0	0	7	5	0	0	0	0	11	12	0	0	0	0	0	0	38	448
252	0	120	0	6	92	12	27	0	0	0	8	5	0	0	0	0	5	1	0	0	0	0	0	0	51	327
253	0	34	0	40	123	5	27	19	0	0	3	5	0	0	0	0	16	2	0	0	0	3	0	0	78	355
254	0	34	0	63	112	14	61	91	0	0	0	12	0	0	0	0	1	4	0	0	0	61	0	0	31	484
255	0	172	0	103	100	17	35	107	0	0	3	2	0	0	0	0	1	0	0	0	0	14	0	0	67	621
256	12	27	0	31	251	58	6	3	0	0	0	5	0	0	0	0	6	0	0	0	0	30	0	0	33	462
257 ^[1]	0	10	0	0	24	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	5	57
258	48	46	0	14	172	75	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	15	0	0	45	422
259	30	82	0	21	33	0	3	0	0	0	1	6	0	0	0	0	0	2	5	9	0	13	0	0	38	243
260	0	11	0	7	8	0	9	2	0	31	4	43	0	0	0	0	1	0	0	2	0	13	0	0	111	242
261	0	1	0	6	120	0	3	0	0	5	2	0	0	0	0	0	0	0	0	0	0	325	0	0	61	523
262	0	0	0	8	75	0	7	0	1	3	9	1	0	0	0	0	2	0	0	0	0	55	0	0	120	281
263	0	20	0	7	109	0	6	0	0	0	3	1	0	0	0	0	1	0	0	0	0	32	0	0	28	207
264	0	25	0	6	102	0	0	0	0	0	45	2	0	0	0	0	2	0	0	0	0	3	0	0	13	198
265	0	3	0	1	72	0	5	0	1	3	61	0	0	0	0	0	2	0	0	0	0	103	0	0	75	326
266	11	26	0	2	55	0	67	0	0	0	40	4	0	0	0	0	152	0	0	0	0	41	0	0	22	420
267	21	40	1346	0	249	113	33	0	0	0	25	12	0	0	0	0	13	0	0	0	0	8	0	0	84	1944
268	0	9	0	0	334	33	2	0	0	0	30	1	0	0	0	0	3	0	0	0	0	25	0	0	82	519
269	24	14	0	1	148	2	4	0	4	0	39	49	0	0	0	0	1	0	0	0	0	34	0	0	95	415
270	8	120	0	1	53	31	2	0	4	0	41	16	0	0	0	0	0	1	0	0	0	11	0	0	119	407
272	0	67	0	0	41	4	12	0	18	3	40	1	0	0	0	0	2	1	0	0	0	36	0	0	105	330
273	117	273	0	1	198	1	1	0	11	1	44	16	0	0	0	0	7	0	0	0	0	14	0	0	63	747
274	0	0	0	0	0	0	0	0	13	3	0	0	0	0	0	0	4	0	0	0	0	74	0	0	159	253
275	4	0	0	0	3	0	0	0	99	17	6	0	0	0	0	0	0	0	1	1	0	56	0	0	62	249

NOAA FISHERIES SERVICE-NEFSC SPRING BOTTOM TRAWL SURVEY 2018
CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

STATION	ATLANTIC COD	HADDOCK	POLLOCK	WHITE HAKE	SILVER HAKE	REDFISH	GOSEFISH	SPINY DOGFISH	YELLOWTAIL FLOUNDER	WINTER FLOUNDER	AMERICAN PLAICE	WITCH FLOUNDER	WINDOWPANE FLDR	SUMMER FLOUNDER	SCUP	BLACK SEA BASS	ATLANTIC HERRING	ATLANTIC MACKEREL	WINTER SKATE	LITTLE SKATE	BUTTERFISH	AMERICAN LOBSTER	LOLIGO	ILLEX	TOTAL [2] OTHER	TOTAL ALL
277	0	127	0	0	34	0	2	0	70	1	46	0	0	0	0	0	174	0	0	3	0	67	0	0	41	565
278	59	685	0	0	1	8	0	0	5	14	12	0	0	0	0	0	0	0	0	4	0	22	0	0	22	832
279 ^[1]	0	23	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	7	35
280	18	742	0	0	0	3	0	0	33	63	5	1	0	0	0	0	0	3	0	0	0	9	0	0	151	1028
282 ^[1]	32	143	0	0	15	2	0	0	23	58	26	0	0	0	0	0	4	0	1	0	0	92	0	0	95	491
283	16	57	0	0	11	1	0	0	22	48	16	8	0	0	0	0	20	2	0	3	0	86	0	0	111	401
284	70	79	0	0	2	2	0	0	60	45	3	0	0	0	0	0	7	0	0	0	0	129	0	0	184	581
285	12	0	0	0	1	0	0	0	30	97	0	0	0	0	0	0	1	1	0	15	0	77	0	0	89	323
286	20	114	0	0	0	0	0	0	11	64	0	0	0	0	0	0	0	0	0	4	0	34	0	0	97	344
287	0	1040	0	0	34	0	0	0	5	141	2	0	0	0	0	0	85	182	0	10	0	12	0	0	116	1627
288	0	0	0	0	1	0	0	0	4	9	0	0	0	0	0	0	2	8	0	0	0	14	0	0	114	152
289	4	0	0	0	1	0	0	0	0	4	0	0	0	0	0	1	9	5	0	0	0	0	0	0	298	322
TOTAL	1046	12871	1698	873	7898	1014	3442	76834	431	854	699	349	178	1084	495	679	1291	1101	11918	6659	4831	2199	2317	140	40483	181384

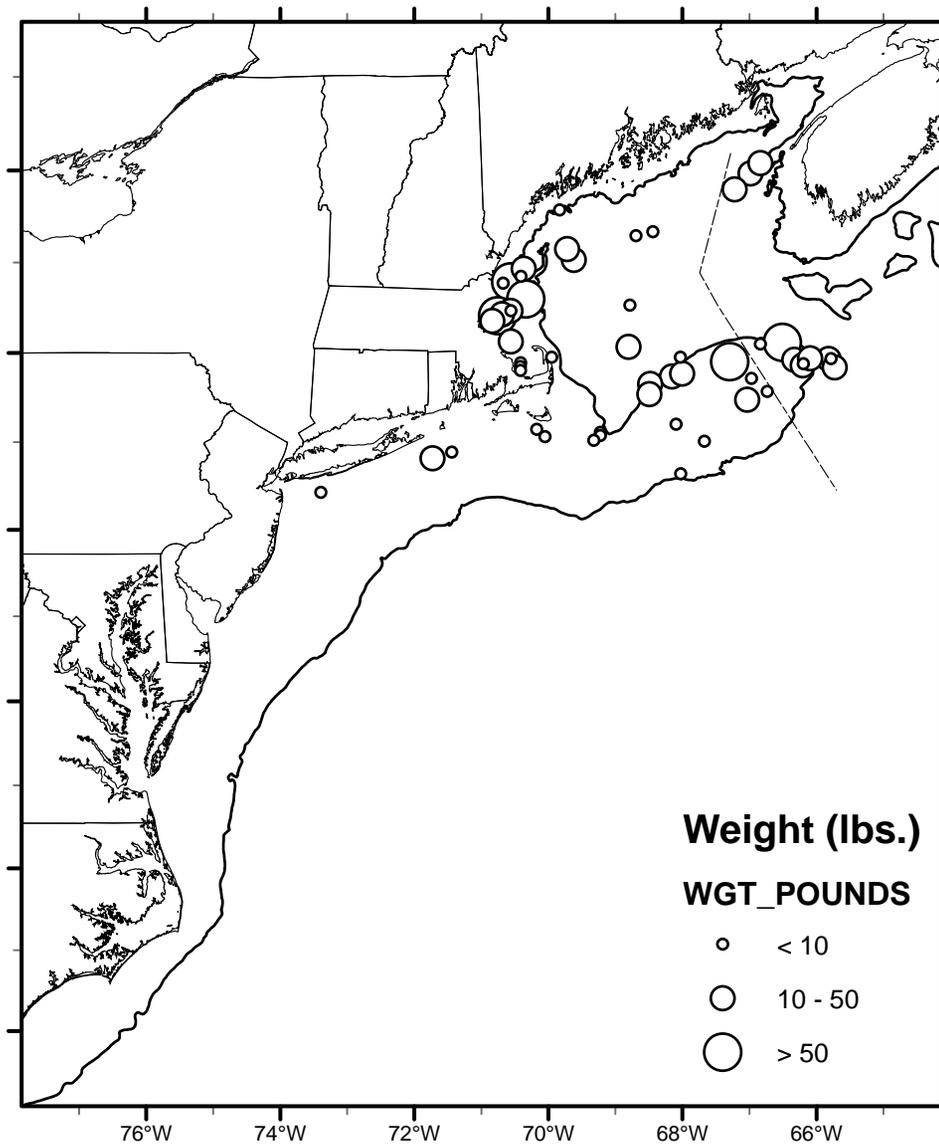
Note: non-sequential station numbers indicate either a test-tow, tow was aborted or no trawl was attempted

^[1] Excluded from stock assessment due to an unacceptable tow evaluation code

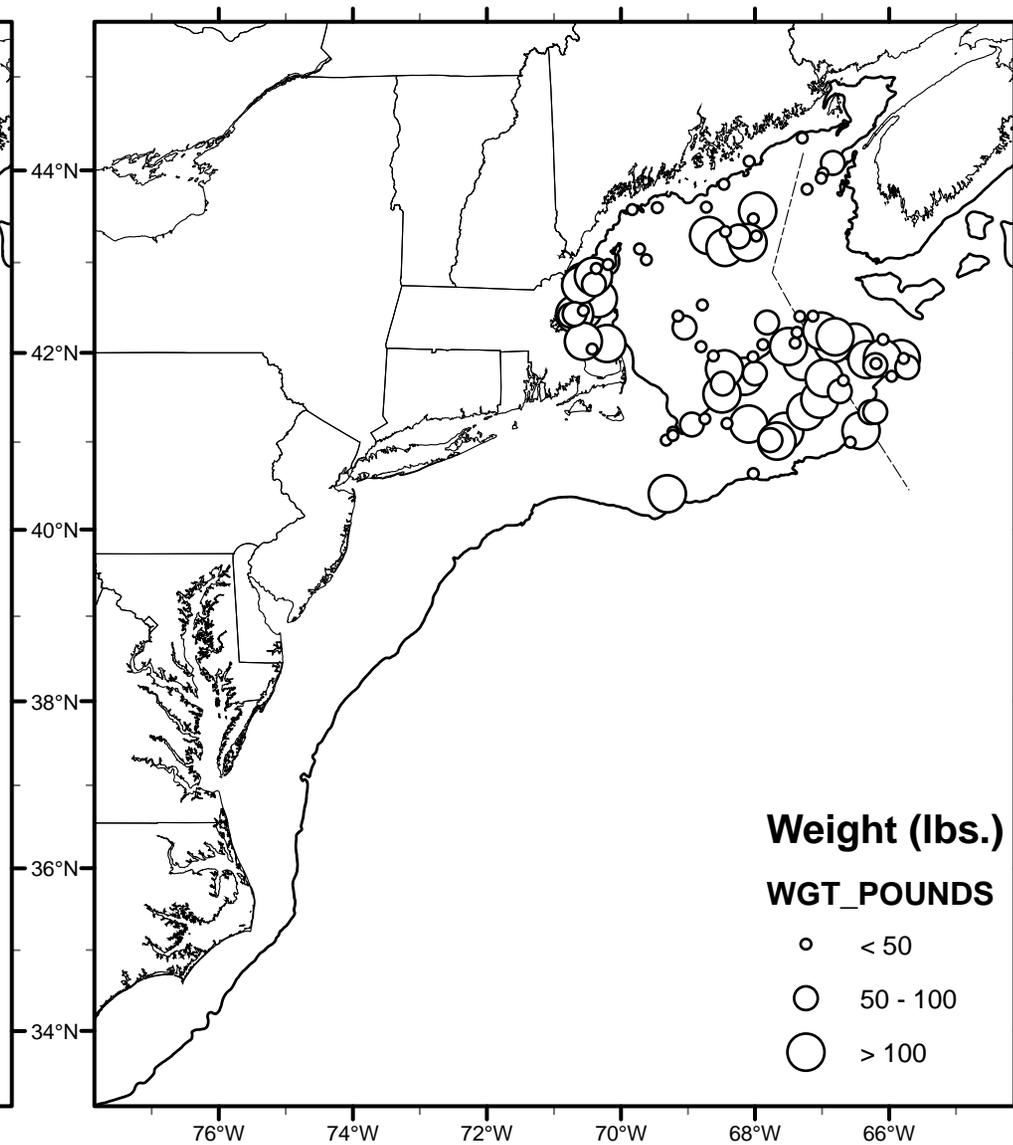
^[2] "Total others" comprised primarily of various rays, Atlantic croaker, spot and smooth dogfish

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14 March to 13 May 2018

ATLANTIC COD

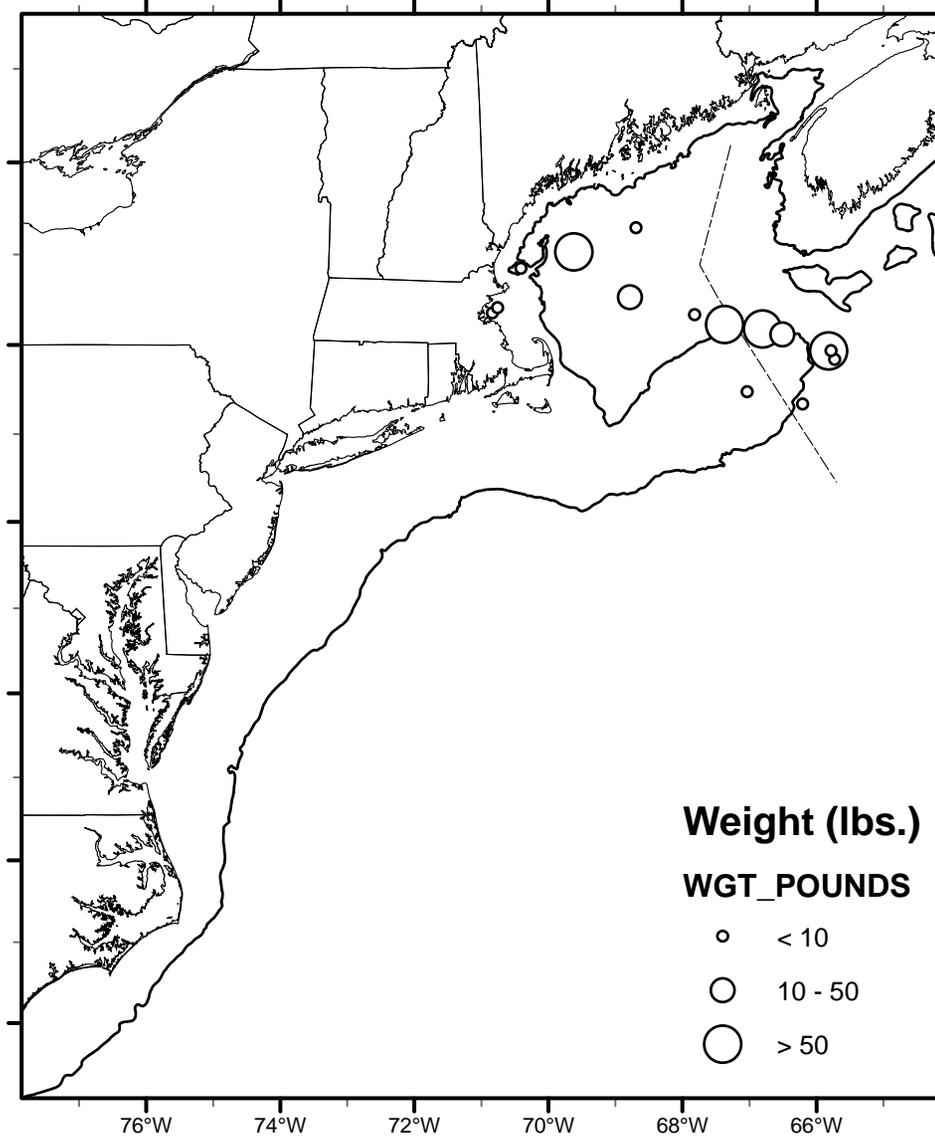


HADDOCK

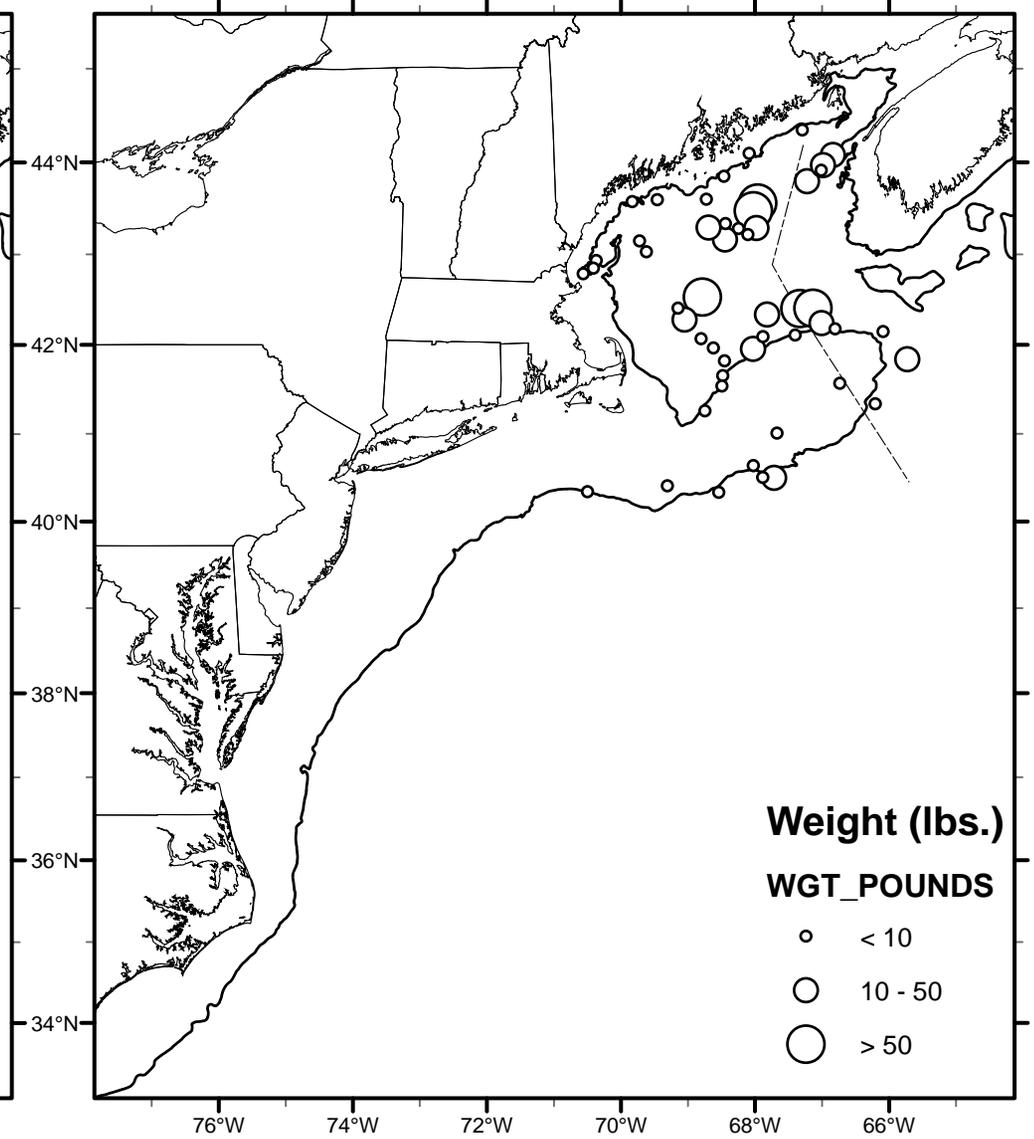


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POLLOCK

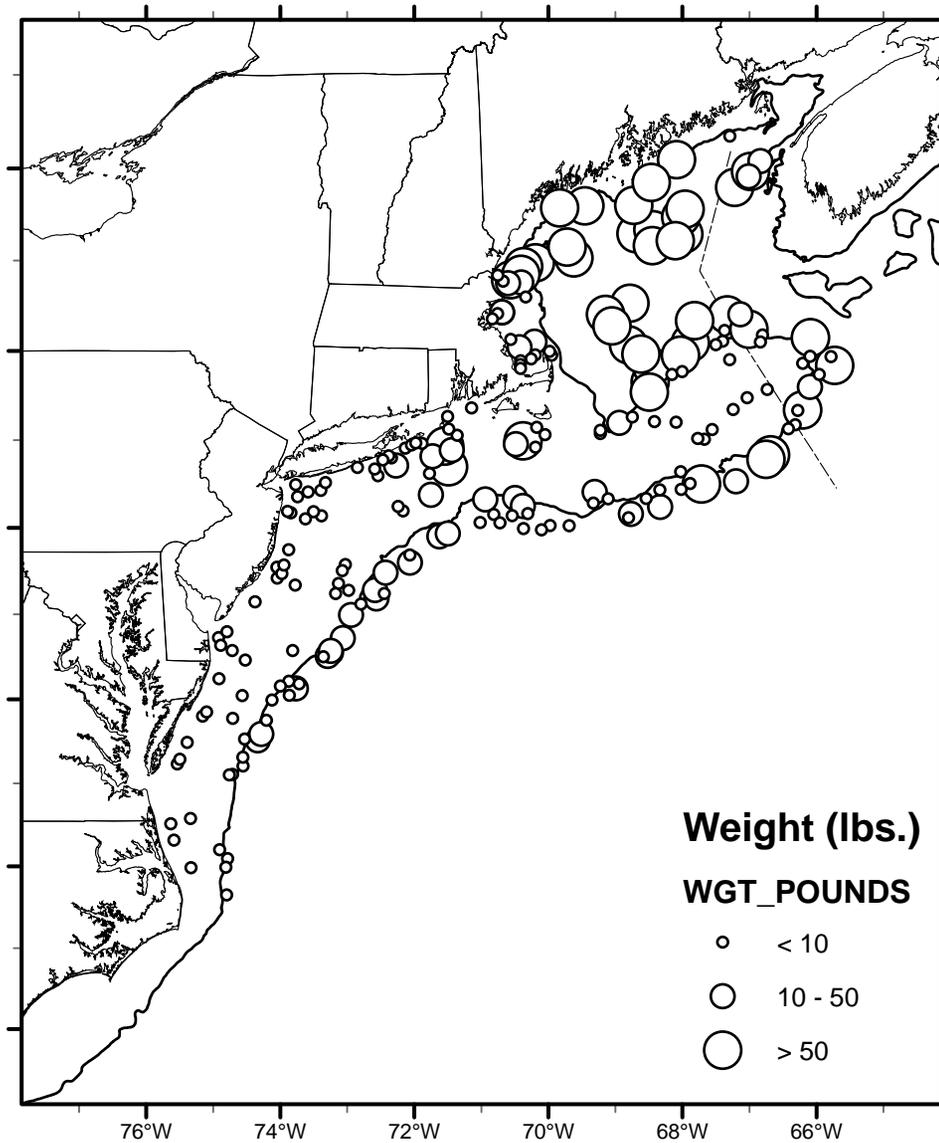


WHITE HAKE

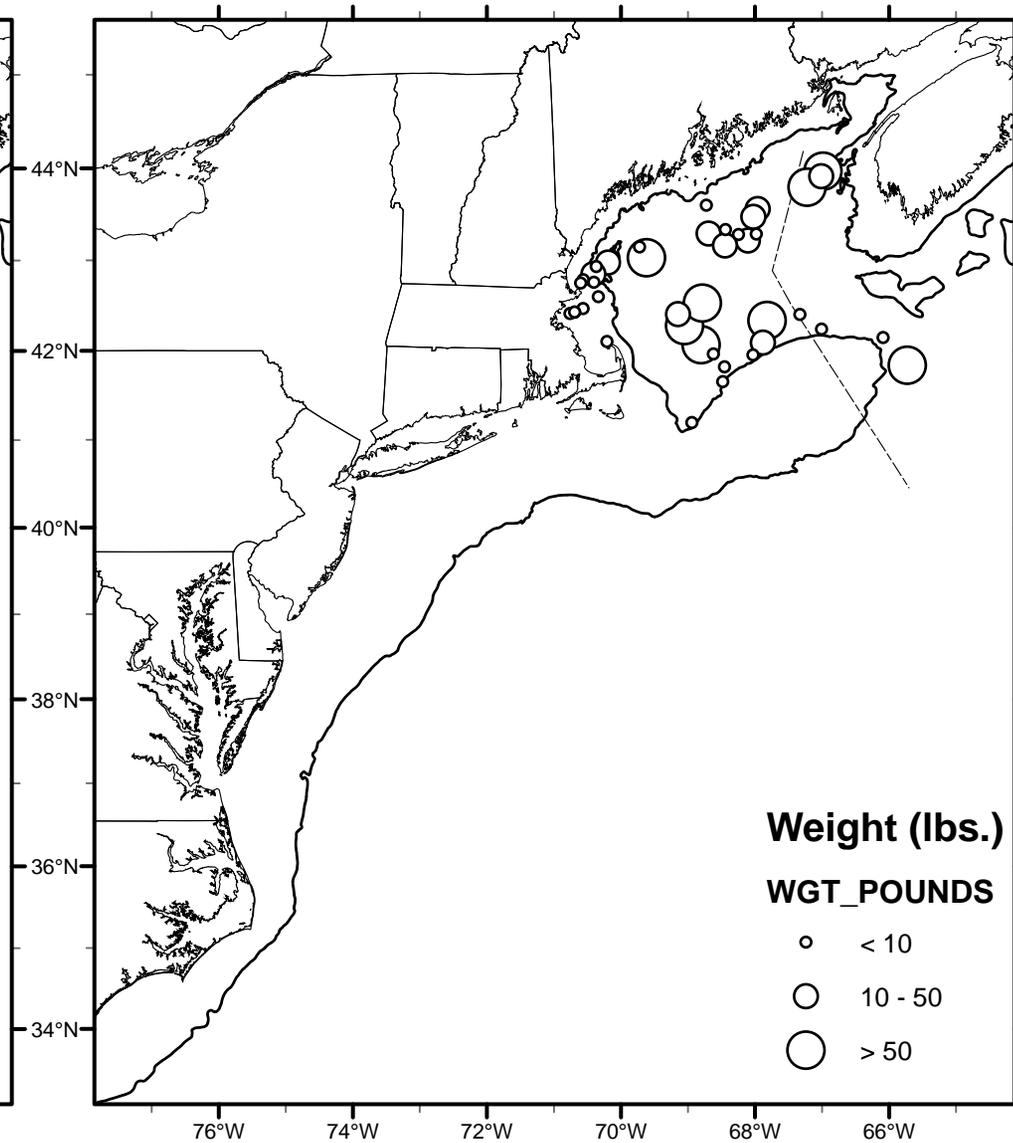


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SILVER HAKE

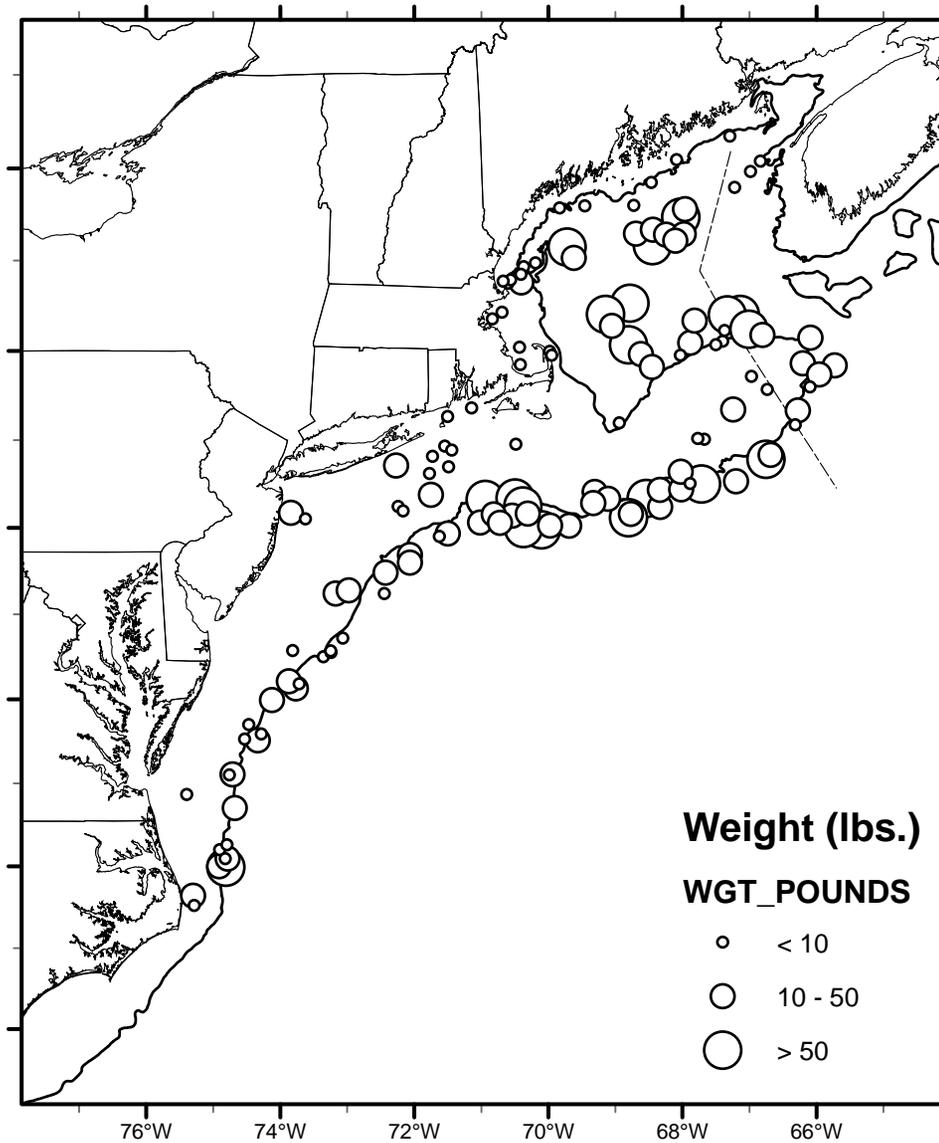


ACADIAN REDFISH

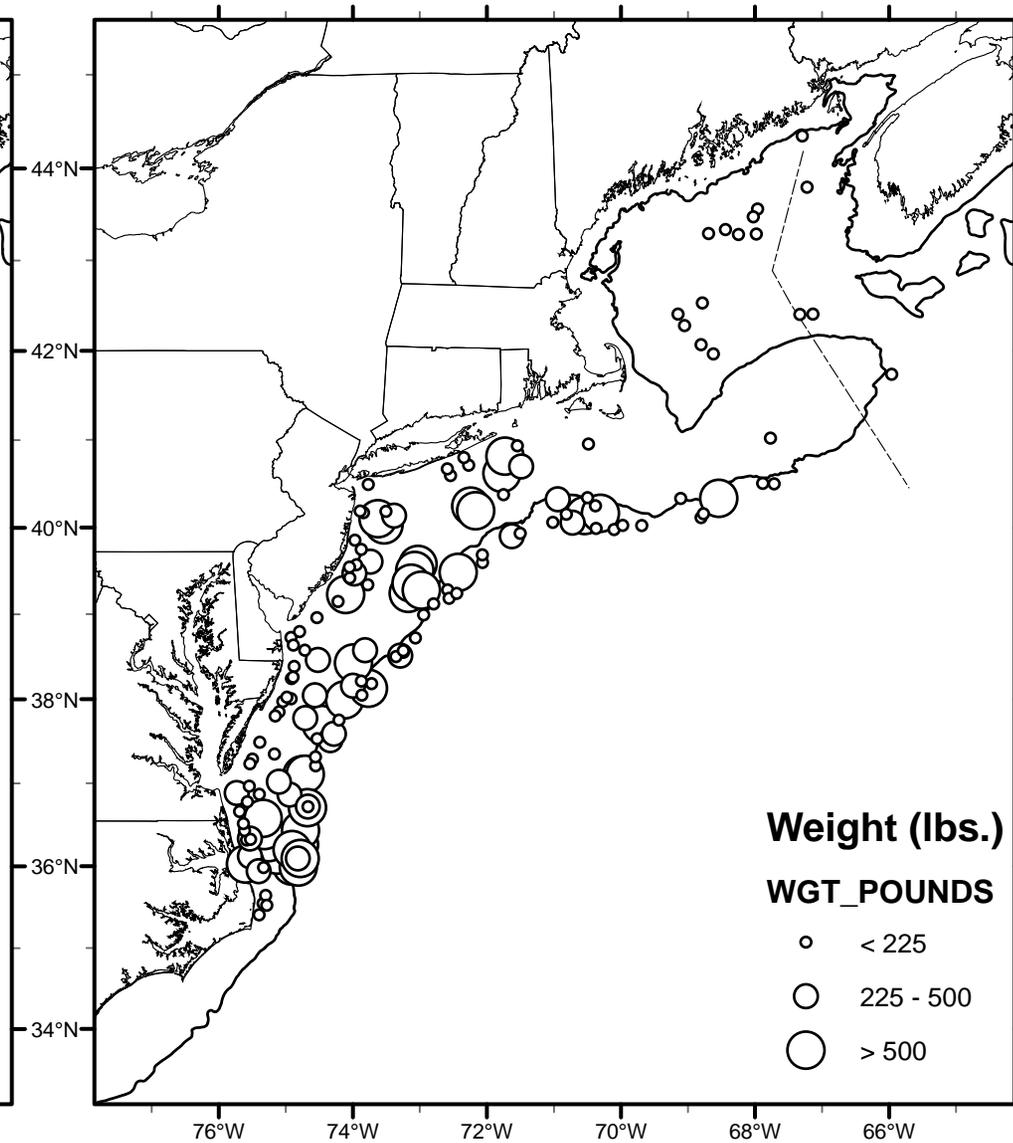


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GOOSEFISH

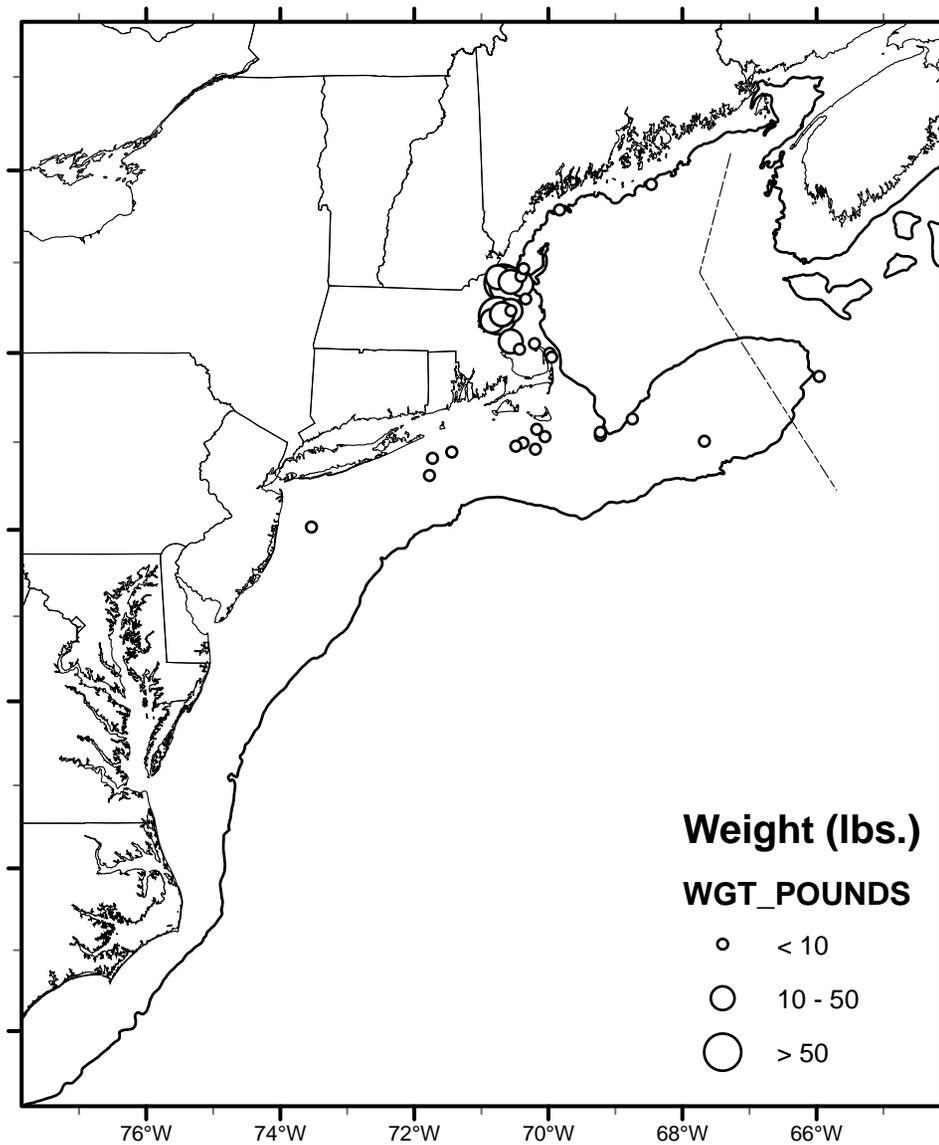


SPINY DOGFISH

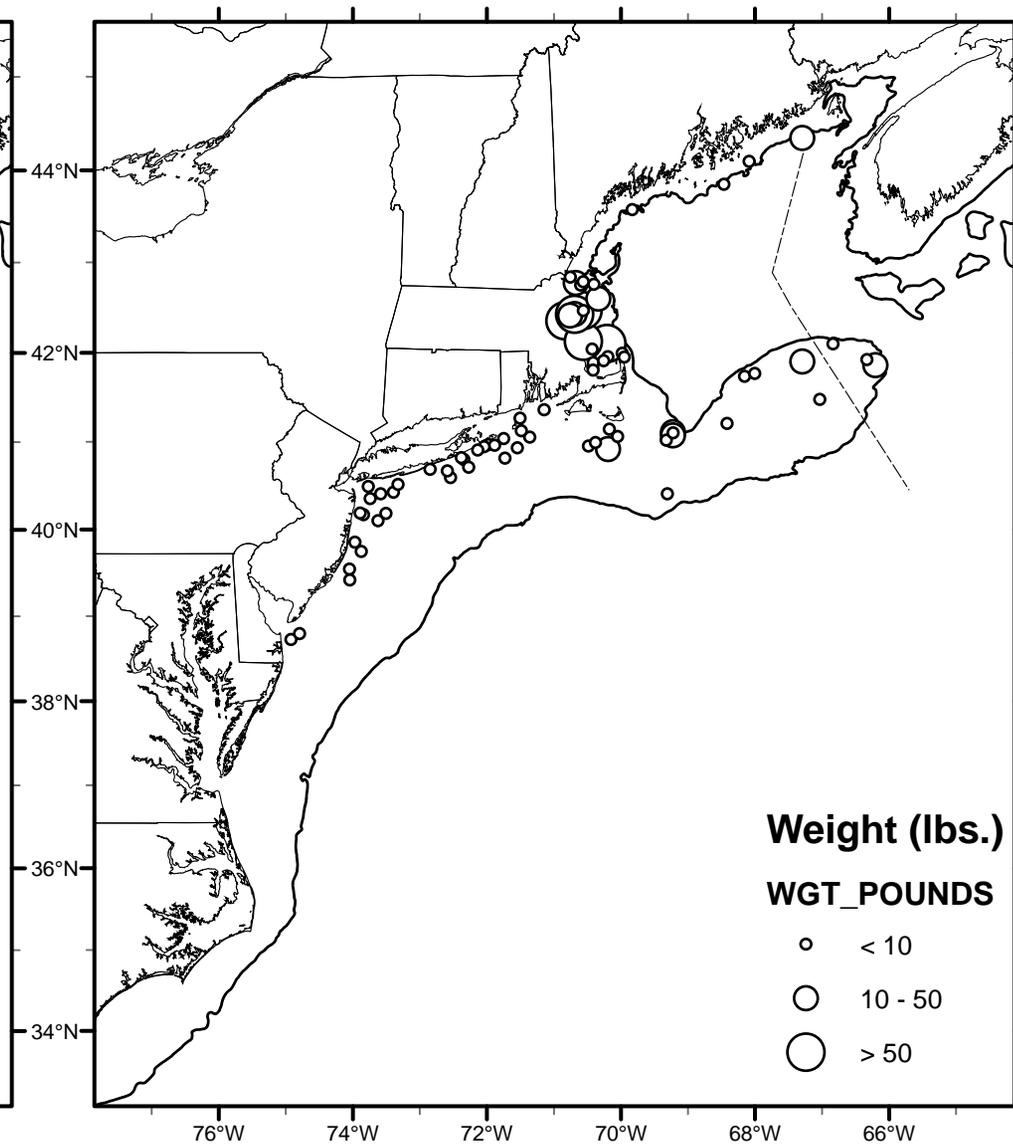


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YELLOWTAIL FLOUNDER

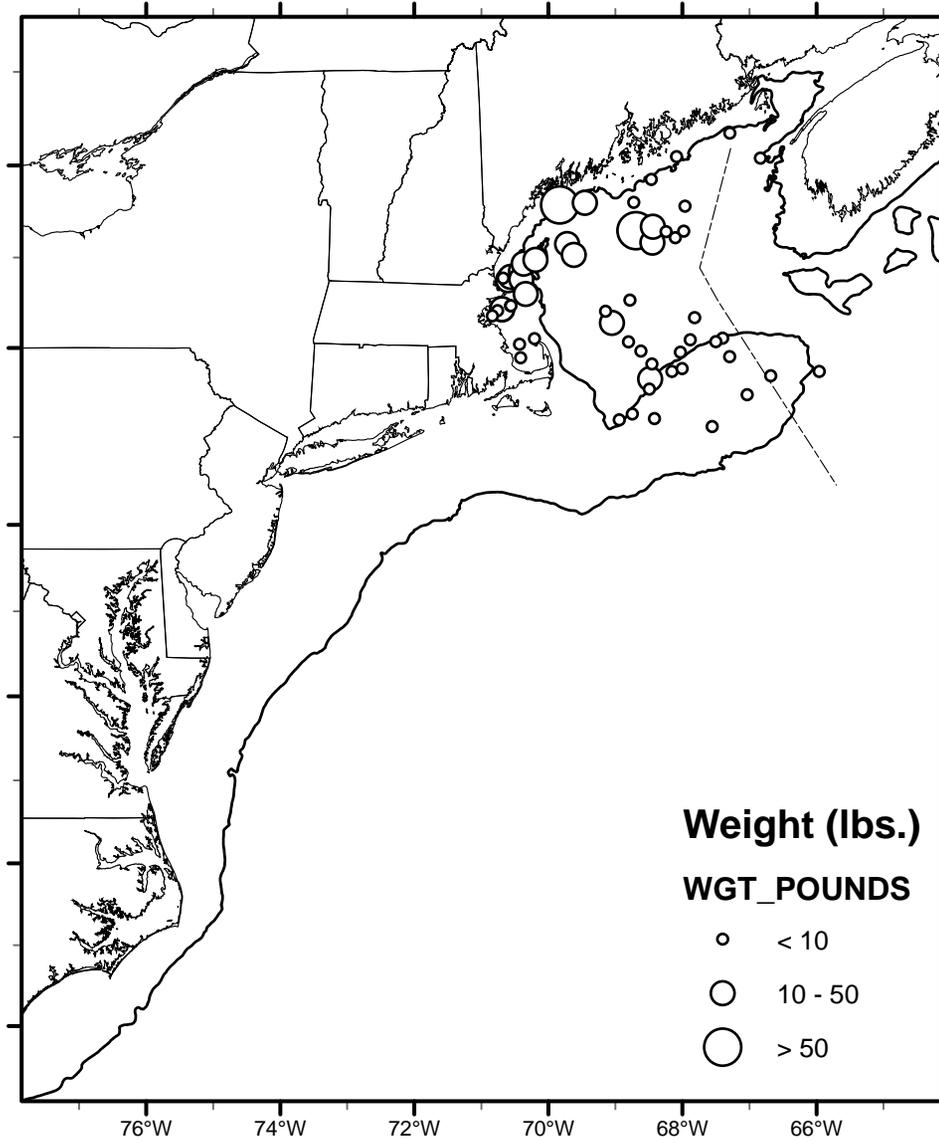


WINTER FLOUNDER

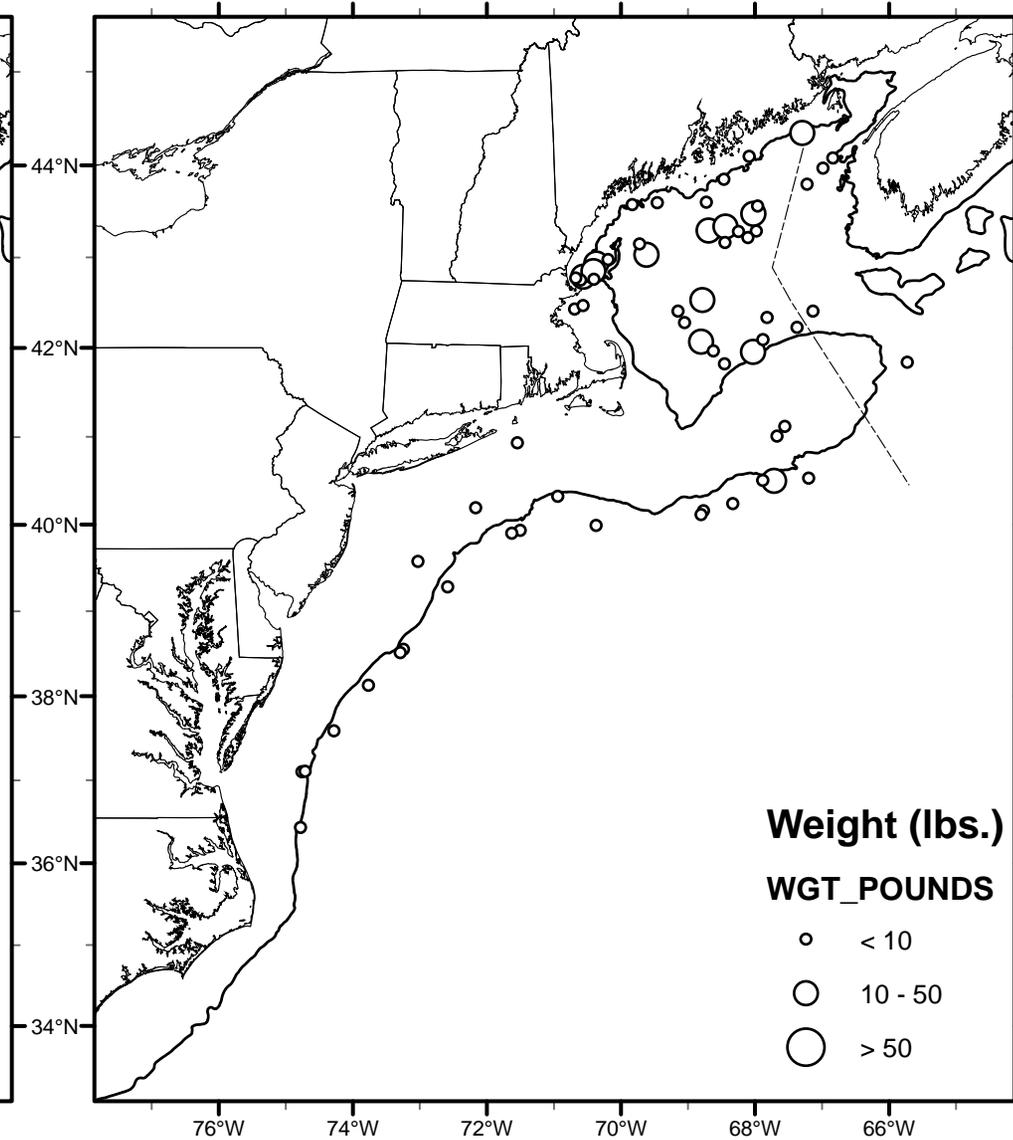


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AMERICAN PLAICE

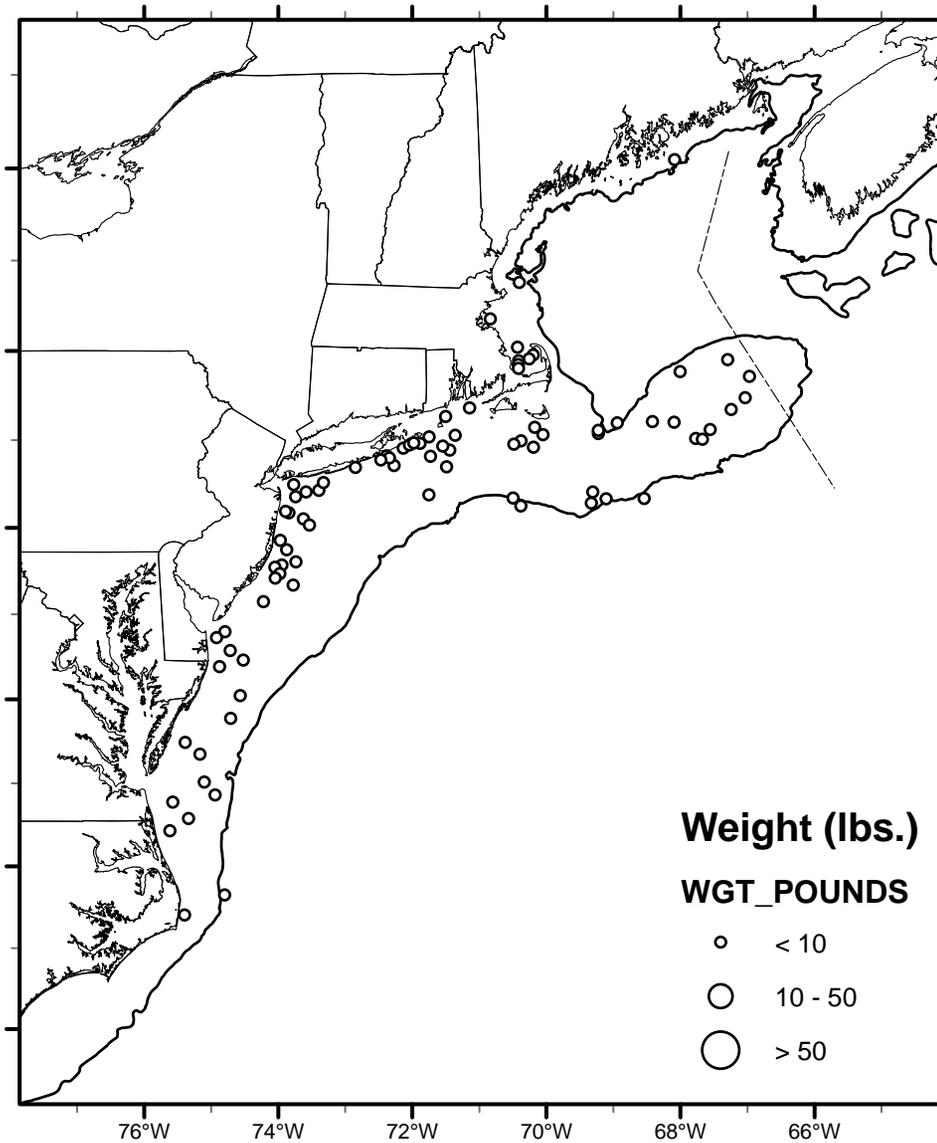


WITCH FLOUNDER

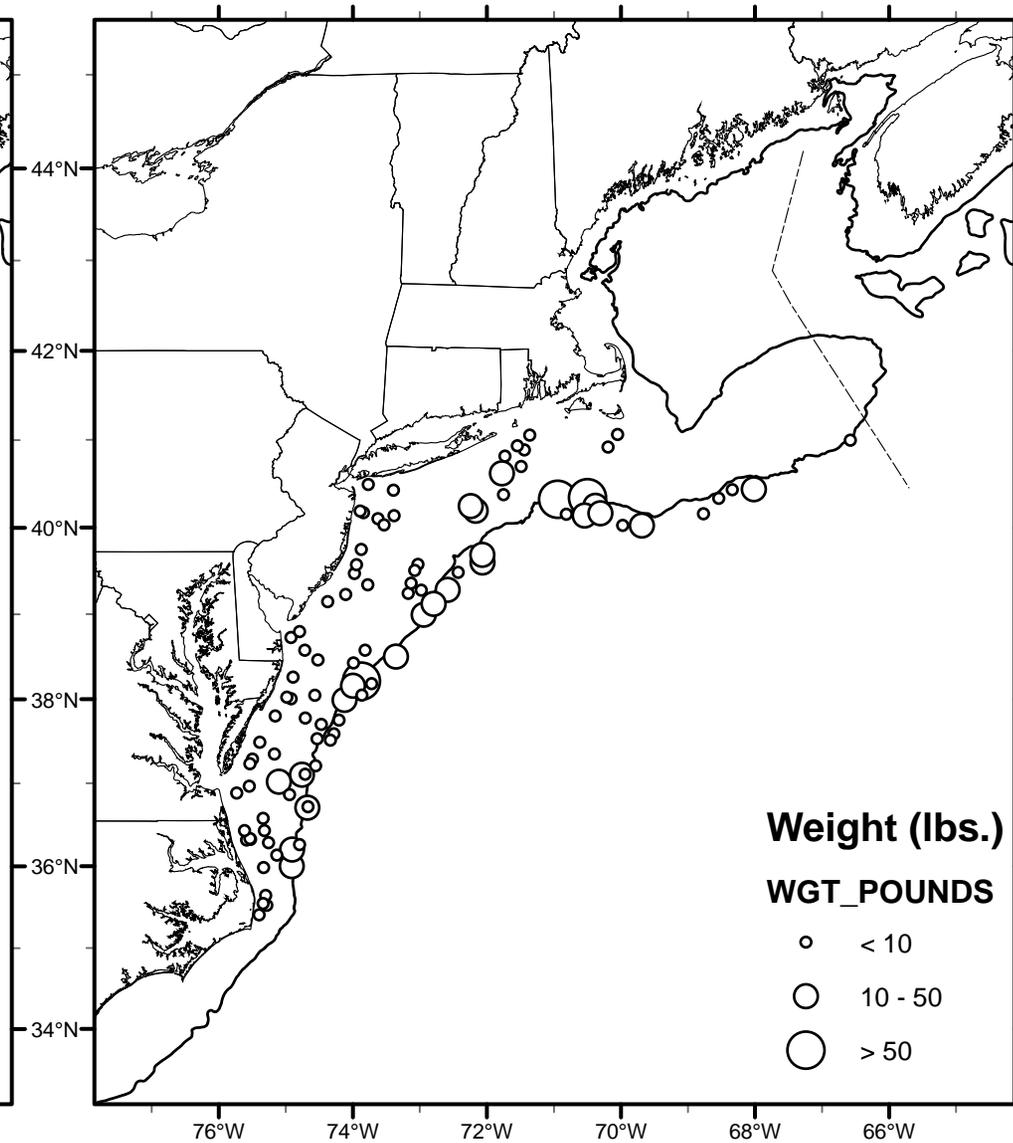


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WINDOWPANE FLOUNDER

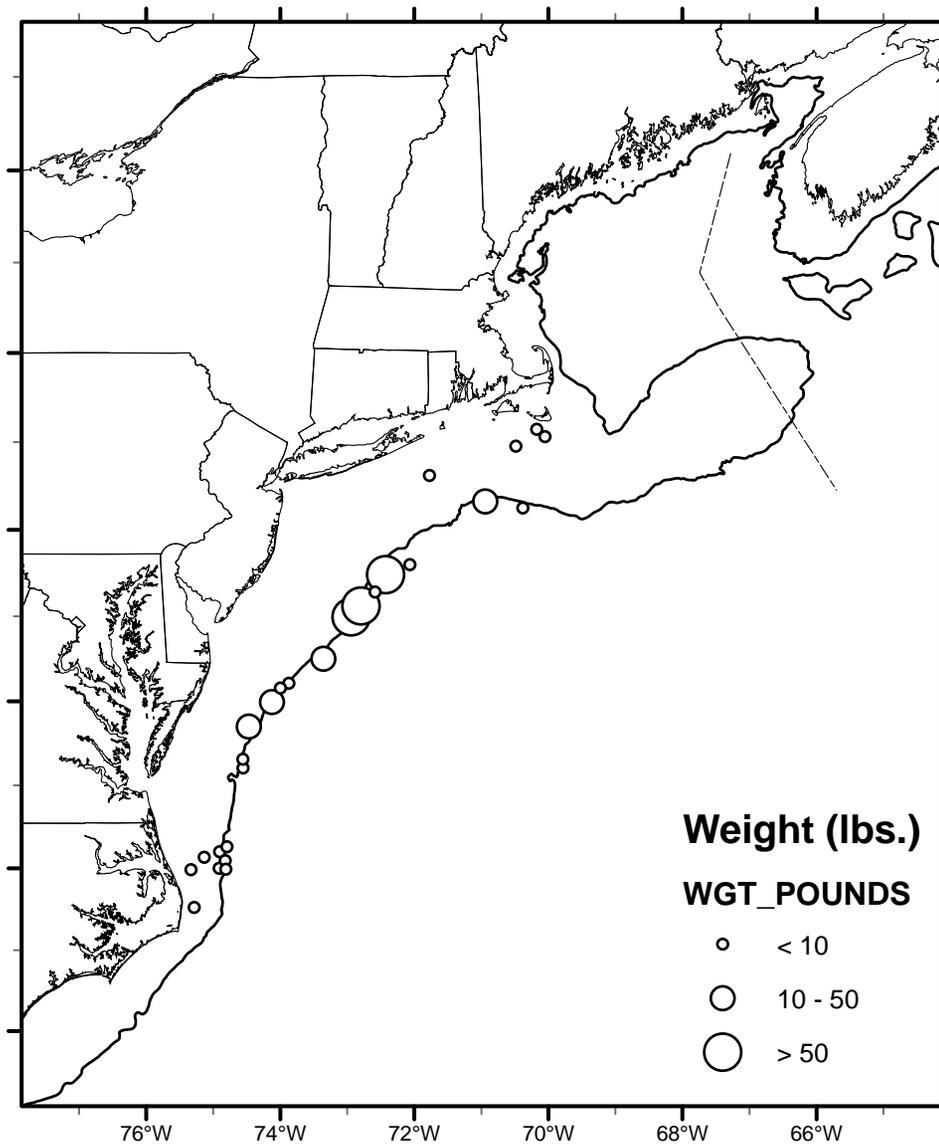


SUMMER FLOUNDER

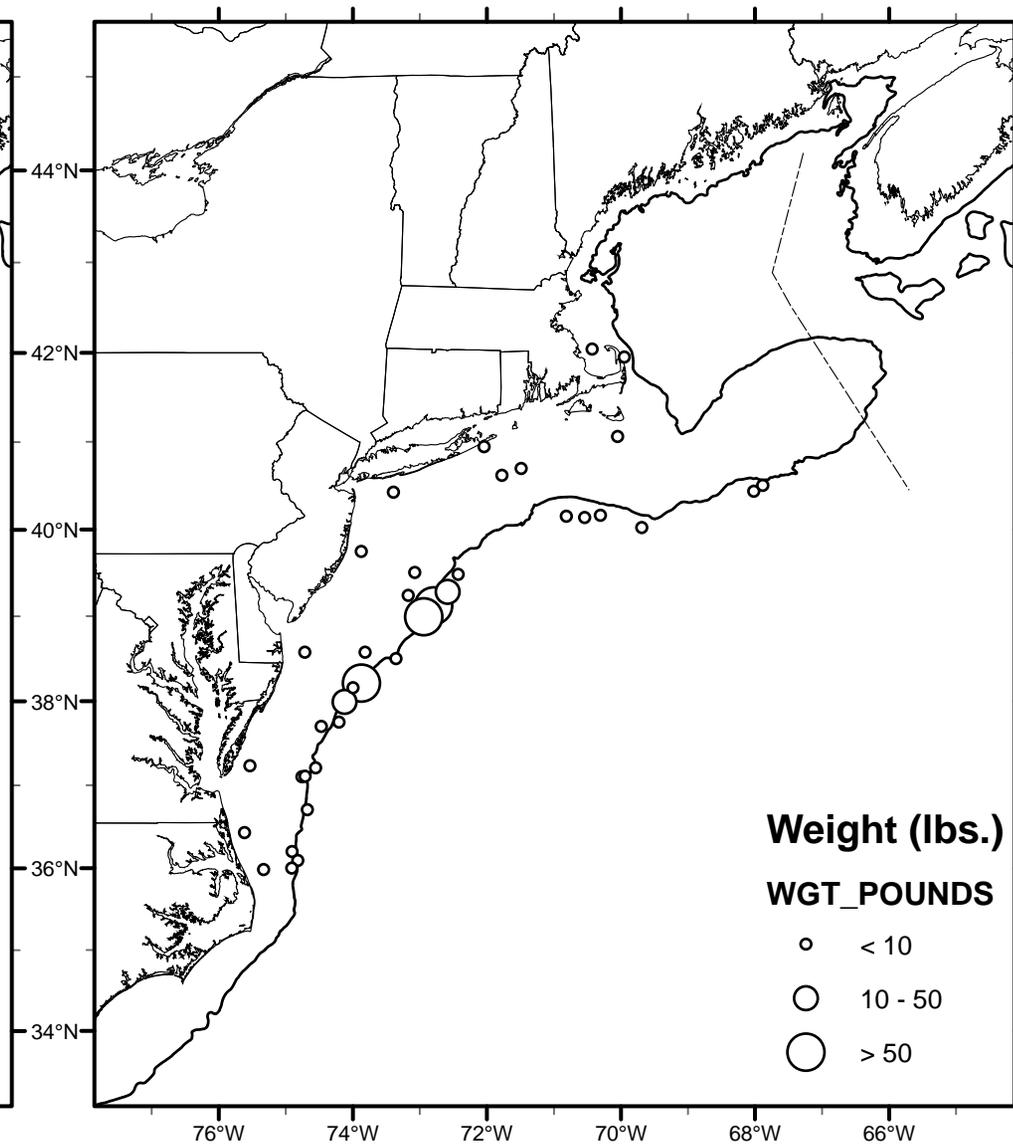


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SCUP

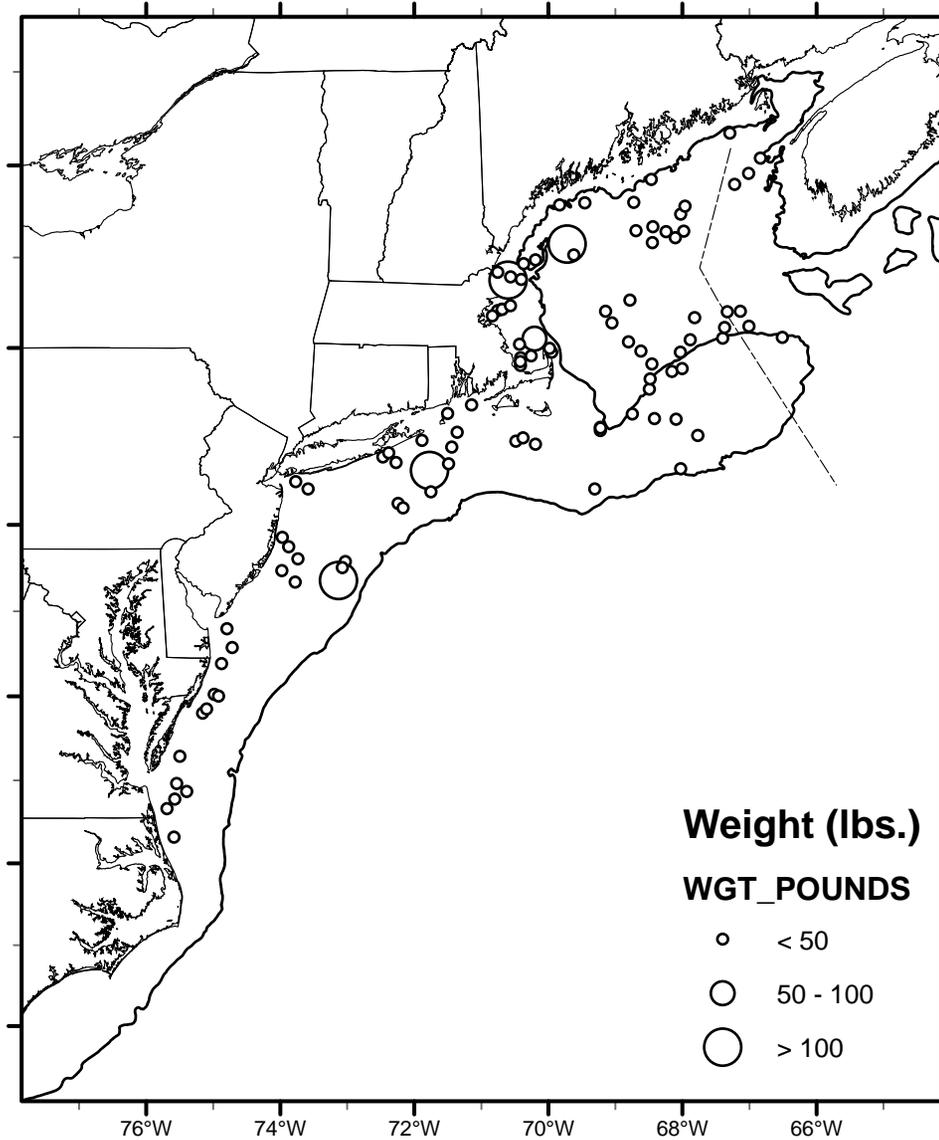


BLACK SEA BASS

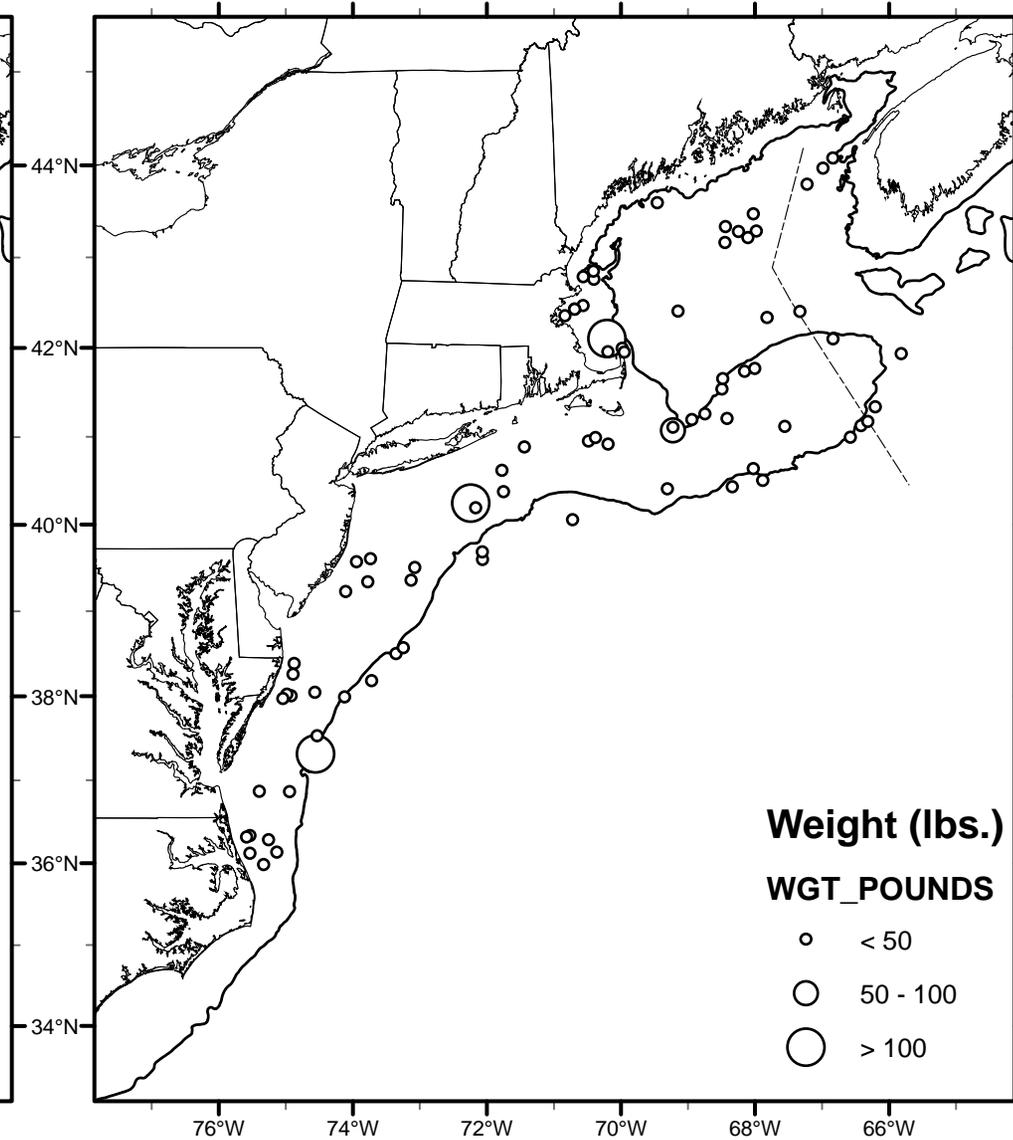


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ATLANTIC HERRING

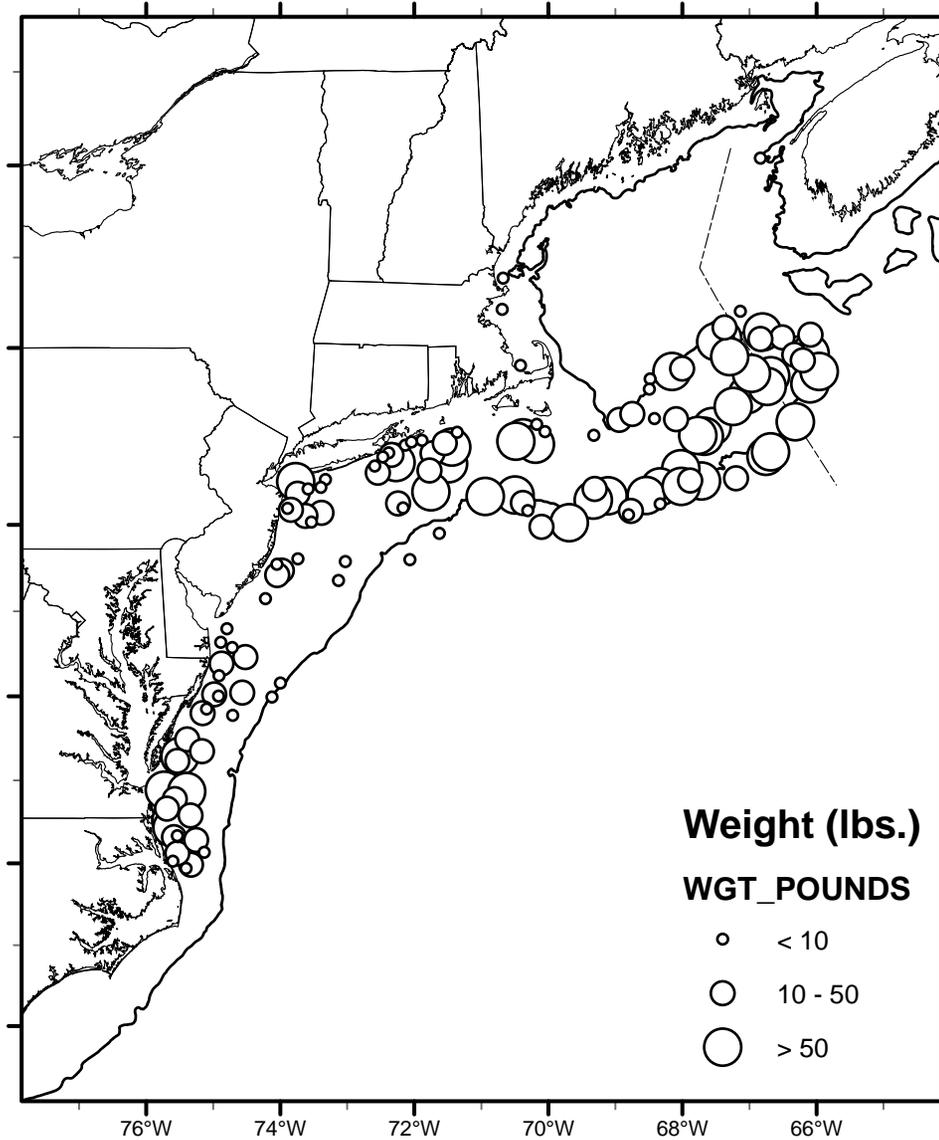


ATLANTIC MACKEREL

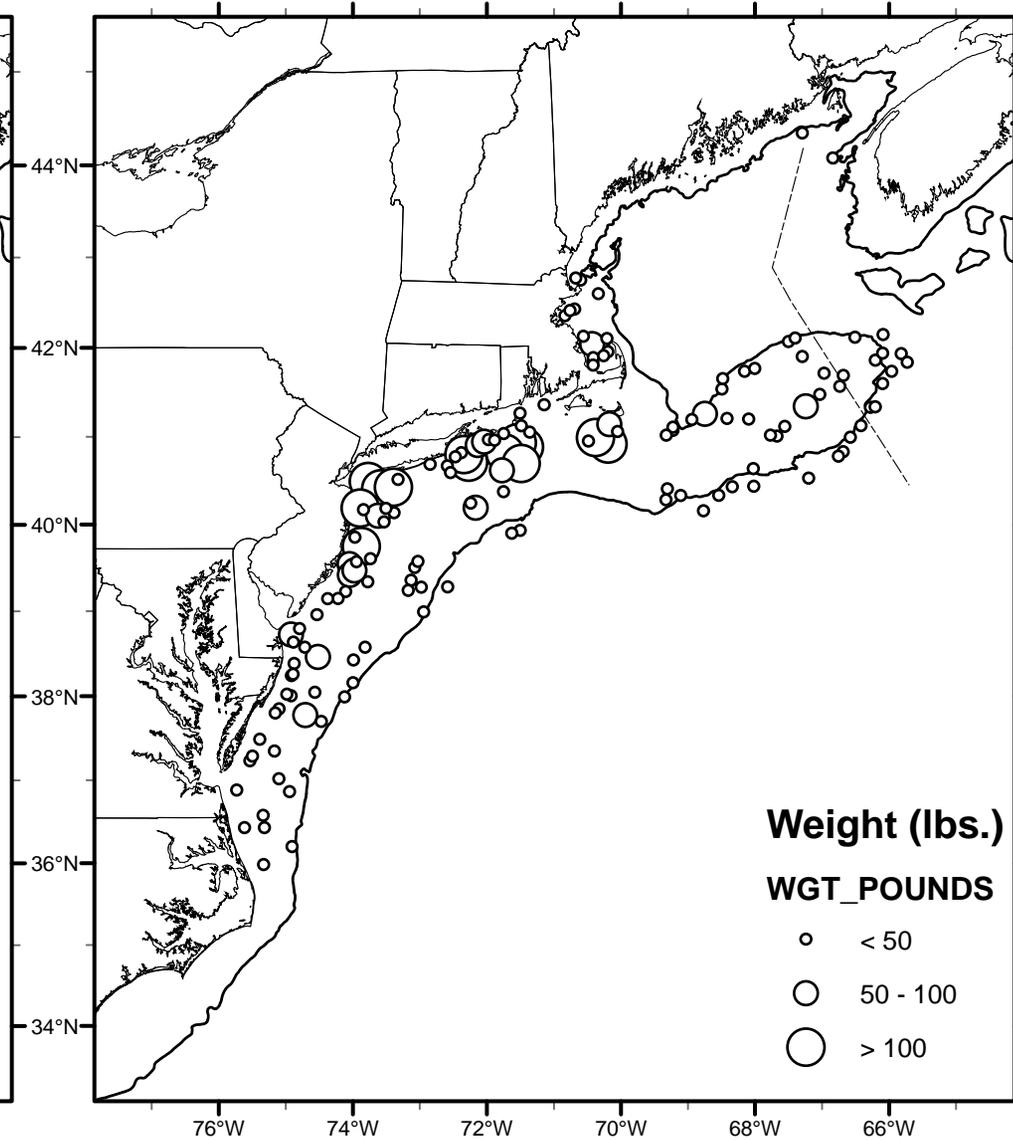


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WINTER SKATE

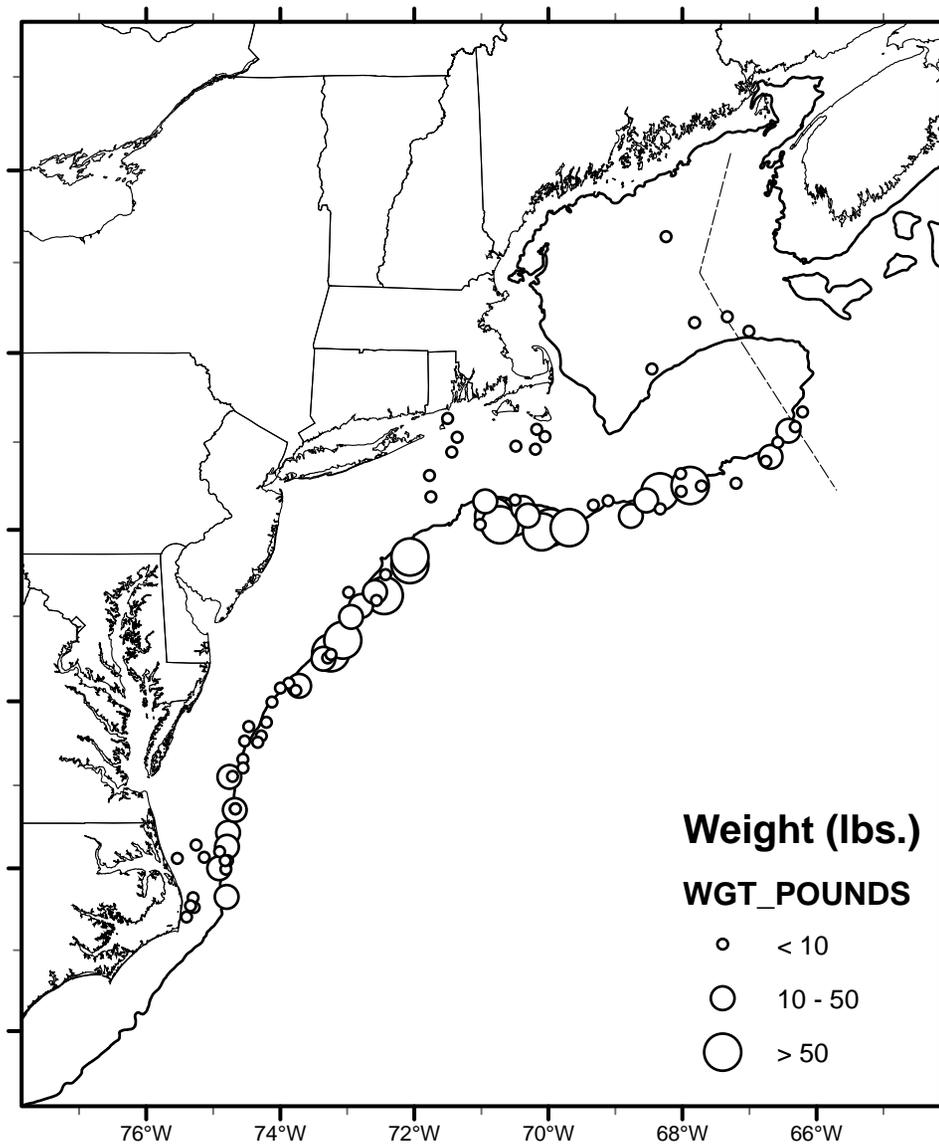


LITTLE SKATE

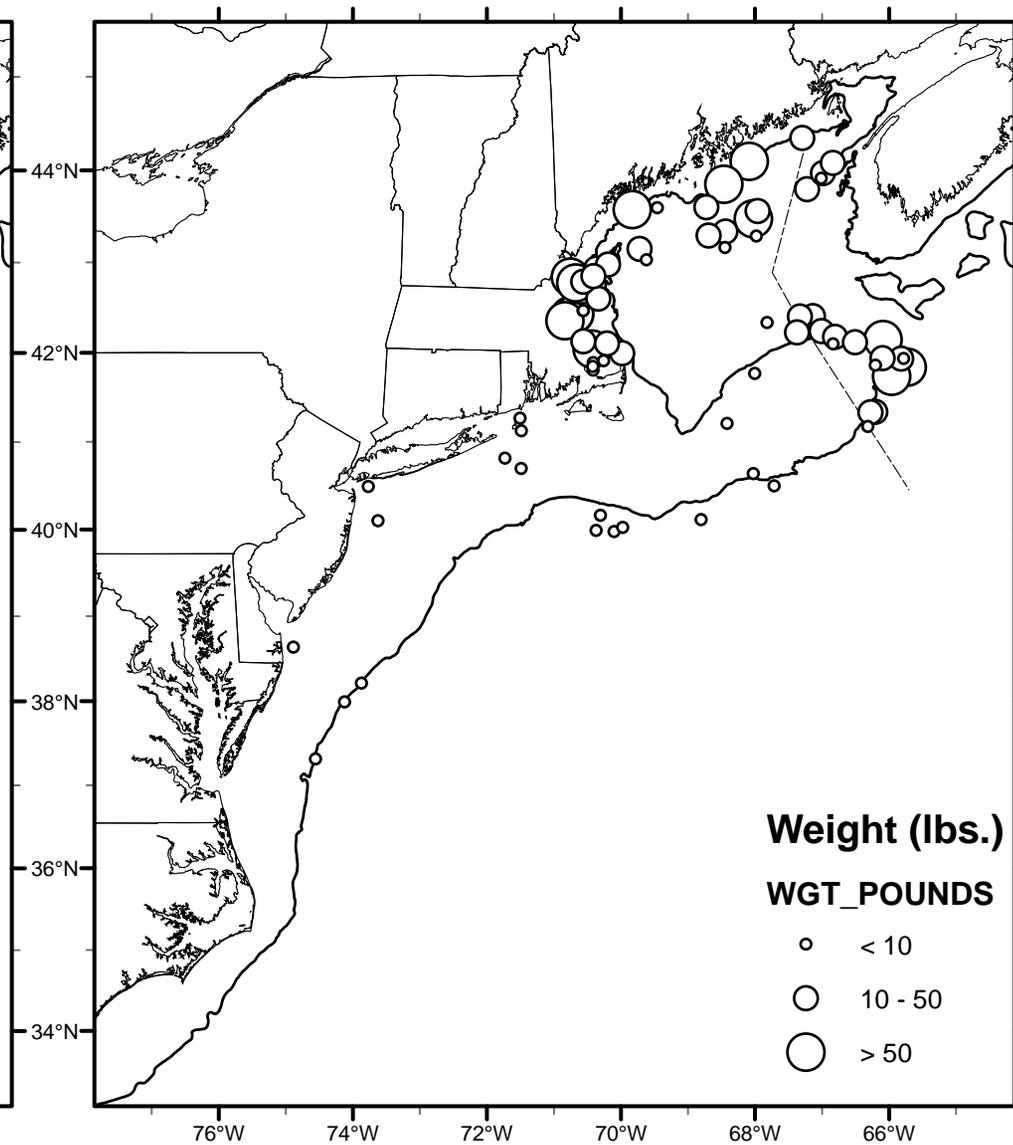


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BUTTERFISH

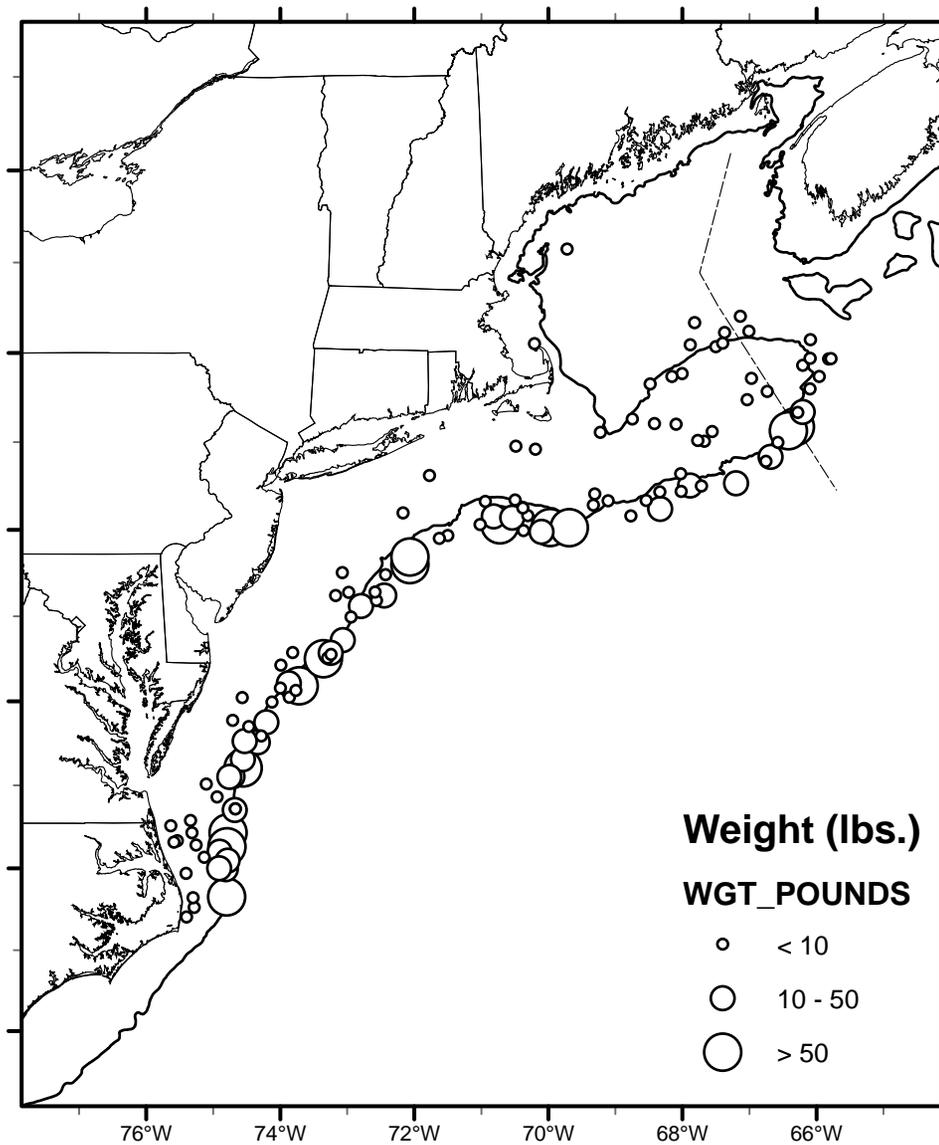


AMERICAN LOBSTER



NOAA Fisheries Service
NEFSC Spring Bottom Trawl Survey
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LOLIGO SQUID



ILLEX SQUID

