

RESOURCE SURVEY REPORT
Catch Summary
NOAA Fisheries Service
Northeast Fisheries Science Center
Spring Bottom Trawl Survey
Cape Hatteras - Gulf of Maine
8 April – 7 June 2016

Submitted to: NOAA, NEFSC

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Date: 2016

Resource Survey Report

Bottom Trawl Survey



Cape Hatteras – Gulf of Maine

8 April – 7 June 2016

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

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



An assorted catch of groundfish
from the Gulf of Maine



American shad (*Alosa sapidissima*)
Blueback herring (*Alosa aestivalis*)
Alewife (*Alosa pseudoharengus*)



Silver hake (*Merluccius bilinearis*)
being worked up in the fish lab

Significant Changes to the NEFSC Bottom Trawl Survey

Many significant changes in survey methodology were implemented, beginning with the 2009 Spring Multispecies Bottom Trawl Survey, that have significant implications for the use of these data. Prior to 2009, multispecies bottom trawl surveys were conducted primarily on the NOAA FSV *Albatross IV* and occasionally on the NOAA FSV *Delaware II*. The 2009 survey was conducted using the NOAA FSV *Henry B. Bigelow*, which is equipped with an autotrawl system that balances warp tensions throughout the duration of survey tows.

The bottom trawl system used for sampling has also been changed. Prior to 2009, the survey was conducted with a Yankee 36 bottom trawl and 450-kg euronet polyvalent trawl doors. Beginning in 2009, the survey is being conducted using a 400 x 12, 4-seam bottom trawl designed and extensively tested with the fishing industry, fishery management, and academic stakeholders in conjunction with the Northeast Fisheries Science Center scientists through the mid-Atlantic and New England Trawl Survey Advisory Panel. The net was extensively tested on the FSV *Delaware II* and the FSV *Henry B. Bigelow* prior to being adopted as the standard survey gear. The bottom trawl is fished with 550-kg, 2.2-m Polyice oval trawl doors.

The survey towing speed was decreased from 3.8 knots prior to 2009 to 3.0 knots beginning in 2009. The new towing speed was selected after extensive scope and tow speed trials conducted on both the FSV *Delaware II* and the FSV *Henry B. Bigelow* and consideration of the range of species to be sampled. The tow duration was also changed from 30 minutes (timed from when the winches were locked until they were reengaged) to 20 minutes of actual bottom time (as determined by net monitoring systems). The adjustments to both tow speed and tow duration have resulted in a decrease of average tow distance from 1.9 nautical miles prior to 2009 to an average tow distance of 1.0 nautical miles beginning in 2009. The shorter tow distance allows us to conduct additional tows in areas that are constrained by fixed fishing gear, untrawlable bottom and steep contours along the edge of the continental shelf. While some commercial fishery stakeholders are likely to express concern about the reduction in tow duration, a preliminary analysis of the length frequency data from paired FSV *Albatross IV* and the FSV *Henry B. Bigelow* tows shows few differences in the largest sized fish of each species caught by the vessels.

Station allocation also changed significantly due to an increase in total available vessel time from 48 to 60 sea days and a reduction in inshore sampling by the FSV *Henry B. Bigelow*. At the time that inshore strata in the mid-Atlantic were historically sampled (September to early October), survey results indicate low densities of commercially and recreational species. These areas will continue to be sampled by the Northeast Area Monitoring and Assessment Program (NEAMAP) bottom trawl survey, although later in the year (late September through early October). As a result of station reallocation, station density was increased significantly in offshore strata that have historically

demonstrated higher densities of fish particularly in the mid-Atlantic and southern New England regions.

The Northeast Fisheries Science Center conducted an extensive comparison of the catchability of the FSV *Albatross IV* sampling with the Yankee 36 bottom trawl using historical protocols and the FSV *Henry B. Bigelow* sampling with the 400 x 12, 4-seam bottom trawl with revised protocols. The resulting dataset is one of the most comprehensive ever produced to study the catchability characteristics of a fisheries bottom trawl survey. A preliminary overall result is that the survey conducted by the FSV *Henry B. Bigelow* has significantly higher catch rates for nearly all species except those with very small total body size (e.g. anchovy species). The results of this study were peer reviewed in August 2009 and analytic approaches will be subsequently used to appropriately interpret pre-2009 survey results with 2009 and later results.

Given the changes in vessel, trawling gear, tow speed, tow duration, sample allocation and towing procedures, straight-forward comparisons of catches in this report with fall bottom trawl survey catches in previous Resource Survey Reports are not appropriate without employing statistical approaches that are reviewed and endorsed for stock assessment applications through peer review processes.

Russell Brown, Former Chief
Ecosystems Survey Branch

RESOURCE SURVEY REPORT

Catch Summary

NOAA Fisheries Service
Northeast Fisheries Science Center

Spring Bottom Trawl Survey

Cape Hatteras - Gulf of Maine

8 April – 7 June 2016

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)

2016 spring bottom trawl survey aboard the NOAA Ship *Henry B. Bigelow*. Details regarding standard operating procedures at each tow location 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 Robert Johnston (508-495-2061), 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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- Spring Bottom Trawl Survey
- Year of interest

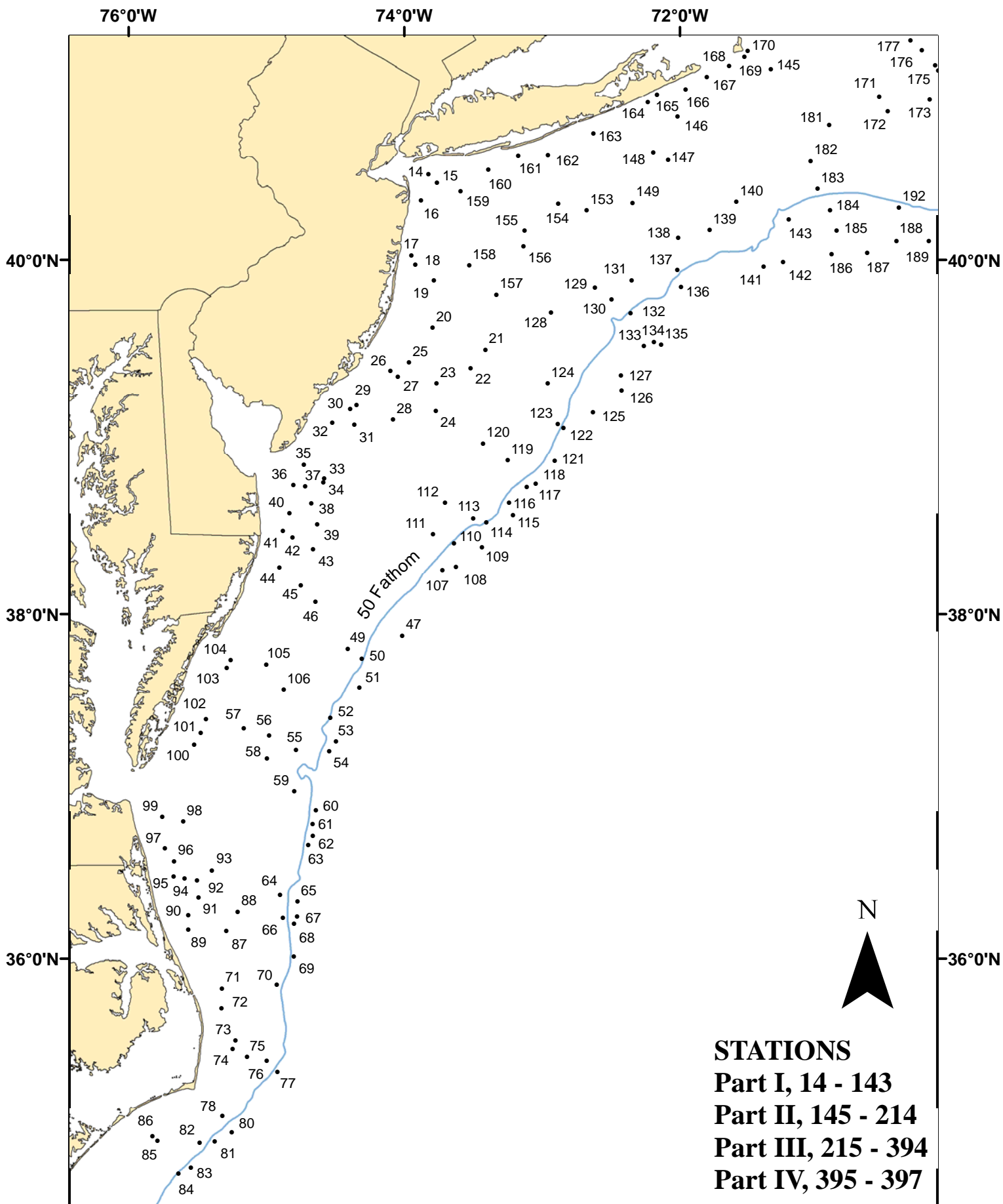


Figure 1. Trawl hauls made from NOAA Ship *Henry B. Bigelow* (16-01), during NOAA Fisheries Service, Northeast Fisheries Science Center's spring bottom trawl survey, 8 April - 7 June 2016

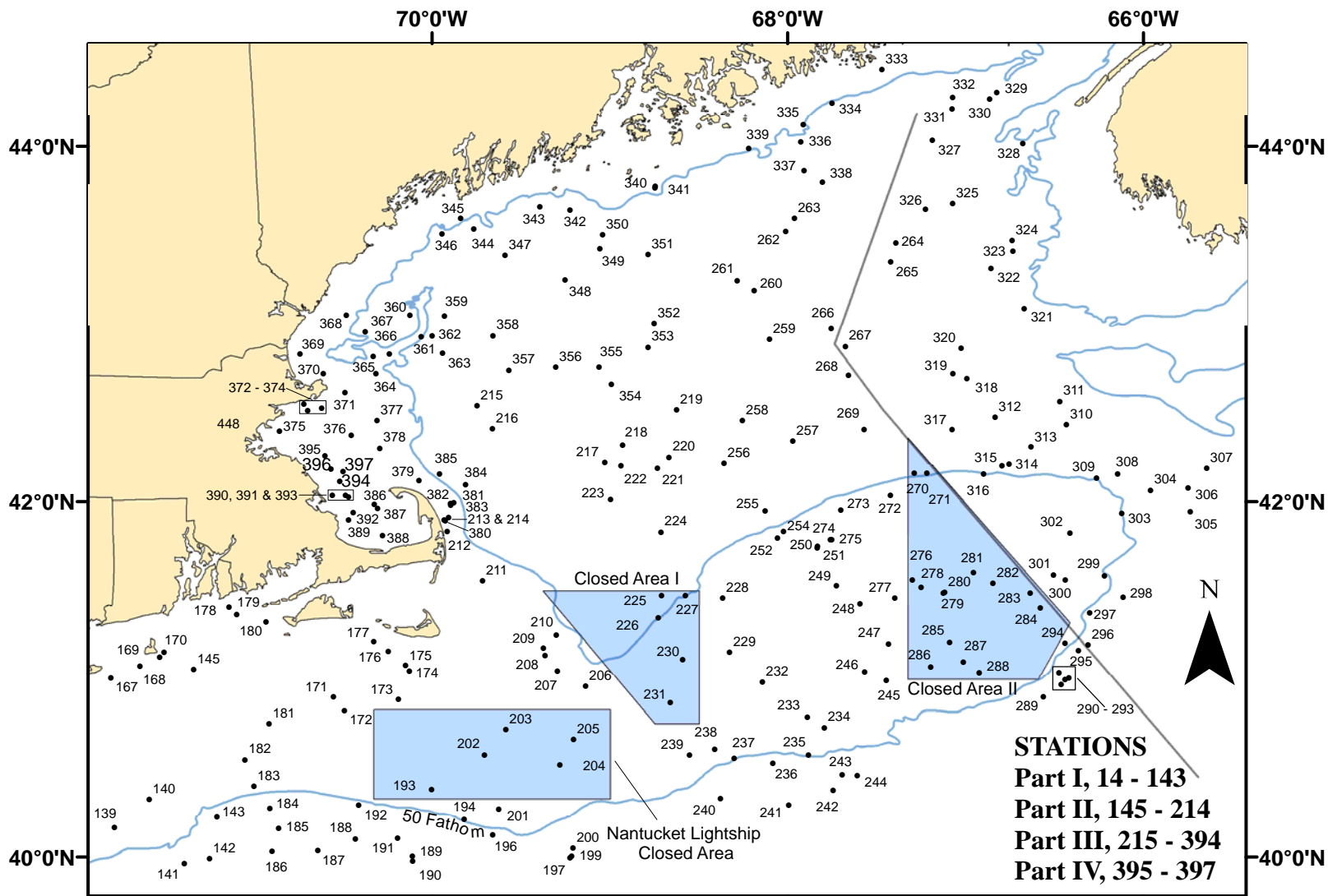


Figure 2. Trawl hauls made from NOAA Ship *Henry B. Bigelow* (16 - 01), during NOAA Fisheries Service, Northeast Fisheries Science Center's spring bottom trawl survey, 8 April - 7 June 2016

NOAA Fisheries Service
 SPRING BOTTOM TRAWL SURVEY
 2016 STATION INFORMATION

Station	Date	Time	Lat	Lon	Loran		Course	Bottom	
					TD's			Depth (FM)	Temp (F)
0014	Apr-08	1152	4028.6	7349.5	X26912.9	Y43710.6	234	12.8	45.4
0015	Apr-08	1338	4025.9	7345.8	X26877.2	Y43679.9	151	15.6	45.5
0016	Apr-08	1605	4019.9	7352.7	X26914.7	Y43627.0	279	12.0	45.6
0017	Apr-08	1905	4001.5	7357.0	X26900.0	Y43443.9	055	12.6	45.3
0018	Apr-08	2052	3958.3	7355.2	X26879.4	Y43410.1	222	13.7	45.4
0019	Apr-08	2319	3953.2	7347.1	X26810.0	Y43353.3	215	15.6	45.4
0020	Apr-09	0149	3937.3	7347.7	X26782.0	Y43191.5	332	12.3	46.3
0021	Apr-09	0521	3929.9	7324.7	X26611.9	Y43112.0	207	19.1	46.2
0022	Apr-09	0659	3923.6	7331.2	X26647.1	Y43049.5	229	26.0	46.9
0023	Apr-09	0939	3918.5	7345.9	X26737.3	Y42997.7	219	21.1	47.3
0024	Apr-09	1119	3909.3	7346.2	X26724.8	Y42902.5	203	20.2	47.5
0025	Apr-09	1400	3925.6	7357.9	X26829.0	Y43071.9	277	13.1	46.5
0026	Apr-09	1529	3922.9	7406.1	X26877.0	Y43042.9	221	12.0	46.9
0027	Apr-09	1658	3920.7	7402.8	X26851.7	Y43019.9	118	13.7	46.8
0028	Apr-09	1916	3906.3	7404.8	X26837.6	Y42867.4	231	16.4	47.1
0029	Apr-09	2139	3911.2	7420.8	X26946.6	Y42916.2	238	11.8	47.4
0030	Apr-09	2246	3910.0	7423.5	X26961.3	Y42902.0	249	12.0	47.2
0031	Apr-10	0029	3904.6	7421.7	X26938.5	Y42844.4	300	14.5	
0032	Apr-10	0212	3905.2	7431.3	X26998.5	Y42847.4	084	10.7	47.2
0033	Apr-10	0512	3846.5	7434.9	X26979.8	Y42639.9	261	15.9	47.3
0034	Apr-10	0606	3845.1	7435.2	X26979.0	Y42624.6	214	16.4	47.3
0035	Apr-10	0756	3851.1	7443.8	X27040.7	Y42685.8	060	10.1	47.5
0036	Apr-10	0944	3844.2	7448.3	X27051.3	Y42606.1	184	10.9	47.4
0037	Apr-10	1110	3843.7	7443.2	X27021.5	Y42604.6	157	10.7	47.3
0038	Apr-10	1227	3838.0	7440.5	X26994.6	Y42542.8	169	14.5	47.2
0039	Apr-10	1355	3830.6	7437.9	X26965.8	Y42463.5	293	11.5	48.1
0040	Apr-10	1541	3834.6	7450.0	X27040.6	Y42498.1	206	13.1	47.6
0041	Apr-10	1658	3828.5	7452.8	X27043.1	Y42427.1	216	9.6	47.7
0042	Apr-10	1822	3826.2	7448.7	X27016.2	Y42405.0	199	12.8	47.8
0043	Apr-10	2005	3822.3	7439.7	X26960.1	Y42370.4	183	17.8	47.9
0044	Apr-10	2250	3816.0	7454.4	X27026.4	Y42285.7	219	11.8	48.0
0045	Apr-11	0043	3809.9	7445.1	X26966.5	Y42228.5	052	18.6	48.1
0046	Apr-11	0223	3804.3	7438.7	X26923.7	Y42174.1	052	17.8	
0047	Apr-11	0642	3752.5	7400.9	X26712.3	Y42094.8	227	137.2	51.8
0049	Apr-11	1233	3748.0	7424.5	X26827.6	Y42016.3	216	34.4	50.3
0050	Apr-11	1417	3744.7	7418.4	X26792.5	Y41988.9	198	50.6	53.0
0051	Apr-11	1610	3734.7	7419.5	X26785.8	Y41882.6	225	63.2	56.0
0052	Apr-11	1821	3724.2	7432.1	X26834.1	Y41751.1	205	52.5	54.8
0053	Apr-11	2013	3716.0	7429.7	X26812.9	Y41669.6	188	148.2	51.8
0054	Apr-11	2203	3712.6	7432.7	X26822.6	Y41628.2	192	75.5	55.0
0055	Apr-12	0036	3713.1	7447.1	X26889.5	Y41605.9	199	32.8	50.5
0056	Apr-12	0241	3718.0	7458.8	X26949.9	Y41638.0	195	22.1	50.0
0057	Apr-12	0443	3720.6	7509.8	X27004.0	Y41647.4	109	17.2	50.2
0058	Apr-12	0639	3710.1	7459.8	X26943.0	Y41550.0	137	22.1	50.2
0059	Apr-12	0846	3658.6	7447.9	X26874.7	Y41450.8	130	33.1	52.7
0060	Apr-12	1054	3652.1	7438.4	X26825.3	Y41402.7	170	126.6	51.4
0061	Apr-12	1236	3647.1	7439.9	X26826.3	Y41348.1	351	71.9	

NOAA Fisheries Service
 SPRING BOTTOM TRAWL SURVEY
 2016 STATION INFORMATION

Station	Date	Time	Lat	Lon	Loran		Course	Bottom	Temp (F)
					TD's			Depth (FM)	
0062	Apr-12	1431	3643.0	7439.8	X26821.3	Y41306.1	225	156.9	
0063	Apr-12	1607	3640.0	7441.8	X26826.6	Y41270.8	213	94.3	
0064	Apr-12	1844	3622.4	7454.1	X26859.4	Y41060.6	188	24.9	61.3
0065	Apr-12	2029	3620.0	7446.4	X26825.5	Y41056.7	174	127.4	
0066	Apr-12	2224	3614.3	7452.9	X26845.9	Y40982.1	189	42.4	59.2
0067	Apr-13	0031	3614.7	7446.7	X26821.3	Y41003.2	150	109.6	
0068	Apr-13	0156	3612.2	7448.0	X26824.0	Y40974.4	177	63.7	59.1
0069	Apr-13	0501	3600.8	7448.1	X26813.5	Y40862.3	352	96.2	58.7
0070	Apr-13	0935	3550.8	7455.5	X26832.9	Y40743.2	350	41.8	56.9
0071	Apr-13	1239	3549.4	7519.4	X26922.2	Y40655.7		18.0	55.5
0072	Apr-13	1424	3542.4	7519.5	X26915.0	Y40585.4	036	13.4	56.5
0073	Apr-13	1647	3531.1	7513.5	X26881.4	Y40497.3	032	17.5	62.6
0074	Apr-13	1833	3528.0	7514.8	X26882.9	Y40464.0	024	16.4	62.8
0075	Apr-13	2016	3525.1	7508.5	X26857.1	Y40458.8	044	17.5	
0076	Apr-13	2202	3523.8	7459.9	X26825.0	Y40477.0	042	21.1	63.1
0077	Apr-14	0054	3519.9	7455.3	X26804.9	Y40459.4	068	103.1	61.8
0078	Apr-14	0549	3504.2	7519.2	X26876.2	Y40233.0	025	37.5	62.3
0080	Apr-14	0924	3458.4	7515.1	X26856.8	Y40199.7	054	184.3	51.9
0081	Apr-14	1208	3454.9	7522.5	X26879.1	Y40140.6	055	85.8	63.7
0082	Apr-14	1352	3454.7	7529.1	X26901.1	Y40111.9	013	36.4	68.5
0083	Apr-14	1605	3445.6	7532.9	X26905.6	Y40021.1	040	73.8	63.7
0084	Apr-14	1745	3443.5	7538.3	X26921.6	Y39980.5	041	38.0	70.1
0085	Apr-14	2004	3455.3	7547.5	X26963.9	Y40042.7	027	15.6	70.4
0086	Apr-14	2137	3457.0	7549.6	X26972.7	Y40048.6	039	13.7	69.2
0087	Apr-15	0814	3609.8	7517.5	X26938.1	Y40867.9	007	19.1	53.3
0088	Apr-15	1009	3616.5	7512.5	X26926.7	Y40951.2	356	18.9	52.3
0089	Apr-15	1250	3610.3	7534.0	X27003.1	Y40827.7	025	13.1	51.3
0090	Apr-15	1405	3615.3	7534.0	X27009.9	Y40881.7	038	14.8	51.6
0091	Apr-15	1537	3621.5	7529.5	X27000.6	Y40959.1	024	17.5	51.9
0092	Apr-15	1658	3627.5	7530.2	X27011.4	Y41022.3	041	16.1	51.7
0093	Apr-15	1824	3631.0	7523.7	X26990.3	Y41075.3	038	12.8	
0094	Apr-15	2035	3628.2	7535.7	X27034.3	Y41016.7	358	13.4	51.5
0095	Apr-15	2146	3628.8	7540.4	X27054.0	Y41012.2	320	12.0	51.6
0096	Apr-15	2314	3634.3	7540.2	X27061.3	Y41072.4	330	12.3	51.3
0097	Apr-16	0054	3638.8	7544.2	X27084.1	Y41113.3	020	11.8	51.3
0098	Apr-16	0241	3648.1	7536.2	X27066.6	Y41234.7	075	12.3	51.3
0099	Apr-16	0509	3649.7	7545.3	X27106.4	Y41233.7	236	11.8	51.3
0100	Apr-17	1708	3715.0	7531.4	X27090.6	Y41546.0	038	12.6	50.4
0101	Apr-17	1821	3719.1	7528.6	X27085.5	Y41597.2	012	13.4	50.3
0102	Apr-17	1937	3723.8	7526.3	X27083.7	Y41654.5	021	14.5	50.0
0103	Apr-17	2211	3741.4	7517.2	X27074.0	Y41868.0	015	11.8	50.1
0104	Apr-17	2313	3744.2	7515.5	X27071.0	Y41902.0	056	13.1	50.2
0105	Apr-18	0111	3742.6	7500.1	X26994.7	Y41906.4	136	15.6	49.4
0106	Apr-18	0302	3733.8	7452.5	X26944.1	Y41821.6	115	20.0	49.2
0107	Apr-18	1015	3815.1	7343.4	X26642.0	Y42346.7	038	65.6	54.7
0108	Apr-18	1212	3816.1	7337.5	X26610.3	Y42362.5	002	136.2	55.9
0109	Apr-18	1449	3822.9	7326.2	X26552.4	Y42440.7	054	139.2	

NOAA Fisheries Service
 SPRING BOTTOM TRAWL SURVEY
 2016 STATION INFORMATION

Station	Date	Time	Lat	Lon	Loran		Course	Bottom	
					TD's			Depth (FM)	Temp (F)
0110	Apr-18	1656	3824.1	7338.3	X26622.1	Y42442.7	255	61.0	54.2
0111	Apr-18	1832	3827.4	7347.5	X26677.6	Y42469.6	050	36.9	48.8
0112	Apr-18	2032	3838.2	7342.3	X26659.5	Y42584.1	039	34.7	47.8
0113	Apr-18	2237	3832.8	7330.0	X26582.1	Y42536.5	138	46.5	51.9
0114	Apr-19	0001	3831.3	7324.3	X26547.9	Y42525.8	080	60.7	52.5
0115	Apr-19	0210	3833.9	7312.7	X26482.6	Y42558.8	041	152.8	51.7
0116	Apr-19	0357	3838.2	7314.4	X26495.0	Y42599.9	022	63.2	54.5
0117	Apr-19	0545	3843.5	7306.7	X26452.7	Y42655.9	031	76.6	55.5
0118	Apr-19	0733	3844.7	7302.7	X26429.6	Y42669.5	017	116.7	55.5
0119	Apr-19	0949	3852.5	7315.0	X26509.4	Y42741.3	021	43.2	50.9
0120	Apr-19	1146	3858.2	7325.7	X26581.1	Y42794.7	021	33.4	46.8
0121	Apr-19	1542	3852.4	7254.5	X26382.8	Y42747.6	027	125.2	
0122	Apr-19	1743	3903.5	7250.7	X26364.0	Y42854.8	025	59.9	55.5
0123	Apr-19	1903	3904.8	7253.2	X26380.5	Y42866.8	022	47.3	54.3
0124	Apr-19	2111	3918.5	7257.6	X26416.9	Y42997.2	073	35.3	50.4
0125	Apr-19	2355	3908.8	7237.8	X26283.5	Y42905.8	083	109.1	55.9
0126	Apr-20	0205	3916.1	7225.4	X26204.0	Y42973.9	050	93.0	56.4
0127	Apr-20	0408	3921.1	7225.7	X26206.3	Y43019.6	226	76.8	56.2
0128	Apr-20	0814	3942.4	7256.1	X26425.7	Y43225.0	062	36.9	46.8
0129	Apr-20	1037	3950.7	7237.0	X26294.5	Y43293.4		32.8	47.8
0130	Apr-20	1210	3946.9	7229.8	X26239.8	Y43254.6	076	39.1	50.9
0131	Apr-20	1400	3953.2	7221.0	X26178.3	Y43306.9	166	42.9	50.9
0132	Apr-20	1554	3942.3	7221.5	X26179.4	Y43209.6	248	55.5	54.4
0133	Apr-20	1827	3931.1	7215.7	X26139.0	Y43108.1	266	124.1	55.5
0134	Apr-20	2027	3932.6	7211.4	X26109.3	Y43119.8	068	83.4	56.1
0135	Apr-20	2157	3931.5	7208.2	X26087.9	Y43109.4	209	131.2	53.8
0136	Apr-21	0125	3951.0	7159.6	X26023.1	Y43276.3	037	63.4	56.5
0137	Apr-21	0302	3956.6	7201.1	X26033.0	Y43324.6	038	49.8	51.6
0138	Apr-21	0455	4007.3	7200.8	X26030.0	Y43416.4	074	39.6	46.5
0139	Apr-21	0643	4010.0	7147.1	X25926.0	Y43428.2	045	44.3	47.6
0140	Apr-21	0859	4019.3	7135.4	X25833.6	Y43494.5	267	45.9	46.6
0141	Apr-21	1218	3957.8	7123.6	X25764.9	Y43312.9	073	112.1	55.9
0142	Apr-21	1423	3959.3	7115.1	X25705.1	Y43319.5	254	157.5	49.2
0143	Apr-21	1659	4013.6	7112.6	X25668.2	Y43430.8	054	56.3	49.7
0145	May-06	1553	4103.2	7120.4	X25719.1	Y43815.6	304	24.9	46.2
0146	May-06	1955	4047.7	7201.1	X26055.1	Y43749.9	105	23.0	47.2
0147	May-06	2226	4033.3	7205.2	X26075.2	Y43637.7	134	30.3	45.0
0148	May-07	0006	4035.6	7211.6	X26130.0	Y43664.3	132	28.2	46.6
0149	May-07	0236	4000.2	7220.6	X26177.7	Y43368.4	222	30.6	45.2
0153	May-07	0519	4016.6	7240.6	X26344.8	Y43529.6	357	30.1	45.8
0154	May-07	0657	4018.9	7253.0	X26445.6	Y43561.5	219	26.0	46.9
0155	May-07	0858	4009.7	7307.6	X26546.0	Y43489.4	226	24.6	46.1
0156	May-07	1022	4004.6	7308.1	X26542.0	Y43441.5	265	24.6	46.3
0157	May-07	1253	3948.3	7319.9	X26604.8	Y43292.0	304	23.8	48.6
0158	May-07	1501	3958.1	7331.7	X26707.7	Y43394.4	314	20.8	48.5
0159	May-07	1750	4022.9	7335.5	X26789.5	Y43640.9	031	13.7	49.0
0160	May-07	1932	4030.1	7323.4	X26710.3	Y43696.7	098	13.1	48.3
0161	May-07	2111	4034.7	7310.4	X26615.3	Y43725.1	044	13.4	48.1

NOAA Fisheries Service
 SPRING BOTTOM TRAWL SURVEY
 2016 STATION INFORMATION

Station	Date	Time	Lat	Lon	Loran		Course	Bottom	
					TD's			Depth (FM)	Temp (F)
0162	May-07	2254	4034.9	7257.4	X26508.9	Y43711.4	073	14.8	47.6
0163	May-08	0427	4042.1	7237.7	X26357.5	Y43750.2	056	17.0	47.3
0164	May-08	0708	4052.4	7213.9	X26172.6	Y43804.9	067	15.3	47.4
0165	May-08	0810	4054.8	7210.0	X26142.3	Y43818.3	058	12.8	47.5
0166	May-08	0938	4056.5	7157.6	X26036.8	Y43814.8	066	16.1	47.6
0167	May-08	1112	4100.6	7148.3	X25962.0	Y43833.7	070	16.1	47.8
0168	May-08	1323	4104.3	7138.6	X25881.9	Y43848.8	044	20.8	46.8
0169	May-08	1452	4107.4	7131.9	X25827.5	Y43861.7	273	14.5	47.6
0170	May-08	1648	4109.2	7130.5	X25818.1	Y43873.2	223	15.6	47.6
0171	May-08	2131	4054.2	7033.2	X25312.6	Y43693.4	133	28.7	46.0
0172	May-08	2248	4049.4	7029.6	X25293.0	Y43655.9	134	30.3	45.9
0173	May-09	0104	4053.3	7011.3	X25156.0	Y43663.3	328	18.0	46.5
0174	May-09	0305	4102.7	7007.6	X25101.2	Y43722.3	010	13.1	46.9
0175	May-09	0404	4104.5	7008.9	X25105.1	Y43735.7		13.7	46.9
0176	May-09	0520	4109.4	7014.8	X25142.7	Y43774.7	338	14.5	46.9
0177	May-09	0634	4112.8	7019.6	X25186.9	Y43803.0	297	15.9	47.1
0178	May-09	1400	4124.4	7108.6	X25657.3	Y43948.9	071	11.8	49.0
0179	May-09	1519	4121.8	7105.9	X25625.5	Y43926.6	342	12.8	
0180	May-09	1714	4119.4	7056.0	X25529.6	Y43896.1	248	17.5	47.3
0181	May-09	2118	4045.0	7055.0	X25497.8	Y43651.2	213	34.2	44.5
0182	May-09	2328	4032.9	7103.1	X25574.2	Y43570.4	186	40.7	47.0
0183	May-10	0120	4023.7	7100.1	X25564.0	Y43498.6	167	48.1	54.0
0184	May-10	0315	4016.5	7054.7	X25538.1	Y43439.0	080	63.7	55.8
0185	May-10	0509	4009.8	7051.8	X25532.1	Y43385.9	115	73.0	54.8
0186	May-10	0714	4001.9	7054.0	X25562.1	Y43327.3	110	125.5	54.2
0187	May-10	0929	4002.3	7038.5	X25466.9	Y43321.3	083	88.0	56.3
0188	May-10	1130	4006.2	7025.8	X25384.7	Y43342.7	268	68.6	55.5
0189	May-10	1410	4000.3	7006.6	X25306.8	Y43289.0	118	96.0	55.5
0190	May-10	1533	3958.5	7006.5	X25311.9	Y43275.8	104	127.4	
0191	May-10	1734	4006.4	7011.6	X25311.8	Y43335.3	261	78.5	55.9
0192	May-10	1947	4017.5	7024.7	X25346.9	Y43424.1	277	53.0	52.1
0193	May-10	2234	4022.6	7000.1	X25206.7	Y43442.7	075	44.3	46.1
0194	May-11	0032	4012.6	6949.1	W14133.7	Y43365.8	125	49.8	53.6
0196	May-11	0330	4007.4	6939.5	W14101.7	Y43324.2	281	53.3	54.3
0197	May-11	0723	3959.7	6913.4	W13998.3	Y43259.1	058	117.8	55.8
0199	May-11	0854	4000.4	6912.8	W13993.4	Y43263.2	218	119.2	55.8
0200	May-11	1028	4003.0	6912.4	W13982.6	Y43280.7	068	80.1	56.4
0201	May-11	1335	4016.2	6937.5	W14063.3	Y43382.9	284	42.7	47.4
0202	May-11	1614	4034.4	6942.3	W14025.7	Y43508.8	159	35.3	45.7
0203	May-11	1818	4042.9	6935.1	W13957.2	Y43559.5	285	26.2	46.1
0204	May-11	2058	4031.1	6916.9	W13907.4	Y43467.9	079	36.9	45.7
0205	May-11	2331	4039.8	6912.3	W13852.2	Y43520.3	102	36.1	45.4
0206	May-12	0228	4057.7	6908.2	W13761.6	Y43629.3	196	37.2	45.0
0207	May-12	0514	4102.6	6917.6	W13789.9	Y43668.9	015	30.3	45.0
0208	May-12	0655	4108.0	6921.8	W13789.9	Y43706.2	114	26.8	44.8
0209	May-12	0902	4110.6	6922.4	W13781.9	Y43722.9	341	27.1	44.8

NOAA Fisheries Service
 SPRING BOTTOM TRAWL SURVEY
 2016 STATION INFORMATION

Station	Date	Time	Lat	Lon	Loran		Course	Bottom	
					TD's			Depth (FM)	Temp (F)
0210	May-12	1040	4114.9	6918.0	W13741.0	Y43744.5	253	34.4	43.9
0211	May-12	1357	4133.2	6943.0	W13795.3	Y43885.6	155	15.6	45.1
0212	May-12	1647	4149.8	6954.9	W13786.8	Y44001.3	166	12.6	46.4
0213	May-12	1834	4153.9	6955.8	W13773.0	Y44026.8	167	13.7	46.6
0214	May-12	2030	4154.6	6954.3	W13761.3	Y44028.4	347	20.0	46.1
0215	May-17	1718	4232.4	6944.8	W13512.7	Y44222.3	115	139.7	43.8
0216	May-17	1954	4224.5	6939.6	W13525.5	Y44172.4	017	137.0	43.8
0217	May-18	0016	4213.2	6901.7	W13375.9	Y44056.2	047	97.3	43.8
0218	May-18	0229	4219.2	6855.7	W13312.4	Y44079.2	279	117.8	45.1
0219	May-18	0638	4231.0	6837.5	W13153.1	Y44113.8	292	108.0	47.2
0220	May-18	0927	4215.0	6840.1	W13254.1	Y44036.3	139	108.0	44.2
0221	May-18	1107	4211.3	6843.9	W13293.4	Y44022.3	238	112.4	44.6
0222	May-18	1338	4212.1	6856.2	W13353.1	Y44042.8	148	96.8	43.7
0223	May-18	1555	4200.6	6859.8	W13430.8	Y43986.3	020	70.8	43.6
0224	May-18	1916	4149.8	6842.8	W13398.0	Y43905.6	242	89.7	45.4
0225	May-18	2229	4128.2	6842.6	W13500.5	Y43784.9	232	71.1	43.5
0226	May-19	0015	4120.6	6843.7	W13540.3	Y43742.6	082	52.2	43.7
0227	May-19	0213	4128.4	6834.5	W13459.8	Y43777.5	345	52.5	44.0
0228	May-19	0423	4127.4	6821.9	W13403.7	Y43758.4	168	30.9	
0229	May-19	0745	4109.1	6819.6	W13475.3	Y43653.0	278	26.8	48.4
0230	May-19	1054	4106.5	6835.4	W13562.2	Y43651.9	086	31.2	47.9
0231	May-19	1346	4052.1	6839.6	W13642.9	Y43570.0	061	33.1	47.8
0232	May-19	1718	4059.0	6808.5	W13468.0	Y43585.7	097	26.0	48.3
0233	May-19	2001	4047.3	6753.4	W13449.3	Y43507.3	280	38.8	45.4
0234	May-19	2140	4043.7	6747.7	W13439.1	Y43482.7	121	39.1	45.6
0235	May-19	2334	4034.4	6753.0	W13500.2	Y43432.4	257	50.0	54.6
0236	May-20	0127	4031.6	6805.1	W13564.7	Y43423.6	032	56.9	50.2
0237	May-20	0315	4033.3	6818.0	W13617.0	Y43441.5	256	51.9	50.0
0238	May-20	0441	4036.3	6824.7	W13635.8	Y43463.8	059	42.4	47.3
0239	May-20	0656	4034.5	6833.1	W13682.2	Y43458.9	075	39.1	47.0
0240	May-20	0945	4019.7	6822.7	W13690.2	Y43362.0	068	70.5	56.2
0241	May-20	1309	4017.4	6759.6	W13595.2	Y43336.4	226	143.0	46.5
0242	May-20	1534	4022.4	6744.7	W13511.7	Y43358.2		88.0	53.4
0243	May-20	1815	4027.8	6741.7	W13477.3	Y43388.2	151	214.9	
0244	May-20	1940	4027.6	6736.5	W13456.1	Y43384.1	073	77.6	54.5
0245	May-20	2319	4059.7	6726.8	W13281.1	Y43558.2	083	38.5	45.8
0246	May-21	0146	4102.3	6734.0	W13300.6	Y43577.7	351	34.2	45.8
0247	May-21	0434	4112.0	6726.0	W13223.4	Y43624.1	085	26.5	48.4
0248	May-21	0745	4125.5	6735.6	W13202.0	Y43704.2	250	21.9	49.2
0249	May-21	1023	4131.7	6743.6	W13207.1	Y43744.9	339	21.6	49.4
0250	May-21	1231	4144.8	6700.5	W12962.5	Y43772.3	207	18.6	49.2
0251	May-21	1306	4144.3	6750.1	W13174.6	Y43817.6	009	18.3	49.2
0252	May-21	1509	4147.8	6803.5	W13217.9	Y43850.2	068	26.8	47.0
0254	May-21	1616	4149.9	6801.4	W13198.0	Y43858.9	063	34.4	45.3
0255	May-21	1811	4156.8	6807.5	W13191.4	Y43901.7	236	111.5	48.7
0256	May-21	2107	4212.8	6821.5	W13173.5	Y44001.2	152	105.0	46.7
0257	May-22	0000	4220.5	6758.3	W13022.3	Y44010.7	214	95.4	47.2
0258	May-22	0229	4227.4	6815.3	W13064.0	Y44066.0	182	104.2	46.3

NOAA Fisheries Service
 SPRING BOTTOM TRAWL SURVEY
 2016 STATION INFORMATION

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					TD's			Depth (FM)	
0259	May-22	0722	4255.0	6806.2	W12859.8	Y44184.4	175	109.9	44.5
0260	May-22	1007	4311.1	6811.3	W12783.7	Y44264.0	121	108.0	44.5
0261	May-22	1209	4314.5	6817.0	W12790.0	Y44286.8	041	105.5	44.7
0262	May-22	1525	4331.3	6800.6	W12603.8	Y44334.2	358	118.9	47.5
0263	May-22	1720	4335.6	6757.7	W12562.1	Y44347.4	214	116.2	47.6
0264	May-22	2137	4327.5	6723.5	W12469.8	Y44266.8	009	116.2	47.6
0265	May-22	2349	4321.1	6725.3	W12518.0	Y44242.9	015	116.2	47.7
0266	May-23	0421	4258.4	6745.3	W12743.7	Y44171.9	052	91.9	46.7
0267	May-23	0646	4252.5	6740.5	W12758.9	Y44139.2	285	123.9	49.3
0268	May-23	0928	4242.7	6739.5	W12812.0	Y44093.4	203	105.3	48.3
0269	May-23	1246	4224.4	6734.2	W12893.7	Y44001.0	352	154.5	49.3
0270	May-23	1625	4209.6	6717.3	W12902.7	Y43910.8	276	88.6	48.2
0271	May-23	1800	4209.6	6713.1	W12885.3	Y43906.5	068	72.7	45.0
0272	May-23	2027	4202.2	6725.4	W12975.6	Y43883.2	146	26.0	47.0
0273	May-23	2252	4157.0	6742.1	W13074.7	Y43874.9	251	24.3	49.5
0274	May-24	0059	4147.3	6745.6	W13139.7	Y43828.5	165	18.6	49.3
0275	May-24	0117	4147.2	6745.2	W13138.0	Y43827.9	324	18.0	49.3
0276	May-24	0511	4133.6	6717.9	W13088.2	Y43731.2	337	26.8	48.9
0277	May-24	0748	4127.4	6723.9	W13143.0	Y43704.0	234	24.6	48.7
0278	May-24	0935	4131.0	6715.0	W13088.8	Y43714.9	121	28.2	48.2
0279	May-24	1103	4129.0	6707.5	W13067.4	Y43698.5	076	30.6	47.8
0280	May-24	1132	4129.3	6707.1	W13064.6	Y43699.3	238	30.3	47.8
0281	May-24	1339	4136.0	6657.3	W12993.0	Y43725.4	253	35.3	47.7
0282	May-24	1537	4132.3	6650.8	W12985.2	Y43701.4	240	38.0	47.0
0283	May-24	1747	4129.0	6638.2	W12953.0	Y43674.5	347	44.0	46.4
0284	May-24	1932	4124.2	6634.8	W12962.8	Y43647.9	098	48.9	46.1
0285	May-24	2312	4112.4	6705.4	W13136.5	Y43610.2	213	35.5	47.2
0286	May-25	0056	4104.2	6711.8	W13199.1	Y43571.8	102	35.8	46.5
0287	May-25	0232	4105.8	6700.8	W13147.6	Y43572.4	028	37.2	46.0
0288	May-25	0405	4102.2	6655.4	W13142.1	Y43549.9	074	39.9	45.3
0289	May-25	0746	4054.2	6633.8	W13094.4	Y43494.2	051	128.8	
0290	May-25	0931	4058.3	6627.7	W13053.6	Y43512.0	034	162.1	46.2
0291	May-25	1100	4100.6	6625.1	W13034.0	Y43522.1	197	200.4	
0292	May-25	1324	4059.8	6626.4	W13042.4	Y43518.9	211	163.2	
0293	May-25	1507	4102.3	6628.4	W13039.0	Y43532.7	200	65.9	56.6
0294	May-25	1726	4112.3	6626.4	W12986.7	Y43582.2	196	50.9	46.4
0295	May-25	1858	4109.8	6621.9	W12981.3	Y43566.6	227	64.0	49.9
0296	May-25	2037	4111.6	6618.6	W12961.2	Y43573.9	028	74.1	54.0
0297	May-25	2231	4122.4	6618.1	W12910.2	Y43626.7	014	54.7	46.7
0298	May-26	0016	4127.7	6606.8	W12845.3	Y43644.9	049	65.6	50.7
0299	May-26	0203	4135.0	6613.1	W12832.5	Y43685.0	273	50.3	46.7
0300	May-26	0349	4133.6	6626.3	W12886.8	Y43688.1	225	47.8	45.7
0301	May-26	0519	4135.2	6630.3	W12894.0	Y43698.8	053	45.1	46.2
0302	May-26	0739	4149.5	6624.8	W12803.8	Y43763.8	042	45.9	46.5
0303	May-26	0953	4156.1	6607.3	W12709.3	Y43780.3	062	50.9	44.8
0304	May-26	1154	4203.9	6557.5	W12637.5	Y43807.7	113	102.8	53.2
0305	May-26	1417	4156.6	6544.1	W12630.4	Y43763.4	334	129.9	45.4
0306	May-26	1610	4204.6	6544.8	W12593.0	Y43800.2	055	135.3	46.9

NOAA Fisheries Service
 SPRING BOTTOM TRAWL SURVEY
 2016 STATION INFORMATION

Station	Date	Time	Lat	Lon	Loran		Course	Bottom	Temp (F)
					TD's			Depth (FM)	
0307	May-26	1816	4211.4	6538.6	W12539.3	Y43825.3	322	116.5	48.3
0308	May-26	2103	4209.4	6608.6	W12646.5	Y43842.5	281	117.0	47.7
0309	May-26	2322	4207.8	6615.8	W12679.1	Y43841.8	086	61.5	
0310	May-27	0301	4226.0	6625.9	W12618.1	Y43934.4	248	146.3	47.3
0311	May-27	0526	4233.9	6628.1	W12583.0	Y43971.8	098	111.5	50.5
0312	May-27	0853	4228.5	6650.0	W12692.2	Y43970.7	258	172.8	47.9
0313	May-27	1132	4218.5	6637.9	W12701.8	Y43912.2	259	155.8	48.0
0314	May-27	1430	4212.6	6645.3	W12760.5	Y43892.1	277	119.5	50.0
0315	May-27	1547	4212.0	6647.7	W12773.1	Y43891.7	084	115.9	50.0
0316	May-27	1808	4209.2	6653.9	W12811.6	Y43884.7	281	55.5	46.0
0317	May-27	2058	4224.3	6704.5	W12771.8	Y43966.8	315	197.4	47.4
0318	May-27	2357	4241.6	6659.6	W12655.3	Y44040.2	131	118.7	49.8
0319	May-28	0139	4243.3	6704.3	W12663.7	Y44053.5	288	114.8	49.6
0320	May-28	0402	4251.7	6701.5	W12603.7	Y44087.6	240	119.2	50.3
0321	May-28	0854	4305.2	6640.2	W12445.7	Y44120.5	065	61.2	47.0
0322	May-28	1158	4318.8	6651.5	W12402.9	Y44190.5	187	103.3	48.3
0323	May-28	1413	4324.6	6644.0	W12340.8	Y44205.0	162	86.1	46.7
0324	May-28	1611	4328.1	6644.3	W12320.1	Y44219.3	153	87.8	46.9
0325	May-28	1945	4340.7	6704.4	W12310.4	Y44294.6	037	73.8	46.2
0326	May-28	2205	4338.7	6713.5	W12357.4	Y44298.8	346	93.0	47.8
0327	May-29	0111	4402.0	6711.2	W12192.7	Y44384.6	166	84.2	47.0
0328	May-29	0536	4401.0	6640.7	W12096.3	Y44340.8	201	55.5	44.7
0329	May-29	0837	4418.2	6649.5	W12007.7	Y44414.2	056	103.1	45.8
0330	May-29	1001	4415.9	6651.8	W12030.7	Y44409.3	213	99.0	45.7
0331	May-29	1258	4412.6	6704.6	W12095.8	Y44414.3	214	73.3	45.1
0332	May-29	1450	4416.5	6704.4	W12068.3	Y44427.8	228	85.0	45.4
0333	May-29	1735	4425.9	6728.2	W12086.3	Y44493.7	144	44.3	
0334	May-29	2020	4414.5	6745.1	W12235.7	Y44477.9	133	59.3	44.7
0335	May-29	2234	4407.4	6754.8	W12328.4	Y44466.3	039	55.2	44.8
0336	May-30	0109	4401.3	6755.6	W12375.4	Y44444.8	078	64.2	45.0
0337	May-30	0412	4351.7	6754.5	W12438.0	Y44406.4	041	97.1	47.1
0338	May-30	0632	4347.9	6748.3	W12437.2	Y44382.9	024	122.5	47.8
0339	May-30	0945	4359.3	6813.1	W12469.9	Y44463.5	253	54.1	44.2
0340	May-30	1354	4346.0	6844.8	W12720.7	Y44461.1	003	53.6	43.1
0341	May-30	1521	4346.4	6844.7	W12717.5	Y44462.6	186	57.7	43.1
0342	May-30	2359	4338.6	6913.4	W12927.9	Y44477.8	017	72.2	42.8
0343	May-31	0413	4339.5	6923.6	W12980.8	Y44499.1	316	65.1	
0344	May-31	0750	4332.0	6945.9	W13162.2	Y44506.7	215	69.2	
0345	May-31	1022	4335.6	6950.3	W13166.1	Y44530.0	327	47.3	42.1
0346	May-31	1221	4330.3	6956.6	W13239.2	Y44518.8	066	61.5	42.0
0347	May-31	1509	4323.1	6935.3	W13156.3	Y44449.5	256	97.9	43.6
0348	May-31	1809	4315.0	6915.1	W13091.2	Y44379.2	347	96.8	43.5
0349	May-31	2034	4325.4	6903.3	W12958.6	Y44405.8	191	89.4	43.3
0350	May-31	2220	4330.0	6902.5	W12923.9	Y44423.9		76.3	42.8
0351	Jun-01	0040	4323.5	6847.1	W12883.7	Y44371.6	066	56.0	42.7
0352	Jun-01	0439	4300.0	6845.1	W13021.4	Y44263.8	245	111.8	
0353	Jun-01	0724	4252.2	6847.1	W13079.1	Y44230.5	199	117.3	46.6
0354	Jun-01	0959	4239.7	6859.4	W13217.8	Y44188.4	065	100.1	45.6

NOAA Fisheries Service
 SPRING BOTTOM TRAWL SURVEY
 2016 STATION INFORMATION

Station	Date	Time	Lat	Lon	Loran		Course	Bottom	
					TD's			Depth (FM)	Temp (F)
0355	Jun-01	1210	4245.4	6903.6	W13207.1	Y44222.8	053	98.4	43.5
0356	Jun-01	1416	4245.5	6918.2	W13287.1	Y44246.0	154	38.5	43.3
0357	Jun-01	1724	4244.4	6934.1	W13383.1	Y44266.1	098	122.5	43.8
0358	Jun-01	1938	4256.1	6939.4	W13346.1	Y44332.4	268	88.6	43.6
0359	Jun-01	2153	4302.5	6955.8	W13405.7	Y44391.6	254	114.8	43.8
0360	Jun-02	0003	4303.1	7007.4	X25806.1	Y44415.0	096	75.7	42.6
0361	Jun-02	0146	4255.6	7003.7	X25742.9	Y44372.3	047	44.6	42.2
0362	Jun-02	0314	4255.9	6960.0	W13470.6	Y44366.8	195	76.3	42.9
0363	Jun-02	0523	4250.2	6956.4	W13481.9	Y44332.8	295	115.4	43.8
0364	Jun-02	0743	4243.2	7018.9	X25741.6	Y44337.0	224	32.8	42.1
0365	Jun-02	1004	4249.7	7014.4	X25758.8	Y44362.1	031	33.4	42.0
0366	Jun-02	1114	4248.9	7019.8	X25781.9	Y44367.8	124	28.4	
0367	Jun-02	1324	4257.3	7022.5	X25847.8	Y44415.0	094	70.5	42.3
0368	Jun-02	1601	4302.9	7028.9	X25915.4	Y44454.3	098	47.6	
0369	Jun-02	1854	4249.9	7044.6	X25930.0	Y44419.7	320	19.1	43.5
0370	Jun-02	2049	4243.2	7036.7	X25842.3	Y44370.1	298	29.3	42.7
0371	Jun-02	2248	4236.8	7029.3	X25759.2	Y44322.6	309	50.3	42.1
0372	Jun-03	0033	4231.6	7037.3	X25774.5	Y44309.3	041	35.3	43.0
0373	Jun-03	0206	4230.8	7042.0	X25798.8	Y44313.4	033	28.4	43.3
0374	Jun-03	0358	4232.9	7043.3	X25820.0	Y44327.2	174	20.5	44.9
0375	Jun-03	0657	4223.8	7051.4	X25818.8	Y44292.2	308	16.7	47.4
0376	Jun-03	0955	4222.3	7027.2	X25653.5	Y44239.8	156	48.1	42.3
0377	Jun-03	1146	4227.4	7018.5	X25637.7	Y44252.9	287	52.8	
0378	Jun-03	1331	4218.0	7017.6	X25569.6	Y44199.5	095	17.8	
0379	Jun-03	1548	4207.1	7004.4	X25423.8	Y44116.2	302	25.7	43.8
0380	Jun-03	1917	4153.5	6955.5	W13772.8	Y44024.0		14.8	46.4
0381	Jun-03	2052	4159.7	6952.7	W13727.3	Y44055.3	161	41.0	43.0
0382	Jun-03	2202	4159.4	6953.8	W13735.1	Y44055.4	330	34.7	43.2
0383	Jun-03	2357	4158.8	6953.7	W13737.4	Y44052.0	324	33.6	43.2
0384	Jun-04	0230	4205.8	6948.7	W13673.9	Y44084.2	153	97.9	
0385	Jun-04	0449	4209.3	6957.5	W13708.0	Y44117.4	138	75.5	42.9
0386	Jun-04	0742	4159.0	7019.5	X25449.1	Y44092.8	072	25.7	42.8
0387	Jun-04	0853	4157.8	7018.4	X25433.6	Y44083.7	061	23.8	43.0
0388	Jun-04	1045	4148.6	7016.7	X25359.0	Y44026.3	059	13.1	46.9
0389	Jun-04	1247	4153.8	7028.2	X25469.9	Y44075.7	153	16.1	44.5
0390	Jun-04	1433	4201.6	7028.2	X25522.0	Y44122.6	157	24.6	43.1
0391	Jun-04	1557	4202.0	7029.2	X25531.2	Y44126.5	204	21.6	43.1
0392	Jun-04	1734	4156.2	7026.6	X25475.3	Y44087.7	357	21.1	43.6
0393	Jun-04	2012	4202.2	7033.7	X25562.1	Y44134.9		18.6	44.0
0394	Jun-04	2221	4206.9	7031.1	X25575.9	Y44158.5	240	20.2	43.3
0395	Jun-06	1911	4215.5	7036.1	X25664.7	Y44217.0	308	23.8	43.8
0396	Jun-06	2112	4211.1	7034.1	X25623.2	Y44188.1	348	24.3	
0397	Jun-06	2247	4210.1	7030.0	X25590.1	Y44175.4	143	32.5	43.0

* Missing sequential station numbers indicate that gear was deployed, but the tow was aborted prior to fishing.

NOAA FISHERIES SERVICE-NEFSC SPRING BOTTOM TRAWL SURVEY 2016
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 OTHER ^[2]	TOTAL ALL	
14	0	0	0	0	7	0	3	2598	0	18	0	0	4	1	0	0	0	0	37	322	0	5	0	0	131	3126	
15	0	0	0	0	18	0	0	1386	0	6	0	0	3	2	0	0	0	0	11	265	0	0	0	0	29	1720	
16	0	0	0	0	0	0	0	519	0	16	0	0	1	5	0	0	2	0	15	31	0	0	0	0	43	632	
17	6	0	0	0	0	0	0	188	0	7	0	0	12	3	0	0	4	0	25	445	0	0	0	0	32	722	
18	0	0	0	0	2	0	0	239	0	6	0	0	11	4	0	0	1	4	0	334	0	0	0	0	15	616	
19	0	0	0	0	1	0	0	291	0	3	0	1	7	1	0	0	1	0	0	327	0	0	0	0	21	653	
20	0	0	0	0	0	0	0	353	0	0	0	0	13	7	0	0	4	52	0	167	0	0	0	2	6	604	
21	0	0	0	0	0	0	0	806	0	0	0	0	2	0	0	0	84	4	10	34	0	0	0	2	5	947	
22	0	0	0	0	1	0	0	1154	0	0	0	0	0	3	0	0	158	1	0	45	1	0	2	0	15	1380	
23	0	0	0	0	0	0	1	573	0	0	0	0	1	1	0	0	367	14	0	32	0	0	3	0	22	1014	
24	0	0	0	0	0	0	21	530	0	0	0	1	0	2	0	0	2	135	6	26	0	0	2	0	1	726	
25	0	0	0	0	0	0	0	291	0	0	0	0	1	0	0	0	23	7	8	104	1	0	0	0	6	441	
26	0	0	0	0	0	0	0	1184	0	0	0	0	1	0	0	0	37	0	0	5	0	0	0	0	69	1296	
27	0	0	0	0	0	0	0	611	0	0	0	0	2	0	0	0	11	0	0	14	0	0	0	0	2	640	
28	0	0	0	0	0	0	0	2191	0	0	0	0	12	4	0	0	0	0	23	51	0	0	0	0	14	2295	
29	0	0	0	0	1	0	0	168	0	0	0	0	9	2	0	0	3	9	5	208	0	0	0	0	42	447	
30	0	0	0	0	2	0	0	157	0	0	0	0	9	5	0	0	2	37	0	58	0	0	0	0	45	315	
31	0	0	0	0	3	0	1	119	0	0	0	0	11	8	0	0	0	4	0	61	0	0	0	0	48	255	
32	0	0	0	0	1	0	0	102	0	0	0	0	4	2	0	0	3	4	0	334	0	0	0	0	57	507	
33 ^[1]	0	0	0	0	0	0	0	19	0	0	0	0	0	1	0	0	3	0	5	14	0	0	0	0	22	64	
34	0	0	0	0	0	0	0	158	0	0	0	0	0	6	0	0	410	6	0	31	0	1	0	0	118	730	
35	0	0	0	0	0	0	0	92	0	0	0	0	0	2	0	0	2	0	3	9	0	0	1	0	87	196	
36	0	0	0	0	0	0	8	145	0	0	0	0	0	0	0	0	0	0	0	11	0	0	1	0	94	259	
37	0	0	0	0	0	0	0	85	0	0	0	0	0	4	0	0	0	2	8	4	0	0	0	0	145	248	
38	0	0	0	0	0	0	0	121	0	0	0	0	0	7	0	0	0	0	32	4	0	0	0	0	58	222	
39	0	0	0	0	0	0	0	83	0	0	0	0	0	1	0	0	0	0	9	1	0	0	0	0	85	179	
40	0	0	0	0	0	0	0	191	0	0	0	0	0	2	0	0	0	0	23	42	0	4	3	0	54	319	
41	0	0	0	0	0	0	0	36	0	0	0	0	1	3	0	0	0	0	56	20	0	0	1	0	48	165	
42	0	0	0	0	0	0	0	172	0	0	0	0	1	1	0	0	0	4	3	3	0	0	4	0	53	241	
43	0	0	0	0	3	0	0	134	0	0	0	0	3	5	0	1	0	3	31	22	0	2	0	0	24	228	
44	0	0	0	0	1	0	0	58	0	0	0	0	1	2	0	0	0	0	33	171	0	0	0	0	122	388	
45	0	0	0	0	7	0	0	118	0	0	0	0	6	2	0	0	0	0	29	23	0	0	0	0	37	222	
46	0	0	0	0	0	0	0	230	0	0	0	0	1	2	0	0	0	0	2	7	0	0	1	0	4	247	
47	0	0	0	3	0	0	16	408	0	0	0	1	0	0	0	0	0	0	0	0	0	0	50	14	42	534	
48 ^[1]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0	1469	0	0	0	0	0	6	2	1	0	0	8	39	0	0	19	1	163	1708	
50	0	0	0	0	0	0	0	53	0	0	0	0	0	6	0	0	0	0	0	2	0	0	59	0	128	248	

NOAA FISHERIES SERVICE-NEFSC SPRING BOTTOM TRAWL SURVEY 2016
CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

	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 OTHER	TOTAL ALL	
51	0	0	0	0	1	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	87	6	10	116	
52	0	0	0	0	0	0	11	325	0	0	0	0	0	6	0	0	0	0	0	0	1	0	72	1	45	461	
53	0	0	0	5	9	0	83	4	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1	136	241	
54	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	27	32	
55	0	0	0	0	1	0	0	106	0	0	0	0	0	7	0	0	0	0	0	30	2	0	26	0	88	260	
56	0	0	0	0	0	0	0	342	0	0	0	0	0	0	0	0	0	0	3	10	0	0	1	0	42	398	
57	0	0	0	0	0	0	0	28	0	0	0	0	0	4	0	0	0	1	0	2	1	0	1	0	51	88	
58	0	0	0	0	0	0	0	43	0	0	0	0	0	1	0	0	0	0	0	0	0	0	4	0	26	74	
59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	2	0	241	0	25	284	
60	0	0	0	0	15	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	50	0	29	2	639	755	
61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	33	592	135	761	
62	0	0	0	9	6	0	40	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	6	4	374	442	
63	0	0	0	1	5	0	13	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	29	8	266	327	
64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	109	1	382	493	
65	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	83	92	
66	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	8	0	13	1	495	519	
67	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	90	95	
68	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69	0	18	5	178	272	
69 ^[1]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	3	
70	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	181	0	229	416	
71 ^[1]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	3	0	122	143	
72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	1	0	354	365	
73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	278	0	0	0	749	1027	
74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	720	741	
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	248	259	
76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	1	0	227	242	
77	0	0	0	0	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1095	1142	
78 ^[1]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	251	254	
79 ^[1]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	6	85	321	413	
81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	
82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	4	
84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1704	1706	
86	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1268	1272	
87	0	0	0	0	0	0	6	23	0	0	0	0	0	0	0	0	0	0	0	0	3	0	2	0	25	59	
88	0	0	0	0	0	0	0	29	0	0	0	0	0	0	0	3	0	0	0	0	0	0	17	0	187	236	

NOAA FISHERIES SERVICE-NEFSC SPRING BOTTOM TRAWL SURVEY 2016
CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

	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 OTHER ^[2]	TOTAL ALL	
89	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	13	39
90	0	0	0	0	0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	28	75
91	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	5	0	0	0	15	0	15	59	
92	0	0	0	0	0	0	0	37	0	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	50	93	
93	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	5	14	0	0	0	7	0	16	59	
94	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	18	1	0	0	2	0	37	73	
95	0	0	0	0	0	0	5	16	0	0	0	0	0	3	0	0	0	0	33	1	0	0	1	0	77	136	
96	0	0	0	0	0	0	0	3	0	0	0	0	0	4	0	0	0	0	54	4	0	0	1	0	172	238	
97	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	20	2	0	0	1	0	71	97	
98	0	0	0	0	0	0	0	14	0	0	0	0	2	2	0	0	0	0	163	0	0	0	1	0	239	421	
99	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	58	4	1	0	1	0	195	262	
100	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	35	18	1	0	0	0	5	89	
101	0	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	1	17	3	1	0	1	0	31	82	
102	0	0	0	0	0	0	0	67	0	0	0	0	0	5	0	0	0	0	27	16	0	0	0	0	32	147	
103	0	0	0	0	0	0	0	26	0	0	0	0	0	1	0	0	0	0	41	71	0	0	0	0	40	179	
104	0	0	0	0	1	0	0	17	0	0	0	0	0	0	0	0	0	0	36	69	0	0	0	0	53	176	
105	0	0	0	0	0	0	0	90	0	0	0	0	2	4	0	0	0	0	32	35	0	0	0	0	34	197	
106	0	0	0	0	0	0	0	71	0	0	0	0	1	7	0	0	0	1	19	9	2	0	2	0	19	131	
107	0	0	0	0	0	0	4	2405	0	0	0	0	0	1	88	0	0	0	0	0	49	0	49	2	22	2620	
108	0	0	0	0	1	0	12	4304	0	0	0	0	0	9	0	0	0	0	0	0	0	0	2	10	7	197	4542
109	0	0	0	0	0	0	7	221	0	0	0	0	0	0	0	0	0	0	0	0	0	0	99	5	69	401	
110	0	0	0	0	1	0	1	933	0	0	0	0	0	18	49	0	0	0	0	0	70	0	65	1	37	1175	
111	0	0	0	0	1	0	0	286	0	0	0	0	0	4	1	4	0	1	0	10	0	0	18	0	402	727	
112	0	0	0	0	1	0	12	572	0	0	0	0	0	5	3	9	0	0	0	24	0	0	8	0	385	1019	
113	0	0	0	0	1	0	0	1757	0	0	0	0	0	15	11	0	0	0	0	5	1	0	24	0	432	2246	
114	0	0	0	0	1	0	1	1337	0	0	0	0	0	0	3	0	0	1	0	0	15	0	34	0	30	1422	
115	0	0	0	8	1	0	47	200	0	0	0	1	0	0	0	0	0	0	0	0	0	5	1	2	57	322	
116	0	0	0	0	2	0	5	73	0	0	0	0	0	2	0	0	0	0	0	0	6	0	79	1	16	184	
117	0	0	0	0	1	0	0	218	0	0	0	0	0	2	0	0	0	0	0	0	191	0	131	3	15	561	
118	0	0	0	0	0	0	2	84	0	0	0	1	0	0	0	0	0	0	0	0	4	0	34	2	132	259	
119	0	0	0	0	1	0	5	586	0	0	0	0	0	13	0	2	0	18	0	2	0	0	8	0	27	662	
120	0	0	0	0	1	0	1	566	0	0	0	0	0	4	0	0	0	0	0	27	0	0	3	0	127	729	
121	0	0	0	0	1	0	10	346	0	0	0	2	0	5	0	0	0	1	0	1	1	0	15	1	26	409	
122	0	0	0	0	3	0	1	51	0	0	0	0	0	8	1	0	0	0	0	0	26	0	25	1	83	199	
123	0	0	0	0	8	0	1	2	0	0	0	0	0	25	462	2	0	2	0	0	74	0	28	0	384	988	
124	0	0	0	0	8	0	0	1227	0	0	0	0	0	9	4	0	0	0	0	31	0	0	4	0	428	1711	
125	0	0	0	0	0	0	14	434	0	0	0	7	0	0	0	0	0	1	0	2	8	0	30	2	54	552	
126	0	0	0	0	0	0	1	7	0	0	0	0	0	0	0	0	0	1	0	0	27	0	23	2	7	68	

NOAA FISHERIES SERVICE-NEFSC SPRING BOTTOM TRAWL SURVEY 2016
CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

	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 OTHER ^[2]	TOTAL ALL
127	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	1	0	0	7	0	112	1	8	138
128	0	0	0	0	1	0	4	261	0	0	0	0	0	10	0	1	0	0	0	46	1	0	1	0	77	402
129	0	0	0	0	0	0	2	304	0	0	0	0	0	2	12	1	4	1	3	37	0	0	18	0	49	433
130	0	0	0	0	2	0	13	180	0	0	0	0	0	27	21	148	0	0	0	3	0	0	7	0	25	426
131	0	0	0	1	4	0	5	60	0	0	0	0	0	8	147	69	0	0	13	8	2	0	6	0	28	351
132	0	0	0	0	11	0	6	178	0	0	0	0	0	42	1	2	0	0	0	3	53	0	36	0	64	396
133	0	0	0	0	3	0	32	0	0	0	0	11	0	8	0	0	0	0	0	0	0	2	72	5	76	209
134	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	90	8	21	141
135	0	0	0	0	1	0	21	509	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	78	612
136	0	0	0	0	15	0	7	2574	0	0	0	0	0	12	0	1	0	1	0	0	81	0	14	0	60	2765
137	0	0	0	0	13	0	4	77	0	0	0	0	0	39	0	4	0	0	0	2	6	0	3	0	80	228
138	0	0	0	0	6	0	5	20	0	0	0	0	0	2	687	8	0	0	10	14	12	3	2	0	83	852
139	0	0	0	0	8	0	14	87	0	0	0	0	0	18	425	8	0	0	10	8	21	0	3	0	54	1656
140	0	0	0	0	3	0	22	27	0	0	0	0	0	31	24	19	949	1	18	4	12	0	4	0	42	1156
141	0	0	0	0	11	0	60	4	0	0	0	1	0	10	0	0	2	0	0	0	0	0	40	4	78	210
142	0	0	0	3	35	0	25	11	0	0	0	3	0	0	0	0	0	0	0	0	0	9	1	1	110	198
143	0	0	0	0	18	0	2	273	0	0	0	0	0	28	718	5	0	0	0	0	7	0	20	0	56	1127
145	5	0	0	0	2	0	7	490	4	20	0	0	1	5	7	6	20	27	44	9	2	3	5	0	52	709
146	0	0	0	0	12	0	0	198	0	5	0	0	0	3	5	9	1	0	2	72	3	0	0	0	17	327
147	0	0	0	0	2	0	15	293	1	0	0	0	0	0	82	16	4	0	6	168	7	0	0	0	95	689
148	0	0	0	0	19	0	3	119	1	2	0	2	1	9	3	28	0	0	4	73	3	0	0	0	77	344
149	0	0	0	0	5	0	3	1142	0	0	0	0	0	0	9	5	5	1	0	104	2	1	2	0	165	1444
153	0	0	0	0	1	0	6	307	2	1	0	4	0	2	1	3	22	74	4	49	1	0	1	0	69	547
154	0	0	0	0	2	0	0	161	0	1	0	0	0	2	0	1	0	2	4	25	0	0	2	0	30	230
155	0	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	9	3	22	30	0	0	4	0	54	149
156	0	0	0	0	0	0	4	131	0	0	0	0	0	0	0	0	4	49	12	20	0	0	0	0	17	237
157	0	0	0	0	0	0	2	48	0	0	0	0	0	3	0	0	0	24	3	24	0	1	2	0	89	196
158	0	0	0	0	0	0	1	48	0	1	0	0	1	2	0	3	0	45	24	48	0	0	2	0	118	293
159	0	0	0	0	20	0	0	66	0	5	0	0	2	1	13	30	0	1	18	50	3	3	3	0	25	240
160	0	0	0	0	5	0	1	0	0	8	0	0	14	13	7	4	0	0	88	277	0	0	0	0	25	442
161	0	0	0	0	3	0	4	20	0	9	0	0	16	10	1	6	0	0	77	288	25	0	1	0	26	486
162	0	0	0	0	3	0	0	78	0	2	0	0	4	3	12	6	0	2	38	85	15	0	7	0	6	261
163	0	0	0	0	8	0	5	188	0	12	0	0	10	20	19	27	5	0	52	102	2	0	9	0	22	481
164	0	0	0	0	1	0	12	0	0	4	0	0	3	17	15	8	0	0	67	50	7	0	6	0	23	213
165	0	0	0	0	0	0	1	8	0	3	0	0	4	11	1	0	1	0	21	39	12	0	1	0	3	105
166	0	0	0	0	2	0	3	31	0	6	0	0	1	11	42	7	0	0	25	29	23	4	5	0	11	200
167	9	0	0	0	2	0	7	7	0	24	0	0	1	13	128	15	1	0	80	23	24	0	5	0	37	376
168	0	0	0	0	1	0	2	21	0	16	0	0	1	11	15	6	1	0	10	2	4	0	1	0	54	145

NOAA FISHERIES SERVICE-NEFSC SPRING BOTTOM TRAWL SURVEY 2016
CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

	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 OTHER ^[2]	TOTAL ALL
169 ^[1]	0	0	0	0	0	0	0	21	0	9	0	0	1	1	65	4	0	0	26	8	1	0	1	0	11	148
170	0	0	0	0	0	0	0	0	0	15	0	0	1	5	653	0	32	2	8	20	12	0	1	0	57	806
171	0	0	0	0	9	0	25	608	12	2	0	0	2	3	8	0	2	0	346	37	1	0	0	0	40	1095
172	0	0	0	1	7	0	27	459	3	0	0	0	3	2	0	0	0	0	247	49	2	1	0	0	48	849
173	0	0	0	0	126	0	1	7	0	5	0	0	2	5	0	0	0	0	168	324	0	0	0	0	34	672
174	0	0	0	0	0	0	1	0	0	2	0	0	7	2	3	11	0	2	49	131	0	0	0	0	45	253
175	6	0	0	0	0	0	2	0	0	4	0	0	8	1	3	12	1	0	52	172	1	0	0	0	51	313
176	0	0	0	0	0	0	0	0	0	6	0	0	1	0	1	2	8	20	6	16	1	0	2	0	146	209
177	0	0	0	0	2	0	1	0	0	6	0	0	1	7	1	1	5	20	3	4	2	0	4	0	99	156
178 ^[1]	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	7	0	2	4	12	0	1	0	0	10	37
179	0	0	0	0	3	0	0	6	0	28	0	0	3	24	989	53	1	4	14	26	198	1	6	0	93	1449
180	0	0	0	0	15	0	25	7	0	68	0	0	0	19	145	187	1	2	0	26	28	55	10	0	116	704
181	0	0	0	2	5	0	28	119	0	2	0	0	0	5	0	5	0	0	51	74	2	1	1	0	92	387
182	0	0	0	0	13	0	9	191	0	0	0	0	0	2	95	4	0	0	4	29	48	0	2	0	169	566
183	0	0	0	0	18	0	6	129	0	0	0	0	0	6	4	1	0	0	0	1	89	0	2	0	116	372
184	0	0	0	0	9	0	5	9	0	0	0	0	0	7	0	0	0	0	0	0	470	1	33	0	75	609
185	0	0	0	0	0	0	6	0	0	0	0	0	0	2	0	0	0	0	0	0	401	0	208	15	29	661
186	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	8	1	1	2	58	77
187	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	1	0	0	375	0	392	183	59	1025
188	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	79	0	245	27	18	370
189 ^[1]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	93	0	66	5	15	179
190	0	0	0	0	0	0	3	4	0	0	0	1	0	0	0	0	0	0	0	0	3	3	72	7	31	124
191	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	330	0	156	6	15	509
192	0	0	0	0	11	0	2	13	0	0	0	0	0	9	0	0	0	0	0	0	300	0	4	1	36	376
193	0	0	0	0	5	0	7	23	0	0	0	0	0	33	0	2	0	0	0	12	3	0	0	0	57	142
194	0	0	0	0	4	0	4	13	0	0	0	0	0	17	0	0	0	0	0	1	376	0	24	0	98	537
195 ^[1]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
196	0	0	0	0	3	0	10	6	0	0	0	0	0	2	0	0	0	0	0	0	48	0	37	2	101	209
197 ^[1]	0	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	5	1	11	22
198 ^[1]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
199	0	0	0	0	0	0	13	1	0	0	0	2	0	0	0	0	0	0	0	0	10	7	20	8	104	165
200	0	0	0	0	1	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66	16	33	123
201	0	0	0	0	2	0	2	39	0	0	0	0	0	7	0	0	0	0	0	3	8	0	2	0	19	82
202	0	0	0	0	0	0	28	544	2	6	0	0	0	8	0	0	0	0	104	45	1	0	1	0	153	892
203	0	58	0	0	14	0	3	1743	1	12	0	0	12	6	0	1	0	0	260	99	0	0	0	0	43	2252
204	0	53	0	0	3	0	6	136	3	6	0	0	2	1	0	0	0	0	229	90	0	0	1	0	325	855
205	0	442	0	0	5	0	36	693	1	13	0	0	3	7	0	0	0	0	971	204	0	0	0	0	64	2439

NOAA FISHERIES SERVICE-NEFSC SPRING BOTTOM TRAWL SURVEY 2016
CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

	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 OTHER ^[2]	TOTAL ALL
206	10	157	0	0	18	0	2	84	1	21	0	0	1	0	0	0	15	2	40	51	0	0	0	0	52	454
207	17	781	0	0	2	0	4	78	0	3	0	0	0	0	0	0	4	0	40	5	0	0	0	0	11	945
208 ^[1]	0	23	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	14	3	0	0	0	0	6	48
209	11	600	0	0	0	0	0	13	0	56	0	0	0	0	0	0	0	0	21	9	0	0	0	0	26	736
210	14	1220	0	0	1	0	0	51	3	2	0	0	1	0	0	0	98	214	78	7	1	7	0	0	37	1734
211	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	4	7
212	0	1	0	0	0	0	1	0	8	4	0	0	0	0	0	1	0	3	7	2	0	8	1	0	52	88
213	124	693	6	0	6	0	0	0	9	35	0	0	3	0	4	3	0	1	15	19	0	11	0	0	291	1220
214 ^[1]	3	7	0	0	3	0	0	0	1	2	0	0	0	0	0	0	0	0	2	1	0	6	0	0	11	36
215	0	57	5	20	64	15	37	71	0	0	1	0	0	0	0	0	1	1	0	0	0	3	0	0	59	334
216	0	47	5	5	74	5	20	59	0	0	6	0	0	0	0	0	78	0	0	0	0	0	0	0	44	343
217	0	5	0	10	149	57	43	259	0	0	19	1	0	0	0	0	2	0	0	0	0	0	0	0	145	690
218	0	5	0	5	129	61	19	369	0	0	6	1	0	0	0	0	1	0	0	0	0	2	0	0	52	650
219	2	25	9	58	128	83	16	1348	0	0	14	3	0	0	0	0	0	0	0	0	0	0	0	0	97	1783
220	0	5	0	11	205	711	27	441	0	0	5	1	0	0	0	0	0	1	0	0	0	0	0	0	67	1474
221	1	7	0	22	135	2065	24	802	0	0	9	3	0	0	0	0	0	1	0	0	0	0	0	0	123	3192
222	0	19	7	3	111	72	24	1094	0	0	16	2	0	0	0	0	0	0	0	0	0	0	0	0	98	1446
223	10	104	7	0	45	407	23	373	0	0	7	1	0	0	0	0	0	0	0	0	0	4	0	0	70	1051
224	0	9	0	9	230	7	29	854	0	0	8	3	0	0	0	0	3	1	0	0	0	0	0	0	189	1342
225	11	111	0	1	60	0	16	290	0	0	2	0	0	0	0	0	14	1	6	0	0	7	0	0	49	568
226	0	376	0	0	42	0	7	664	0	0	9	0	0	0	0	0	6	0	106	74	0	3	0	0	120	1407
227	0	368	0	2	53	0	1	338	0	0	16	2	0	0	0	0	4	4	12	11	0	0	0	0	114	925
228	0	641	0	0	26	0	0	333	1	2	1	0	3	2	0	0	54	88	23	24	0	3	1	0	24	1226
229	0	936	0	0	2	0	0	238	0	1	0	0	0	0	0	0	0	4	43	13	0	0	1	0	9	1247
230	3	1077	0	0	2	0	0	234	1	9	2	0	1	0	0	0	1	0	28	59	0	2	1	0	21	1441
231 ^[1]	0	124	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	7	152
232	0	172	0	0	2	0	0	119	0	0	0	0	0	0	0	0	2	178	21	6	0	0	1	0	10	511
233	0	0	0	0	3	0	3	5	0	0	0	1	0	0	0	0	0	1	2	84	0	0	0	0	85	184
234	0	0	0	0	4	0	0	27	0	0	0	0	0	0	0	0	0	0	9	34	0	0	0	0	116	190
235	0	0	0	0	19	0	0	2	0	0	0	0	0	11	0	0	0	1	0	27	3	3	8	1	140	215
236	0	0	0	0	2	0	3	5	0	0	0	0	0	8	0	0	0	0	0	21	25	0	4	1	18	87
237	0	0	0	0	10	0	2	17	0	0	0	0	0	17	0	0	0	0	9	20	3	0	13	0	42	133
238	0	0	0	0	3	0	2	9349	0	0	0	3	0	52	0	0	0	0	3	3	0	4	2	1	19	9441
239	0	0	0	0	7	0	5	5	0	0	0	0	0	13	0	3	0	0	38	19	0	0	3	1	103	197
240	0	0	0	0	1	0	4	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	184	14	17	231
241	0	0	0	5	0	0	8	30	0	0	0	5	0	0	0	0	0	0	0	0	3	2	2	3	1937	1995
242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	176	77	29	282
243	0	0	0	9	0	1	80	0	0	0	0	34	0	0	0	0	0	0	0	0	0	39	1	3	94	261

NOAA FISHERIES SERVICE-NEFSC SPRING BOTTOM TRAWL SURVEY 2016
CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

	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 OTHER ^[2]	TOTAL ALL	
244	0	0	0	0	4	0	12	0	0	0	0	2	0	0	0	0	0	0	0	7	1	5	16	8	32	87	
245	0	547	0	0	58	0	9	259	1	9	2	0	0	6	0	0	0	0	14	54	0	0	1	0	55	1015	
246	4	126	0	0	48	0	0	572	1	0	1	0	0	0	0	0	2	4	57	60	0	0	0	1	83	959	
247	4	225	0	0	56	0	0	84	0	0	1	0	1	15	0	0	1	12	5	12	0	0	0	0	75	491	
248	2	66	0	0	1	0	0	20	0	0	0	0	1	0	0	0	0	3	57	5	0	3	3	0	9	170	
249	4	128	0	0	3	0	0	16	1	4	0	0	10	0	0	0	24	13	152	27	0	0	1	0	19	402	
250 ^[1]	0	1	0	0	0	0	0	0	0	10	0	0	2	0	0	0	0	0	11	5	0	0	0	0	5	34	
251	15	68	0	0	2	0	0	23	0	22	0	0	2	0	0	0	0	0	39	4	0	0	20	0	19	214	
252	15	346	0	0	19	0	15	38	0	0	0	0	0	0	0	0	69	15	166	29	0	0	6	0	20	738	
254	18	807	0	0	90	0	2	72	0	0	3	0	1	0	0	0	5	42	588	93	0	0	6	0	32	1759	
255	0	12	0	0	1089	0	38	51	0	0	12	0	0	0	0	0	2	1	24	1	0	2	0	0	215	1447	
256	0	11	0	18	65	4	23	1324	0	0	10	3	0	0	0	0	3	1	0	1	0	0	0	0	136	1599	
257	0	3	0	7	27	112	14	152	0	0	1	3	0	0	0	0	0	0	0	0	0	3	0	0	150	472	
258	3	21	0	13	105	112	9	1403	0	0	10	3	0	0	0	0	4	0	0	0	0	0	0	0	73	1756	
259	0	11	0	4	21	70	1	328	0	0	9	1	0	0	0	0	5	1	0	0	0	2	1	0	57	511	
260	0	41	0	9	37	66	16	64	0	0	19	3	0	0	0	0	7	0	0	0	0	21	0	0	39	322	
261	0	83	8	24	85	59	16	148	0	0	14	5	0	0	0	0	4	1	0	0	0	0	0	0	48	495	
262	0	42	0	10	77	9	6	26	0	0	2	1	0	0	0	0	1	0	0	0	0	13	0	0	36	223	
263	0	17	0	5	84	8	19	11	0	0	6	2	0	0	0	0	1	0	0	0	0	50	0	0	52	255	
264	0	66	0	22	31	27	0	23	0	0	1	16	0	0	0	0	1	0	0	0	0	84	0	0	60	331	
265	0	27	2	34	55	34	7	66	0	0	1	0	0	0	0	0	0	0	0	0	0	21	0	0	52	299	
266	6	51	10	4	9	876	0	860	0	0	0	1	0	0	0	0	46	4	0	0	0	2	0	0	54	1923	
267	0	2	2	21	65	158	34	997	0	0	1	1	0	0	0	0	37	5	0	0	0	21	0	0	97	1441	
268	3	10	14	9	20	474	20	1013	0	0	0	4	0	0	0	0	4	2	0	0	0	7	0	0	42	1622	
269	0	17	24	42	362	16	36	2506	0	0	1	0	0	0	0	0	1	0	0	0	0	20	0	0	61	3086	
270	0	171	21	31	380	3	31	16	0	0	8	33	0	0	0	0	64	2	9	0	0	41	2	0	160	972	
271	0	250	0	1	182	0	38	6	0	0	3	11	0	0	0	0	9	33	15	0	0	42	3	1	67	661	
272	15	639	2	0	3	0	0	11	5	27	0	0	2	0	0	0	31	17	79	96	0	0	12	0	63	1002	
273	23	400	18	0	21	0	0	171	1	12	1	0	1	0	0	0	5	1	691	90	0	30	47	0	70	1582	
274 ^[1]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
275	33	235	1	0	30	0	0	44	0	37	0	0	28	1	0	0	5	1	191	321	1	0	17	0	59	1004	
276	11	81	0	0	8	0	0	53	1	20	0	0	0	0	0	0	4	2	84	9	0	1	0	0	6	280	
277	0	46	0	0	1	0	0	171	0	0	0	0	0	0	0	0	0	2	23	12	5	0	0	0	4	264	
278	0	56	0	0	2	0	1	122	9	0	0	0	0	0	0	0	0	168	27	4	0	0	1	0	14	404	
279 ^[1]	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0	0	0	0	0	0	5	
280	0	44	0	0	1	0	0	11	0	0	0	0	2	0	0	0	0	1	30	4	0	0	1	1	4	99	
281	3	532	0	2	2	0	3	5	6	0	0	0	1	0	0	0	0	1	22	6	0	0	1	0	11	595	
282	0	399	0	0	26	0	0	0	7	0	0	0	0	0	0	0	0	0	58	11	0	0	2	0	20	523	

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CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

	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 OTHER ^[2]	TOTAL ALL
283	0	748	0	0	6	0	0	0	2	0	0	0	0	0	0	0	0	0	45	0	0	0	3	1	30	835
284	2	787	0	0	6	0	10	662	5	18	0	0	0	0	0	0	0	0	55	31	0	2	0	0	97	1675
285	0	114	0	0	119	0	5	4	1	0	0	0	1	0	0	0	0	0	38	57	0	9	0	0	46	394
286	0	874	0	0	88	0	16	3	12	0	1	0	0	4	0	0	0	0	172	44	0	0	0	0	80	1294
287	0	2	0	0	37	0	1	0	5	0	0	0	0	0	0	0	0	0	17	25	0	0	0	0	16	103
288	0	1	0	0	11	0	2	0	0	0	0	0	0	0	0	0	0	0	0	30	0	0	1	0	50	95
289	0	0	0	5	66	0	14	0	0	0	0	0	0	0	0	0	0	0	0	1	0	271	0	3	69	429
290 ^[1]	0	0	0	0	35	4	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	0	2	69	157
291 ^[1]	0	0	0	5	10	2	34	0	0	0	0	2	0	0	0	0	0	0	0	0	0	37	0	0	71	161
292	0	0	0	24	86	22	19	0	0	0	0	3	0	0	0	0	0	0	0	0	0	197	0	2	238	591
293	0	3	0	0	45	0	1	0	0	0	0	0	0	0	0	0	0	2	0	1	0	10	53	9	34	158
294	0	90	0	0	7	0	3	0	0	0	0	0	0	0	0	0	0	0	0	11	0	13	1	0	1009	1134
295	0	2	0	0	182	0	7	0	0	0	0	0	0	0	0	0	0	0	0	17	0	9	5	1	56	279
296	0	22	0	0	270	0	9	0	0	0	0	0	0	0	0	0	0	1	0	13	4	13	6	2	153	493
297	0	5	0	0	64	0	2	0	8	0	0	1	0	0	0	0	0	0	16	43	0	27	0	0	142	308
298	0	23	0	0	98	0	9	0	0	0	1	0	0	0	0	0	0	0	16	14	1	29	1	0	163	355
299	0	10	0	0	6	0	4	0	6	0	1	0	0	0	0	0	0	0	31	21	0	7	0	1	56	143
300	11	797	0	0	3	0	4	24	1	0	1	0	0	0	0	0	0	0	35	3	0	0	0	0	31	910
301	3	496	0	0	1	0	6	8	2	0	0	0	0	0	0	0	0	0	30	4	0	0	0	0	108	658
302	90	505	0	0	0	0	0	89	0	22	0	0	0	0	0	0	0	0	31	6	0	37	1	0	75	856
303	282	385	5	0	0	0	8	8	0	3	0	0	0	0	0	0	0	0	0	0	0	10	0	0	221	922
304	0	176	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	2	1	57	2	0	78	319
305	7	161	2	0	3	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	0	0	50	289
306	8	70	26	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	0	0	78	224
307	14	124	96	0	18	0	8	0	0	0	0	0	0	0	0	0	0	0	0	2	0	97	0	2	38	399
308	0	50	28	0	50	0	4	0	0	0	0	1	0	0	0	0	0	0	22	89	0	41	0	0	30	315
309	81	137	940	0	1	0	0	61	0	0	0	0	0	0	0	0	34	0	3	1	0	108	0	0	177	1543
310	0	29	0	18	90	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	25	0	0	170	335
311	5	93	3	11	278	0	0	0	0	0	0	2	0	0	0	0	0	1	0	34	0	21	0	0	32	480
312	0	15	0	3	95	0	14	0	0	0	0	1	0	0	0	0	0	0	0	1	0	65	0	0	84	278
313	12	236	16	18	510	1425	0	5637	0	0	0	0	0	0	0	0	0	0	0	1	0	55	0	0	157	8067
314 ^[1]	0	8	3	21	756	0	60	437	0	0	0	4	0	0	0	0	0	0	0	0	0	144	3	0	80	1516
315	11	5	3	3	705	2	72	975	0	0	0	31	0	0	0	0	0	0	0	0	1	118	3	0	79	2008
316	229	1098	275	0	6	0	6	169	3	0	2	0	0	0	0	0	1	2	0	0	0	60	3	1	166	2021
317	0	74	0	47	742	0	88	14	0	0	0	0	0	0	0	0	0	4	0	0	0	68	0	0	59	1096
318	2	18	0	20	157	72	2	151	0	0	0	1	0	0	0	0	0	0	0	0	0	13	0	0	90	526
319	4	18	2	48	218	62	0	843	0	0	0	1	0	0	0	0	0	0	0	0	0	12	0	0	235	1443
320	0	26	1	58	116	66	0	4014	0	0	0	1	0	0	0	0	0	0	0	0	0	28	0	0	98	4408

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321 ^[1]	425	146	6	0	2	0	0	482	0	55	0	1	0	0	0	0	14	0	0	0	0	2	0	0	8	1141
322	48	86	51	56	564	42	8	424	0	1	2	8	0	0	0	0	0	0	0	0	0	6	0	0	41	1337
323	40	110	2	28	61	2	6	490	0	1	4	8	0	0	0	0	0	0	0	0	0	47	0	0	43	842
324	140	103	159	23	359	1	15	254	0	2	0	3	0	0	0	0	0	0	0	0	0	19	1	0	60	1139
325	24	108	27	0	77	2	3	156	0	1	0	0	0	0	0	0	1	0	0	0	0	23	0	0	32	454
326	29	26	0	18	206	33	33	75	0	0	2	3	0	0	0	0	3	1	0	0	0	13	0	0	19	461
327	0	32	0	16	27	2	9	20	0	0	5	2	0	0	0	0	13	37	0	0	0	11	0	0	36	210
328	54	480	0	0	0	0	5	28	0	216	1	1	0	0	0	0	0	0	0	2	0	39	0	0	67	893
329	12	48	0	12	204	21	0	0	0	1	0	0	0	0	0	0	3	15	0	0	0	28	0	0	20	364
330	4	112	0	45	152	386	0	8	0	0	0	1	0	0	0	0	4	0	0	0	0	17	0	0	37	766
331	5	31	0	8	76	0	0	5	0	1	8	22	0	0	0	0	0	0	0	0	0	31	0	0	24	211
332	22	9	0	5	16	0	2	23	0	1	1	20	0	0	0	0	0	0	0	0	0	24	0	0	48	171
333	0	0	0	1	90	1	1	0	0	28	1	0	0	0	0	0	0	0	2	0	0	168	0	0	42	334
334	0	1	0	5	488	0	5	0	0	5	18	0	0	0	0	0	0	0	0	1	0	99	0	0	32	654
335	1	2	0	7	1336	0	6	0	0	4	10	1	0	0	0	0	0	42	1	0	0	213	0	0	60	1683
336	0	0	0	5	26	0	11	0	0	0	21	1	0	0	0	0	0	20	0	0	0	79	0	0	13	176
337	11	128	0	12	70	1	14	23	0	0	14	7	0	0	0	0	1	3	0	0	0	9	0	0	27	320
338	0	17	0	29	92	35	11	64	0	0	4	2	0	0	0	0	0	0	0	0	0	12	0	0	32	298
339	0	0	0	1	129	0	2	0	0	2	8	1	0	0	0	0	1	0	0	0	0	143	0	0	38	325
340 ^[1]	0	0	0	1	122	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	70	0	0	7	202
341	0	2	0	2	108	1	0	0	0	1	9	0	0	0	0	0	1	0	0	0	0	107	0	0	19	250
342	0	66	0	12	30	0	1	0	0	1	60	2	0	0	0	0	32	0	0	0	0	52	0	0	23	279
343	0	3	0	4	96	0	11	0	0	0	27	0	0	0	0	0	4	3	0	0	0	60	0	0	51	259
344	0	101	0	17	137	0	1	22	2	0	48	3	0	0	0	0	2	0	0	0	0	24	0	0	66	423
345	0	8	1	0	24	0	4	0	1	1	35	0	0	0	0	0	34	2	0	0	0	47	0	0	78	235
346	3	291	0	10	481	1	7	243	5	0	163	1	0	0	0	0	13	0	0	0	0	21	0	0	133	1372
347	2	181	1	11	42	100	21	85	0	0	42	3	0	0	0	0	0	0	0	0	0	10	0	0	103	601
348	1	97	0	18	55	106	13	69	0	0	45	14	0	0	0	0	1	1	0	0	0	14	0	0	105	539
349	0	16	0	13	40	61	12	36	0	0	39	9	0	0	0	0	5	1	0	0	0	19	0	0	58	309
350	0	232	0	4	112	1	8	66	0	0	61	8	0	0	0	0	3	0	0	0	0	16	0	0	78	589
351	11	29	1	3	36	6	1	8	0	1	10	4	0	0	0	0	3	0	0	1	0	66	0	0	57	237
352	0	53	0	17	84	354	29	77	0	0	33	2	0	0	0	0	0	0	0	0	0	3	0	0	97	749
353	0	21	5	80	153	248	52	198	0	0	25	2	0	0	0	0	0	0	0	0	0	22	0	0	65	871
354	1	22	3	15	112	540	29	171	0	0	15	2	0	0	0	0	2	1	0	0	0	0	0	0	42	955
355	0	23	4	6	79	722	39	135	0	0	38	3	0	0	0	0	1	0	0	0	0	2	0	0	35	1087
356	369	1151	29	0	0	1	9	126	17	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	201	1915
357	0	84	0	16	69	14	2	48	0	0	6	3	0	0	0	0	0	1	0	0	0	7	0	0	41	291
358	0	15	1	3	36	155	34	37	0	0	15	3	0	0	0	0	1	1	0	0	0	9	0	0	33	343

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359	0	59	2	3	2	9	13	17	0	0	19	5	0	0	0	0	0	0	0	0	0	3	0	0	32	164
360	0	35	0	2	6	34	6	3	0	0	58	2	0	0	0	0	16	0	0	0	0	14	0	0	114	290
361	107	197	31	2	20	1	16	55	38	6	8	2	0	0	0	0	5	0	0	0	0	121	0	0	175	784
362	3	81	296	3	405	407	28	102	1	0	13	12	0	0	0	0	0	0	0	0	0	23	0	0	270	1644
363	0	261	0	11	42	417	12	330	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	67	1151
364	1	263	0	1	6	0	0	70	56	1	25	0	0	0	0	0	187	1	4	0	13	16	0	0	18	662
365 ^[1]	0	8	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1	0	0	2	13
366	168	316	10	0	3	0	0	37	5	40	0	0	0	0	0	0	0	0	0	0	0	7	0	0	64	650
367	20	27	11	3	330	21	18	213	2	0	46	6	0	0	0	0	28	1	0	0	0	13	0	0	116	855
368	16	236	4	3	162	1	12	55	7	0	171	4	0	0	0	0	2487	1	0	0	1	50	0	0	133	3343
369	1	30	0	0	3	0	0	0	38	5	0	0	0	0	0	0	8	112	0	5	0	62	0	0	90	354
370	48	173	0	2	33	0	4	18	127	36	25	19	0	0	0	0	3	6	0	20	0	54	0	0	125	693
371	0	131	0	0	40	8	79	31	43	3	284	66	0	0	0	0	19	0	3	2	0	54	0	0	56	819
372	2	280	0	5	81	0	26	21	180	11	87	40	0	0	0	0	13	2	0	0	0	54	0	0	97	899
373	12	202	1	3	125	0	17	0	453	120	63	21	0	0	0	0	2	0	0	2	0	36	0	0	176	1233
374	17	100	1	6	31	0	8	0	172	124	6	1	2	0	0	1	158	1	6	8	0	126	0	0	109	877
375	14	3	1	0	4	0	0	0	6	71	0	0	0	0	0	0	99	5	0	1	1	125	1	0	192	523
376	2	243	0	1	195	42	6	92	25	4	47	0	0	0	0	0	37	0	0	0	0	12	0	0	65	771
377	0	335	1	3	21	122	15	89	8	1	38	13	0	0	0	0	61	0	0	0	0	25	1	0	106	839
378	80	404	2	0	1	0	7	48	28	44	2	0	0	0	0	0	1	0	0	6	0	61	0	0	111	795
379	2	36	1	0	5	0	0	0	8	4	0	0	0	2	0	0	1	0	0	0	2	11	1	0	85	158
380 ^[1]	0	0	12	0	0	0	0	0	1	6	0	0	0	1	0	0	0	2	2	1	0	10	0	0	45	80
381	42	2359	1	0	120	0	1	6	47	22	3	5	0	0	0	0	6	0	6	1	1	47	0	0	389	3056
382 ^[1]	32	127	0	1	14	0	0	6	1	2	0	0	0	0	0	0	0	0	0	0	0	10	0	0	83	276
383	548	1033	3	1	61	2	0	0	8	52	1	2	0	0	0	0	3	0	0	0	0	32	0	0	348	2094
384	13	153	6	2	93	1	2	80	0	0	7	4	0	0	0	0	8	0	0	0	0	28	0	0	152	549
385	15	613	4	22	122	1	28	44	0	0	43	6	0	0	0	0	10	0	0	0	0	16	0	0	494	1418
386	0	1	0	1	179	0	0	0	15	16	24	0	0	0	0	0	184	0	0	0	3	14	0	0	1224	1661
387	0	1	0	1	229	0	9	0	3	17	15	0	0	0	0	0	72	0	0	0	7	20	0	0	653	1027
388	0	0	0	0	5	0	6	0	1	93	0	0	5	0	0	0	12	0	0	32	1	35	2	0	100	292
389	0	183	0	1	39	0	4	0	3	85	0	0	2	0	0	0	12	0	0	7	1	39	1	0	100	477
390 ^[1]	0	9	0	0	4	0	0	0	2	17	0	0	0	0	0	0	0	4	0	0	1	8	0	0	6	51
391 ^[1]	0	6	0	0	1	0	1	0	3	25	0	0	0	0	0	0	1	0	0	2	0	33	1	0	20	93
392	0	779	0	1	172	0	28	9	11	42	5	0	1	0	0	0	6	0	0	0	0	54	0	0	376	1484
393	3	9	2	0	6	0	0	19	13	157	0	0	1	0	0	0	1	0	0	84	0	46	0	0	86	427
394	3	122	0	0	78	0	0	8	21	139	0	0	0	0	0	0	2	0	0	21	0	42	0	0	152	588
395	0	23	0	0	30	0	4	12	37	65	3	2	0	0	0	1	934	2	2	6	2	25	0	0	104	1252
396	46	48	1	0	53	0	4	0	52	250	3	0	1	0	0	0	6	0	0	16	0	27	0	0	172	679

NOAA FISHERIES SERVICE-NEFSC SPRING BOTTOM TRAWL SURVEY 2016
 CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

	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 OTHER	TOTAL ALL
	397	6	446	0	1	22	1	7	0	67	146	11	5	0	0	0	2	0	0	1	0	59	0	0	159	933
TOTAL	3555	34073	2221	1314	18672	11116	2901	92869	1640	2604	2023	596	301	953	5006	768	7376	1712	7557	8743	4285	5230	4240	1192	40763	262728

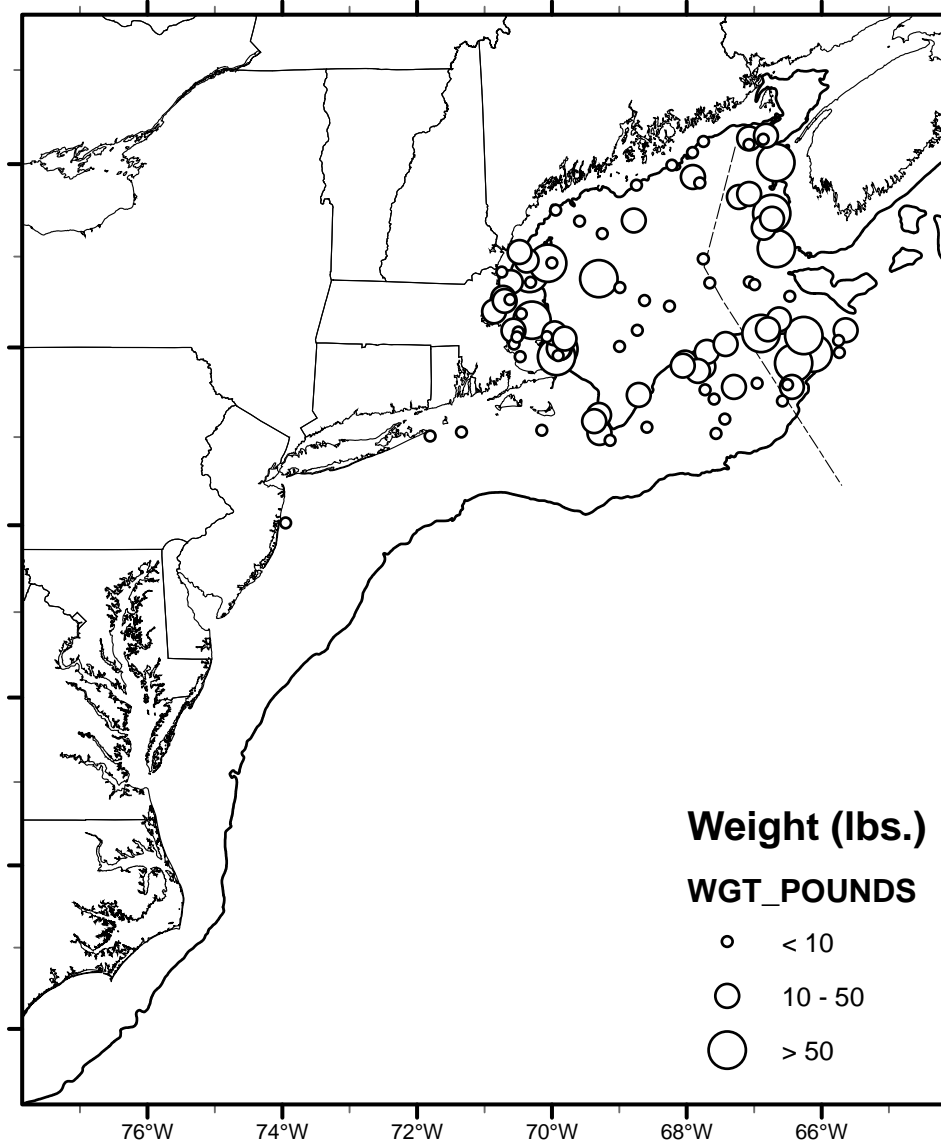
[1] Excluded from stock assessment due to an unacceptable tow evaluation code

[2] "Total other" in southern areas are primarily comprised of various rays, spot and Atlantic croaker

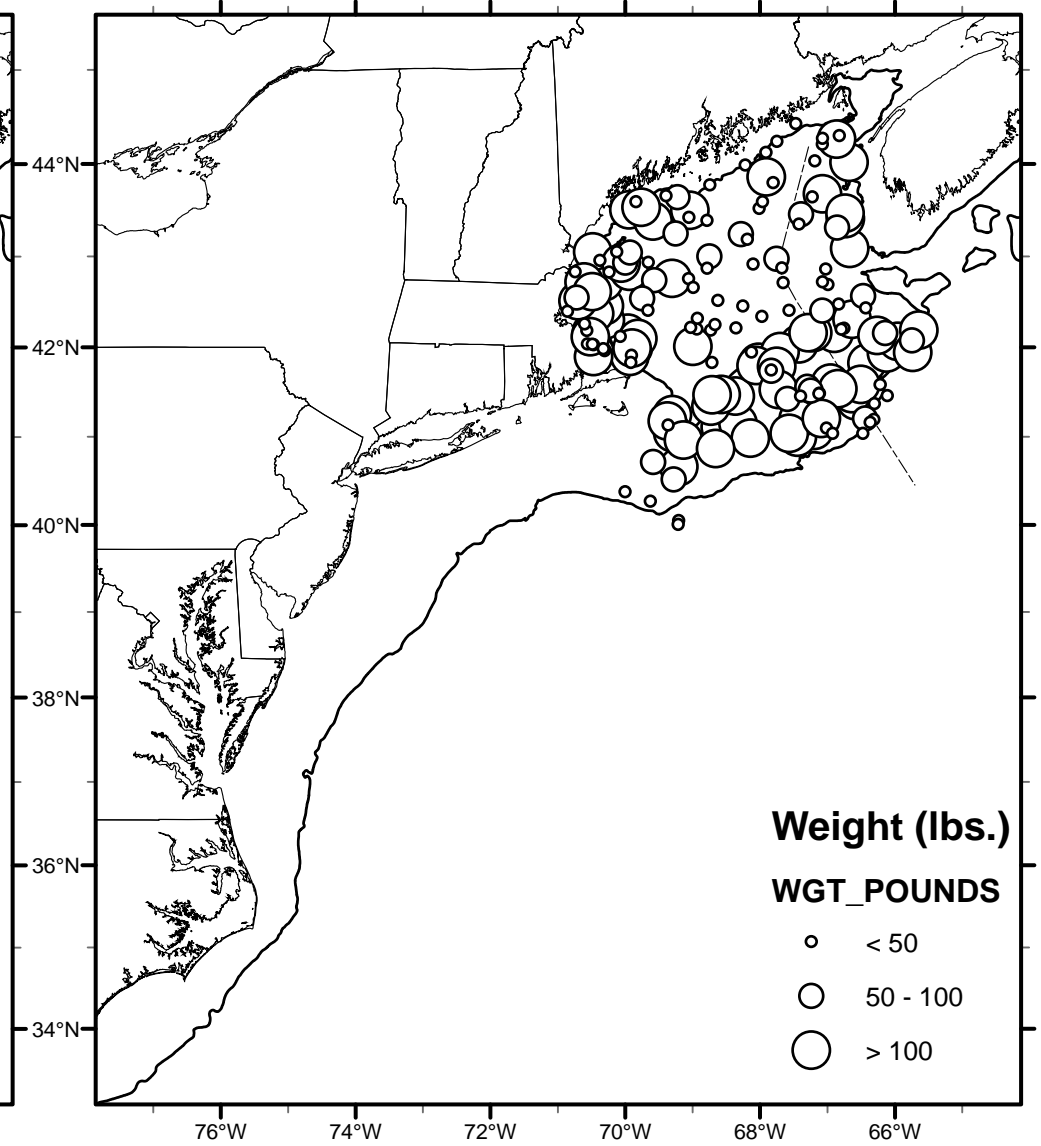
[3] Missing sequential numbers indicate either a test-tow or no-trawl was attempted

NOAA Fisheries Service
NEFSC Spring Bottom Trawl Survey
8 April - 7 June 2016

ATLANTIC COD

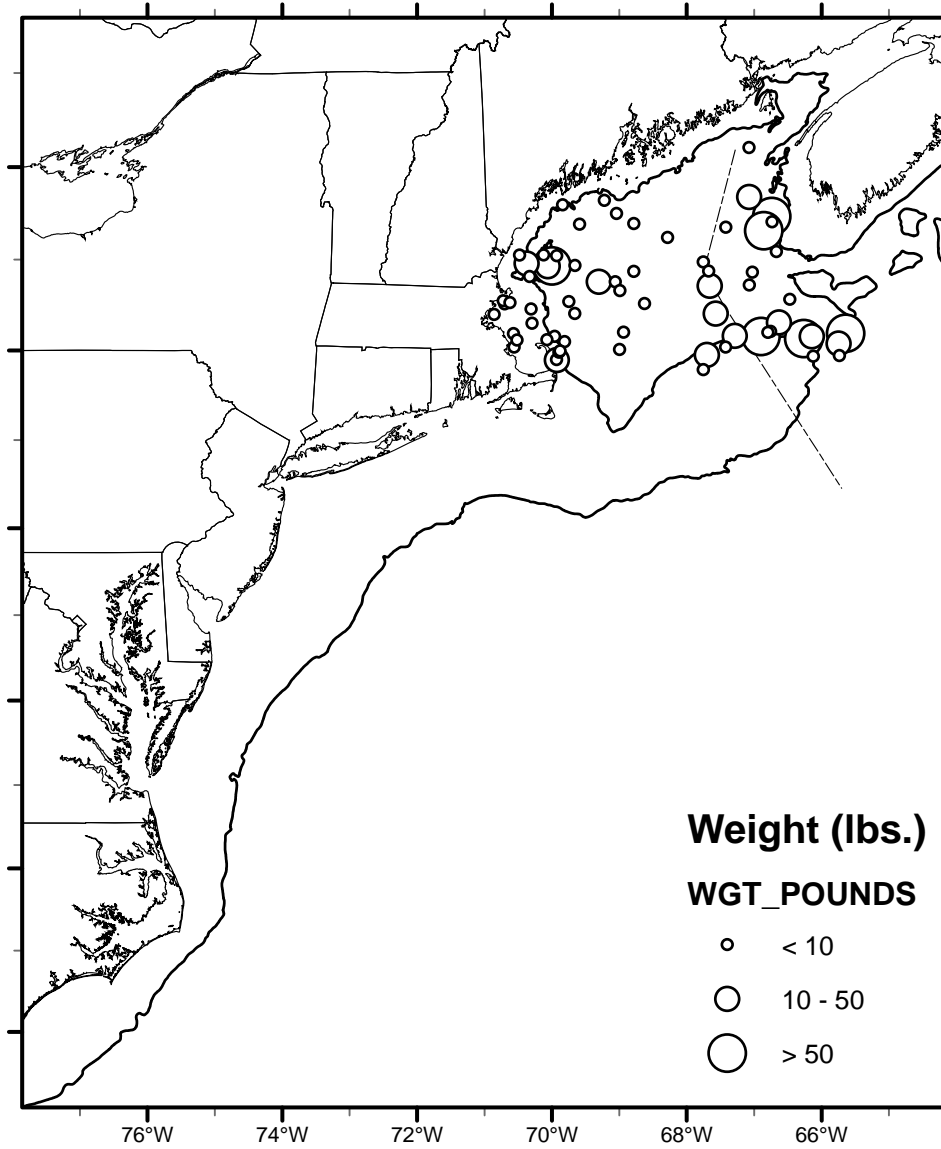


HADDOCK

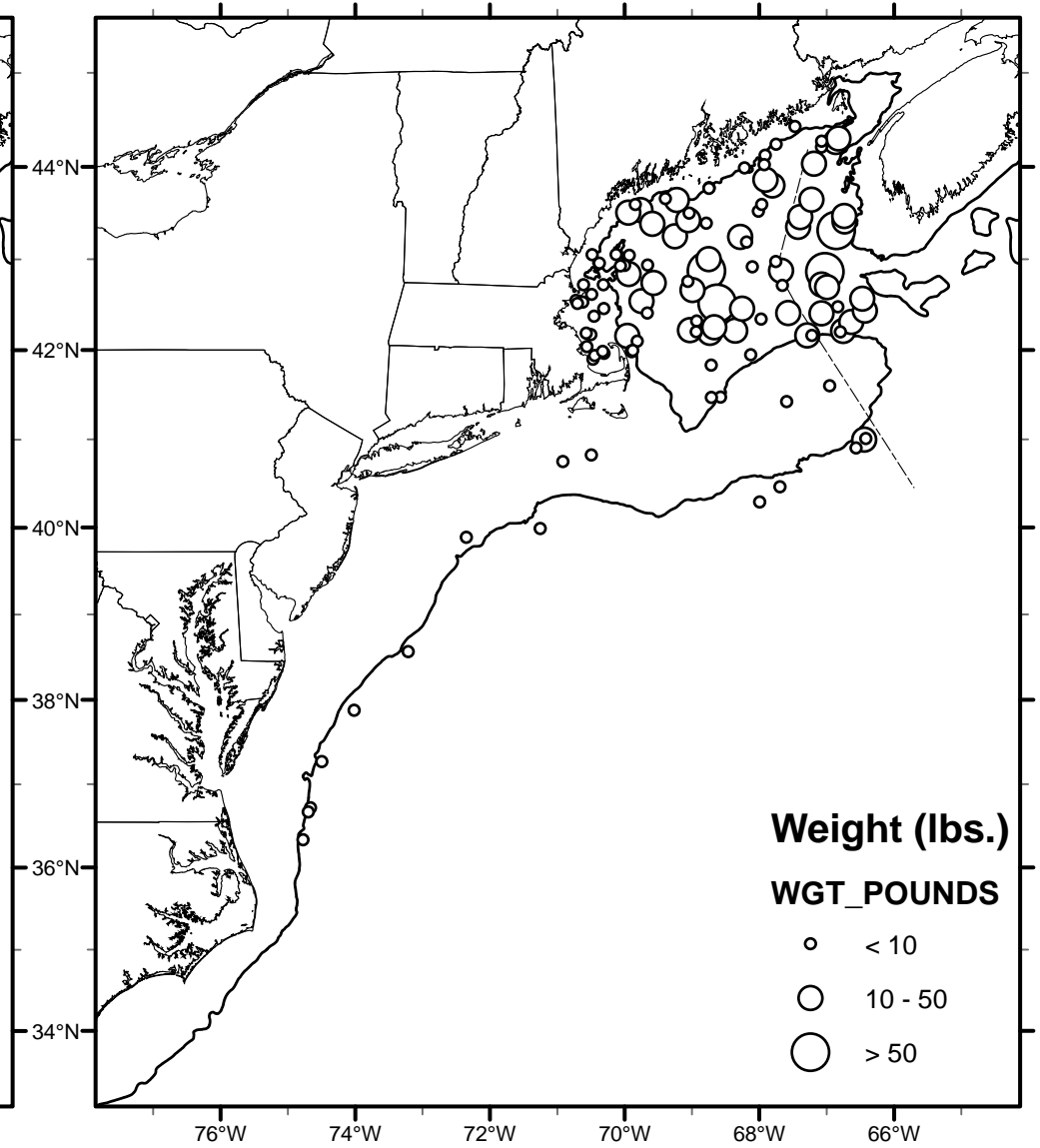


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NEFSC Spring Bottom Trawl Survey
8 April - 7 June 2016

POLLOCK

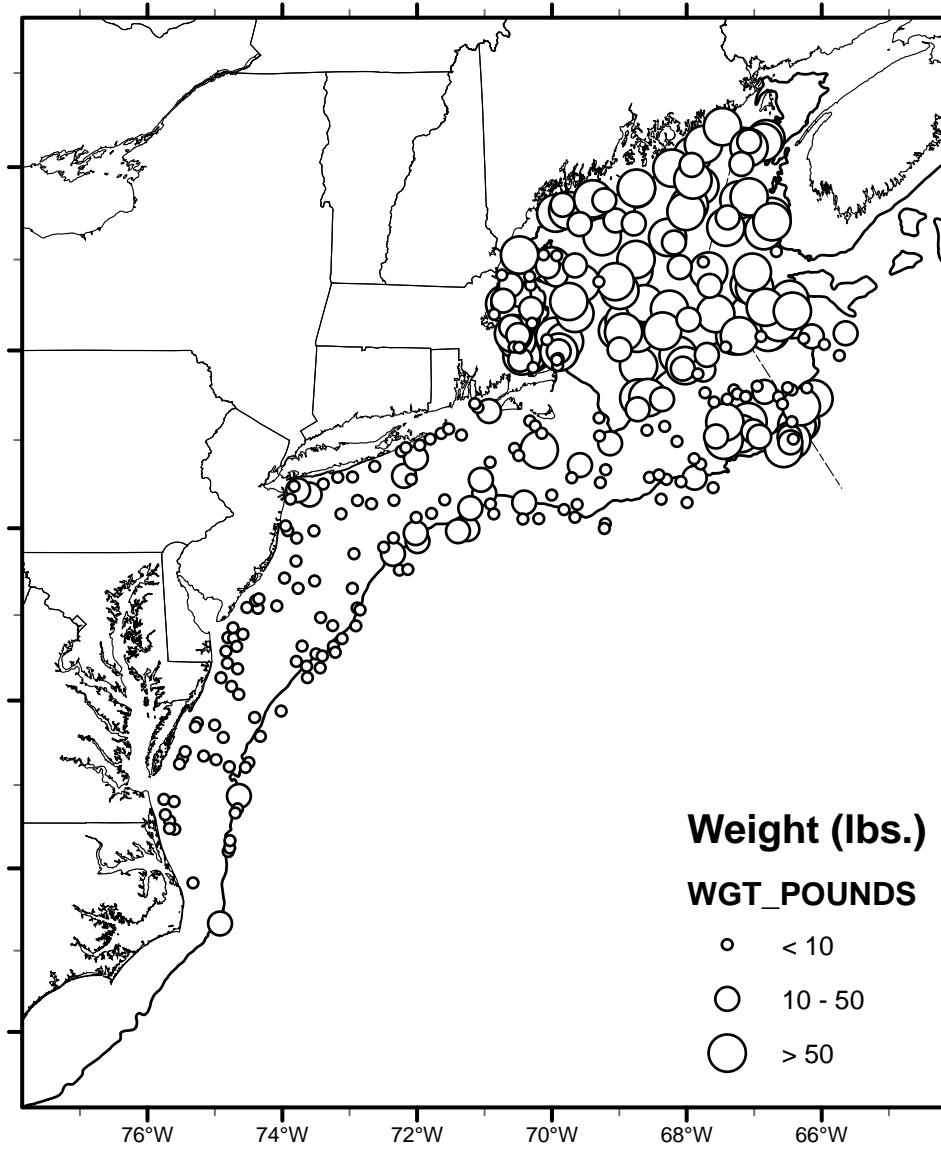


WHITE HAKE

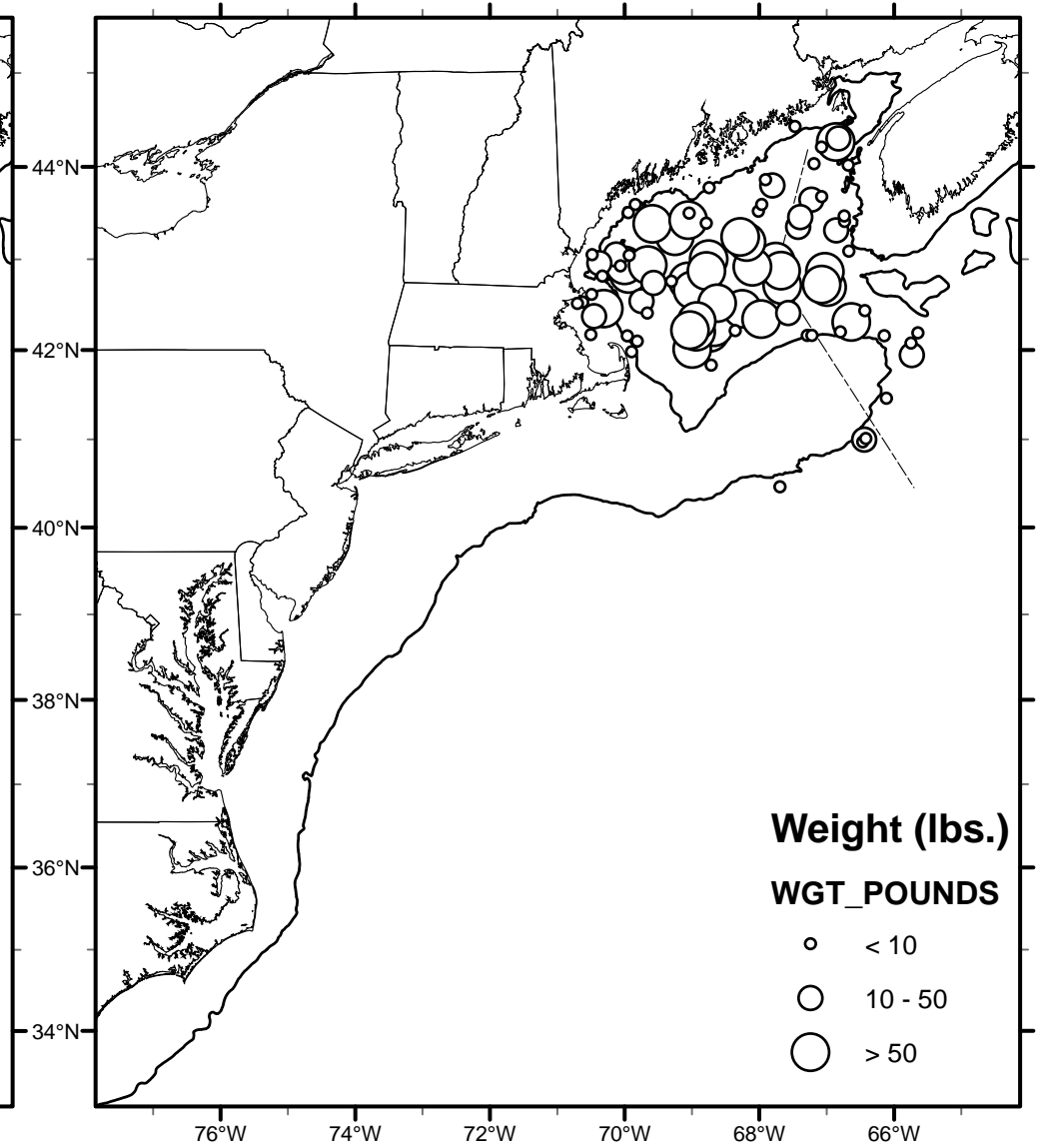


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NEFSC Spring Bottom Trawl Survey
8 April - 7 June 2016

SILVER HAKE

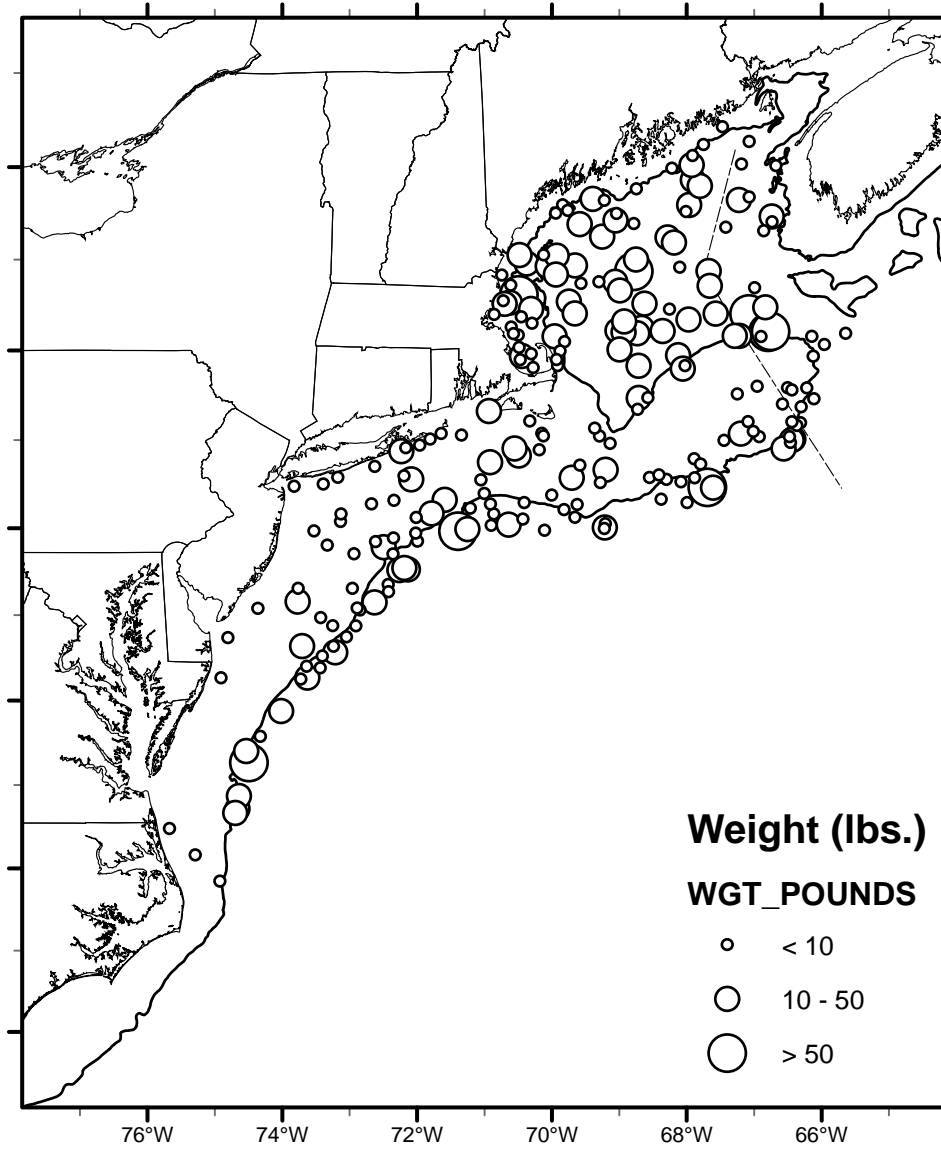


ACADIAN REDFISH

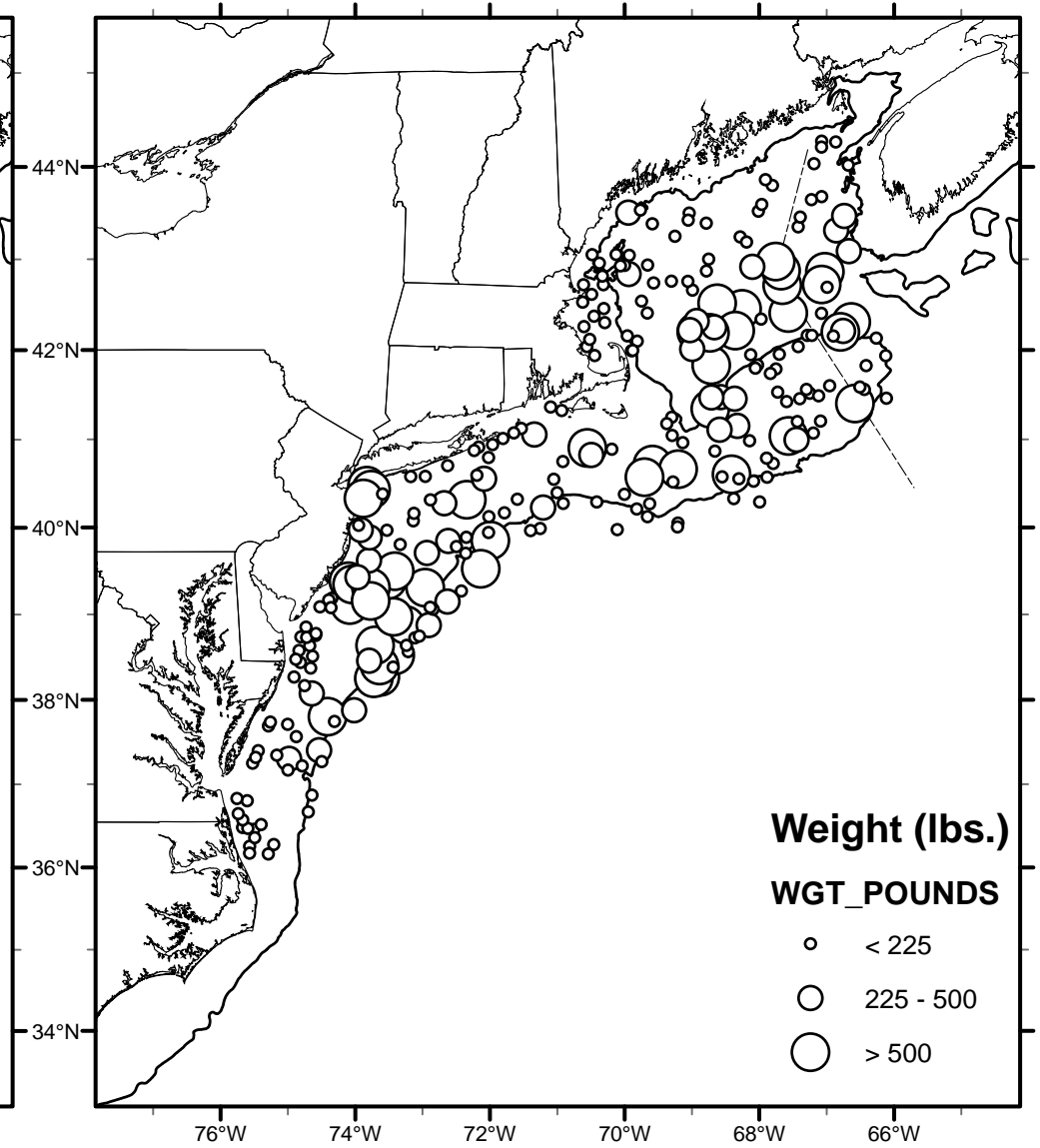


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NEFSC Spring Bottom Trawl Survey
8 April - 7 June 2016

GOOSEFISH

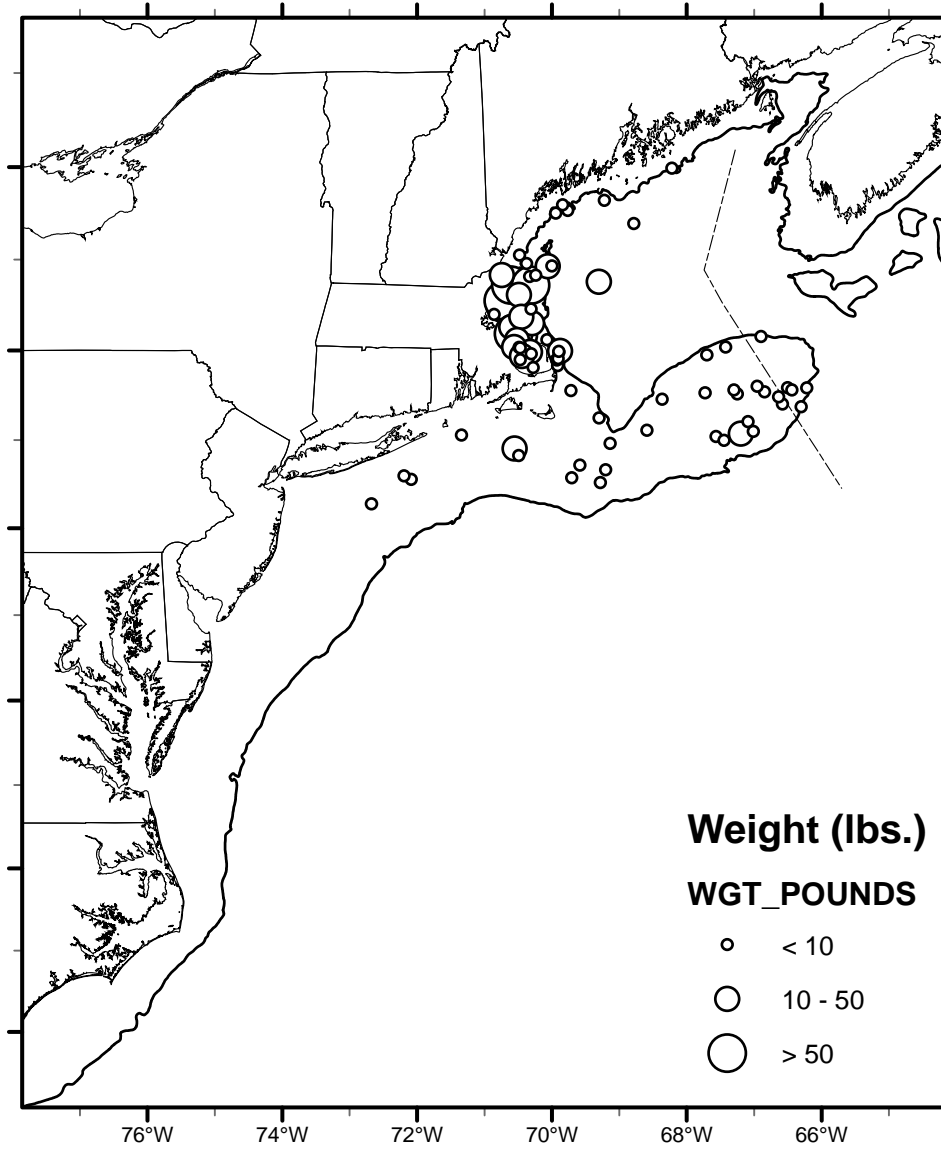


SPINY DOGFISH

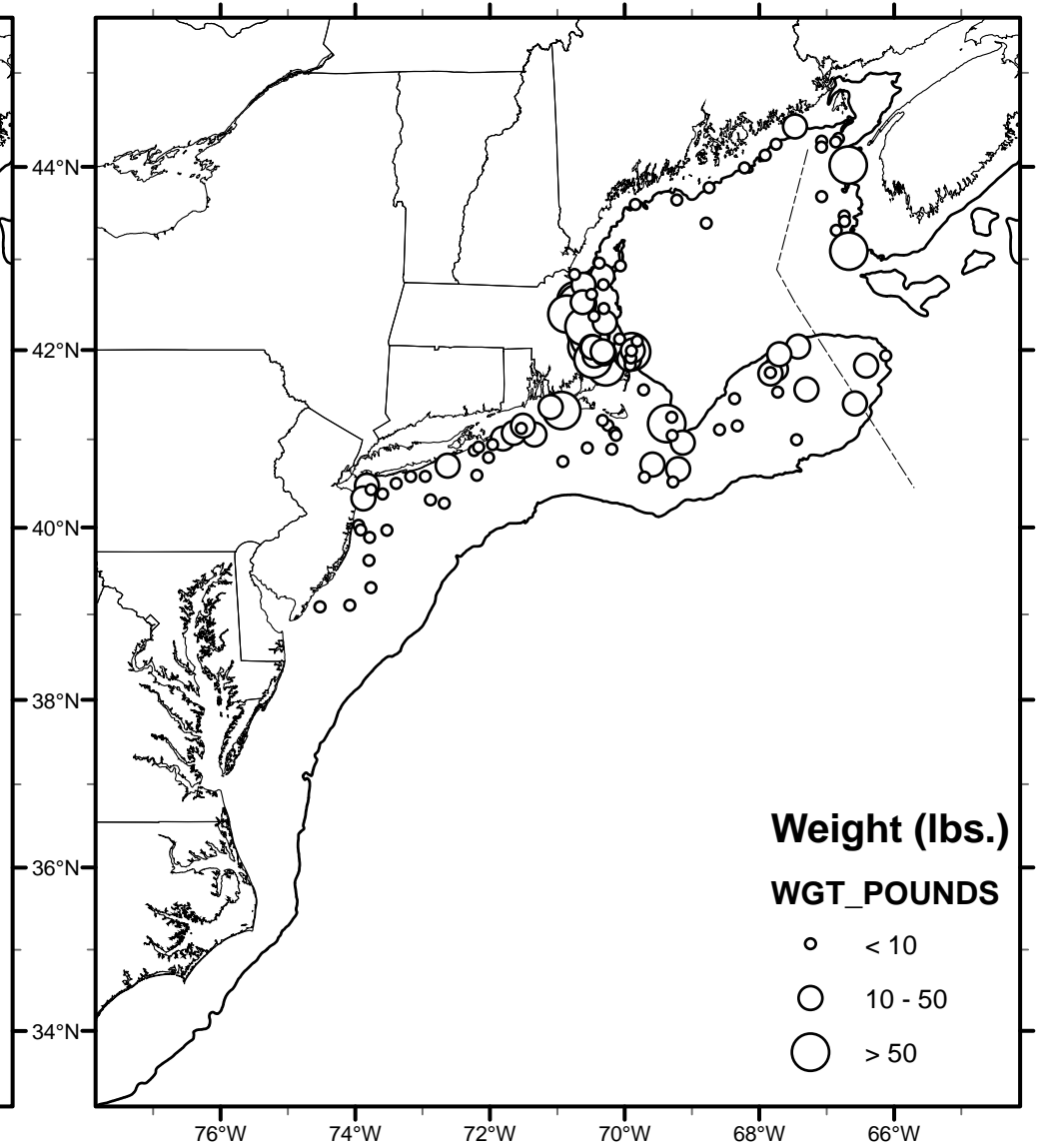


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NEFSC Spring Bottom Trawl Survey
8 April - 7 June 2016

YELLOWTAIL FLOUNDER

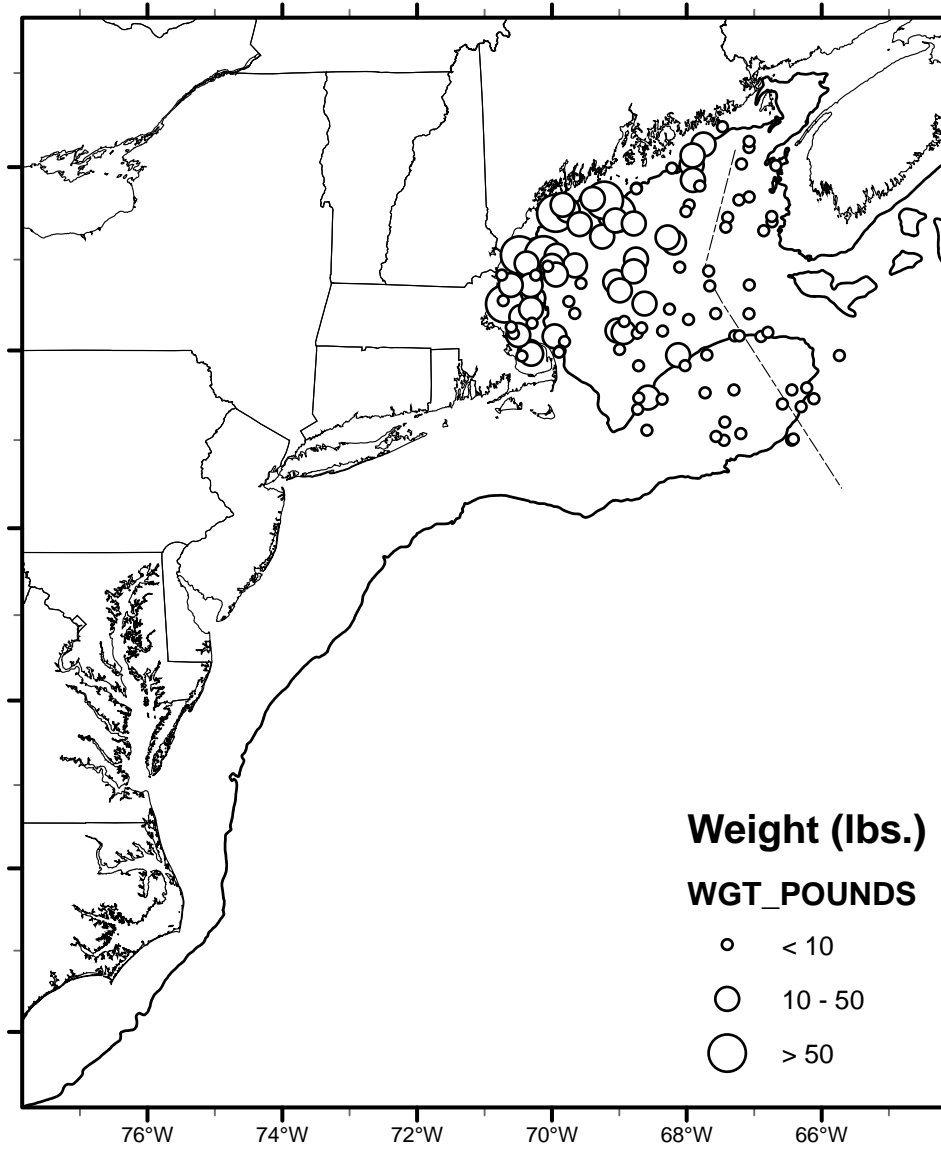


WINTER FLOUNDER

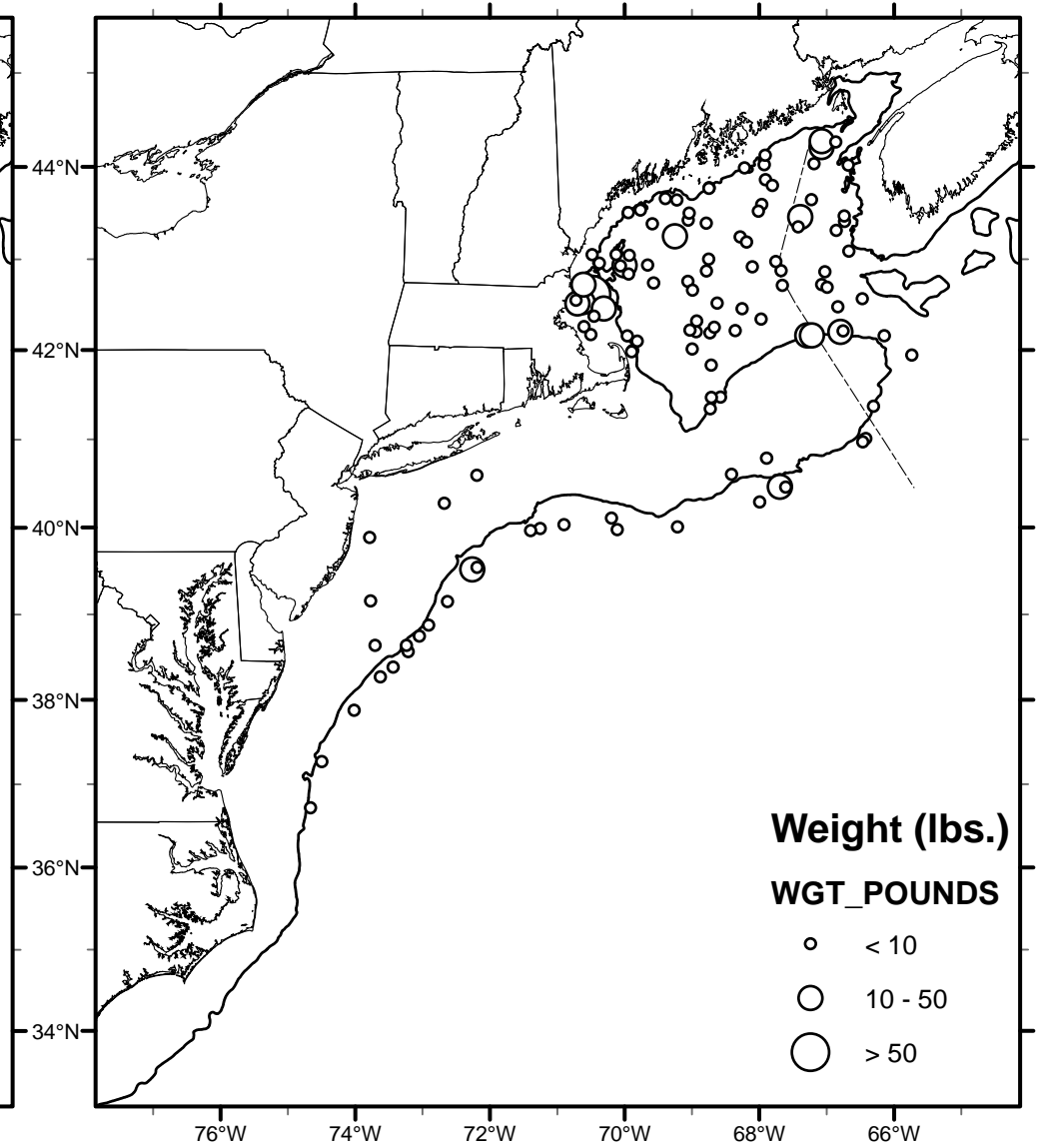


NOAA Fisheries Service
NEFSC Spring Bottom Trawl Survey
8 April - 7 June 2016

AMERICAN PLAICE

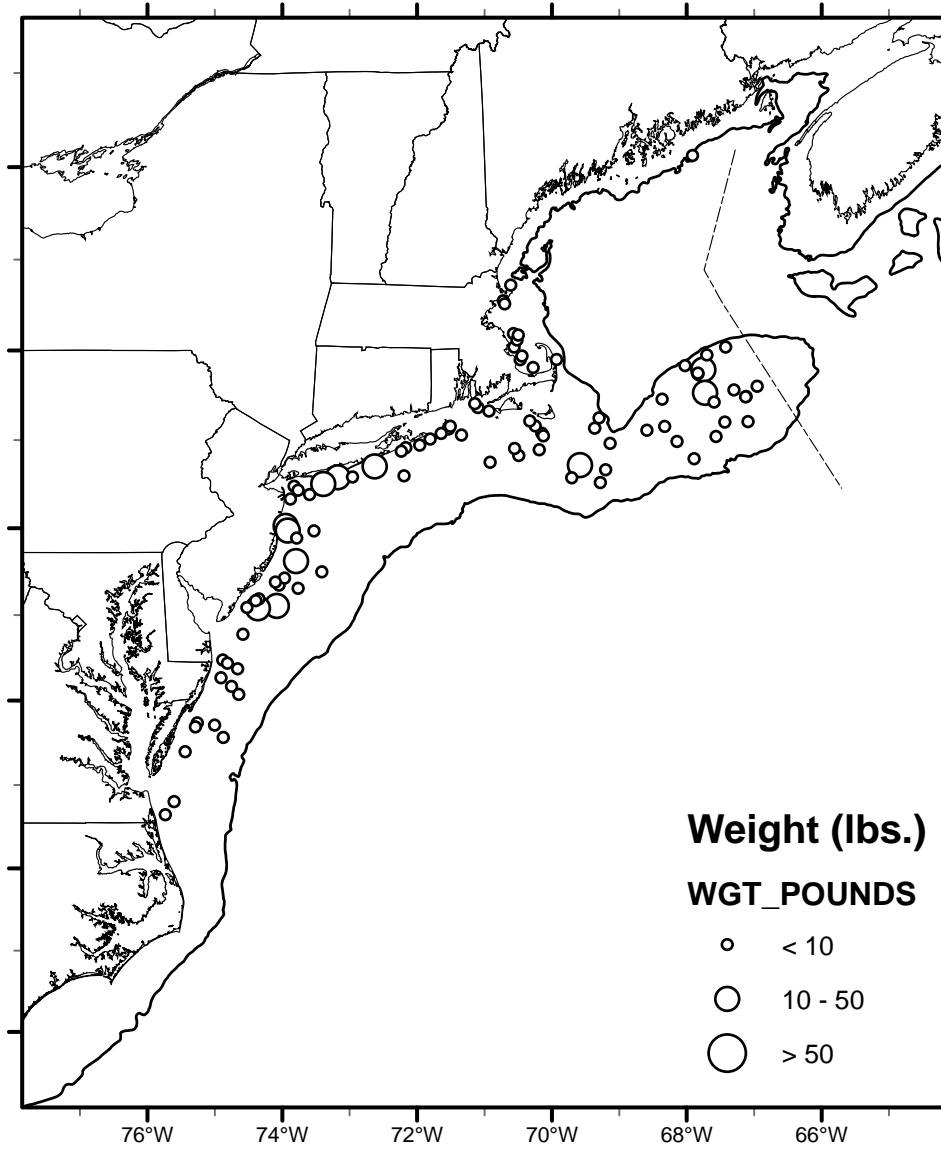


WITCH FLOUNDER

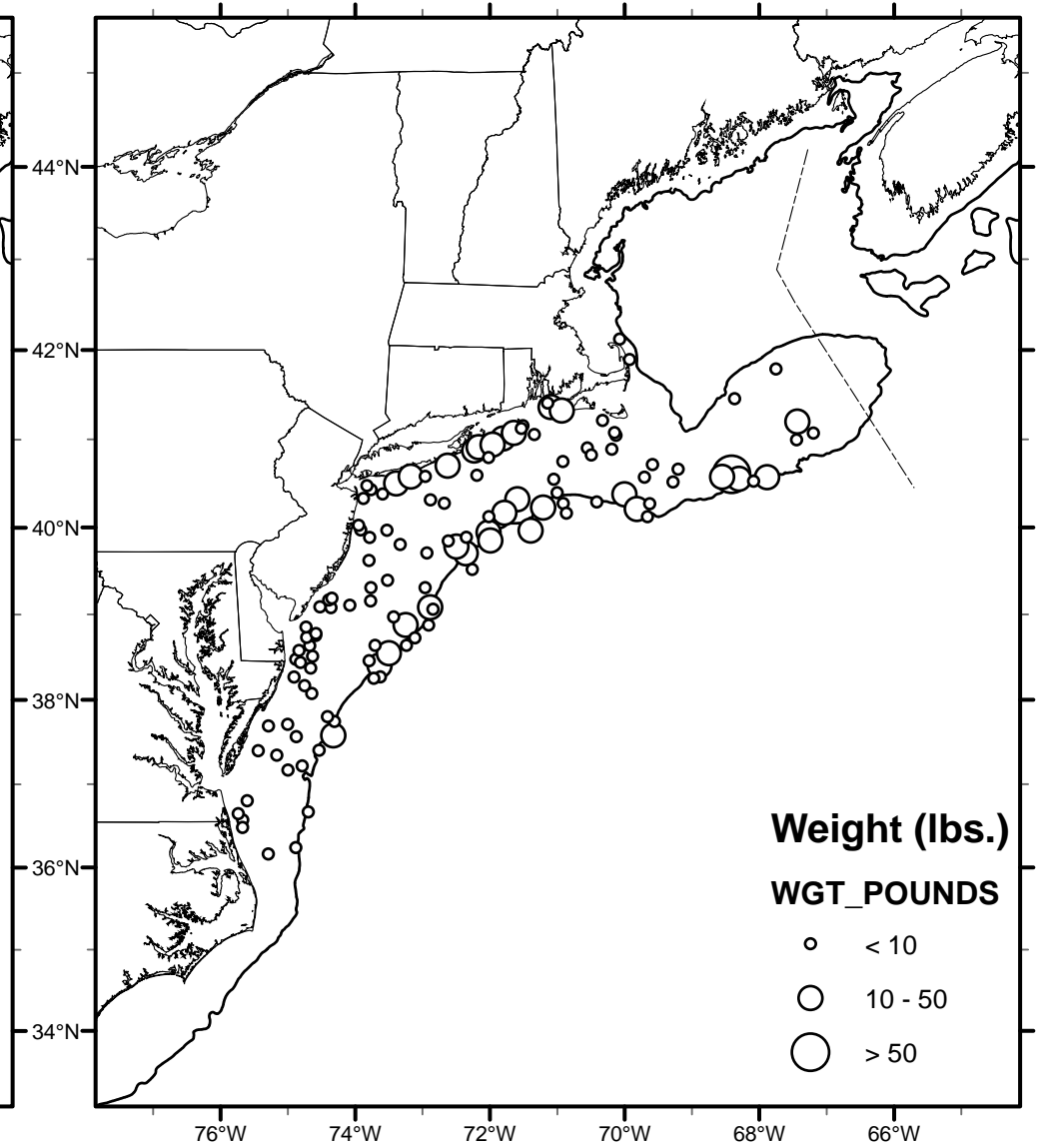


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NEFSC Spring Bottom Trawl Survey
8 April - 7 June 2016

WINDOWPANE FLOUNDER

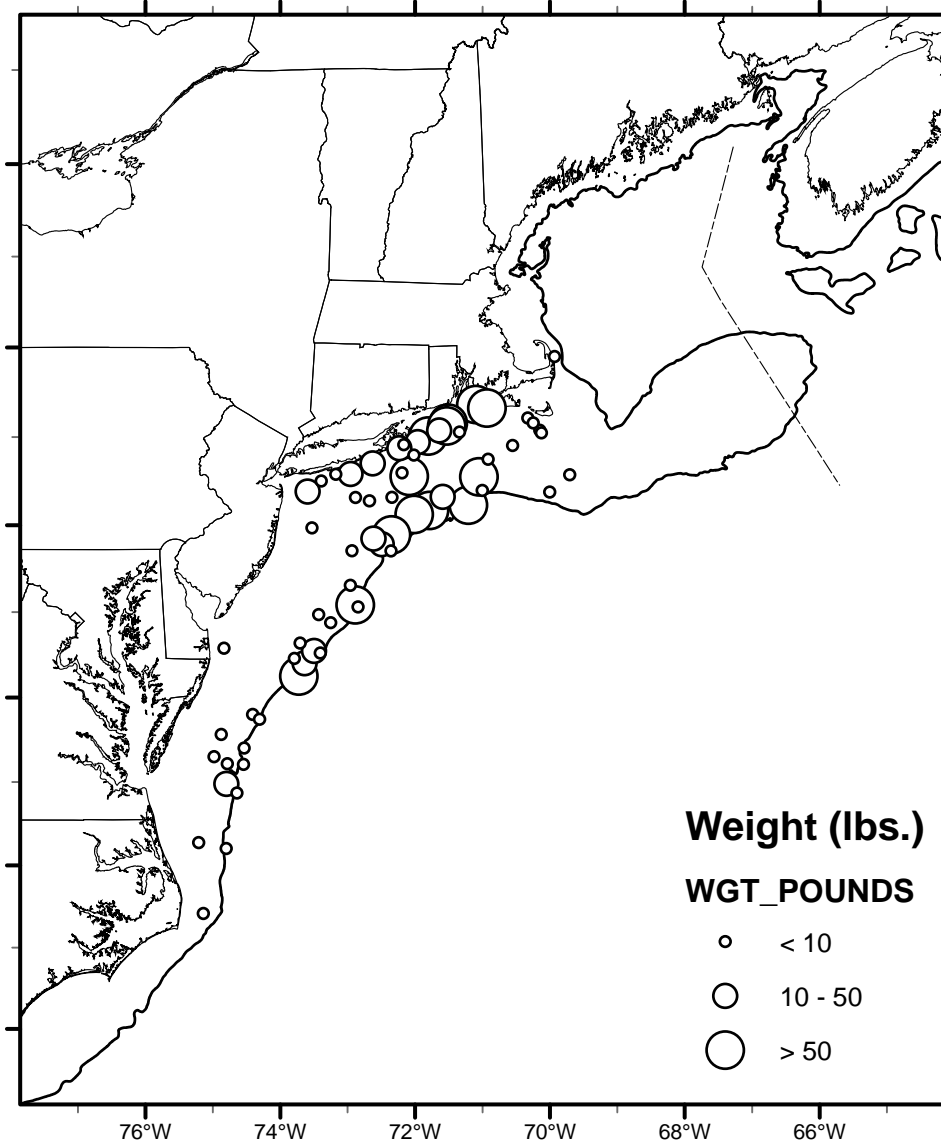


SUMMER FLOUNDER

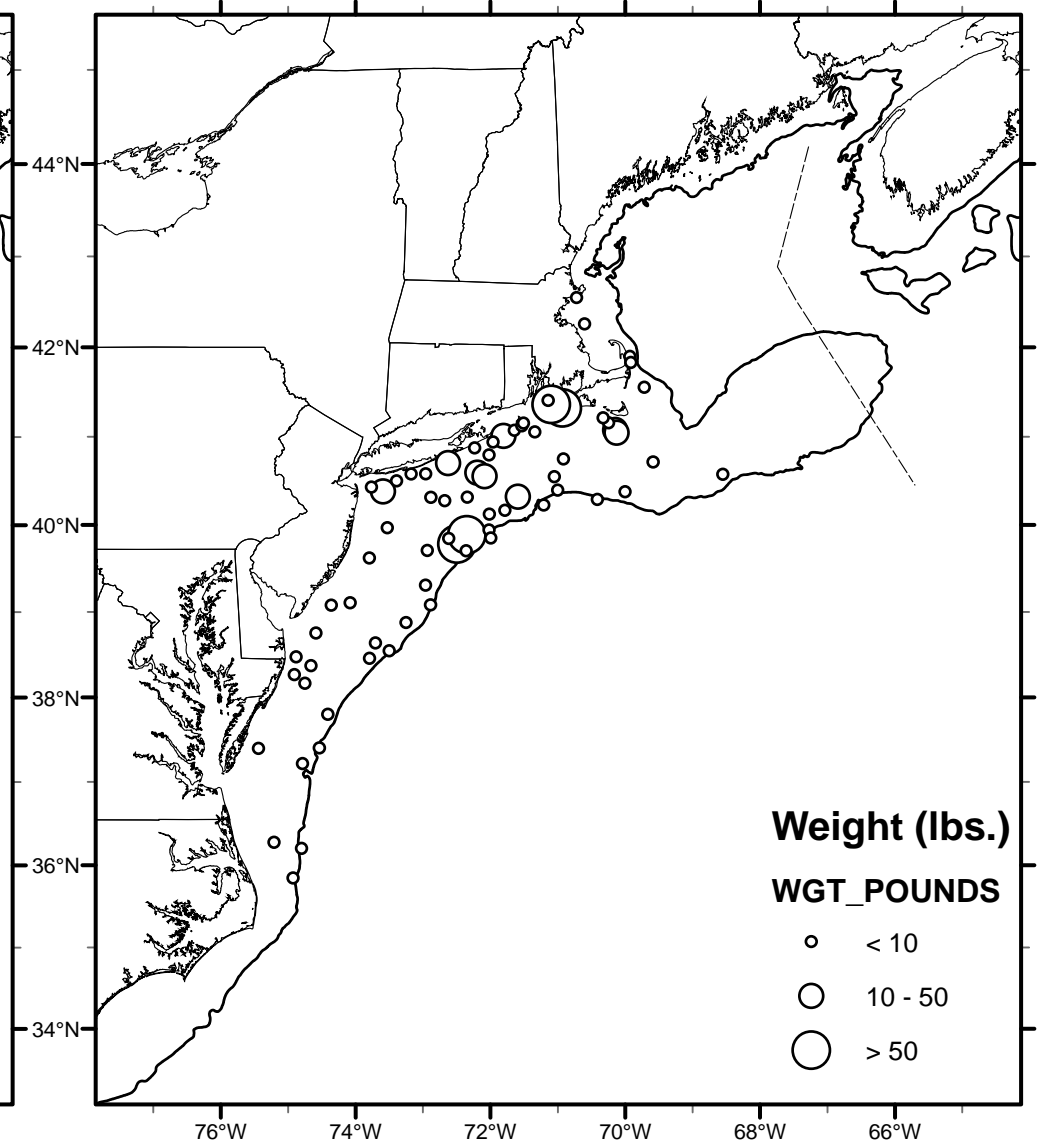


NOAA Fisheries Service
NEFSC Spring Bottom Trawl Survey
8 April - 7 June 2016

SCUP

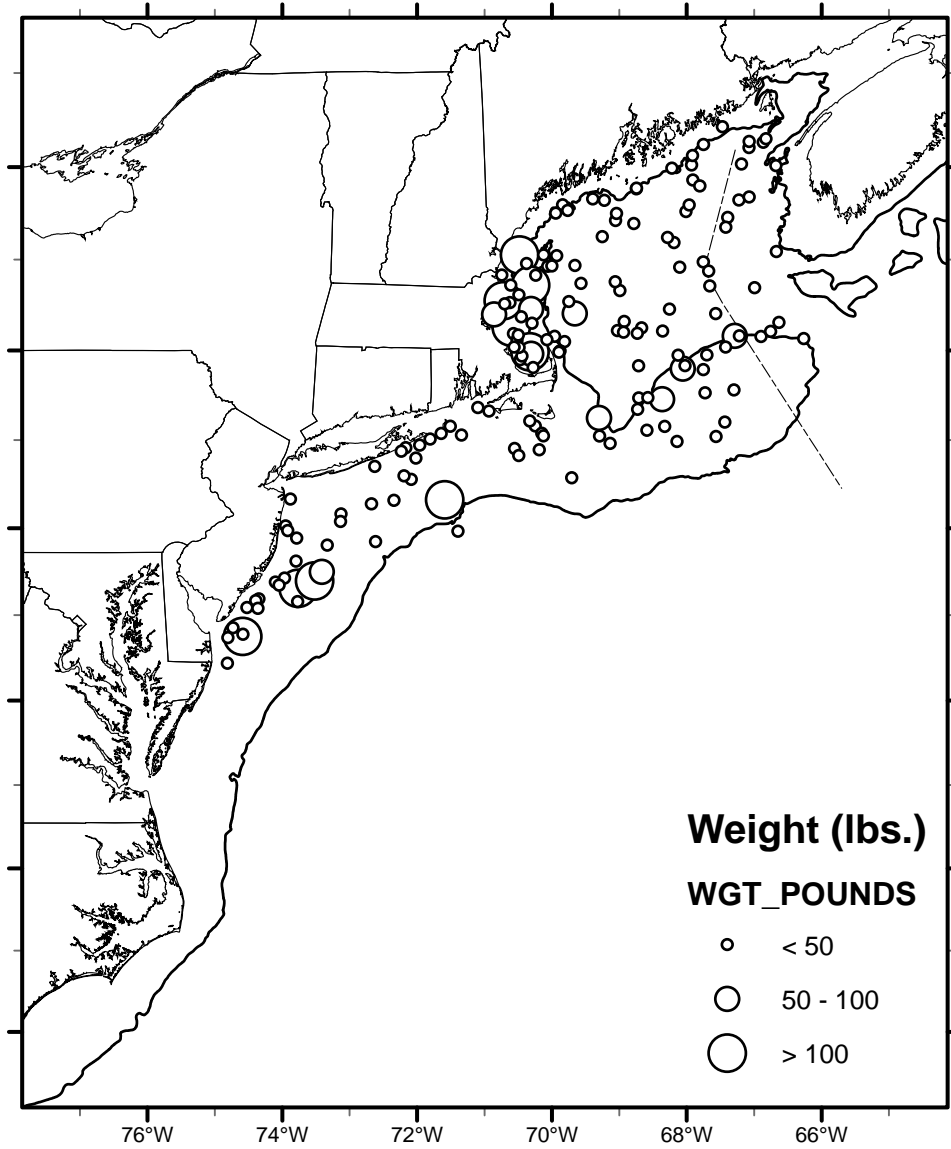


BLACK SEA BASS

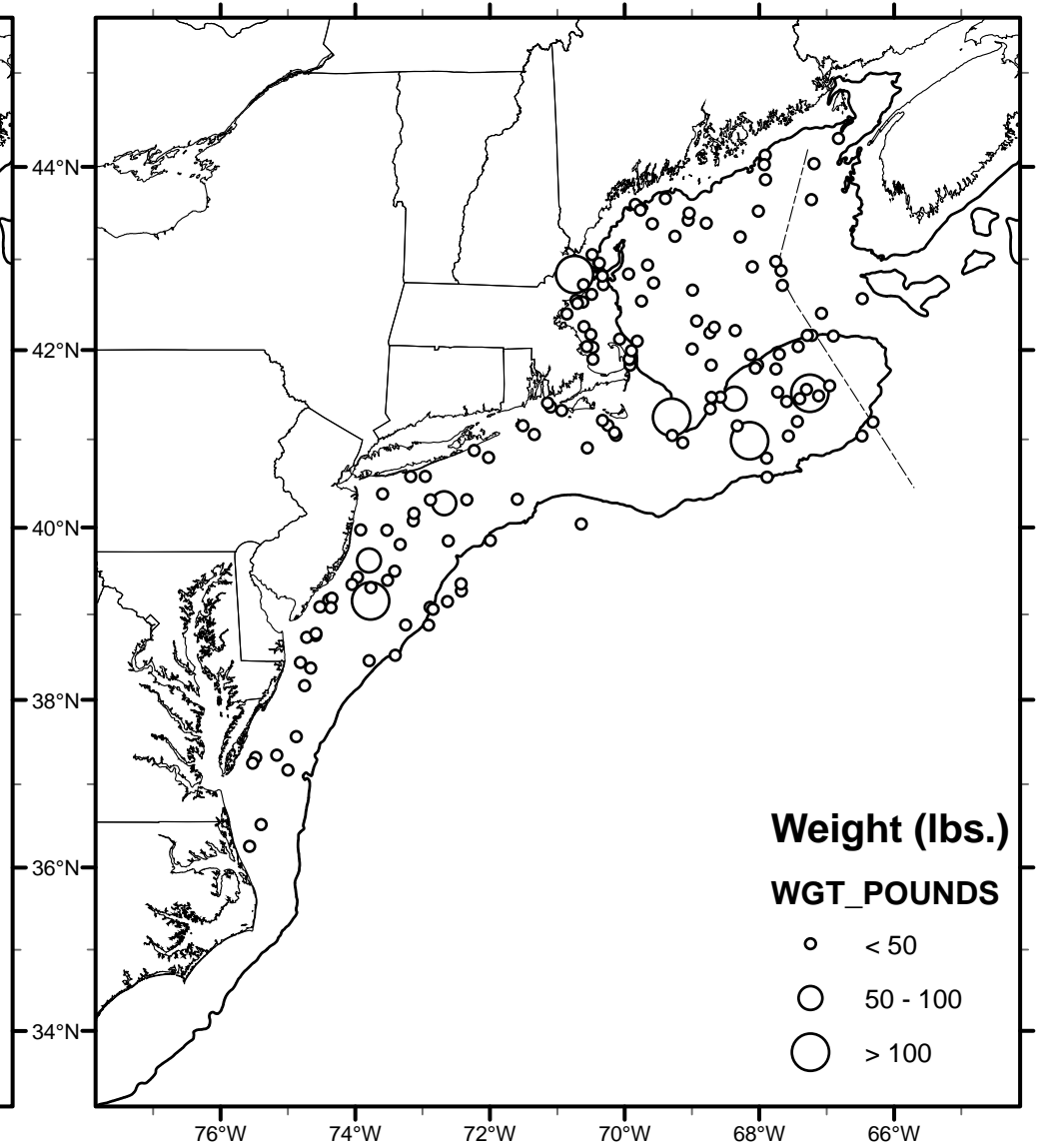


NOAA Fisheries Service
NEFSC Spring Bottom Trawl Survey
8 April - 7 June 2016

ATLANTIC HERRING

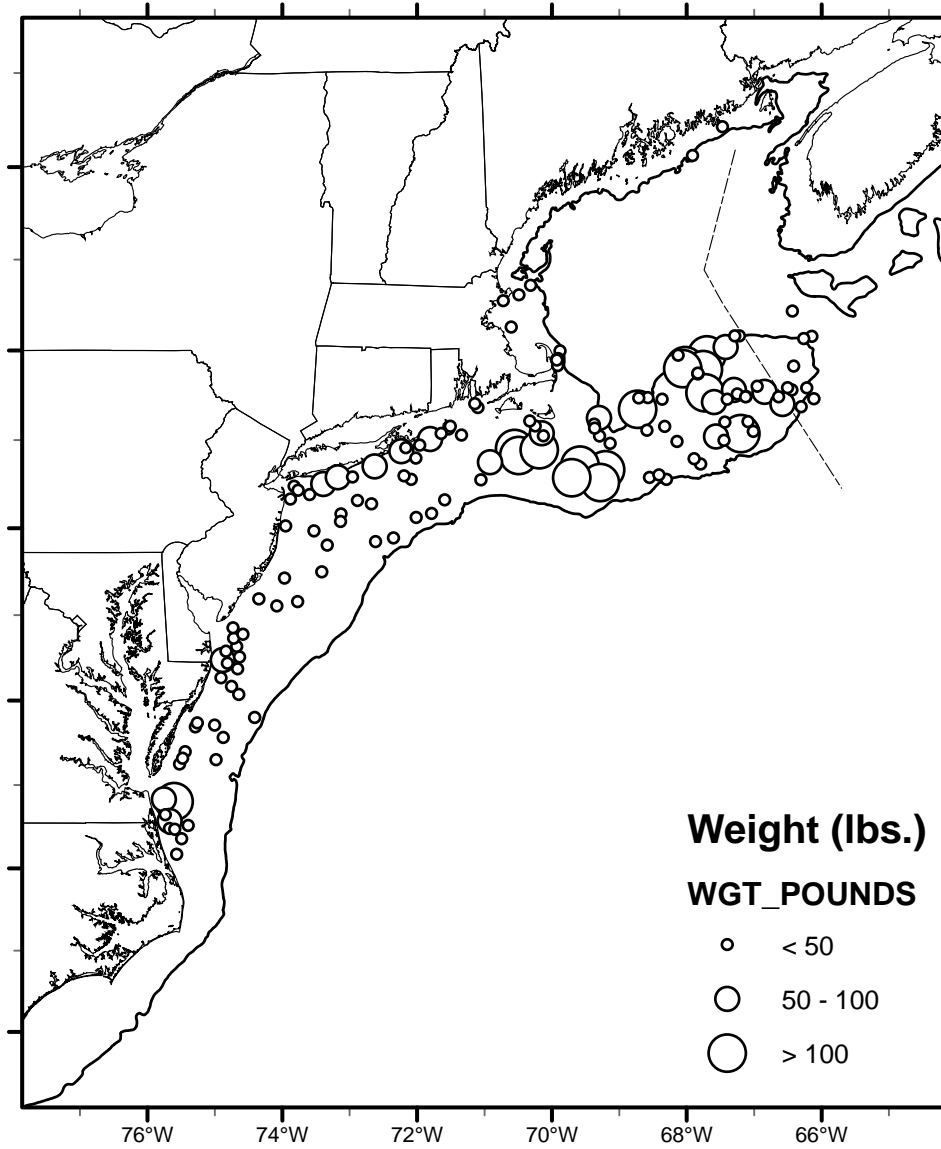


ATLANTIC MACKEREL

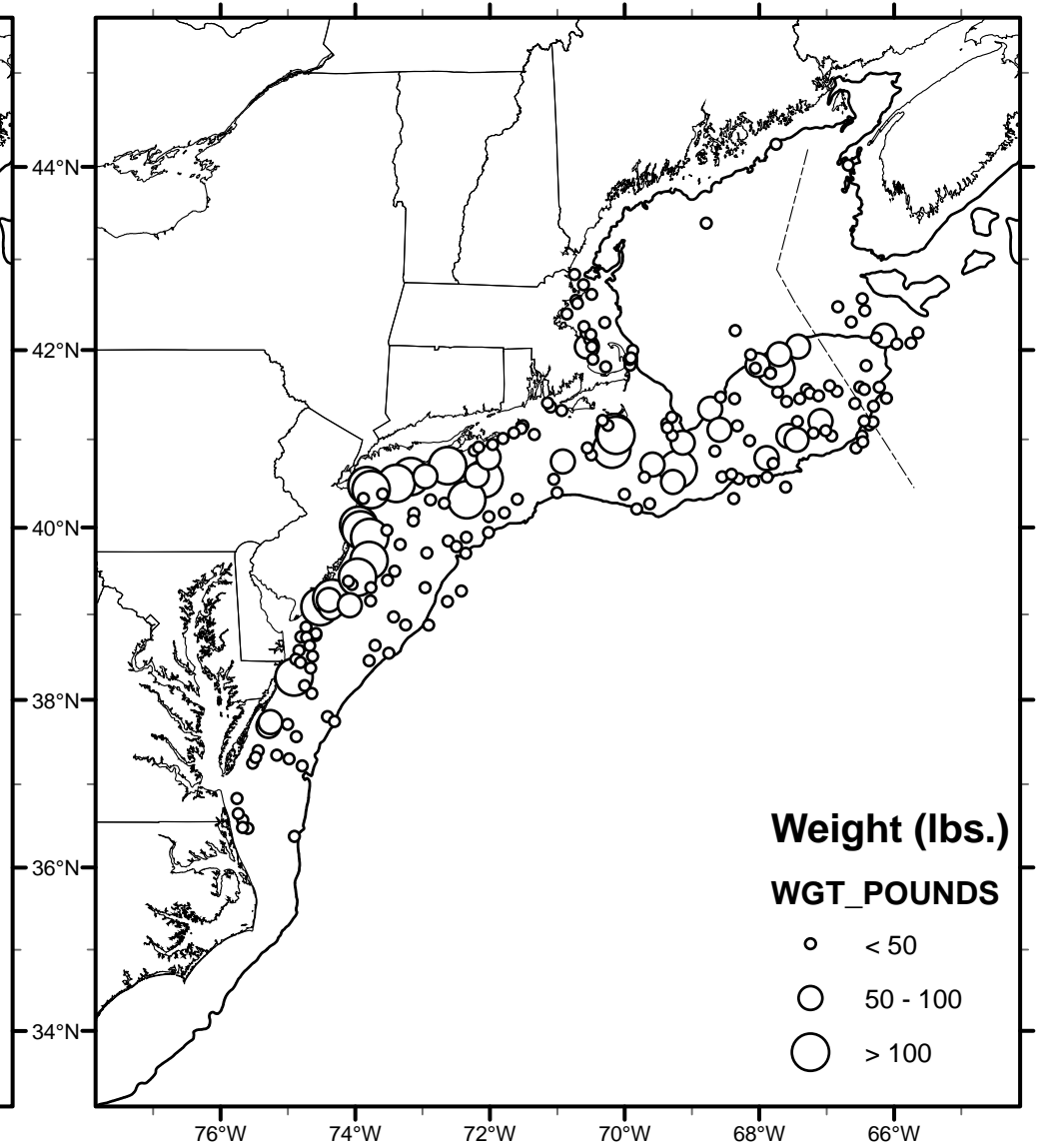


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NEFSC Spring Bottom Trawl Survey
8 April - 7 June 2016

WINTER SKATE

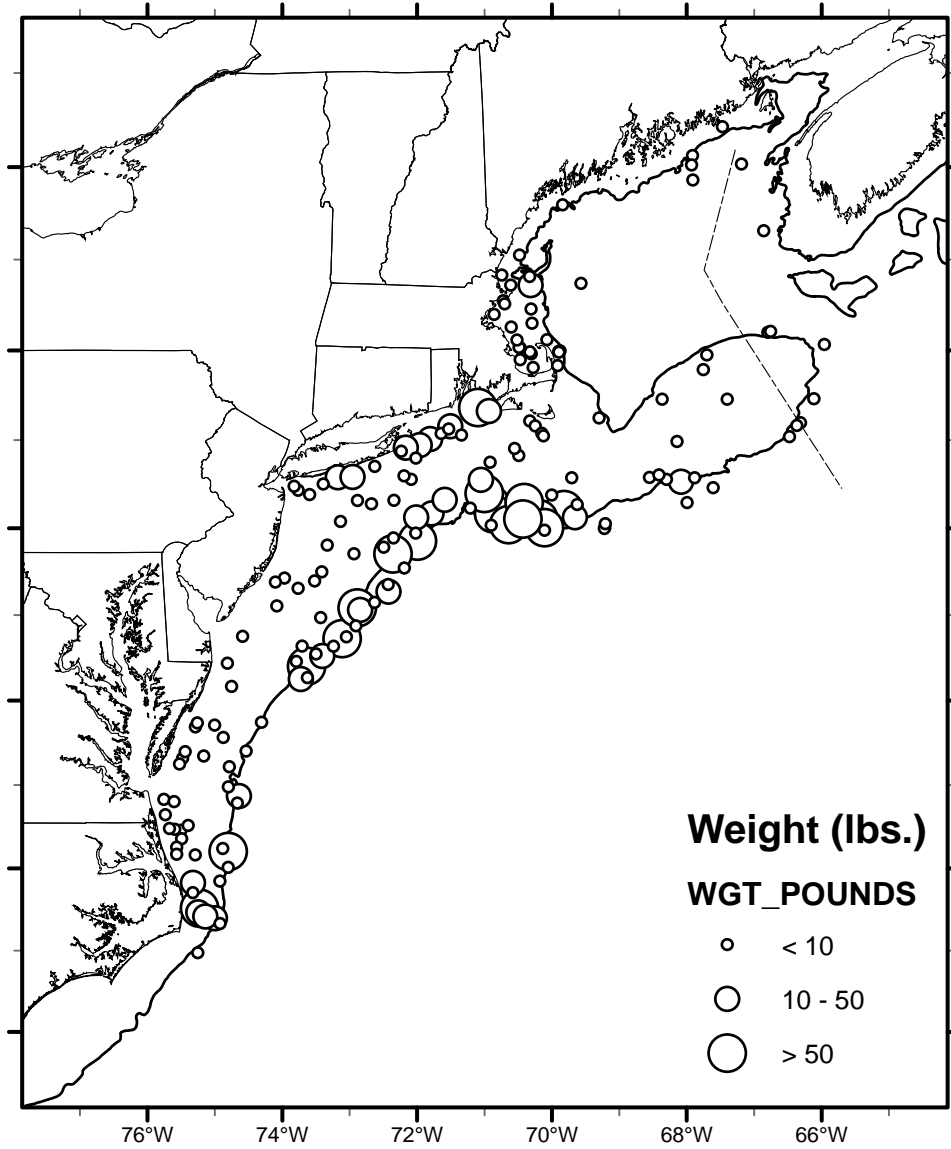


LITTLE SKATE

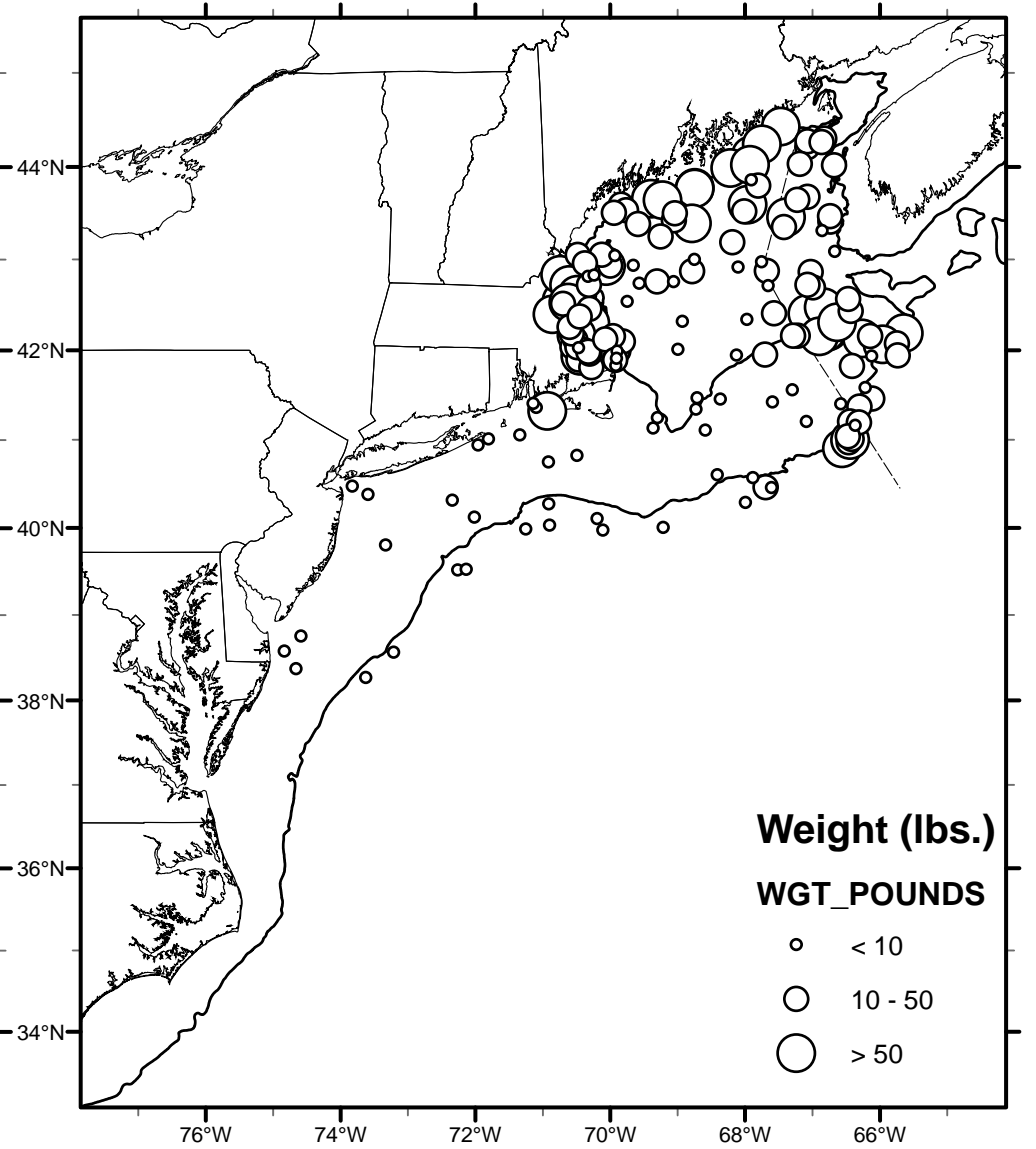


NOAA Fisheries Service
NEFSC Spring Bottom Trawl Survey
8 April - 7 June 2016

BUTTERFISH

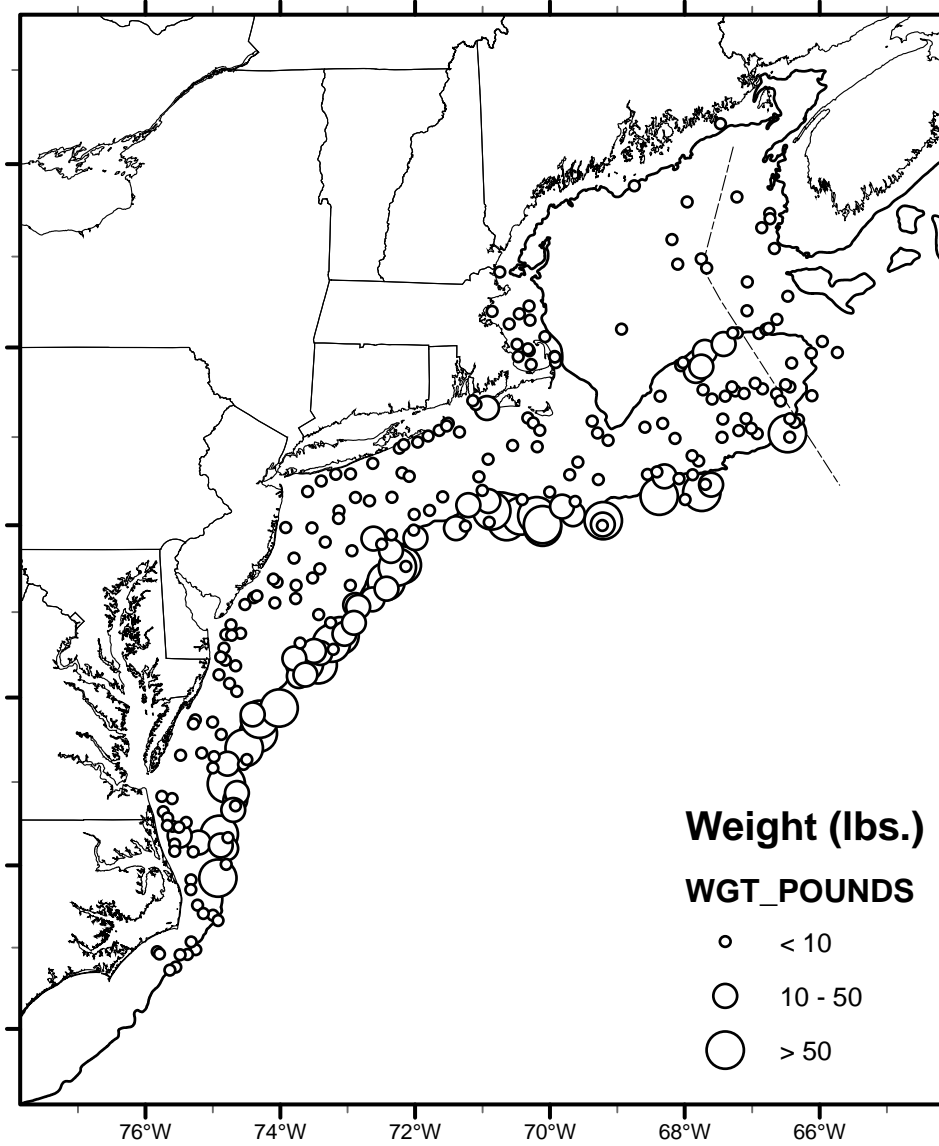


AMERICAN LOBSTER



NOAA Fisheries Service
NEFSC Spring Bottom Trawl Survey
8 April - 7 June 2016

LOLIGO SQUID



ILLEX SQUID

