

RESOURCE SURVEY REPORT
Catch Summary
NOAA Fisheries Service
Northeast Fisheries Science Center
Spring Bottom Trawl Survey
Cape Hatteras -Gulf of Maine
13 March – 7 May 2015

Submitted to: NOAA, NEFSC

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Date: 2015

Resource Survey Report

Bottom Trawl Survey



Cape Hatteras – Gulf of Maine

13 March – 7 May 2015

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

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



A large catch on the back deck
of the *Henry B. Bigelow*



White hake (*Urophycis tenuis*)
as they are weighed and measured



Scientists working up a
catch in the wet 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 tows speed was decreased from 3.8 knots prior to 2009 to 3.0 knots beginning in 2009. The new tows speed was selected after extensive scope and tows 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 tows 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 tows speed and tows duration have resulted in a decrease of average tows distance from 1.9 nautical miles prior to 2009 to an average tows distance of 1.0 nautical miles beginning in 2009. The shorter tows 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 tows 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
13 March – 7 May 2015

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 2015 spring bottom trawl survey aboard the NOAA FSV *Henry B. Bigelow*. Tows were made with a NEFSC standardized 4 seam, 3 bridle otter trawl rigged with a rockhopper sweep, 550 kg (1200 lbs) Poly Ice oval doors, and 36.6 m (20 fathoms) bridles. The cod end and upper belly were lined with 1/2-inch mesh to retain young-of-the-year fish.

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 at:

<http://www.nefsc.noaa.gov/esb>

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- Year of interest

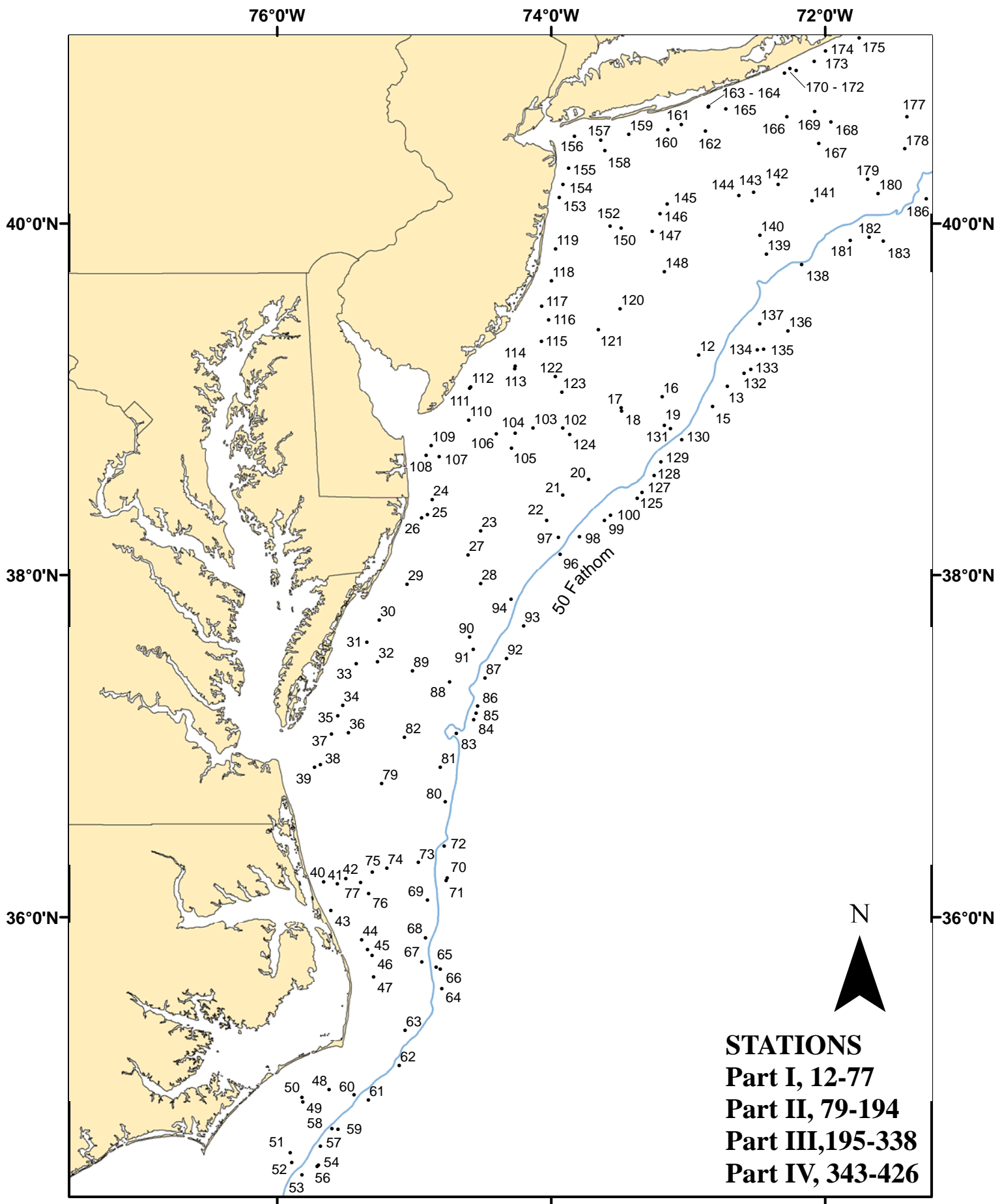


Figure 1. Trawl hauls made from NOAA FSV *Henry B. Bigelow* (15-01), during NOAA Fisheries Service, Northeast Fisheries Center's spring bottom trawl survey, 13 March - 7 May 2015

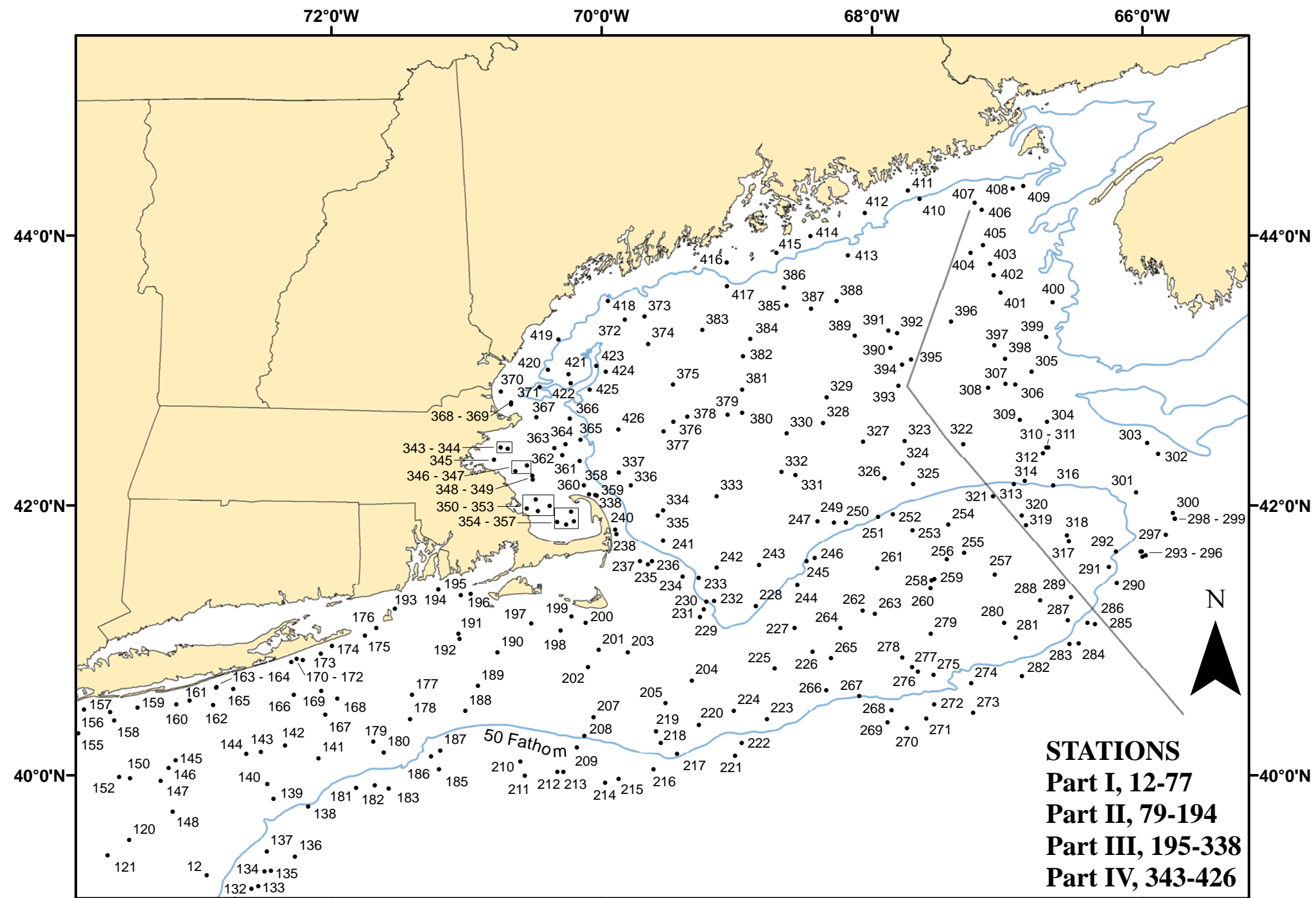


Figure 2. Trawl hauls made from NOAA FSV *Henry B. Bigelow* (15-01), during NOAA Fisheries Service, Northeast Fisheries Center's spring bottom trawl survey, 13 March - 7 May 2015

NOAA Fisheries Service SPRING BOTTOM TRAWL SURVEY
2015 STATION INFORMATION

Station	Date	Time	Lat	Lon	Loran		Course	Bottom Depth (FM)	Temp (F)
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					TD's				
0012	Mar-14	0130	3915.5	7255.4	X26400.3	Y42968.4	132	40.7	49.2
0013	Mar-14	0423	3904.9	7242.8	X26314.7	Y42869.1	197	131.0	52.3
0015	Mar-14	0658	3857.9	7249.3	X26352.8	Y42801.4	208	138.1	54.3
0016	Mar-14	0933	3901.3	7311.4	X26493.4	Y42829.4	221	40.5	48.6
0017	Mar-14	1148	3857.6	7329.3	X26602.5	Y42787.5	122	31.7	
0018	Mar-14	1450	3856.6	7329.1	X26600.5	Y42777.2	215	31.7	45.0
0019	Mar-14	1812	3851.6	7310.4	X26480.1	Y42733.8	238	42.7	50.9
0020	Mar-14	2218	3833.1	7343.5	X26661.2	Y42530.6	212	33.6	47.8
0021	Mar-15	0015	3827.6	7354.8	X26719.6	Y42465.2	229	32.3	48.0
0022	Mar-15	0226	3818.9	7401.9	X26748.1	Y42368.1	301	36.4	52.1
0023	Mar-15	0542	3815.2	7430.9	X26900.7	Y42301.4	020	23.0	41.5
0024	Mar-15	0831	3826.2	7452.0	X27034.0	Y42401.9	209	8.7	36.8
0025	Mar-15	0941	3821.0	7454.2	X27035.0	Y42341.7	202	9.6	
0026	Mar-15	1045	3819.9	7456.7	X27046.0	Y42326.9	186	12.3	35.8
0027	Mar-15	1333	3807.0	7436.4	X26916.5	Y42206.1	203	18.9	40.0
0028	Mar-15	1533	3757.2	7430.9	X26872.7	Y42105.7	244	28.2	43.7
0029	Mar-15	1846	3756.9	7503.1	X27034.5	Y42062.2	206	12.8	36.3
0030	Mar-15	2051	3744.3	7515.3	X27070.3	Y41903.9	236	13.4	36.2
0031	Mar-15	2224	3736.8	7520.6	X27081.2	Y41810.4	199	11.5	36.0
0032	Mar-15	2355	3729.9	7516.0	X27047.5	Y41740.8	179	15.9	37.9
0033	Mar-16	0127	3729.2	7525.3	X27088.9	Y41717.3		13.4	35.6
0034	Mar-16	0337	3714.6	7531.2	X27089.3	Y41542.5	211	13.1	35.2
0035	Mar-16	0453	3711.0	7533.4	X27092.4	Y41497.8	029	13.4	35.4
0036	Mar-16	0701	3705.0	7528.7	X27062.2	Y41439.1	187	17.2	36.3
0037	Mar-16	0827	3704.7	7536.1	X27093.3	Y41421.1	209	11.5	35.9
0038	Mar-16	1046	3654.0	7541.0	X27095.8	Y41290.9	234	11.2	37.0
0039	Mar-16	1151	3653.0	7543.6	X27105.0	Y41274.0	248	10.9	36.6
0040	Mar-17	1550	3612.5	7539.7	X27027.9	Y40836.5	162	10.9	37.6
0041	Mar-17	1718	3611.9	7533.6	X27003.7	Y40845.6	042	14.8	38.3
0042	Mar-17	1828	3613.8	7529.9	X26991.9	Y40875.8	165	16.1	38.2
0043	Mar-17	2020	3602.4	7536.4	X27002.0	Y40737.8	156	13.1	37.9
0044	Mar-17	2235	3552.0	7523.0	X26938.6	Y40670.5	155	13.7	40.7
0045	Mar-17	2356	3548.4	7520.4	X26924.7	Y40642.6	329	17.2	42.0
0046	Mar-18	0123	3546.4	7518.4	X26915.0	Y40628.5	334	17.8	42.3
0047	Mar-18	0328	3538.7	7517.8	X26904.5	Y40555.1	023	13.9	44.1
0048	Mar-18	1002	3458.3	7537.2	X26932.4	Y40109.9	234	17.2	66.0
0049	Mar-18	1140	3454.0	7548.8	X26967.0	Y40025.8	020	13.9	62.6
0050	Mar-18	1255	3455.5	7549.2	X26969.7	Y40036.7	208	13.7	62.7
0051	Mar-18	1522	3435.7	7554.3	X26966.5	Y39848.0	197	26.5	66.6
0052	Mar-18	1657	3432.1	7553.6	X26960.7	Y39823.2	028	32.3	65.7
0053	Mar-18	2011	3427.5	7549.2	X26941.9	Y39808.2	223	82.8	64.2
0054	Mar-18	2233	3431.1	7541.9	X26921.8	Y39868.4	209	156.9	
0056	Mar-18	2354	3430.7	7542.4	X26923.1	Y39862.4	212	151.2	62.0
0057	Mar-19	0202	3437.8	7541.0	X26925.1	Y39923.7	213	69.7	65.5
0058	Mar-19	0406	3444.3	7536.0	X26914.7	Y39997.2	242	52.5	67.0
0059	Mar-19	0558	3444.0	7533.3	X26905.5	Y40005.8	226	93.5	64.7
0060	Mar-19	0825	3456.5	7526.3	X26893.4	Y40138.5	212	41.8	66.3
0061	Mar-19	1054	3454.6	7520.0	X26870.3	Y40148.0	231	147.6	61.3

NOAA Fisheries Service SPRING BOTTOM TRAWL SURVEY
2015 STATION INFORMATION

Station	Date	Time	Lat	Lon	Loran		Course	Bottom Depth (FM)	Temp (F)
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0062	Mar-19	1412	3507.1	7506.5	X26834.2	Y40306.3	224	164.9	50.0
0063	Mar-19	1649	3519.6	7504.0	X26835.9	Y40425.4	219	18.9	65.3
0064	Mar-19	1958	3534.6	7447.9	X26790.0	Y40616.5	007	67.8	53.2
0065	Mar-19	2239	3541.5	7448.6	X26798.2	Y40678.2	169	152.0	
0066	Mar-20	0009	3542.3	7450.3	X26805.6	Y40679.1	003	64.2	51.3
0067	Mar-20	0232	3544.2	7456.7	X26831.1	Y40676.8	347	32.0	53.5
0068	Mar-20	0417	3552.6	7455.0	X26832.6	Y40762.2	017	46.5	53.1
0069	Mar-20	0656	3606.1	7454.2	X26842.5	Y40897.0	081	44.8	50.7
0070	Mar-20	0944	3613.9	7445.5	X26815.8	Y40998.2	177	171.4	
0071	Mar-20	1250	3612.9	7446.0	X26816.6	Y40987.2	015	155.0	
0072	Mar-20	1509	3625.3	7446.9	X26832.6	Y41108.6	173	84.5	52.1
0073	Mar-20	1728	3619.4	7458.2	X26872.5	Y41019.1	191	23.0	51.0
0074	Mar-20	1938	3617.5	7512.0	X26925.7	Y40962.9	282	18.9	47.8
0075	Mar-20	2059	3616.1	7518.3	X26949.1	Y40931.0	186	17.5	44.3
0076	Mar-20	2235	3608.5	7519.9	X26946.3	Y40847.7	265	18.9	42.1
0077	Mar-20	2357	3612.3	7523.5	X26964.8	Y40878.0	335	17.5	40.4
0079	Mar-23	2106	3647.4	7514.3	X26973.8	Y41274.4	122	14.2	41.5
0080	Mar-24	0019	3640.8	7446.3	X26846.9	Y41268.5	001	38.0	50.3
0081	Mar-24	0219	3653.0	7448.6	X26870.8	Y41390.3	010	30.1	51.5
0082	Mar-24	0449	3703.5	7504.2	X26953.2	Y41470.4	039	20.0	44.0
0083	Mar-24	0824	3705.0	7441.5	X26853.8	Y41531.2	297	144.1	49.1
0084	Mar-24	1036	3709.6	7433.9	X26824.9	Y41594.7	001	69.4	54.5
0085	Mar-24	1229	3711.9	7432.8	X26822.6	Y41620.9	017	75.7	54.5
0086	Mar-24	1341	3714.6	7432.2	X26822.8	Y41650.0	009	74.4	53.8
0087	Mar-24	1615	3724.2	7429.0	X26819.2	Y41757.0	147	127.7	51.6
0088	Mar-24	1840	3722.8	7444.4	X26890.2	Y41715.1	353	31.7	45.7
0089	Mar-24	2050	3726.8	7500.7	X26971.8	Y41731.2	022	17.8	40.9
0090	Mar-25	0001	3738.6	7435.7	X26870.0	Y41899.6	048	30.9	52.1
0091	Mar-25	0146	3734.2	7434.1	X26856.6	Y41854.6	076	34.4	50.2
0092	Mar-25	0414	3731.1	7419.5	X26781.9	Y41844.4	033	140.0	52.7
0093	Mar-25	0719	3742.4	7412.0	X26757.6	Y41974.6	017	110.2	53.5
0094	Mar-25	0910	3751.7	7417.5	X26796.7	Y42064.8	012	39.1	52.4
0096	Mar-25	1207	3807.2	7356.0	X26702.3	Y42252.4	022	63.7	51.4
0097	Mar-25	1331	3813.1	7356.8	X26713.2	Y42312.7	030	41.8	53.2
0098	Mar-25	1517	3813.3	7347.6	X26663.0	Y42324.4	088	63.7	53.6
0099	Mar-25	1651	3818.9	7336.7	X26607.9	Y42391.5		84.5	
0100	Mar-25	1906	3820.7	7334.0	X26594.4	Y42412.1	193	169.2	
0102	Mar-26	0249	3850.7	7354.9	X26751.1	Y42707.1	229	23.5	41.4
0103	Mar-26	0442	3850.8	7407.9	X26829.3	Y42701.3	272	23.5	41.3
0104	Mar-26	0640	3849.0	7415.7	X26872.8	Y42678.0	182	23.5	41.3
0105	Mar-26	0755	3843.8	7417.3	X26873.2	Y42621.8	218	21.1	41.7
0106	Mar-26	0942	3848.7	7424.0	X26921.3	Y42671.0	219	21.1	39.8
0107	Mar-26	1257	3840.8	7400.5	X26770.0	Y42600.3	199	9.3	38.4
0108	Mar-26	1423	3841.4	7454.8	X27081.2	Y42570.2	171	12.8	38.3
0109	Mar-26	1553	3844.6	7452.5	X27076.2	Y42608.3	082	8.7	38.3
0110	Mar-26	1827	3853.2	7436.1	X27000.8	Y42714.1	025	13.1	38.7
0111	Mar-26	2108	3904.1	7435.7	X27022.4	Y42834.2	215	11.2	38.2

NOAA Fisheries Service SPRING BOTTOM TRAWL SURVEY
2015 STATION INFORMATION

Station	Date	Time	Lat	Lon	Loran TD's		Course	Bottom Depth (FM)	Temp (F)
0112	Mar-26	2217	3904.7	7435.2	X27020.6	Y42840.5	066	10.4	37.9
0113	Mar-27	0104	3910.9	7416.0	X26915.9	Y42913.6	198	10.9	
0114	Mar-27	0218	3911.7	7415.7	X26916.3	Y42922.9	255	11.8	38.7
0115	Mar-27	0432	3920.2	7404.2	X26859.4	Y43014.3	022	13.9	39.8
0116	Mar-27	0642	3927.4	7401.1	X26853.5	Y43090.3	023	13.9	39.5
0117	Mar-27	0825	3932.1	7404.1	X26883.5	Y43140.7	069	12.6	39.5
0118	Mar-27	1012	3940.8	7359.8	X26872.8	Y43230.7	029	12.6	39.2
0119	Mar-27	1200	3951.5	7358.1	X26884.5	Y43341.7	185	12.3	38.4
0120	Mar-27	1516	3931.3	7329.8	X26648.5	Y43126.2	199	20.0	41.6
0121	Mar-27	1700	3924.2	7339.3	X26702.5	Y43056.3	238	20.2	41.6
0122	Mar-27	1938	3908.1	7358.1	X26798.3	Y42888.5	230	23.0	39.9
0123	Mar-27	2115	3902.9	7355.3	X26772.0	Y42834.3	192	20.2	40.8
0124	Mar-27	2328	3848.4	7351.9	X26729.4	Y42683.8	131	26.2	43.7
0125	Mar-28	0329	3826.4	7322.2	X26532.6	Y42478.7	031	123.6	53.9
0127	Mar-28	0758	3828.7	7320.2	X26522.7	Y42502.3	030	83.4	54.7
0128	Mar-28	1002	3834.4	7314.8	X26495.2	Y42562.7	029	83.7	53.0
0129	Mar-28	1154	3839.0	7311.9	X26481.2	Y42609.2	352	72.5	53.9
0130	Mar-28	1358	3846.7	7302.8	X26430.8	Y42688.9		126.0	54.1
0131	Mar-28	1600	3850.5	7307.7	X26463.1	Y42724.2	052	46.5	49.0
0132	Mar-28	2046	3909.4	7235.5	X26268.8	Y42911.5	011	150.1	54.1
0133	Mar-28	2220	3910.8	7232.5	X26249.4	Y42924.6	020	150.1	53.7
0134	Mar-29	0030	3917.3	7229.6	X26231.6	Y42985.1	325	77.9	52.6
0135	Mar-29	0218	3917.5	7226.8	X26213.5	Y42986.7	323	80.7	52.8
0136	Mar-29	0452	3923.7	7216.2	X26143.3	Y43041.3	000	109.6	54.3
0137	Mar-29	0713	3926.2	7228.6	X26226.3	Y43065.8	031	66.7	52.5
0138	Mar-29	1111	3946.1	7210.2	X26099.6	Y43238.7	318	53.9	51.2
0139	Mar-29	1310	3949.7	7225.7	X26211.1	Y43277.7	327	44.8	49.3
0140	Mar-29	1439	3956.1	7228.5	X26234.5	Y43336.8	047	36.9	42.5
0141	Mar-29	1733	4007.6	7205.7	X26067.0	Y43422.0	283	38.0	47.3
0142	Mar-29	1930	4013.1	7220.5	X26183.9	Y43481.4	274	33.6	41.1
0143	Mar-29	2101	4010.5	7231.3	X26265.6	Y43467.4	287	33.6	41.6
0144	Mar-29	2227	4009.4	7237.8	X26314.9	Y43462.6	204	30.9	41.3
0145	Mar-30	0143	4006.5	7309.1	X26552.4	Y43460.7	227	24.6	40.3
0146	Mar-30	0257	4003.2	7312.2	X26571.1	Y43431.8	243	23.5	40.4
0147	Mar-30	0423	3957.3	7315.7	X26587.8	Y43377.5	119	36.4	40.2
0148	Mar-30	0654	3943.8	7310.4	X26530.0	Y43244.3	306	23.5	43.0
0150	Mar-30	0955	3958.5	7329.3	X26690.7	Y43397.1	285	22.4	41.5
0152	Mar-30	1115	3959.2	7334.2	X26727.8	Y43406.3	259	17.2	40.2
0153	Mar-30	1404	4008.9	7356.5	X26914.5	Y43518.8	015	11.8	38.1
0154	Mar-30	1515	4013.2	7354.7	X26912.8	Y43561.5	356	11.2	38.3
0155	Mar-30	1658	4018.5	7352.3	X26908.1	Y43613.1	358	13.7	38.2
0156	Mar-30	1912	4029.2	7349.8	X26917.0	Y43717.5	061	12.3	37.7
0157	Mar-30	2048	4028.0	7338.3	X26823.3	Y43692.7	158	12.6	38.4
0158	Mar-30	2153	4024.4	7336.4	X26799.9	Y43656.1	083	12.0	38.1
0159	Mar-30	2344	4030.0	7326.0	X26730.7	Y43698.4	086	12.8	37.7
0160	Mar-31	0139	4031.5	7308.9	X26595.7	Y43694.0	081	15.3	36.6
0161	Mar-31	0252	4033.1	7303.0	X26551.3	Y43701.9	109	15.3	37.3

NOAA Fisheries Service SPRING BOTTOM TRAWL SURVEY
2015 STATION INFORMATION

Station	Date	Time	Lat	Lon	Loran TD's		Course	Bottom Depth (FM)	Temp (F)
0162	Mar-31	0425	4031.1	7252.4	X26461.1	Y43671.2	090	21.6	38.0
0163	Mar-31	0601	4039.0	7251.2	X26464.9	Y43739.7	086	16.4	
0164	Mar-31	0718	4039.3	7251.0	X26464.1	Y43742.5	040	16.4	36.9
0165	Mar-31	0837	4038.3	7243.5	X26400.1	Y43725.0	154	19.1	37.2
0166	Mar-31	1120	4035.8	7216.7	X26172.7	Y43671.5	123	26.8	39.5
0167	Mar-31	1334	4026.8	7202.7	X26050.6	Y43581.3	022	34.4	40.6
0168	Mar-31	1510	4034.1	7157.4	X26011.3	Y43635.8	358	31.4	39.4
0169	Mar-31	1704	4037.6	7204.5	X26073.4	Y43672.4	314	28.7	39.3
0170	Mar-31	1915	4050.3	7217.7	X26201.9	Y43793.2	052	15.9	36.9
0171	Mar-31	2015	4051.9	7215.4	X26184.0	Y43802.8	082	15.6	36.8
0172	Mar-31	2115	4051.2	7212.6	X26159.0	Y43792.9	071	18.3	37.2
0173	Mar-31	2234	4054.2	7204.8	X26095.8	Y43806.6	064	17.0	37.2
0174	Mar-31	2346	4057.6	7159.8	X26057.7	Y43826.5	059	14.2	37.5
0175	Apr-01	0200	4102.0	7145.1	X25935.7	Y43839.9	212	14.8	37.9
0176	Apr-01	0345	4105.4	7140.1	X25897.0	Y43859.0	098	19.4	39.0
0177	Apr-01	0746	4035.7	7124.1	X25739.0	Y43613.2	164	36.4	38.2
0178	Apr-01	1000	4025.0	7125.1	X25750.9	Y43530.7	225	40.2	42.2
0179	Apr-01	1237	4014.9	7141.4	X25880.9	Y43463.7	080	45.7	46.8
0180	Apr-01	1407	4010.1	7136.8	X25848.4	Y43421.4	163	46.2	48.7
0181	Apr-01	1707	3954.4	7149.0	X25946.2	Y43298.8	075	73.5	52.5
0182	Apr-01	1839	3955.5	7140.7	X25886.4	Y43303.4	086	71.6	54.4
0183	Apr-01	2032	3954.1	7134.5	X25844.3	Y43288.6	247	131.0	51.2
0185	Apr-01	2359	4002.5	7112.2	X25680.7	Y43343.4	067	114.3	53.1
0186	Apr-02	0211	4008.4	7115.7	X25697.0	Y43391.9	035	60.7	48.6
0187	Apr-02	0335	4011.0	7111.6	X25664.8	Y43409.5	059	66.7	50.6
0188	Apr-02	0700	4028.6	7100.5	X25559.8	Y43535.6	078	44.6	42.1
0189	Apr-02	0917	4039.6	7054.9	X25503.1	Y43612.3	080	37.2	37.6
0190	Apr-02	1216	4054.7	7046.3	X25419.0	Y43711.3	293	28.4	36.4
0191	Apr-02	1502	4102.9	7103.5	X25569.7	Y43791.1	081	19.1	
0192	Apr-02	1655	4100.7	7103.0	X25563.3	Y43774.5	333	25.4	37.7
0193	Apr-02	2021	4114.0	7131.8	X25840.0	Y43910.4	119	20.8	37.4
0194	Apr-02	2301	4122.7	7112.4	X25687.2	Y43942.7	088	13.9	35.3
0195	Apr-07	1901	4120.2	7102.5	X25590.6	Y43910.6	277	15.6	36.8
0196	Apr-07	2029	4120.7	7058.2	X25552.9	Y43907.9	114	15.9	37.0
0197	Apr-08	0015	4107.6	7031.3	X25287.3	Y43782.9	152	21.6	35.6
0198	Apr-08	0226	4104.4	7018.3	X25177.4	Y43745.4	024	18.9	37.0
0199	Apr-08	0422	4110.7	7013.3	X25129.8	Y43781.8	243	13.4	40.0
0200	Apr-08	0649	4107.9	7007.0	X25082.2	Y43755.6	248	11.8	40.3
0201	Apr-08	0953	4055.6	7001.3	X25092.0	Y43668.4	238	13.1	39.7
0202	Apr-08	1253	4048.1	7006.0	X25144.1	Y43622.7	183	18.9	40.0
0203	Apr-08	1612	4054.7	6948.4	W13983.5	Y43649.0	160	19.1	41.0
0204	Apr-08	2059	4042.2	6919.9	W13881.9	Y43542.0	126	26.0	40.8
0205	Apr-08	2354	4032.2	6931.6	W13978.4	Y43485.9	095	33.9	39.6
0207	Apr-09	0343	4025.9	7003.6	X25211.1	Y43467.6	054	40.5	40.4
0208	Apr-09	0651	4017.5	7007.7	X25258.0	Y43411.8	079	49.5	
0209	Apr-09	0859	4012.3	7011.0	X25290.4	Y43377.1	122	55.8	
0210	Apr-09	1209	4006.2	7036.0	X25442.8	Y43348.7	067	69.4	51.4
0211	Apr-09	1436	3959.7	7034.0	X25447.7	Y43299.1	061	144.4	49.0

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Station	Date	Time	Lat	Lon	Loran		Course	Bottom Depth (FM)	Temp (F)
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0212	Apr-09	1744	4001.4	7019.6	X25365.9	Y43304.0	251	121.9	54.0
0213	Apr-09	2009	4001.4	7017.0	X25352.9	Y43302.4	254	131.0	53.7
0214	Apr-09	2350	3956.8	6958.5	W14229.9	Y43259.5	127	137.0	54.4
0215	Apr-10	0134	3958.4	6952.4	W14194.5	Y43268.4	135	80.4	53.2
0216	Apr-10	0355	4002.7	6937.0	W14104.1	Y43290.5	086	61.8	49.0
0217	Apr-10	0600	4009.5	6926.6	W14030.7	Y43331.2	252	48.4	48.3
0218	Apr-10	0736	4014.3	6933.8	W14050.6	Y43367.7	327	43.7	40.0
0219	Apr-10	0900	4019.4	6935.8	W14043.9	Y43403.8	000	39.9	40.2
0220	Apr-10	1132	4022.3	6916.8	W13938.6	Y43410.2	131	44.3	41.0
0221	Apr-10	1441	4008.7	6900.8	W13907.6	Y43312.2	144	82.3	52.1
0222	Apr-10	1708	4014.4	6857.8	W13873.5	Y43348.0	089	62.1	43.8
0223	Apr-10	1935	4025.1	6846.6	W13781.7	Y43408.9	290	44.6	41.3
0224	Apr-10	2144	4028.6	6901.3	W13839.6	Y43441.1	292	42.4	41.4
0225	Apr-11	0118	4047.5	6843.2	W13679.0	Y43545.0	192	35.5	40.6
0226	Apr-11	0546	4054.8	6826.3	W13568.3	Y43575.5	000	27.9	41.3
0227	Apr-11	0757	4105.4	6834.3	W13561.4	Y43644.7	054	29.5	40.6
0228	Apr-11	1056	4115.3	6851.5	W13603.2	Y43719.3	106	54.4	40.7
0229	Apr-11	1504	4110.2	6916.4	W13751.7	Y43714.4	141	29.0	41.0
0230	Apr-11	1713	4113.8	6914.6	W13727.8	Y43734.1	315	41.0	
0231	Apr-11	1915	4117.2	6913.4	W13706.8	Y43753.8	070	52.2	40.9
0232	Apr-11	2044	4117.5	6910.0	W13687.7	Y43752.0	278	54.7	41.2
0233	Apr-11	2329	4127.9	6916.9	W13678.1	Y43821.3	165	51.4	40.3
0234	Apr-12	0116	4128.3	6924.1	W13714.2	Y43832.5	148	30.1	39.5
0235	Apr-12	0511	4133.7	6939.4	W13773.8	Y43883.6	121	19.4	
0236	Apr-12	0657	4135.2	6937.6	W13756.6	Y43890.5	121	27.9	38.5
0237	Apr-12	0842	4135.2	6943.0	W13786.6	Y43897.4	144	17.2	38.4
0238	Apr-12	1115	4147.2	6953.4	W13790.8	Y43983.6	339	13.4	38.4
0240	Apr-12	1222	4149.1	6954.0	W13785.4	Y43995.6	352	15.3	38.2
0241	Apr-12	1550	4144.2	6932.7	W13688.0	Y43937.6	335	88.9	40.1
0242	Apr-12	1930	4132.3	6908.9	W13616.1	Y43837.9		89.4	41.0
0243	Apr-12	2151	4133.5	6850.2	W13513.7	Y43823.6	074	84.5	41.5
0244	Apr-13	0031	4124.5	6833.1	W13470.5	Y43754.0	351	47.8	40.8
0245	Apr-13	0225	4135.1	6829.0	W13401.1	Y43809.0	010	50.6	40.7
0246	Apr-13	0421	4136.7	6825.4	W13376.2	Y43813.9	345	29.0	41.1
0247	Apr-13	0720	4153.0	6824.1	W13290.1	Y43900.7	165	109.6	44.3
0249	Apr-13	0905	4152.4	6816.9	W13257.7	Y43889.5	041	118.7	44.2
0250	Apr-13	1035	4152.4	6811.5	W13232.5	Y43883.1	060	101.7	43.3
0251	Apr-13	1232	4154.8	6757.2	W13154.0	Y43879.8	066	51.7	41.2
0252	Apr-13	1345	4156.1	6750.7	W13118.0	Y43879.3	050	36.6	41.0
0253	Apr-13	1601	4148.8	6742.0	W13116.0	Y43832.5	151	19.7	41.7
0254	Apr-13	1828	4151.3	6726.0	W13034.4	Y43829.4	208	28.7	41.4
0255	Apr-13	2114	4138.8	6719.1	W13068.1	Y43758.7	240	27.9	41.3
0256	Apr-14	0030	4135.9	6726.7	W13113.9	Y43751.1	341	24.6	41.4
0257	Apr-14	0350	4129.2	6705.5	W13058.3	Y43697.9	191	31.4	41.3
0258	Apr-14	0727	4126.7	6733.5	W13187.3	Y43708.7		20.8	
0259	Apr-14	0823	4127.1	6732.2	W13179.6	Y43710.1	225	23.2	41.6
0260	Apr-14	1033	4123.3	6734.0	W13205.4	Y43691.0	265	21.9	41.6
0261	Apr-14	1338	4132.1	6757.6	W13267.8	Y43760.4	136	21.6	41.9

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Station	Date	Time	Lat	Lon	Loran		Course	Bottom Depth (FM)	Temp (F)
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0262	Apr-14	1814	4113.3	6804.1	W13384.6	Y43663.0	060	24.9	41.7
0263	Apr-14	2019	4111.7	6758.6	W13367.0	Y43649.5	251	23.5	41.6
0264	Apr-14	2243	4105.4	6814.0	W13465.5	Y43627.1	124	24.9	
0265	Apr-15	0142	4052.0	6818.1	W13541.7	Y43552.7	082	28.2	42.3
0266	Apr-15	0430	4037.9	6820.3	W13608.9	Y43470.7	218	43.2	41.9
0267	Apr-15	0707	4035.3	6805.6	W13552.6	Y43445.3	217	51.4	44.1
0268	Apr-15	0947	4029.0	6751.3	W13514.0	Y43400.4	255	62.3	50.9
0269	Apr-15	1245	4023.5	6753.1	W13543.4	Y43369.1	048	131.2	53.2
0270	Apr-15	1533	4020.9	6744.4	W13515.9	Y43349.7	068	122.2	
0271	Apr-15	1804	4025.2	6735.8	W13463.0	Y43369.9	282	87.2	53.3
0272	Apr-15	2000	4031.4	6732.3	W13423.3	Y43403.7		67.3	52.0
0273	Apr-15	2244	4027.7	6715.1	W13366.6	Y43374.0	075	182.1	46.2
0274	Apr-16	0127	4040.9	6715.9	W13316.1	Y43447.9	337	52.8	49.2
0275	Apr-16	0335	4044.6	6732.6	W13370.8	Y43478.1	286	46.2	47.5
0276	Apr-16	0458	4046.2	6739.6	W13393.7	Y43491.8	307	39.9	43.1
0277	Apr-16	0638	4048.1	6742.1	W13396.9	Y43504.0	026	39.4	42.5
0278	Apr-16	0801	4052.3	6746.5	W13398.0	Y43531.2	300	35.5	41.9
0279	Apr-16	1022	4103.1	6733.9	W13296.7	Y43581.6	078	33.6	41.6
0280	Apr-16	1337	4107.8	6701.3	W13140.4	Y43583.5	149	36.6	41.5
0281	Apr-16	1507	4101.2	6656.1	W13149.7	Y43545.0	102	39.9	42.0
0282	Apr-16	1753	4044.1	6653.4	W13212.6	Y43452.4	057	78.7	55.9
0283	Apr-16	2045	4058.3	6632.3	W13071.1	Y43514.6	042	63.7	55.8
0284	Apr-16	2318	4058.7	6628.2	W13053.7	Y43514.3	039	134.5	
0285	Apr-17	0220	4107.2	6621.0	W12989.6	Y43553.3	023	131.5	50.5
0286	Apr-17	0432	4107.9	6624.3	W12998.5	Y43558.7	243	65.6	47.9
0287	Apr-17	0555	4109.0	6633.1	W13026.1	Y43570.2	305	50.0	42.2
0288	Apr-17	0754	4117.9	6645.3	W13032.1	Y43624.1	307	40.5	41.1
0289	Apr-17	0947	4119.3	6631.6	W12973.7	Y43621.0	024	49.2	42.1
0290	Apr-17	1212	4125.4	6611.3	W12871.7	Y43636.9	061	66.2	48.9
0291	Apr-17	1403	4132.5	6614.8	W12850.6	Y43674.1	039	50.3	41.4
0292	Apr-17	1542	4139.4	6611.7	W12806.5	Y43704.9	006	49.8	41.4
0293	Apr-17	1742	4139.3	6600.7	W12769.0	Y43696.1	131	53.0	
0294	Apr-17	1902	4139.4	6600.1	W12766.7	Y43696.0	126	54.1	41.9
0295	Apr-17	2024	4137.7	6558.4	W12769.3	Y43686.5	218	56.3	
0296	Apr-17	2133	4137.2	6559.9	W12776.5	Y43685.5	081	55.5	54.0
0297	Apr-17	2358	4147.0	6549.5	W12694.9	Y43723.3	195	70.0	44.7
0298	Apr-18	0242	4154.0	6545.5	W12647.6	Y43752.8	358	102.5	
0299	Apr-18	0357	4154.1	6545.5	W12647.1	Y43753.1	328	104.4	49.5
0300	Apr-18	0541	4156.5	6546.3	W12637.6	Y43765.0	319	113.2	45.6
0301	Apr-18	0809	4205.7	6602.8	W12645.5	Y43820.7	155	88.3	43.5
0302	Apr-18	1116	4222.8	6552.9	W12525.0	Y43888.4	326	105.5	47.1
0303	Apr-18	1256	4227.7	6557.7	W12514.5	Y43914.5	306	97.9	47.0
0304	Apr-18	1739	4237.3	6642.2	W12614.6	Y44001.8	320	97.1	47.3
0305	Apr-18	2114	4259.3	6649.1	W12512.4	Y44106.0	182	90.2	
0306	Apr-19	0027	4253.6	6656.3	W12573.0	Y44089.7	025	105.3	47.4
0307	Apr-19	0236	4254.1	6700.8	W12586.9	Y44097.1	048	117.8	47.7
0308	Apr-19	0531	4252.2	6708.4	W12627.8	Y44097.8	034	130.1	47.8
0309	Apr-19	0933	4238.2	6654.4	W12654.9	Y44019.0	137	135.1	47.6

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Station	Date	Time	Lat	Lon	Loran		Course	Bottom Depth (FM)	Temp (F)
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0310	Apr-19	1214	4225.9	6642.6	W12679.0	Y43950.8	110	183.7	
0311	Apr-19	1329	4225.9	6641.8	W12676.1	Y43949.7	304	181.0	46.2
0312	Apr-19	1606	4223.2	6644.1	W12699.3	Y43940.0	231	181.8	46.4
0313	Apr-19	1853	4209.5	6657.0	W12821.8	Y43889.2	106	51.9	42.0
0314	Apr-19	2018	4211.0	6652.2	W12795.3	Y43891.5	096	102.3	42.1
0316	Apr-19	2331	4209.0	6639.5	W12758.1	Y43869.6	268	57.7	41.9
0317	Apr-20	0234	4146.6	6633.4	W12849.7	Y43756.9		40.5	41.5
0318	Apr-20	0357	4144.0	6632.6	W12859.7	Y43743.8	235	39.1	41.5
0319	Apr-20	0657	4151.2	6651.6	W12895.4	Y43795.9	041	38.3	41.7
0320	Apr-20	0824	4155.5	6653.5	W12881.1	Y43818.5	179	36.9	41.8
0321	Apr-20	1038	4204.1	6706.2	W12887.0	Y43872.4	158	30.6	41.8
0322	Apr-20	1436	4227.2	6719.5	W12816.1	Y43997.1	038	181.0	47.5
0323	Apr-20	1749	4228.7	6745.5	W12918.9	Y44034.7	263	125.5	47.1
0324	Apr-20	2030	4218.6	6746.3	W12978.5	Y43987.2	225	120.3	47.0
0325	Apr-21	0145	4209.4	6741.6	W13007.5	Y43936.6	115	104.2	45.3
0326	Apr-21	0454	4212.1	6754.4	W13050.0	Y43964.6	114	131.2	47.6
0327	Apr-21	0832	4228.3	6803.9	W13004.7	Y44056.0	152	96.2	43.0
0328	Apr-21	1204	4236.7	6821.6	W13041.7	Y44119.9	156	106.4	42.8
0329	Apr-21	1538	4248.0	6820.1	W12967.5	Y44171.8	133	112.6	42.7
0330	Apr-21	1846	4232.1	6837.9	W13149.0	Y44119.7	183	108.3	42.9
0331	Apr-21	2154	4213.6	6834.0	W13231.2	Y44020.9	164	95.1	42.5
0332	Apr-21	2346	4214.8	6840.1	W13255.2	Y44035.5	135	107.4	42.2
0333	Apr-22	0404	4204.1	6908.9	W13461.7	Y44017.2	130	102.3	42.1
0334	Apr-22	0720	4157.7	6932.7	W13623.4	Y44015.0	301	115.4	41.9
0335	Apr-22	0852	4155.5	6935.1	W13647.7	Y44005.9	192	109.1	42.0
0336	Apr-22	1207	4208.8	6947.0	W13649.7	Y44098.5	345	87.5	41.2
0337	Apr-22	1443	4214.6	6952.4	W13651.3	Y44139.2	140	112.6	
0338	Apr-22	1732	4204.3	7002.2	X25393.0	Y44096.7	318	22.4	
0343	Apr-27	1723	4225.8	7044.8	X25786.0	Y44290.8	019	27.3	38.3
0344	Apr-27	1934	4225.3	7041.7	X25762.9	Y44282.6	280	29.8	
0345	Apr-27	2218	4220.3	7047.7	X25771.9	Y44265.0	289	19.7	39.2
0346	Apr-28	0036	4215.3	7038.2	X25677.3	Y44219.7	324	19.7	38.9
0347	Apr-28	0232	4217.8	7033.1	X25660.2	Y44224.8	316	39.1	38.2
0348	Apr-28	0423	4213.1	7030.8	X25614.8	Y44193.9	306	31.7	38.2
0349	Apr-28	0558	4211.6	7030.5	X25603.2	Y44184.6	343	30.9	38.4
0350	Apr-28	0838	4202.7	7029.2	X25535.5	Y44130.2	357	26.0	38.8
0351	Apr-28	1027	4158.5	7033.2	X25535.4	Y44112.2	340	16.1	43.3
0352	Apr-28	1213	4157.5	7028.3	X25495.1	Y44097.8	184	19.1	40.5
0353	Apr-28	1339	4159.8	7023.1	X25477.0	Y44103.5	014	27.3	38.0
0354	Apr-28	1534	4152.5	7019.8	X25405.3	Y44054.4	052	17.2	42.6
0355	Apr-28	1703	4151.5	7015.7	X25373.3	Y44042.2	071	15.9	42.6
0356	Apr-28	1815	4152.8	7012.3	X25362.2	Y44044.6	060	15.3	42.4
0357	Apr-28	1934	4157.1	7013.6	X25400.7	Y44072.3		20.5	39.8
0358	Apr-28	2230	4204.9	7005.5	X25413.3	Y44104.9	300	14.8	40.3
0359	Apr-28	2355	4204.5	7002.8	X25396.8	Y44098.4	310	19.7	
0360	Apr-29	0118	4209.1	7007.8	X25454.9	Y44132.7	072	26.0	38.4
0361	Apr-29	0403	4219.7	7009.7	X25538.5	Y44195.3	155	39.1	39.0

NOAA Fisheries Service SPRING BOTTOM TRAWL SURVEY
2015 STATION INFORMATION

Station	Date	Time	Lat	Lon	Loran		Course	Bottom Depth (FM)	Temp (F)
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0362	Apr-29	0541	4222.4	7017.4	X25598.3	Y44223.6	312	23.0	
0363	Apr-29	0831	4225.6	7021.0	X25639.1	Y44247.1	276	29.5	38.5
0364	Apr-29	1126	4227.3	7016.0	X25623.3	Y44247.9	034	40.7	
0365	Apr-29	1301	4229.2	7009.4	X25601.1	Y44246.6	358	59.6	39.1
0366	Apr-29	1544	4238.7	7014.1	X25687.7	Y44305.3	059	46.2	39.2
0367	Apr-29	1806	4239.1	7028.9	X25771.6	Y44334.2	078	26.5	40.7
0368	Apr-29	2056	4244.9	7040.2	X25873.6	Y44385.4	346	23.5	40.1
0369	Apr-29	2222	4245.8	7040.2	X25879.2	Y44390.2	341	27.3	39.7
0370	Apr-29	2345	4250.5	7044.7	X25934.1	Y44422.9	345	19.4	40.0
0371	Apr-30	0148	4252.5	7027.5	X25846.1	Y44400.4	017	65.6	38.7
0372	Apr-30	1156	4322.7	6949.7	W13245.1	Y44473.2	064	77.9	39.5
0373	Apr-30	1346	4324.0	6940.9	W13184.0	Y44463.1	207	77.1	39.2
0374	Apr-30	1550	4311.9	6939.3	W13250.4	Y44406.2	095	33.9	39.3
0375	Apr-30	1952	4253.7	6928.3	W13295.9	Y44302.2	007	92.4	42.0
0376	Apr-30	2347	4237.3	6928.1	W13389.3	Y44220.9	328	129.0	42.7
0377	May-01	0144	4232.8	6932.5	W13439.1	Y44204.9	087	154.7	43.3
0378	May-01	0403	4239.4	6922.0	W13342.8	Y44221.6	096	120.0	42.8
0379	May-01	0658	4240.3	6904.1	W13239.1	Y44198.3	100	90.8	42.2
0380	May-01	0841	4241.2	6857.6	W13198.8	Y44193.2	072	89.1	42.0
0381	May-01	1119	4251.6	6857.6	W13138.2	Y44243.2	097	70.8	40.1
0382	May-01	1531	4306.3	6857.2	W13047.1	Y44311.3	163	88.3	40.8
0383	May-01	1915	4318.0	6915.3	W13072.9	Y44393.1	212	90.8	41.0
0384	May-01	2239	4314.2	6854.0	W12980.4	Y44341.6	034	83.9	40.5
0385	May-02	0217	4328.9	6837.9	W12800.5	Y44380.3	084	65.3	
0386	May-02	0447	4336.9	6839.1	W12753.1	Y44415.1	228	82.8	41.2
0387	May-02	0746	4327.4	6827.0	W12755.4	Y44357.1	036	94.6	45.0
0388	May-02	0959	4330.8	6815.7	W12678.0	Y44354.0	224	93.0	45.1
0389	May-02	1304	4315.6	6807.6	W12738.4	Y44277.9	076	115.6	42.6
0390	May-02	1507	4317.7	6752.7	W12656.5	Y44265.8	091	120.8	48.0
0391	May-02	1709	4316.5	6748.8	W12646.8	Y44255.6	196	134.5	48.2
0392	May-02	1853	4310.2	6751.8	W12700.1	Y44232.3	195	112.9	44.9
0393	May-02	2152	4253.0	6748.2	W12789.4	Y44151.7	316	118.7	45.7
0394	May-03	0049	4305.0	6742.6	W12692.1	Y44197.2	095	88.3	
0395	May-03	0223	4302.7	6746.6	W12723.7	Y44192.5	090	109.4	
0396	May-03	0658	4321.7	6724.8	W12512.2	Y44244.9	000	115.6	45.2
0397	May-03	1013	4311.1	6705.7	W12503.3	Y44176.0	319	105.5	45.0
0398	May-03	1229	4305.2	6700.9	W12520.8	Y44145.2	048	101.2	46.6
0399	May-03	1445	4314.8	6642.7	W12396.7	Y44163.3	050	63.4	42.0
0400	May-03	1710	4330.4	6639.8	W12290.3	Y44223.0	330	66.7	41.0
0401	May-03	1948	4334.5	6703.0	W12345.5	Y44268.3	318	111.3	46.1
0402	May-03	2136	4342.2	6706.0	W12306.5	Y44302.5	032	73.5	
0403	May-03	2316	4347.5	6707.6	W12277.1	Y44325.3	257	96.5	45.2
0404	May-04	0128	4352.3	6716.3	W12277.3	Y44355.2	010	102.0	46.9
0405	May-04	0258	4355.8	6710.7	W12232.5	Y44361.0	021	73.0	
0406	May-04	0543	4411.4	6711.2	W12127.5	Y44419.0	252	74.1	43.5
0407	May-04	0743	4414.7	6714.4	W12115.8	Y44435.1	266	103.3	45.2
0408	May-04	1018	4420.9	6657.5	W12014.7	Y44434.0	221	69.2	40.6
0409	May-04	1219	4421.9	6652.8	W11992.6	Y44431.6	242	61.8	40.4

NOAA Fisheries Service SPRING BOTTOM TRAWL SURVEY
2015 STATION INFORMATION

Station	Date	Time	Lat	Lon	Loran TD's		Course	Bottom Depth (FM)	Temp (F)
0410	May-04	1645	4416.3	6738.9	W12197.7	Y44475.3	065	53.0	39.2
0411	May-04	1834	4419.9	6744.1	W12192.4	Y44495.8	245	38.5	
0412	May-04	2214	4410.0	6803.2	W12347.0	Y44488.4	044	47.6	
0413	May-05	0223	4351.1	6810.6	W12515.6	Y44428.2	211	96.5	43.2
0414	May-05	0744	4359.9	6827.3	W12534.5	Y44487.5	121	46.5	39.3
0415	May-05	1025	4352.2	6842.4	W12665.6	Y44481.7	032	55.0	39.1
0416	May-05	1451	4348.1	6904.5	W12813.5	Y44501.5	200	44.6	39.4
0417	May-05	1739	4337.5	6904.4	W12884.4	Y44458.6	184	64.8	39.1
0418	May-06	0015	4331.0	6957.2	W13239.0	Y44522.7	023	59.6	38.3
0419	May-06	0441	4313.8	7019.2	X25927.3	Y44487.4	038	50.6	
0420	May-06	0807	4300.5	7023.8	X25873.6	Y44432.8	027	62.9	38.2
0421	May-06	1000	4258.3	7014.7	X25813.6	Y44405.6	305	91.0	39.1
0422	May-06	1153	4254.2	7013.8	X25783.5	Y44383.4	057	78.7	38.9
0423	May-06	1400	4302.0	7002.3	X25775.3	Y44400.5	167	33.9	38.4
0424	May-06	1522	4259.6	6958.2	W13438.0	Y44381.6	169	108.0	43.5
0425	May-06	1726	4251.6	7005.3	X25725.6	Y44355.3	207	63.7	38.7
0426	May-06	2052	4233.9	6952.5	W13550.1	Y44242.9	357	107.4	42.8

*Missing sequential station numbers indicate either a test-tow or no-trawl was attempted

NOAA FISHERIES SERVICE-NEFSC SPRING BOTTOM TRAWL SURVEY 2015
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 FFLOUNDER	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
12	0	0	0	0	6	0	0	58	0	0	0	0	0	12	0	155	0	1	0	64	4	0	6	0	129	435
13	0	0	0	0	58	0	7	433	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	1	63	604
15	0	0	0	0	36	0	29	1056	0	0	0	1	0	0	0	0	0	0	0	0	3	3	77	9	115	1329
16	0	0	0	0	4	0	12	1389	0	0	0	0	0	31	0	11	0	0	0	30	0	0	22	0	223	1722
17 ^[1]	0	0	0	0	0	0	0	760	0	0	0	0	0	0	0	0	0	0	0	28	0	0	1	0	25	814
18	0	0	0	0	0	0	0	3568	0	0	0	0	1	2	0	0	0	0	13	97	0	0	3	0	29	3713
19	0	0	0	0	6	0	0	50	0	0	0	0	0	7	0	1	0	1	0	31	6	0	4	0	418	524
20	0	0	0	0	6	0	2	1223	0	0	0	0	0	19	0	0	0	4	0	91	0	0	8	0	846	2199
21	0	0	0	0	1	0	3	784	0	0	0	0	0	12	0	2	11	1	0	164	0	0	6	0	90	1074
22	0	0	0	0	3	0	7	1043	0	0	0	0	0	31	0	0	1	3	0	174	0	0	14	0	1014	2290
23	0	0	0	0	0	0	0	71	0	0	0	0	3	4	0	0	32	2	2	63	0	0	1	0	12	190
24	0	0	0	0	0	0	0	5	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	7
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6	0	0	0	0	2	11
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	9	13
27	0	0	0	0	0	0	0	17	0	0	0	0	1	0	0	0	239	0	7	7	0	0	0	0	13	284
28	0	0	0	0	0	0	0	1704	0	0	0	0	0	3	0	0	0	0	0	246	0	0	1	0	17	1971
29	0	0	0	0	0	0	0	39	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	2	49
30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	5	0	0	0	0	1	7
31	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	2	5
32	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	4	2	0	0	0	0	5	15
33	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	1	4
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	3
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	4
36	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	0	16	0	23	0	0	0	0	0	40	83
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	14	0	0	0	0	0	1	19
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	1	15
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7
40	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	10	55
41	0	0	0	0	0	0	0	72	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	1	91
42	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	36	0	0	0	0	0	2	61
43	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	3	35
44	0	0	0	0	0	0	0	55	0	0	0	0	0	0	0	0	0	0	72	0	0	0	0	0	97	224
45	0	0	0	0	0	0	6	223	0	0	0	0	0	0	0	0	0	0	64	0	0	0	2	0	119	414
46	0	0	0	0	0	0	0	228	0	0	0	0	0	0	0	0	0	0	42	0	0	0	5	0	209	484
47	0	0	0	0	0	0	0	329	0	0	0	0	0	0	0	0	0	0	31	0	0	0	2	0	22	384
48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	128	135
49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	790	791

NOAA FISHERIES SERVICE-NEFSC SPRING BOTTOM TRAWL SURVEY 2015
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 FFLOUNDER	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	
50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	101	103	
51	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	33	35
52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	65	70	
53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	138	0	12	0	84	234
54 ^[1]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	4	6	
56	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	6	1	118	136
57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79	0	22	0	66	167
58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	9	0	26	37
59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81	0	90	0	254	425
60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	297	298
61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	15	2	441	459
62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	468	473
63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	28	35	
64	0	0	0	0	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	4	411	424
65	0	0	0	0	3	0	28	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	1090	1131	
66	0	0	0	0	0	0	30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	30	0	242	2	389	694
67	0	0	0	0	0	0	0	36	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	2	0	4477	4519
68	0	0	0	0	0	0	0	41	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	30	0	7168	7242
69	0	0	0	0	0	0	0	635	0	0	0	0	0	2	0	1	0	0	0	0	0	2	0	85	0	856	1581
70	0	0	0	13	29	0	25	4605	0	0	0	1	0	0	0	0	0	0	0	0	0	0	6	34	1	346	5060
71 ^[1]	0	0	0	3	17	0	29	1402	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	45	1	501	2010
72	0	0	0	0	0	0	18	46	0	0	0	0	0	55	0	1	0	0	0	0	0	17	0	118	1	316	572
73	0	0	0	0	0	0	0	7375	0	0	0	0	0	10	0	0	0	0	0	0	0	2	0	14	0	155	7556
74	0	0	0	0	0	0	0	916	0	0	0	0	1	7	0	0	0	1	16	3	0	0	9	0	89	1042	
75	0	0	0	0	0	0	0	211	0	0	0	0	1	1	0	0	0	1	123	0	0	0	2	0	261	600	
76	0	0	0	0	0	0	0	162	0	0	0	0	0	1	0	0	0	0	90	0	0	0	0	0	0	138	391
77	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	1	62	0	0	0	0	0	0	50	134
79	0	0	0	0	0	0	0	66	0	0	0	0	1	2	0	0	0	0	31	1	0	0	0	0	0	58	159
80	0	0	0	0	0	0	22	765	0	0	0	0	0	5	0	1	0	0	0	0	0	0	0	1	0	114	908
81	0	0	0	0	0	0	0	320	0	0	0	0	0	70	0	0	0	0	0	0	0	0	0	1	0	245	636
82	0	0	0	0	0	0	0	434	0	0	0	0	0	14	0	0	0	0	14	15	0	0	1	0	64	542	
83	0	0	0	0	19	0	20	1587	0	0	0	1	0	0	0	0	0	0	0	0	0	2	3	29	1	108	1770
84	0	0	0	0	2	0	4	28	0	0	0	0	0	4	14	0	0	0	0	0	0	9	0	275	61	46	443
85	0	0	0	0	0	0	9	186	0	0	0	0	0	16	1	0	0	0	0	0	0	26	0	406	37	73	754
86	0	0	0	0	1	0	0	127	0	0	0	0	0	7	0	0	0	0	0	0	0	60	0	157	23	69	444
87	0	0	0	0	34	0	23	558	0	0	0	4	0	0	0	0	0	0	0	0	0	3	0	32	4	192	850
88	0	0	0	0	1	0	0	706	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	2	0	173	1071
89	0	0	0	0	0	0	0	100	0	0	0	0	2	1	0	0	1	0	23	66	0	0	0	0	0	15	208

NOAA FISHERIES SERVICE-NEFSC SPRING BOTTOM TRAWL SURVEY 2015
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 FFLOUNDER	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	
90	0	0	0	0	1	0	5	623	0	0	0	0	0	20	0	0	0	1	3	91	0	0	3	0	930	1677	
91	0	0	0	0	1	0	0	978	0	0	0	0	0	30	0	10	0	1	0	31	0	0	3	0	1199	2253	
92	0	0	0	2	40	0	8	237	0	0	0	1	0	0	0	1	0	0	0	1	1	0	25	0	40	356	
93	0	0	0	0	11	0	19	165	0	0	0	0	0	8	0	0	0	0	0	0	38	0	42	6	36	325	
94	0	0	0	0	0	0	0	78	0	0	0	0	0	24	4	3	0	114	0	0	19	0	13	0	364	619	
96	0	0	0	0	3	0	2	49	0	0	0	0	0	0	0	4	0	4	0	0	0	0	24	0	14	100	
97	0	0	0	0	1	0	0	14	0	0	0	0	0	21	0	1	0	0	0	0	6	0	30	1	133	207	
98	0	0	0	0	2	0	18	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	38	9	42	119	
99	0	0	0	0	4	0	2	38	0	0	0	0	0	4	0	0	0	0	0	0	1	0	102	5	36	192	
100 ^[1]	0	0	0	1	1	0	24	283	0	0	0	8	0	0	0	0	0	0	0	0	0	8	26	0	81	432	
101 ^[1]	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	5	
102	0	0	0	0	0	0	0	428	0	0	0	0	7	3	0	0	0	0	0	182	0	0	0	0	24	644	
103	4	0	0	0	1	0	0	759	0	0	0	2	8	7	0	0	0	0	42	274	0	17	0	0	13	1127	
104	7	0	0	0	0	0	0	1211	0	0	0	0	3	4	0	0	6	0	18	70	0	0	0	0	15	1334	
105	0	0	0	0	0	0	0	647	0	0	0	0	1	6	0	0	14	0	40	13	0	0	0	0	21	742	
106	0	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	198	0	0	13	0	0	0	0	18	260	
107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	7	10	
108	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	6	0	0	0	0	68	75	
109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	13	17	
110	0	0	0	0	0	0	0	0	0	3	0	0	1	0	0	0	23	0	0	22	0	0	0	0	11	60	
111	0	0	0	0	0	0	0	0	0	1	0	0	4	0	0	0	2	0	10	56	0	0	0	0	7	80	
112	0	0	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	0	14	30	0	0	0	0	2	54	
113 ^[1]	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	13	70	0	0	0	0	5	92	
114	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	8	63	0	0	0	0	6	81	
115	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	2	0	0	87	0	0	0	0	2	95	
116	2	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	135	0	13	43	0	0	0	0	7	204	
117	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	21	0	2	22	0	0	0	0	3	49	
118	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	47	0	3	35	0	0	0	0	1	87	
119	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	5	0	0	52	0	0	0	0	1	60	
120	0	0	0	0	0	0	0	709	0	0	0	0	1	0	0	0	41	0	0	38	0	0	0	0	5	794	
121	0	0	0	0	0	0	0	5170	0	0	0	0	2	1	0	0	0	0	13	44	0	0	0	0	47	5277	
122	0	0	0	0	1	0	0	22	0	0	0	0	14	4	0	0	7	0	17	104	0	0	0	0	32	201	
123	0	0	0	0	0	0	0	20	2	0	0	0	17	4	0	0	31	0	44	134	0	0	0	0	12	264	
124	0	0	0	0	0	0	0	275	0	0	0	1	4	10	0	0	1	0	7	167	0	0	0	0	32	497	
125	0	0	0	0	20	0	6	59	0	0	0	9	0	0	0	0	0	0	0	2	10	0	13	2	63	184	
126 ^[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
127	0	0	0	0	1	0	2	133	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	34	0	19	209
128	0	0	0	0	2	0	1	188	0	0	0	0	0	7	0	0	0	0	0	0	177	0	66	0	27	468	

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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 FFLOUNDER	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
129	0	0	0	0	2	0	0	11	0	0	0	0	0	31	529	0	0	0	0	0	28	0	95	3	8	707
130	0	0	0	0	20	0	42	77	0	0	0	2	0	6	0	0	0	0	0	0	0	0	46	2	553	748
131	0	0	0	0	8	0	6	51	0	0	0	0	0	7	0	0	0	0	0	5	3	0	4	0	33	117
132	0	0	0	0	18	0	24	73	0	0	0	10	0	0	0	0	0	0	0	0	0	0	5	1	42	173
133	0	0	0	1	17	0	4	396	0	0	0	3	0	0	0	0	0	0	0	0	0	1	8	0	69	499
134	0	0	0	0	8	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	28	60
135	0	0	0	0	7	0	3	200	0	0	0	0	0	26	0	0	0	0	0	0	0	0	15	0	15	266
136	0	0	0	0	50	0	0	410	0	0	0	0	0	8	0	0	0	0	0	0	0	0	14	0	66	548
137	0	0	0	0	17	0	15	1753	0	0	0	0	0	8	2	1	0	0	0	0	2	0	29	0	32	1859
138	0	0	0	0	21	0	5	19	0	0	0	0	0	44	8	47	0	0	24	0	30	0	20	0	51	269
139	0	0	0	0	47	0	8	362	0	0	0	0	0	68	4	0	83	4	12	25	42	0	5	0	68	728
140	0	0	0	0	3	0	0	487	0	0	0	1	0	11	0	0	0	0	13	19	0	0	0	0	19	553
141	0	0	0	0	15	0	7	356	0	0	0	0	0	50	0	0	43	16	0	13	0	0	4	0	48	552
142	0	0	0	0	4	0	1	104	0	0	0	0	0	8	0	0	5	1	19	152	0	0	0	0	25	319
143	2	0	0	0	1	0	0	385	0	0	0	0	0	5	0	0	8	0	27	230	0	0	0	0	30	688
144	0	0	0	0	2	0	0	180	1	0	0	0	0	5	0	0	0	0	42	130	0	0	0	0	57	417
145	0	0	0	0	0	0	0	22	2	0	0	1	1	0	0	0	0	0	53	113	0	0	0	0	17	209
146	4	0	0	0	0	0	0	22	1	0	0	0	2	3	0	0	41	0	118	137	0	0	0	0	17	345
147	0	0	0	0	4	0	6	798	0	0	0	8	0	5	0	0	0	0	101	177	0	3	0	0	96	1198
148	0	0	0	0	0	0	0	390	0	1	0	0	2	7	1	0	0	0	4	31	0	0	0	0	22	458
150	0	0	0	0	0	0	0	249	5	0	0	0	1	5	0	0	0	0	59	26	0	0	0	0	22	367
152	0	0	0	0	0	0	0	108	0	1	0	0	2	4	0	0	0	0	23	11	0	0	0	0	25	174
153	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	2	6
154	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	6	0	0	0	0	1	10
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	5	0	1	0	0	0	19
156	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	11	0	0	66	0	0	0	0	13	94
157	0	0	0	0	0	0	0	0	0	2	0	0	5	0	0	0	1	0	0	67	0	0	0	0	7	82
158	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	7	67	0	0	0	0	9	88
159	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	5	42	0	0	0	0	10	63
160	0	0	0	0	0	0	0	0	0	5	0	0	6	0	0	0	0	0	20	175	0	0	0	0	2	208
161	0	0	0	0	0	0	0	0	0	4	0	0	2	1	0	0	0	0	3	94	0	0	0	0	2	106
162	0	0	0	0	0	0	0	0	2	4	0	0	8	1	0	0	0	0	77	644	0	0	0	0	10	746
163 ^[1]	0	0	0	0	0	0	0	0	0	3	0	0	2	0	0	0	0	0	10	41	0	0	0	0	3	59
164	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	9	43	0	0	0	0	1	55
165	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	2	28	0	0	0	0	11	44
166	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	19	0	5	43	0	0	0	0	12	83
167	5	0	0	0	1	0	0	179	7	0	0	0	2	4	0	0	42	0	14	57	0	0	0	0	7	318
168	0	0	0	0	0	0	0	239	3	0	0	0	1	2	0	0	1	0	14	83	0	0	0	0	23	366

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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 FFLOUNDER	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	2	0	0	0	0	0	0	42	4	0	0	0	0	5	0	0	0	0	26	19	0	0	0	0	34	132
170	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	14	0	0	0	0	1	18
171	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	14	0	0	0	0	3	20
172	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	2	163	0	0	0	0	3	171
173	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	0	0	3	7
174	0	0	0	0	0	0	0	0	0	7	0	0	1	0	0	0	0	0	0	4	0	1	0	0	2	15
175	0	0	0	0	0	0	0	0	0	9	0	0	1	0	0	0	0	0	1	12	0	0	0	0	2	25
176	0	0	0	0	0	0	0	0	0	9	0	0	1	0	0	0	0	0	0	29	0	0	0	0	2	41
177	0	0	0	0	0	0	0	5	3	0	0	0	1	2	0	0	0	0	21	64	0	0	0	0	5	101
178	2	0	0	0	3	0	65	116	1	0	0	1	3	9	0	0	61	11	32	81	0	0	2	0	39	426
179	0	0	0	4	25	0	15	6	0	0	0	1	0	73	324	8	1	0	99	12	32	0	14	0	161	775
180	0	0	0	3	42	0	33	0	0	0	0	3	0	83	2	0	0	0	78	6	16	0	10	0	79	355
181	0	0	0	0	76	0	0	0	0	0	0	0	0	57	0	2	0	0	7	0	24	0	13	0	58	237
182	0	0	0	0	24	0	5	1	0	0	0	0	0	8	0	2	0	0	0	0	9	0	19	0	35	103
183	0	0	0	1	17	0	16	268	0	0	0	4	0	0	0	0	0	0	0	0	4	0	19	0	154	483
185	0	0	0	0	37	0	9	771	0	0	0	2	0	0	0	0	0	0	0	0	11	0	8	0	47	885
186	0	0	0	0	36	0	4	969	0	0	0	0	0	21	1	10	0	1	53	0	41	0	7	0	353	1496
187	0	0	0	1	88	0	52	276	0	0	0	0	0	72	1	1	0	1	34	0	46	0	4	0	798	1374
188	1	0	0	0	3	0	5	52	13	0	0	0	23	14	0	0	2	0	154	8	0	0	0	0	139	414
189	0	0	0	0	0	0	9	0	1	0	0	0	6	0	0	0	0	0	39	1	0	0	0	0	76	132
190	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	8	34	0	0	0	0	5	48
191 ^[1]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	4
192	0	0	0	0	0	0	0	0	2	4	0	0	0	0	0	0	0	0	0	19	0	0	0	0	3	28
193	0	0	0	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0	8	0	0	0	0	0	7	19
194	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	2	7
196	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0	0	0	0	9	13
197	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	7	0	0	0	0	16	27
198	0	0	0	0	0	0	0	0	0	5	0	0	1	0	0	0	0	0	5	3	0	0	0	0	15	29
199	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	15
200	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3	6
201	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	9
202	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	3	0	0	0	0	0	7	25
203	0	0	0	0	0	0	0	0	0	8	0	0	1	0	0	0	0	122	0	0	0	0	0	0	7	138
204	0	0	0	0	0	0	0	0	0	14	0	0	4	0	0	0	0	3	0	7	0	0	0	0	1	29
205	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	0	1	0	183	155	0	0	0	0	22	365
207	0	0	0	0	1	0	0	0	0	0	0	1	7	0	0	0	0	0	43	166	0	0	0	0	10	228
208	0	0	0	0	1	0	9	0	0	0	0	0	0	4	0	0	0	2	19	23	0	0	0	0	12	70

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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 FFLOUNDER	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	
209 ^[1]	0	0	0	0	14	0	6	0	0	0	0	0	0	6	0	0	56	1	70	1	0	0	0	0	37	191	
210	0	0	0	0	6	0	15	67	0	0	0	1	0	14	0	0	1	0	18	1	456	0	54	0	35	668	
211	0	0	0	0	66	0	19	1522	0	0	0	0	0	0	0	0	0	1	0	0	2	0	14	3	69	1696	
212	0	0	0	0	30	0	10	33	0	0	0	2	0	7	0	0	0	1	0	0	73	1	24	1	88	270	
213	0	0	0	0	29	0	19	92	0	0	0	2	0	0	0	0	0	10	0	0	140	0	12	0	49	353	
214	0	0	0	1	36	0	20	8	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0	327	395	
215	0	0	0	0	52	0	4	1297	0	0	0	1	0	8	0	0	0	1	48	1	815	0	36	0	90	2353	
216	0	0	0	1	133	0	31	14	0	0	0	0	0	7	0	0	0	1	415	4	3	0	4	0	304	917	
217	0	1	0	0	4	0	0	2	0	0	0	1	0	5	0	0	99	1	68	69	0	0	0	0	33	283	
218	0	0	0	0	2	0	3	0	0	0	0	3	2	0	0	0	2	1	41	47	0	0	0	0	7	108	
219	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	101	1031	48	53	0	0	0	0	13	1247	
220	0	0	0	0	1	0	17	0	0	0	0	1	0	0	0	0	167	3	44	57	0	0	0	0	4	294	
221	0	0	0	0	6	0	14	184	0	0	0	1	0	91	0	1	0	1	376	1	24	0	11	0	224	934	
222	0	0	0	7	33	0	6	10	0	0	0	0	3	4	0	0	0	0	170	2	1	0	3	0	63	302	
223	0	0	0	0	3	0	0	0	1	0	0	1	7	0	0	0	9	1	234	919	0	0	0	0	23	1198	
224	0	0	0	0	1	0	0	0	0	0	0	1	2	0	0	0	1	0	136	322	0	0	0	0	35	498	
225	0	10	0	0	1	0	0	0	2	0	0	0	4	0	0	0	0	1	35	41	0	0	0	0	6	100	
226	0	1515	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	2	3	40	0	0	0	0	55	1618	
227	0	1	0	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	2	0	0	0	0	4	11	
228	0	52	0	0	1	0	0	0	1	2	1	0	0	0	0	0	128	624	8	4	0	0	0	0	52	873	
229	1	0	1	0	0	0	0	0	0	10	0	0	0	0	0	0	2	3	1	0	0	11	0	0	15	44	
230 ^[1]	1	0	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	44	0	1	0	10	0	0	6	67	
231	0	8	0	0	1	0	0	0	2	1	0	0	3	0	0	0	4	37	11	2	0	0	0	0	54	123	
232	1	32	0	0	2	0	0	0	2	4	0	0	2	0	0	0	14	87	0	1	0	0	0	0	97	242	
233	1	0	0	0	4	0	0	0	1	0	0	0	0	0	0	0	2	2	16	9	0	0	0	0	323	358	
234	2	0	0	0	0	0	0	0	3	3	0	0	1	0	0	0	0	3	0	0	0	2	0	0	14	28	
235 ^[1]	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	
236	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	9	
237	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	32	
238	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
240	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	4	
241	0	44	0	0	136	0	0	0	2	0	0	0	0	0	0	0	3	28	6	3	0	3	0	0	120	345	
242	1	51	0	0	9	18	0	0	0	0	4	2	0	0	0	0	1	83	0	0	0	9	0	0	102	280	
243	0	2440	0	5	103	1	13	0	0	0	4	1	0	0	0	0	12	23	0	0	0	31	0	0	122	2755	
244	0	2424	0	0	11	0	0	0	0	0	13	0	0	0	0	0	0	9	15	179	0	0	0	0	40	2691	
245	0	725	0	1	9	0	0	0	0	0	10	0	1	0	0	0	1	0	155	515	0	0	0	0	65	1482	
246	0	976	0	0	6	0	0	0	0	0	1	0	1	0	0	0	0	2	204	265	0	0	0	0	42	1497	
247	20	55	0	11	121	467	33	0	0	0	6	7	0	0	0	0	1	0	10	6	0	40	0	0	750	1527	

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	ATLANTIC COD	HADDOCK	POLLOCK	WHITE HAKE	SILVER HAKE	REDFISH	GOOSEFISH	SPINY DOGFISH	YELLOWTAIL FLOUNDER	WINTER FLOUNDER	AMERICAN PLAICE	WITCH FFLOUNDER	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
249	15	101	0	6	437	0	135	4	0	0	10	2	0	0	0	0	5	3	0	0	0	3	0	0	396	1117
250	0	48	0	0	144	0	0	2	0	0	7	2	0	0	0	0	4	0	14	0	0	0	0	0	157	378
251	1	1806	0	0	261	0	0	0	0	0	15	0	1	0	0	0	115	6	131	16	0	0	0	0	112	2464
252	3	545	0	0	64	0	0	0	2	2	8	0	2	0	0	0	1462	202	85	14	0	0	0	0	28	2417
253	0	160	0	0	0	0	0	0	0	3	0	0	1	0	0	0	0	1	0	0	0	0	0	0	34	199
254	28	1121	0	0	2	0	0	0	0	6	0	0	0	0	0	0	0	1	51	248	0	0	0	0	64	1521
255	0	157	0	0	1	0	0	0	2	6	0	0	1	0	0	0	0	0	44	88	0	0	0	0	7	306
256	2	1371	0	0	2	0	0	0	0	11	0	0	8	0	0	0	0	0	69	383	0	0	0	0	33	1879
257	37	103	0	0	4	0	0	0	9	12	4	0	15	0	0	0	0	0	48	40	0	0	0	0	3	275
258 ^[1]	1	147	0	0	2	0	0	0	0	0	1	0	2	0	0	0	0	0	32	32	0	0	0	0	5	222
259	5	1728	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	8	17	0	0	0	0	7	1767
260	2	1308	0	0	1	0	0	0	0	6	0	0	0	0	0	0	1	0	5	19	0	0	0	0	5	1347
261	2	1	0	0	1	0	0	0	0	4	0	0	2	0	0	0	0	3	2	23	0	0	0	0	21	59
262	0	3481	0	0	31	0	0	0	0	0	1	0	2	0	0	0	0	0	10	161	0	0	0	0	18	3704
263	0	987	0	0	5	0	0	0	0	11	0	0	3	0	0	0	0	0	110	355	0	0	0	0	10	1481
264 ^[1]	0	1	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0	19	237	0	0	0	0	27	287
265	0	232	0	0	3	0	0	0	6	5	2	0	7	0	0	0	2	0	205	129	0	0	0	0	4	595
266	1	178	0	0	17	0	0	0	9	0	2	0	14	0	0	0	251	48	279	102	0	0	0	0	44	945
267	0	5	0	0	24	0	0	1	0	0	0	0	0	0	0	0	1	0	79	8	0	0	1	0	51	170
268	0	0	0	0	30	0	6	2	0	0	0	0	1	12	0	0	0	0	11	3	6	0	4	0	47	122
269	0	0	0	3	133	0	50	253	0	0	0	3	0	0	0	0	0	0	40	3	79	0	3	0	297	864
270	0	0	0	0	95	0	8	25	0	0	0	1	0	0	0	0	0	0	10	0	70	4	16	1	148	378
271	0	0	0	0	49	0	0	1	0	0	0	0	0	9	0	0	0	0	19	14	24	0	17	0	84	217
272	0	0	0	0	157	0	40	0	0	0	0	0	0	16	0	0	0	0	44	12	4	0	5	0	214	492
273	0	0	0	1	18	0	61	0	0	0	0	4	0	0	0	0	0	0	0	2	0	64	0	0	127	277
274	0	7	0	0	244	0	0	2	7	0	0	0	3	13	0	0	0	0	152	14	0	0	1	0	130	573
275	0	148	0	5	59	0	0	1	3	0	0	3	9	0	0	0	0	20	224	78	0	0	0	0	277	827
276	0	282	0	0	59	0	11	0	5	0	2	3	4	0	0	0	1	0	217	36	0	0	0	0	26	646
277	1	737	0	0	23	0	0	0	7	0	3	1	1	0	0	0	4	0	215	35	0	0	0	0	24	1051
278	3	485	0	1	4	0	0	0	2	5	0	0	2	0	0	0	9	508	52	10	0	0	0	0	6	1087
279	7	383	0	0	4	0	0	0	1	2	0	0	0	0	0	0	137	1	21	1	0	0	0	0	15	572
280	1	524	0	0	14	0	0	0	2	0	0	0	3	0	0	0	110	0	52	7	0	0	0	0	11	724
281	0	148	0	0	26	0	1	0	6	0	0	0	1	0	0	0	43	0	27	5	0	0	0	0	7	264
282	0	0	0	0	46	0	0	1	0	0	0	2	0	0	0	0	0	0	11	24	7	0	5	0	116	212
283	0	149	0	0	506	0	0	0	0	0	0	0	0	5	0	0	0	5	10	15	2	0	6	0	112	810
284 ^[1]	0	22	0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0	41	0	0	8	0	0	161	342
285	0	29	0	0	164	0	26	0	0	0	0	5	0	0	0	0	0	0	44	0	0	10	4	1	221	504
286	0	63	0	0	221	0	0	0	0	0	0	0	0	0	0	0	0	1	71	6	0	0	1	0	68	431

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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 FFLOUNDER	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
287	0	156	0	1	107	0	0	0	2	0	1	0	0	0	0	0	0	39	11	0	0	1	0	548	866	
288	0	94	0	0	5	0	0	0	6	0	2	0	3	0	0	0	0	36	5	0	0	0	0	7	158	
289	0	251	0	0	20	0	0	0	3	0	0	0	1	0	0	0	0	221	13	0	0	0	0	33	542	
290	0	81	6	0	143	0	5	8	6	0	0	0	0	0	0	0	0	354	17	0	0	0	0	175	795	
291	4	147	0	0	3	0	0	0	4	3	4	0	7	0	0	0	9	0	189	0	0	2	0	0	25	397
292	2	99	0	0	30	0	0	0	1	0	9	0	2	0	0	0	4	0	112	4	0	0	0	0	56	319
293 ^[1]	0	96	0	0	104	0	0	0	1	2	1	0	3	0	0	0	0	55	0	0	6	0	0	5	273	
294	0	118	0	1	206	0	0	0	2	0	0	0	4	0	0	0	0	317	16	0	6	0	0	27	697	
295 ^[1]	0	31	0	0	98	0	0	0	0	0	0	0	2	0	0	0	14	61	20	0	5	0	0	12	243	
296	0	76	0	1	53	0	0	0	1	0	0	0	2	0	0	0	1	108	32	0	15	0	0	39	328	
297	44	65	15	1	91	0	0	0	0	0	0	0	0	0	0	0	1	22	7	0	123	0	1	62	432	
298 ^[1]	4	38	8	3	103	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	4	0	0	25	188	
299	79	151	65	12	75	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95	0	0	31	510	
300	68	111	33	11	72	1	0	0	0	0	0	0	0	0	0	0	0	2	2	0	66	0	0	59	425	
301	19	81	2	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	249	10	0	11	0	0	100	476
302	84	86	3	3	405	0	4	2	0	0	0	0	0	0	0	0	2	12	7	0	16	14	0	24	662	
303	0	29	0	0	489	0	4	2	0	0	0	0	0	0	0	0	9	26	18	1	0	4	0	27	609	
304	68	214	12	2	9	0	4	45	0	0	0	22	0	0	0	0	1	6	29	0	2	0	0	53	467	
305 ^[1]	9	107	0	0	34	3	0	0	0	0	0	0	0	0	0	0	5	0	0	0	7	0	0	18	183	
306	34	34	31	4	34	11	0	75	0	0	0	2	0	0	0	0	1	4	0	0	4	0	0	93	327	
307	0	41	40	35	33	15	0	37	0	0	1	0	0	0	0	0	1	5	0	0	15	0	0	137	360	
308	4	23	0	72	12	124	0	25	0	0	0	7	0	0	0	0	1	1	0	0	36	0	0	138	443	
309	5	5	0	8	537	0	74	2	0	0	0	14	0	0	0	0	2	0	0	0	14	0	0	178	839	
310 ^[1]	8	2	0	11	311	6	74	0	0	0	0	0	0	0	0	0	1	0	0	0	51	0	0	68	532	
311	9	4	0	11	1696	224	52	0	0	0	0	0	0	0	0	0	0	0	0	0	59	0	0	60	2115	
312	14	39	0	99	164	10	8	0	0	0	0	0	0	0	0	0	0	0	0	0	128	0	0	91	553	
313	26	597	0	0	17	0	0	0	2	2	1	0	0	0	0	0	0	0	231	3	0	5	0	0	102	986
314	21	166	0	6	15	0	11	0	0	0	2	6	0	0	0	0	0	132	0	0	28	0	0	84	471	
315 ^[1]	8	49	4	0	1	0	0	0	1	0	0	0	0	0	0	0	0	4	0	0	20	0	0	34	121	
316	60	596	5	0	25	0	0	0	6	0	0	0	0	0	0	0	1	2	27	0	0	68	0	0	169	959
317	0	30	0	0	0	0	0	0	1	0	3	0	3	0	0	0	0	37	4	0	0	0	0	25	103	
318	11	31	0	0	1	0	0	0	9	3	3	0	1	0	0	0	0	249	25	0	0	0	0	2	335	
319	15	156	0	0	3	0	0	0	3	5	4	0	3	0	0	0	0	195	18	0	2	0	0	16	420	
320	12	124	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	15	3	0	0	0	0	2	158	
321	32	598	0	0	1	0	0	0	20	21	2	0	0	0	0	0	0	10	10	0	1	0	0	102	797	
322	0	5	0	125	602	0	50	0	0	2	3	1	0	0	0	0	1	0	0	0	5	0	0	87	881	
323	0	1	2	76	184	46	8	8	0	0	0	1	0	0	0	0	2	0	0	0	26	0	0	196	550	

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	ATLANTIC COD	HADDOCK	POLLOCK	WHITE HAKE	SILVER HAKE	REDFISH	GOOSEFISH	SPINY DOGFISH	YELLOWTAIL FLOUNDER	WINTER FLOUNDER	AMERICAN PLAICE	WITCH FFLOUNDER	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	
324	1	20	0	41	309	1502	20	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	188	2089	
325	4	47	4	0	33	21	28	0	0	0	1	2	0	0	0	0	0	0	0	0	0	20	0	0	102	262	
326	0	0	0	23	410	8	46	4	0	0	6	5	0	0	0	0	1	0	0	0	0	8	0	0	130	641	
327	0	0	0	5	267	272	3	9	0	0	2	4	0	0	0	0	0	0	0	0	0	3	0	0	66	631	
328	10	5	0	3	76	2	32	3	0	0	2	1	0	0	0	0	2	0	9	0	0	4	0	0	55	204	
329	0	0	0	14	98	30	17	0	0	0	16	5	0	0	0	0	3	0	0	0	0	0	0	0	56	239	
330	3	0	0	4	134	5	7	76	0	0	4	3	0	0	0	0	1	0	0	0	0	2	0	0	55	294	
331	8	12	0	1	269	118	12	8	0	0	4	4	0	0	0	0	4	0	0	0	0	0	0	0	0	98	538
332	0	4	0	1	55	64	10	5	0	0	1	13	0	0	0	0	3	0	0	0	0	0	0	0	0	84	240
333	0	52	0	0	84	10	18	3	0	0	10	2	0	0	0	0	3	12	0	0	0	0	0	0	61	255	
334	0	30	0	0	38	14	3	2	0	0	2	6	1	0	0	0	0	1	0	0	0	5	0	0	68	170	
335	17	51	5	3	95	11	0	4	0	0	11	5	0	0	0	0	2	0	2	0	0	32	0	0	90	328	
336	12	1032	0	0	57	85	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	43	0	0	84	1316	
337	0	281	0	1	63	147	3	0	0	0	16	6	0	0	0	0	0	0	0	0	0	2	0	0	151	670	
338 ^[1]	0	0	0	0	0	1	0	0	0	2	1	0	0	0	0	0	26	0	0	0	0	4	0	0	27	61	
343	27	0	0	0	1	1	0	0	57	79	1	0	0	0	0	0	0	0	2	4	0	117	0	0	47	336	
344 ^[1]	1	0	0	0	0	2	0	0	1	5	0	0	0	0	0	0	0	0	0	0	0	45	0	0	6	60	
345	6	0	0	0	1	0	0	0	5	26	0	0	3	0	0	0	0	0	0	26	0	16	0	0	70	153	
346	6	0	0	0	0	0	0	0	19	30	0	0	1	0	0	0	0	0	0	26	0	50	0	0	88	220	
347	0	11	0	1	55	0	0	0	14	18	29	0	0	0	0	0	0	0	0	7	0	75	0	0	39	249	
348	11	0	0	0	17	0	1	0	31	67	3	0	2	0	0	0	3	0	0	28	0	32	0	0	150	345	
349	24	0	0	0	2	3	1	0	18	38	5	0	0	0	0	0	34	0	0	25	0	92	0	0	55	297	
350	0	0	0	0	1	0	0	0	1	10	1	0	0	0	0	0	1	0	0	9	0	47	0	0	46	116	
351	0	0	0	0	0	0	0	0	1	8	0	0	1	0	0	0	0	1	0	32	0	5	0	0	35	83	
352	0	0	0	0	1	0	0	0	1	2	0	0	0	0	0	0	147	0	0	3	0	18	0	0	21	193	
353	0	0	0	0	9	0	1	0	0	5	0	1	0	0	0	0	22	0	0	11	0	57	0	0	33	139	
354	0	0	0	0	0	0	0	4	0	5	0	0	2	0	0	0	10	0	0	10	0	7	0	0	1303	1341	
355	0	0	0	0	0	0	0	0	0	15	0	0	1	0	0	0	0	0	0	12	0	2	0	0	530	560	
356	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	593	0	0	5	0	3	0	0	102	715	
357	0	0	0	0	151	0	0	0	0	7	0	0	2	0	0	0	5	0	0	17	0	7	0	0	31	220	
358	1	0	0	0	15	0	0	0	6	20	0	0	7	0	0	0	1	0	0	18	0	5	0	0	301	374	
359 ^[1]	1	0	0	0	1	0	0	0	2	3	0	0	0	0	0	0	0	0	0	6	0	17	0	0	27	57	
360	0	0	0	0	59	0	0	0	16	23	0	0	1	0	0	0	2	1	4	27	0	6	0	0	178	317	
361	95	205	1	0	6	0	0	0	10	66	2	0	0	0	0	0	2	3	0	0	0	33	0	0	227	650	
362 ^[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	690
363	16	394	0	0	1	0	0	0	94	18	4	0	0	0	0	0	47	0	0	0	0	55	0	0	61	690	
364 ^[1]	12	168	0	0	0	3	0	0	44	28	5	3	0	0	0	0	0	1	0	0	0	25	0	0	98	387	
365	749	74	0	0	6	13	1	8	3	11	10	0	0	0	0	0	0	0	0	0	0	82	0	0	113	1070	

NOAA FISHERIES SERVICE-NEFSC SPRING BOTTOM TRAWL SURVEY 2015
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 FFLOUNDER	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
366	256	594	0	0	0	0	0	0	6	8	3	0	0	0	0	0	0	0	0	0	0	5	0	0	18	890
367	49	109	0	0	0	0	0	0	88	41	5	0	0	0	0	0	0	0	3	0	0	7	0	0	95	397
368	5	0	0	0	20	0	0	0	39	33	3	0	1	0	0	0	1	0	0	36	0	27	0	0	67	232
369	0	0	0	0	79	0	1	0	58	30	3	0	1	0	0	0	0	0	3	13	0	55	0	0	110	353
370	9	0	0	0	2	0	0	0	24	9	0	0	0	0	0	0	0	0	0	5	0	19	0	0	22	90
371	5	11	0	0	67	2	0	0	38	0	117	3	0	0	0	0	0	0	3	0	0	8	0	0	33	287
372	0	8	0	0	290	1	5	0	1	0	42	1	0	0	0	0	72	1	0	0	0	20	0	0	50	491
373	0	26	1	2	262	1	9	0	3	0	11	1	0	0	0	0	12	0	0	0	0	17	0	0	57	402
374	101	271	7	0	1	2	1	0	14	9	3	0	0	0	0	0	0	6	0	1	0	19	0	0	50	485
375	0	8	1	2	133	16	17	3	0	0	35	8	0	0	0	0	5	2	0	0	0	3	0	0	56	289
376	0	2	29	16	106	12	15	19	0	0	8	2	0	0	0	0	4	11	0	0	0	3	0	0	73	300
377	0	0	0	19	305	13	40	0	0	0	0	1	0	0	0	0	3	0	0	0	0	5	0	0	88	474
378	0	9	0	5	217	89	9	10	0	0	13	5	0	0	0	0	2	1	0	0	0	6	0	0	104	470
379	8	10	0	1	99	13	45	13	0	0	9	6	0	0	0	0	2	0	0	0	0	0	0	0	124	330
380	0	0	0	3	37	18	25	10	0	0	10	5	0	0	0	0	1	0	0	0	0	2	0	0	181	292
381	400	5868	1529	0	6	9	0	0	0	0	7	0	0	0	0	0	0	0	4	0	0	7	0	0	67	7897
382	0	11	0	1	528	1	1	0	0	0	10	2	0	0	0	0	3	0	0	0	0	23	0	0	78	658
383	0	5	0	3	140	1	4	0	0	0	23	1	0	0	0	0	37	0	0	0	0	12	0	0	43	269
384	0	1	0	7	205	1	7	0	0	0	9	4	0	0	0	0	35	1	0	0	0	15	0	0	35	320
385 ^[1]	11	1	7	2	28	11	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	61	0	0	104	228
386	0	2	0	9	236	0	1	0	0	0	0	6	0	0	0	0	1	0	8	0	0	46	0	0	40	349
387	1	1	1	18	293	1	5	30	0	0	14	10	0	0	0	0	1	0	0	0	1	37	0	0	126	539
388	0	1	3	17	162	674	3	2	0	0	7	6	0	0	0	0	6	0	0	0	0	38	0	0	45	964
389	0	8	22	37	88	7	42	445	0	0	8	9	0	0	0	0	5	8	0	0	0	2	0	0	116	797
390	0	0	9	45	87	52	36	26	0	0	0	10	0	0	0	0	1	3	0	0	0	19	0	0	44	332
391	0	0	0	38	138	3	0	28	0	0	6	1	0	0	0	0	3	4	0	0	0	4	0	0	29	254
392	0	2	0	20	24	0	22	5	0	0	15	2	0	0	0	0	4	4	0	0	0	6	0	0	35	139
393	0	0	0	15	89	2	77	14	0	0	3	8	0	0	0	0	1	3	0	0	0	0	0	0	78	290
394 ^[1]	0	13	1	0	2	1683	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	87	1792
395	0	2	0	9	64	33	15	28	0	0	7	8	0	0	0	0	1	9	0	0	0	4	0	0	80	260
396	4	1	0	4	57	0	12	0	0	0	1	2	0	0	0	0	0	3	0	0	0	17	0	0	86	187
397	27	44	49	16	79	75	0	107	0	0	0	5	0	0	0	0	4	0	0	0	0	23	0	0	59	488
398	0	7	0	9	76	0	0	133	0	0	0	1	0	0	0	0	5	0	0	0	0	6	0	0	24	261
399	3	131	1	0	4	0	0	0	0	12	0	0	0	0	0	0	27	50	3	0	0	21	0	0	44	296
400	1	590	4	8	28	0	0	0	0	3	5	13	0	0	0	0	39	4175	18	3	0	12	0	0	88	4987
401	9	14	1	24	88	5	29	14	0	0	1	8	0	0	0	0	0	14	0	0	0	2	1	0	68	278
402 ^[1]	13	78	0	2	308	0	1	3	0	0	0	0	0	0	0	0	0	4	0	0	0	16	0	0	241	666
403	0	8	0	1	68	1468	3	6	0	0	1	11	0	0	0	0	0	0	0	0	0	6	0	0	45	1617

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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 FFLOUNDER	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
404	0	0	0	9	47	11	4	82	0	0	0	1	0	0	0	0	4	0	0	0	13	0	0	37	208	
405 ^[1]	4	60	3	5	114	13	0	14	0	0	0	26	0	0	0	0	1	1	0	0	0	10	0	0	56	307
406	0	0	0	17	36	0	1	9	0	0	3	16	0	0	0	0	2	0	4	0	0	17	0	0	44	149
407	0	6	0	35	11	4	1	5	0	0	1	5	0	0	0	0	1	0	0	0	0	60	0	0	21	150
408	2	51	0	7	15	1	5	3	0	29	2	1	0	0	0	0	0	0	0	0	0	128	0	0	61	305
409	2	119	0	1	3	0	0	0	0	28	1	0	0	0	0	0	2	0	0	0	0	136	0	0	52	344
410	0	2	0	0	4	0	2	0	0	9	9	0	0	0	0	0	1	0	0	0	0	32	0	0	13	72
411 ^[1]	3	0	0	0	1	2	0	0	0	8	4	0	0	0	0	0	88	0	0	0	0	233	0	0	20	359
412 ^[1]	1	1	1	0	6	0	0	0	0	4	3	0	1	0	0	0	8	0	0	0	0	134	0	0	12	171
413	0	0	0	14	61	1	0	0	0	0	7	5	0	0	0	0	1	0	0	0	0	69	0	0	39	197
414	0	0	0	0	12	0	0	0	1	2	5	0	0	0	0	0	49	0	0	0	0	290	0	0	68	427
415	0	0	0	0	12	0	1	0	0	1	10	0	0	0	0	0	4	0	0	0	0	286	0	0	18	332
416	0	0	0	1	0	0	0	0	0	1	7	0	0	0	0	0	6	0	0	0	0	325	0	0	23	363
417	0	1	0	1	18	0	1	0	1	1	21	0	0	0	0	0	8	0	0	0	0	62	0	0	30	144
418	0	0	0	2	26	0	1	0	0	1	24	0	0	0	0	0	1	0	0	0	0	47	0	0	38	140
419 ^[1]	0	0	0	0	12	0	1	0	2	1	7	0	0	0	0	0	5	1	0	0	0	37	0	0	45	111
420	0	3	0	2	10	1	1	0	8	2	19	0	0	0	0	0	2	0	0	0	0	29	0	0	43	120
421	0	14	0	0	145	194	1	0	3	0	74	2	0	0	0	0	0	0	0	0	0	16	0	0	106	555
422	3	16	0	0	60	50	2	0	31	2	43	1	0	0	0	0	1	0	3	0	0	47	0	0	146	405
423	376	179	0	0	1	0	2	0	61	10	3	0	0	0	0	0	0	0	3	0	0	57	0	0	40	732
424	7	129	0	8	316	15	30	91	2	0	15	7	0	0	0	0	0	1	0	0	0	9	0	0	65	695
425	6	16	0	0	34	51	4	48	3	1	17	1	0	0	0	0	4	0	0	0	0	28	0	0	72	285
426	0	12	3	2	168	24	32	0	0	0	11	2	0	0	0	0	0	0	0	0	0	7	0	0	65	326
TOTAL	3115	40155	1909	1087	18230	7800	2271	60038	903	1024	933	435	369	1365	911	263	5319	7473	9838	11570	2743	4624	2880	188	48869	234312

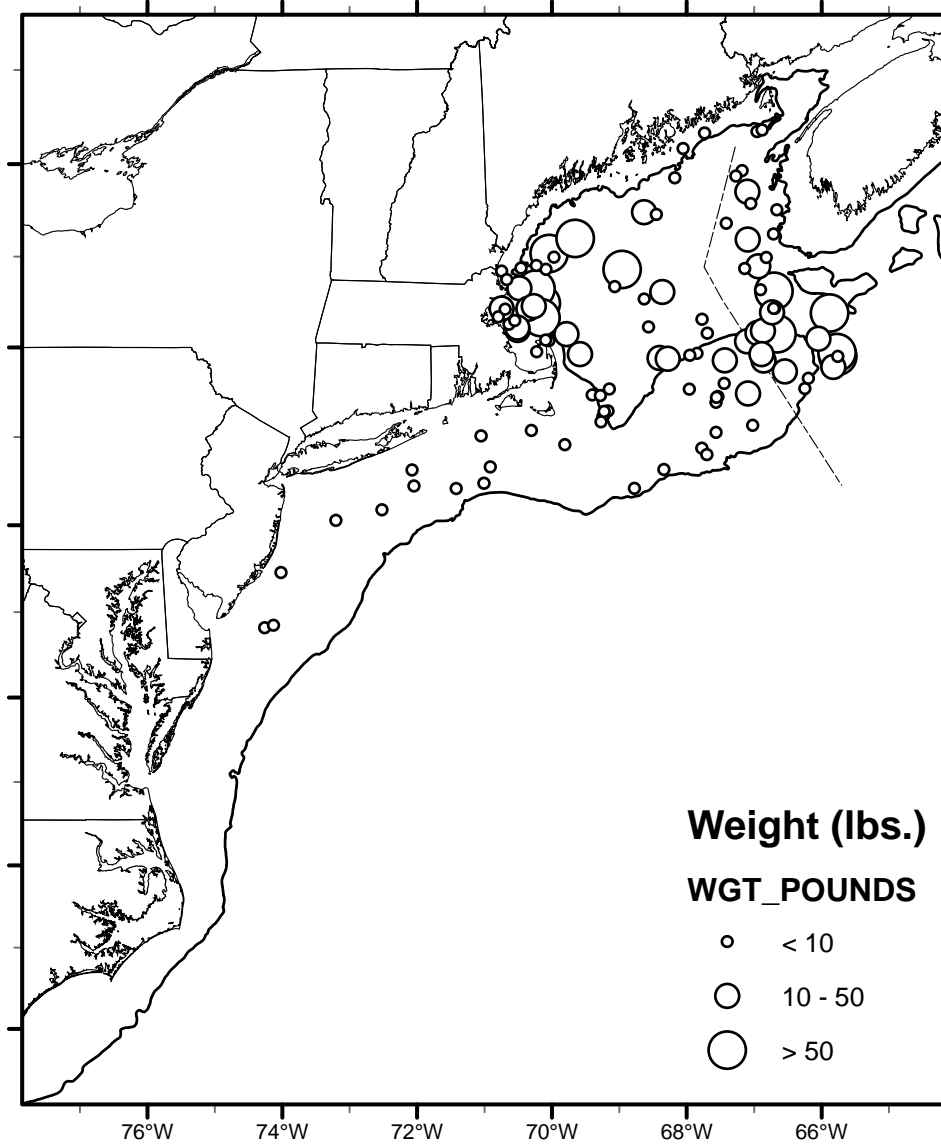
^[1] Excluded from stock assessment due to an unacceptable tow evaluation code

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

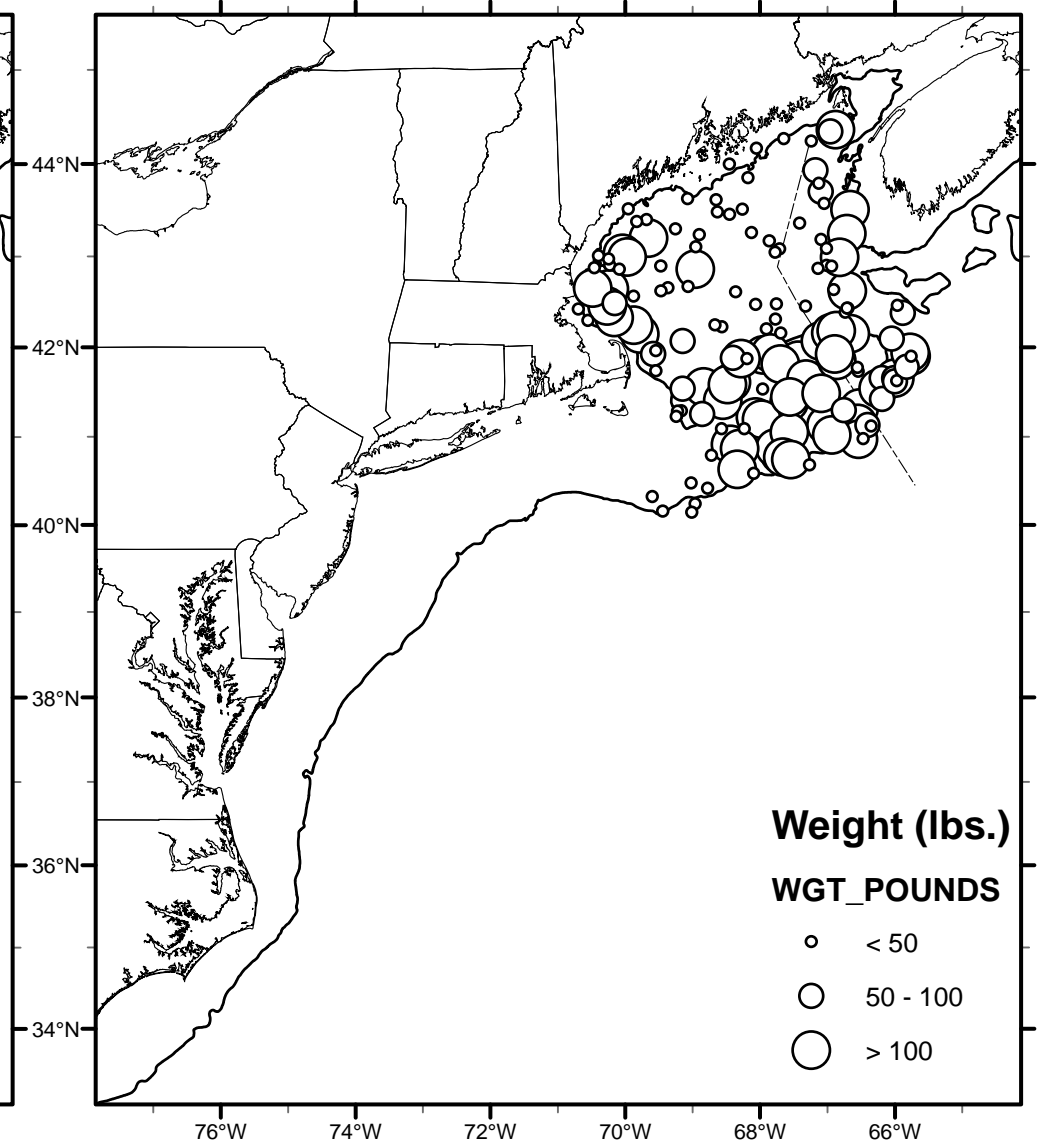
^[3] Missing sequential numbers indicate either a test-tow or no-trawl was attempted

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ATLANTIC COD

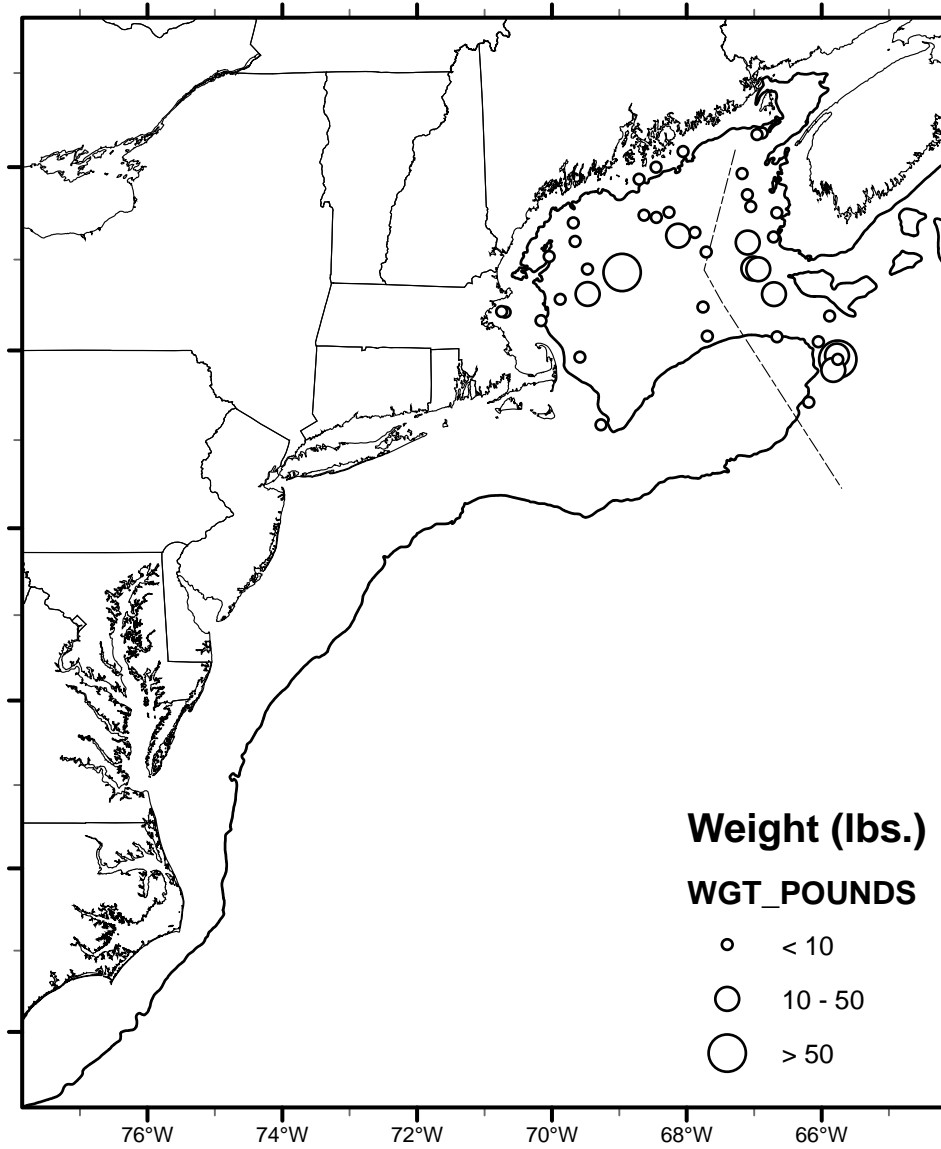


HADDOCK

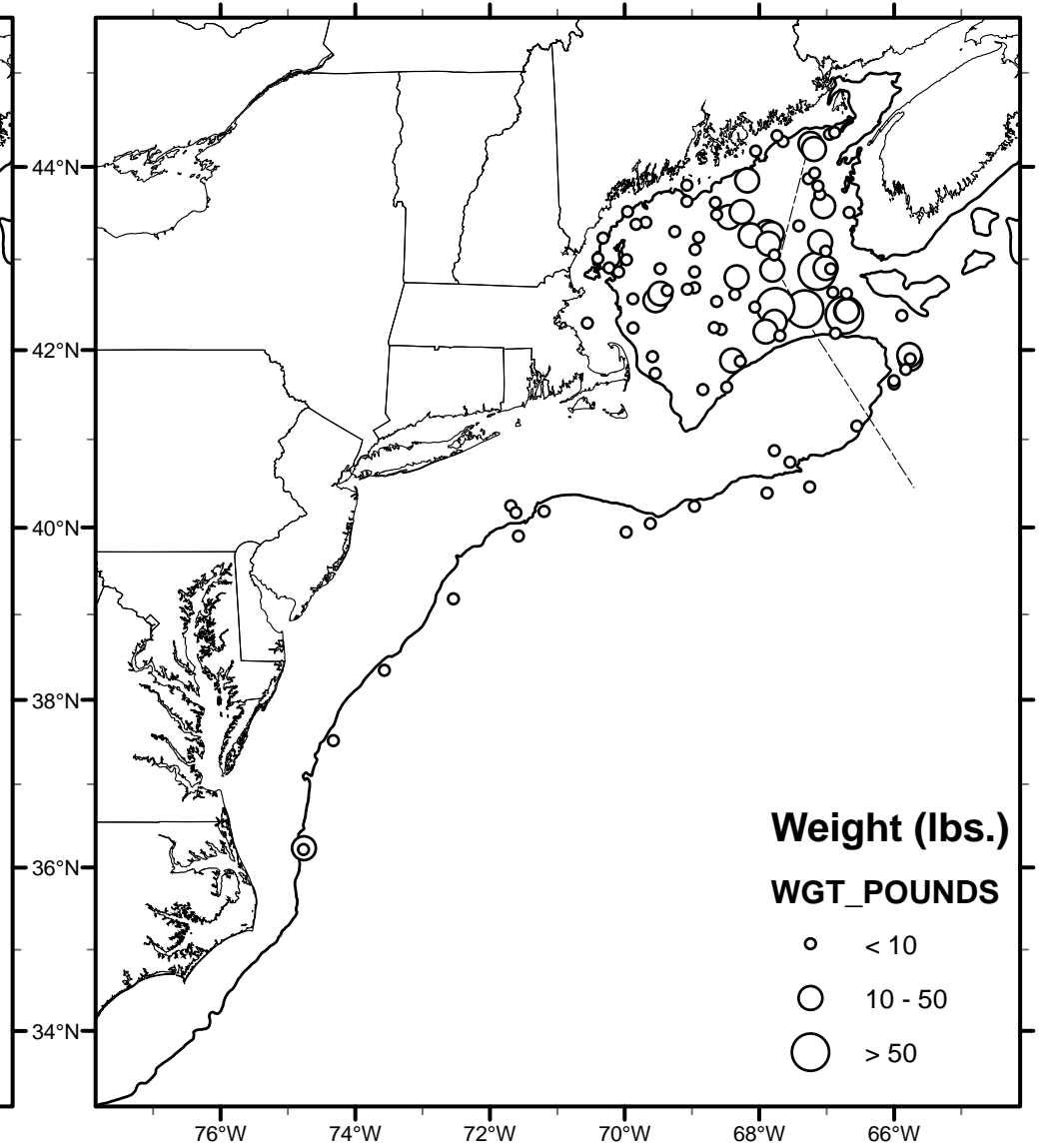


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POLLOCK

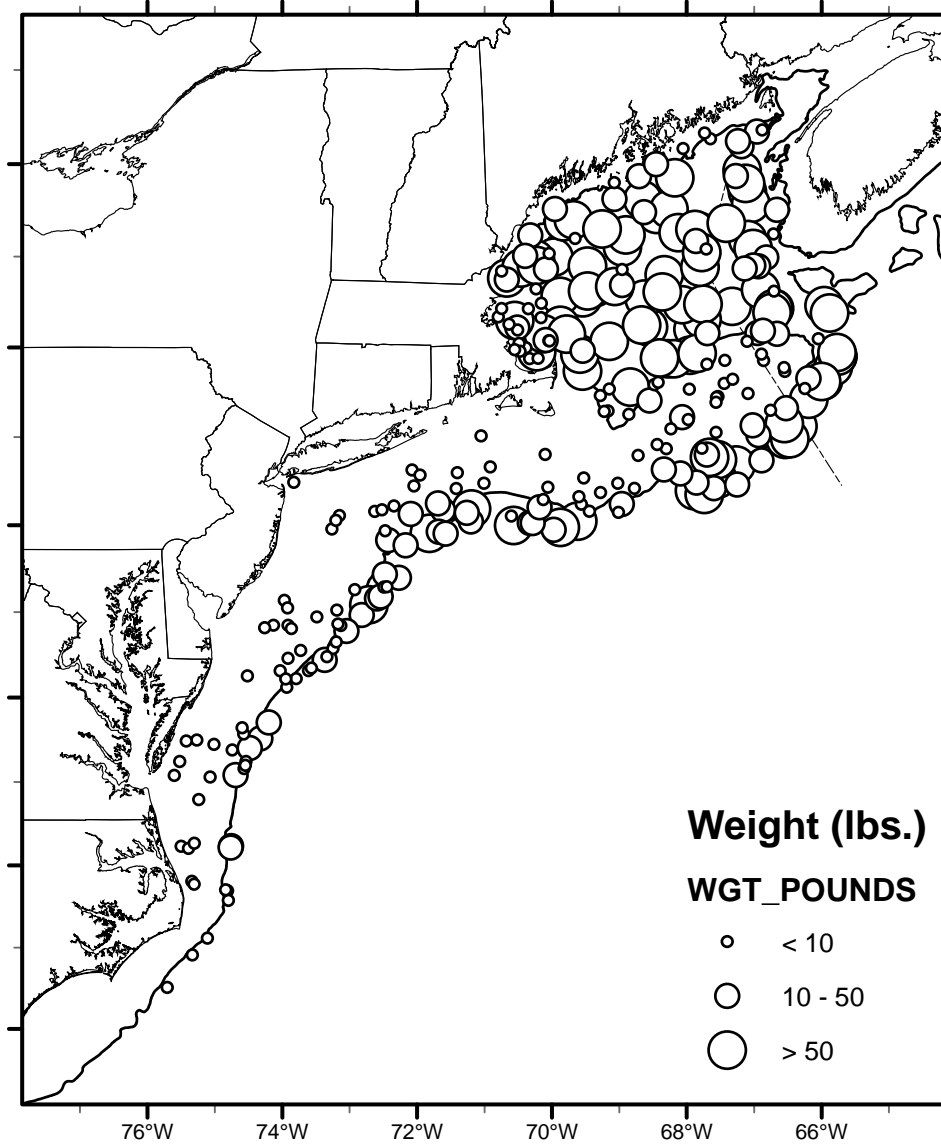


WHITE HAKE

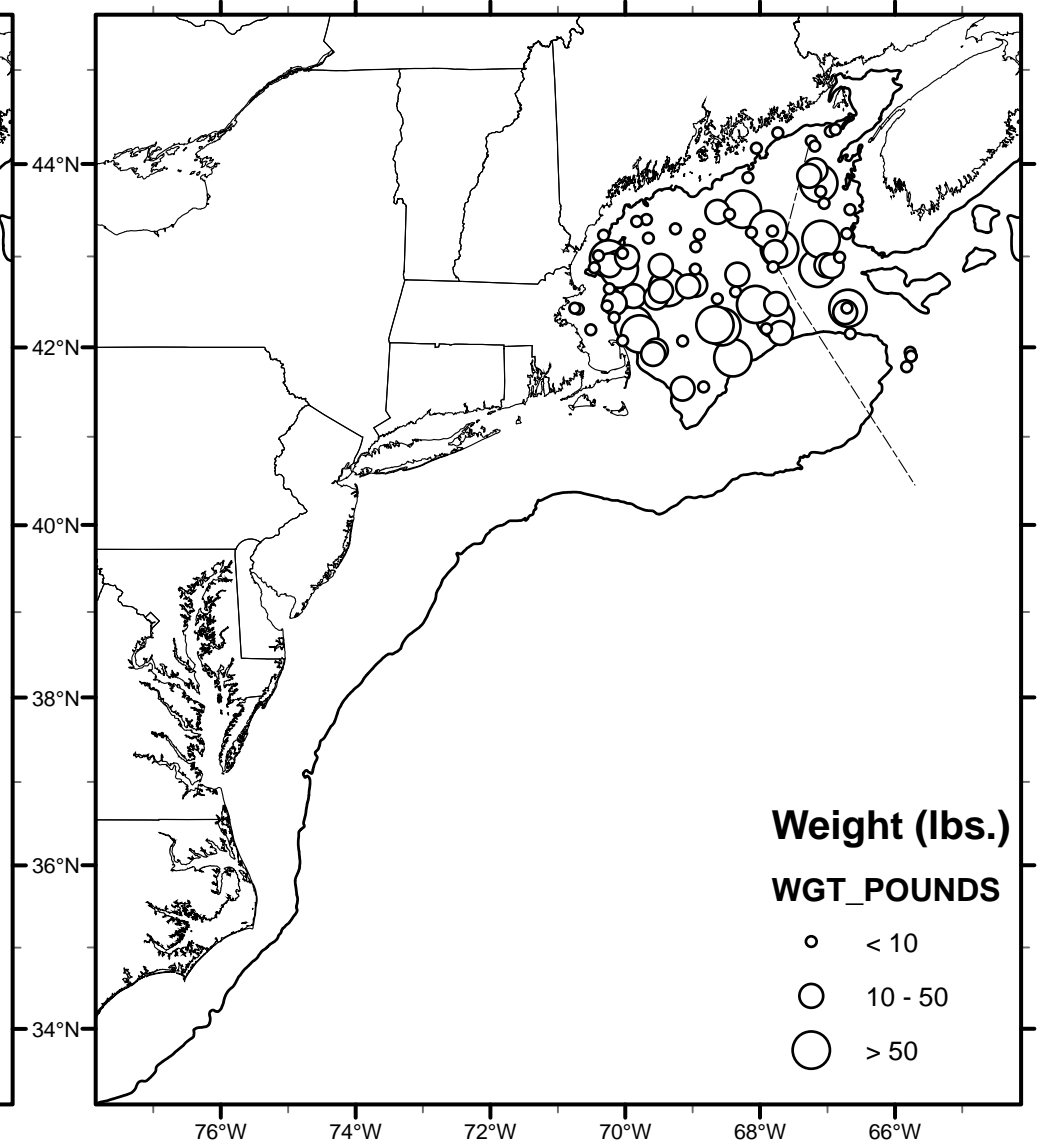


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SILVER HAKE

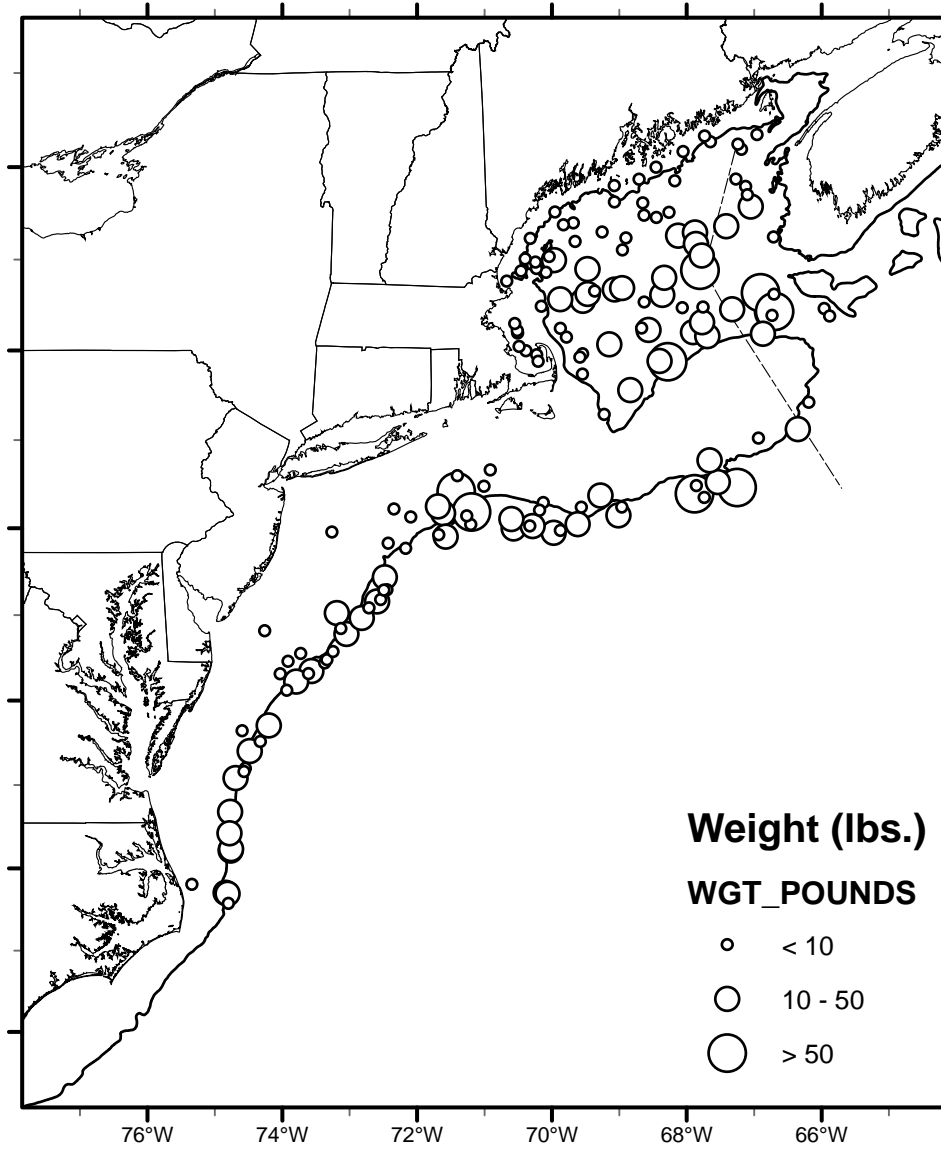


ACADIAN REDFISH

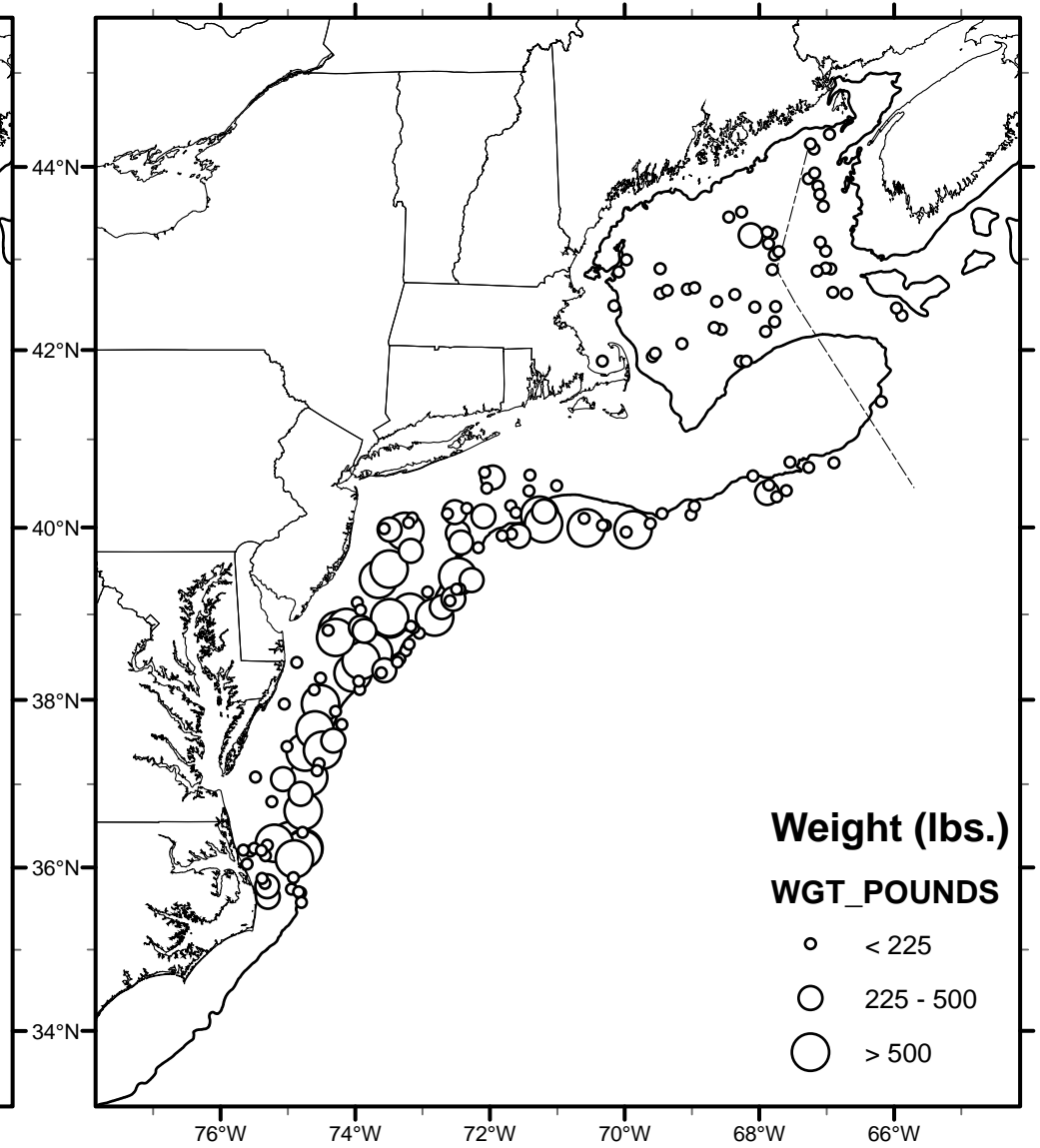


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GOOSEFISH

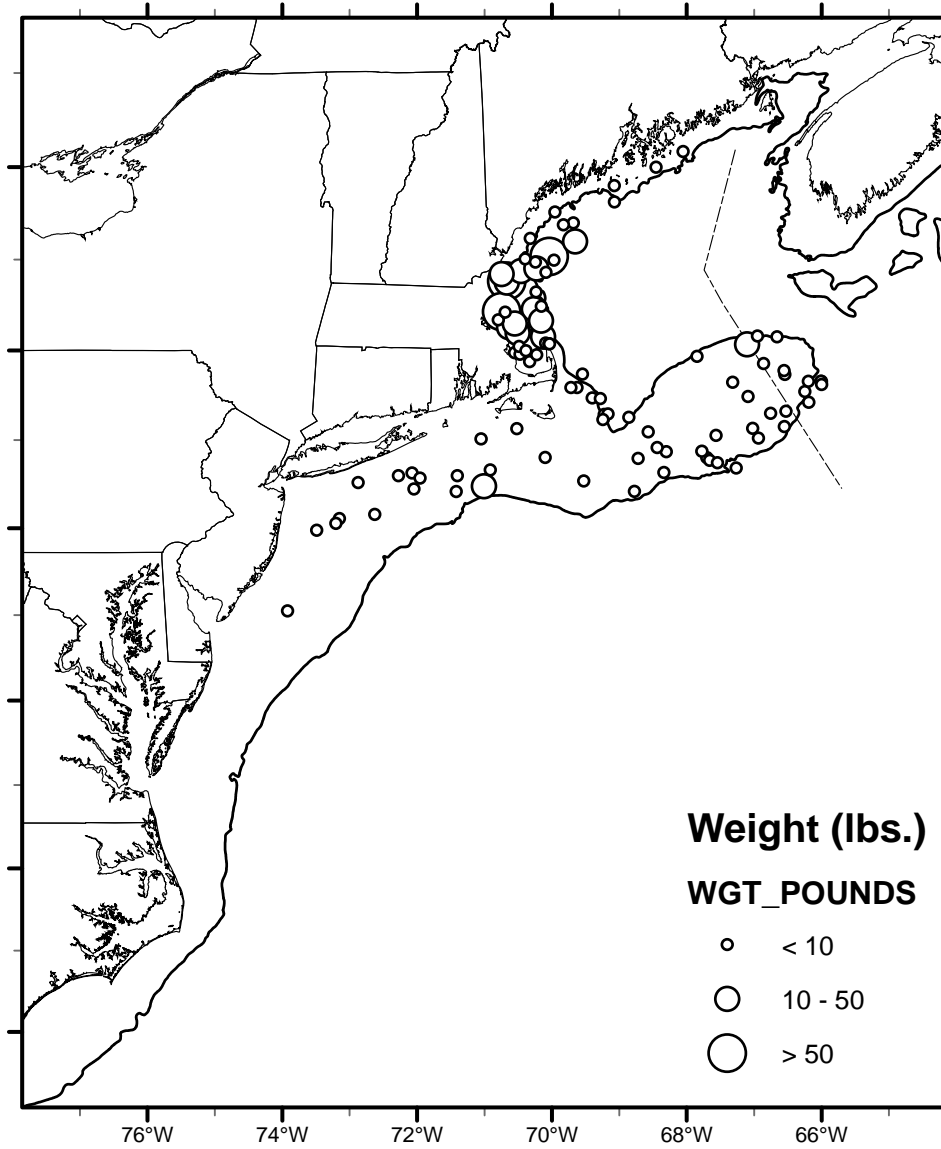


SPINY DOGFISH

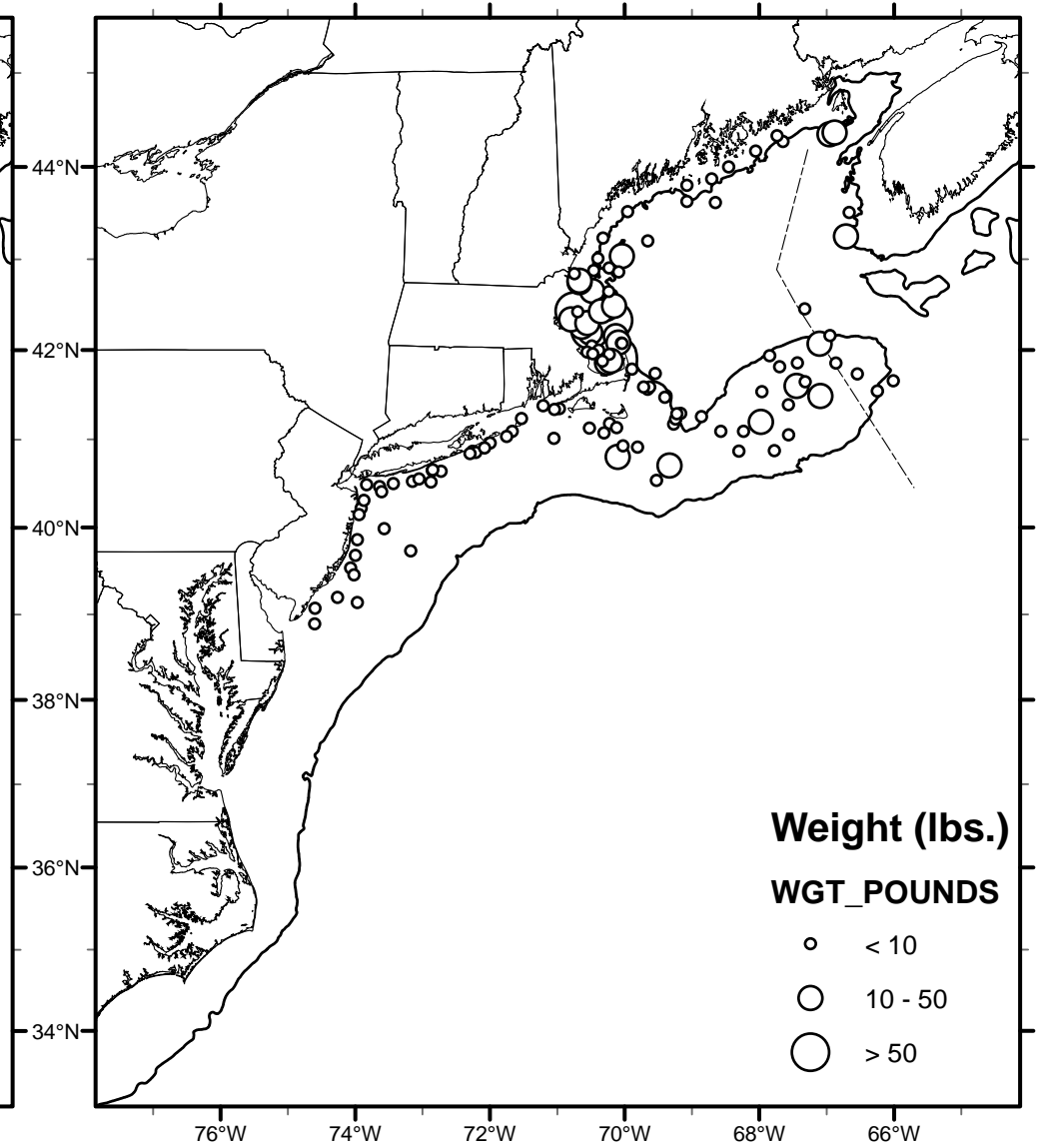


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YELLOWTAIL FLOUNDER

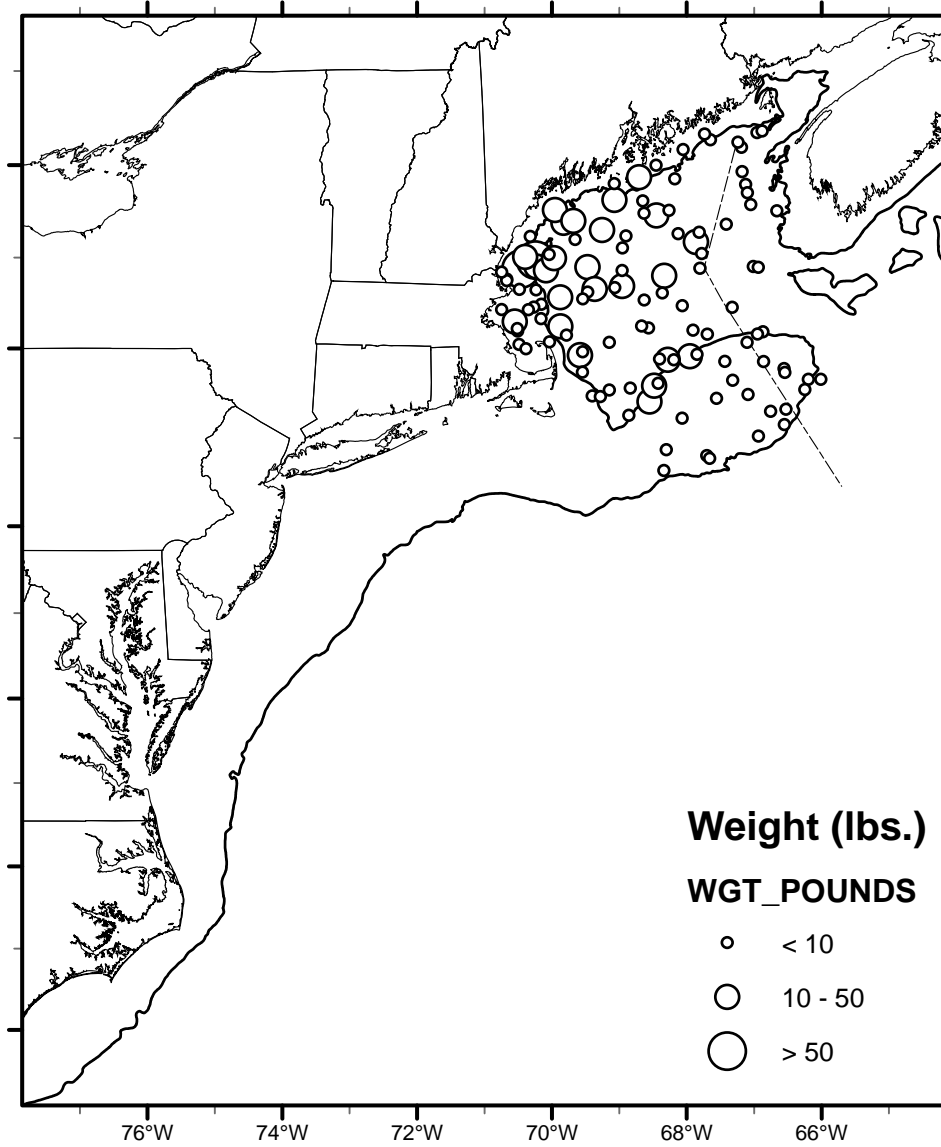


WINTER FLOUNDER

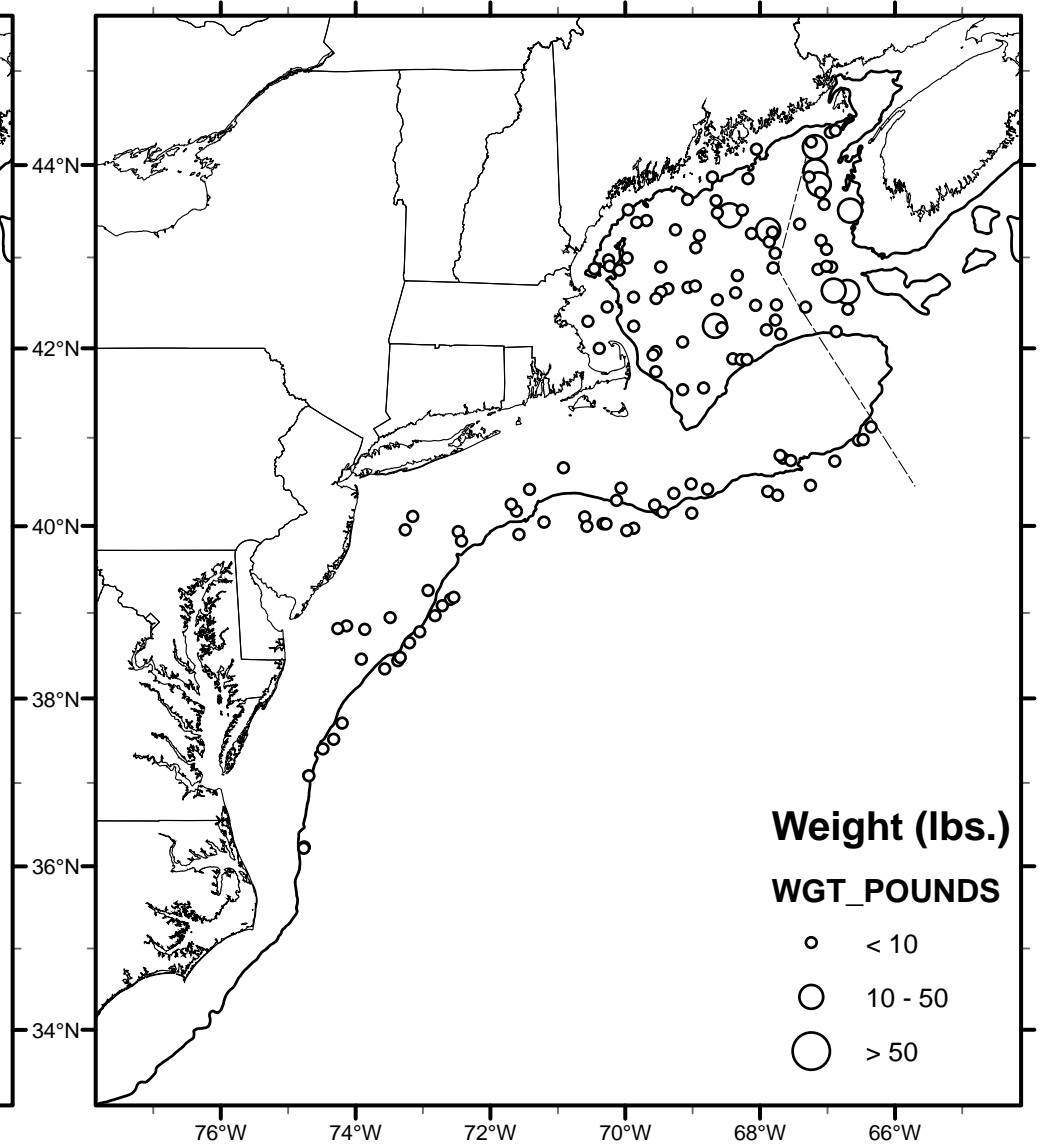


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AMERICAN PLAICE

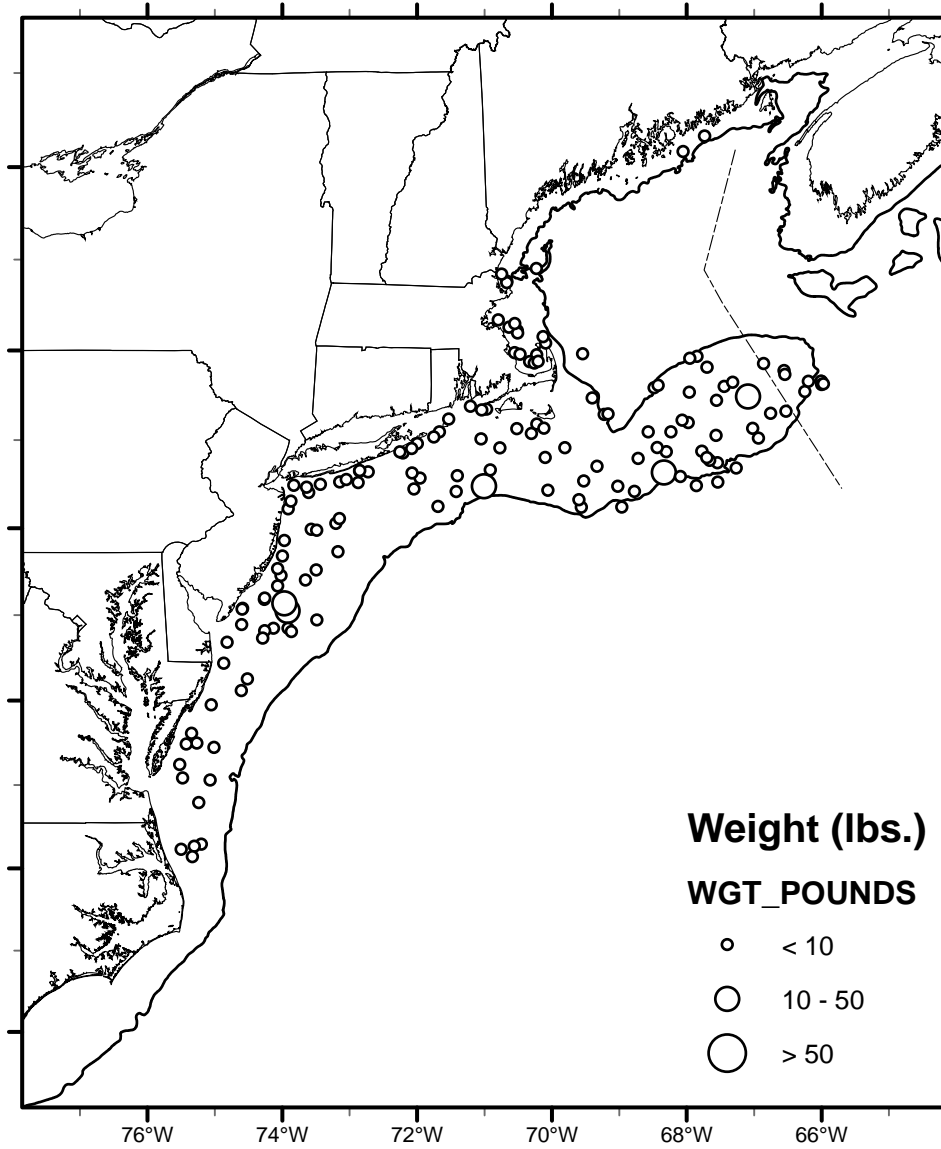


WITCH FLOUNDER

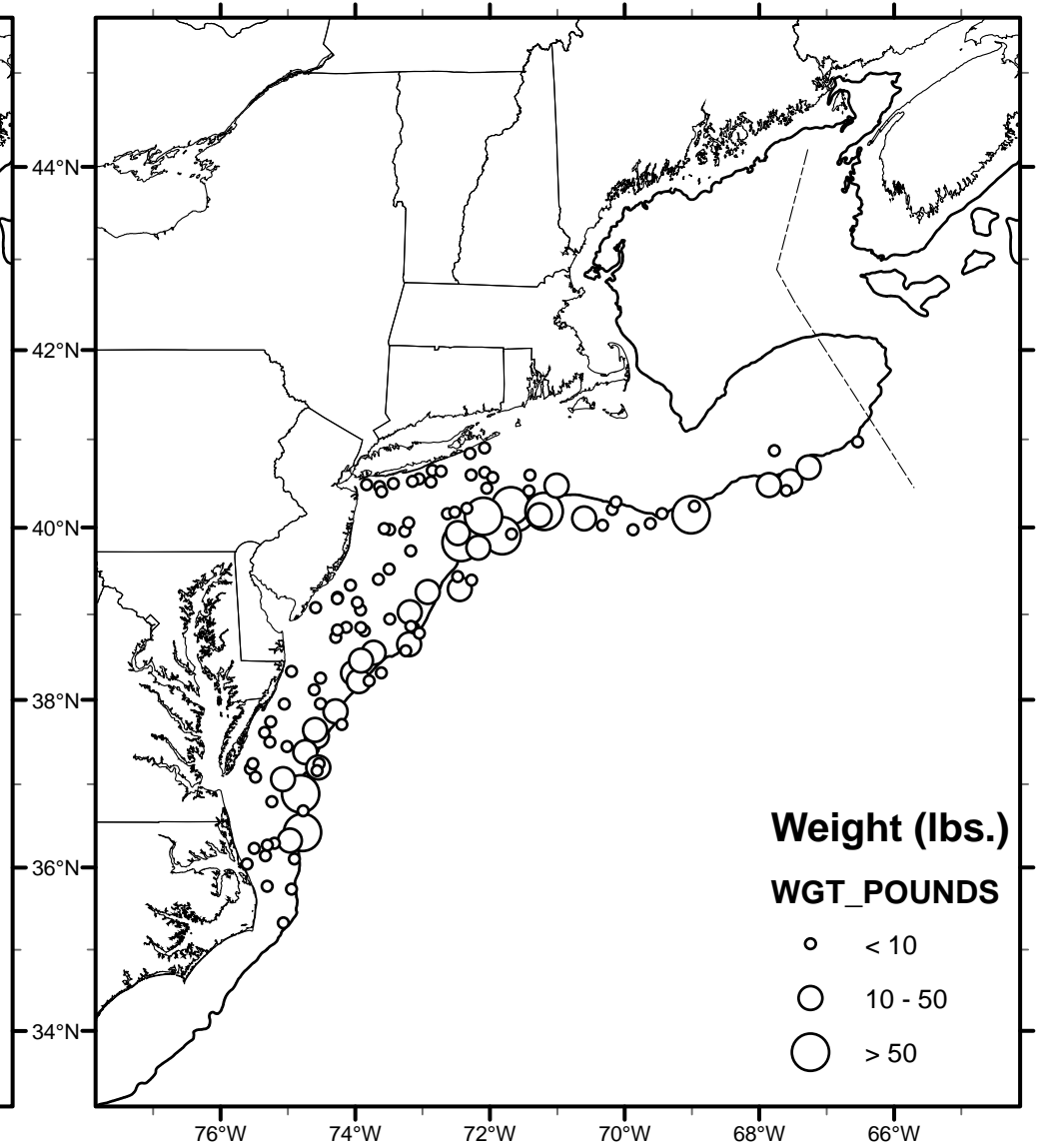


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WINDOWPANE FLOUNDER

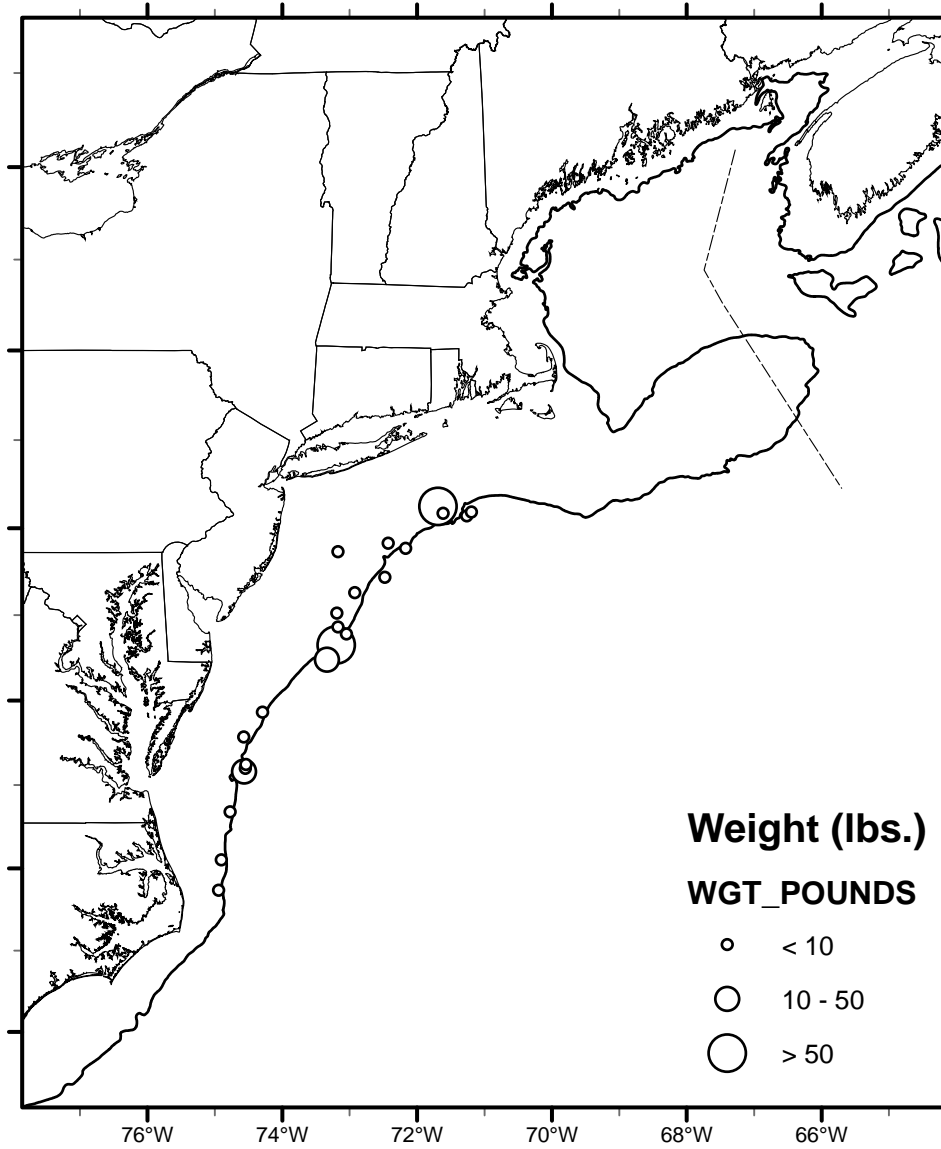


SUMMER FLOUNDER

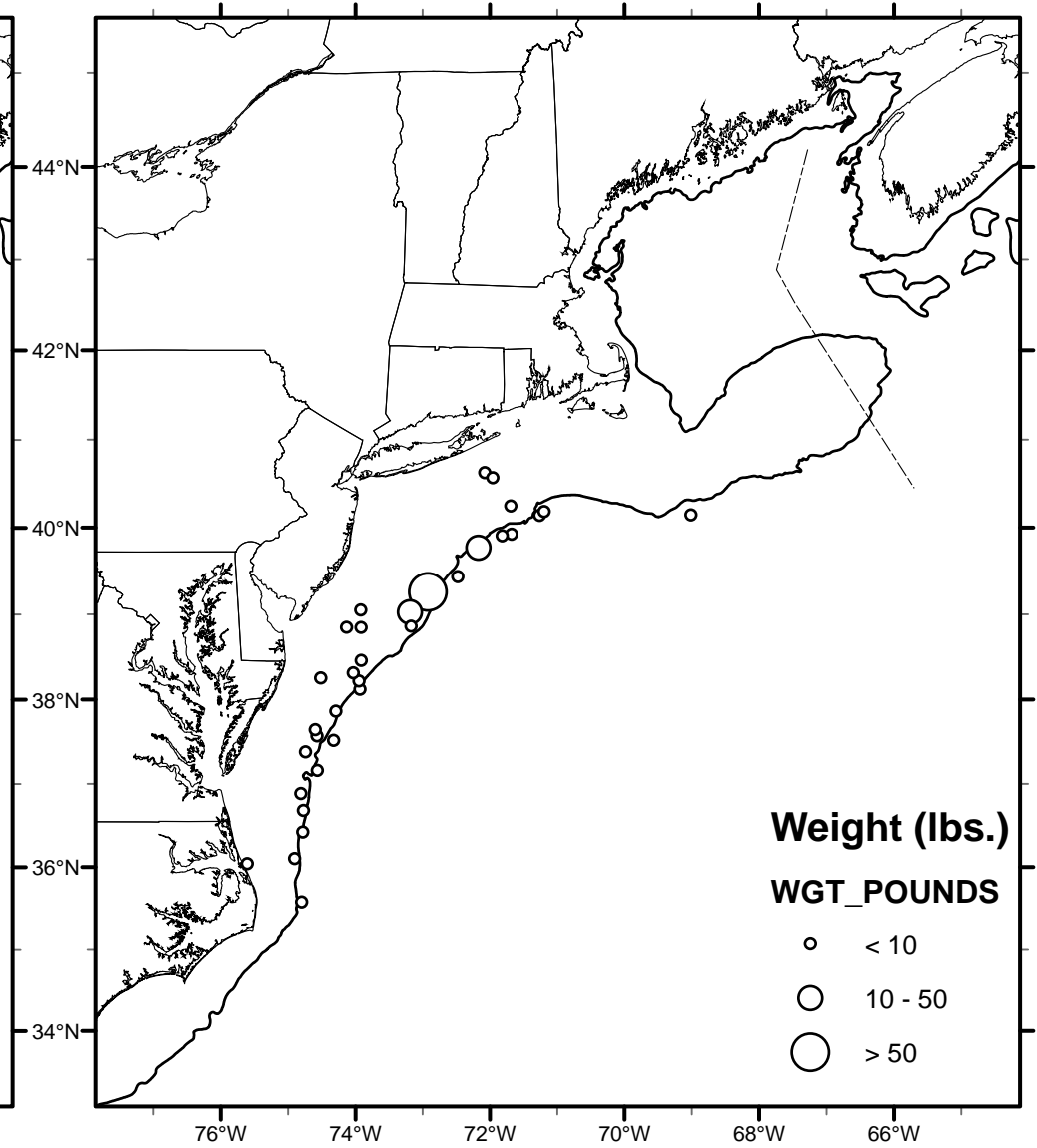


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SCUP

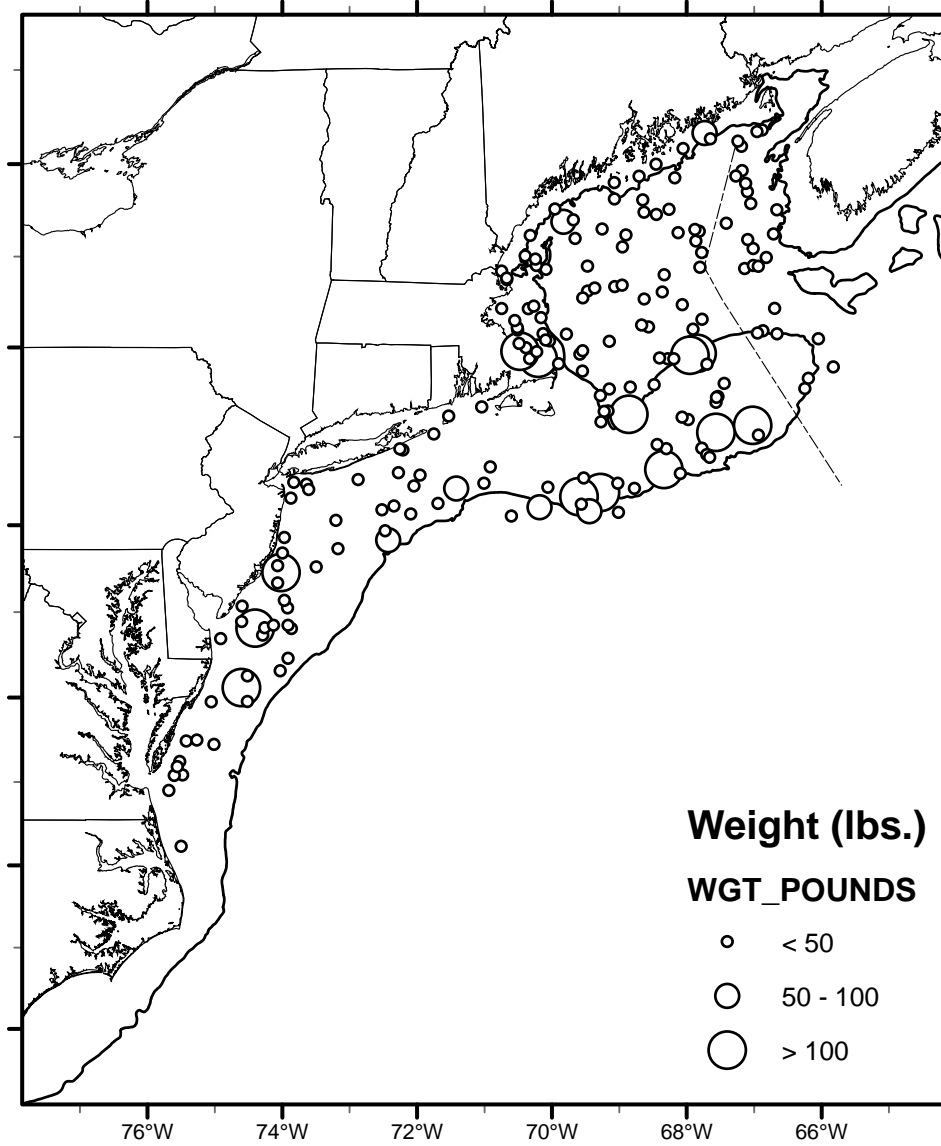


BLACK SEA BASS

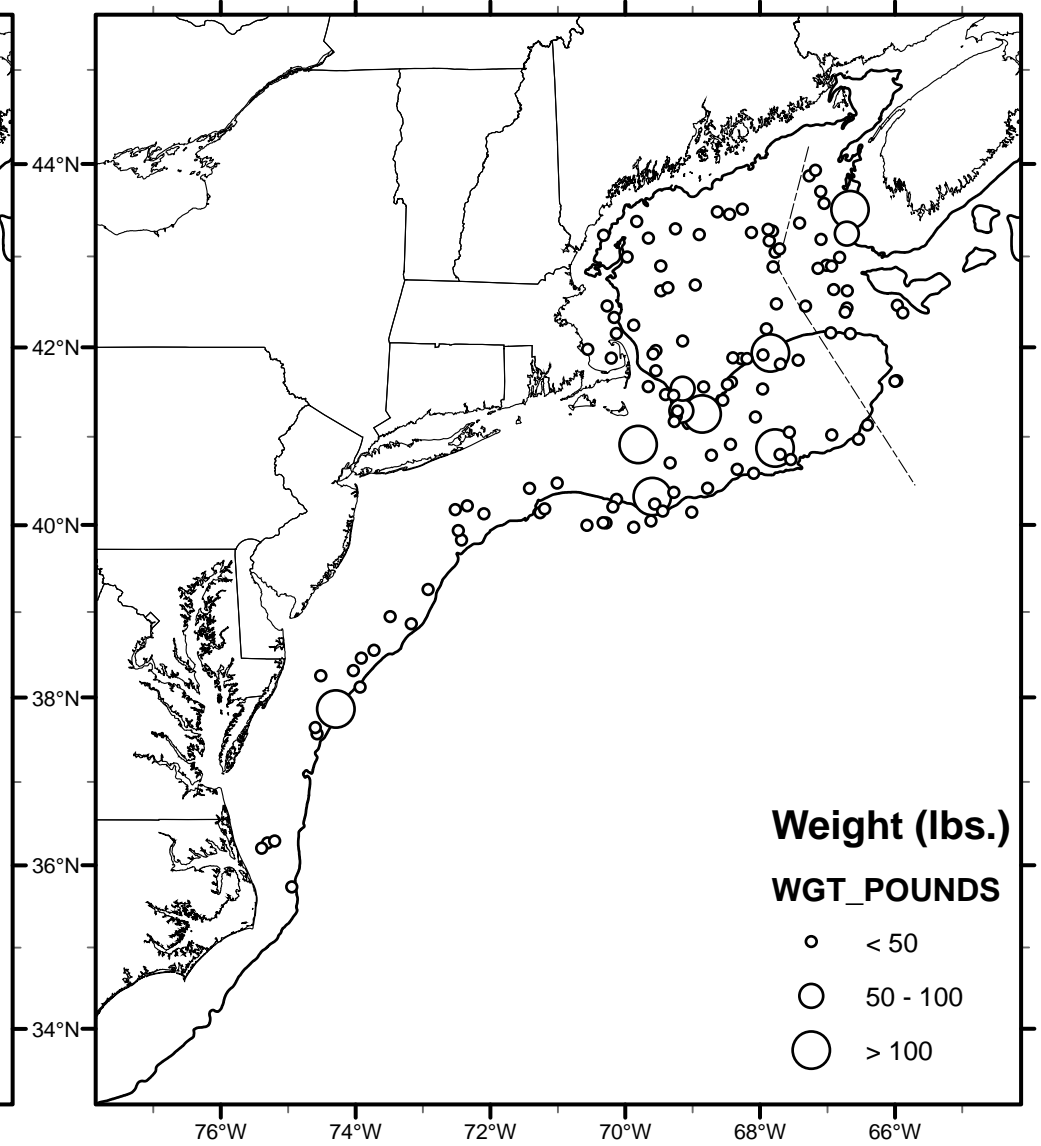


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ATLANTIC HERRING

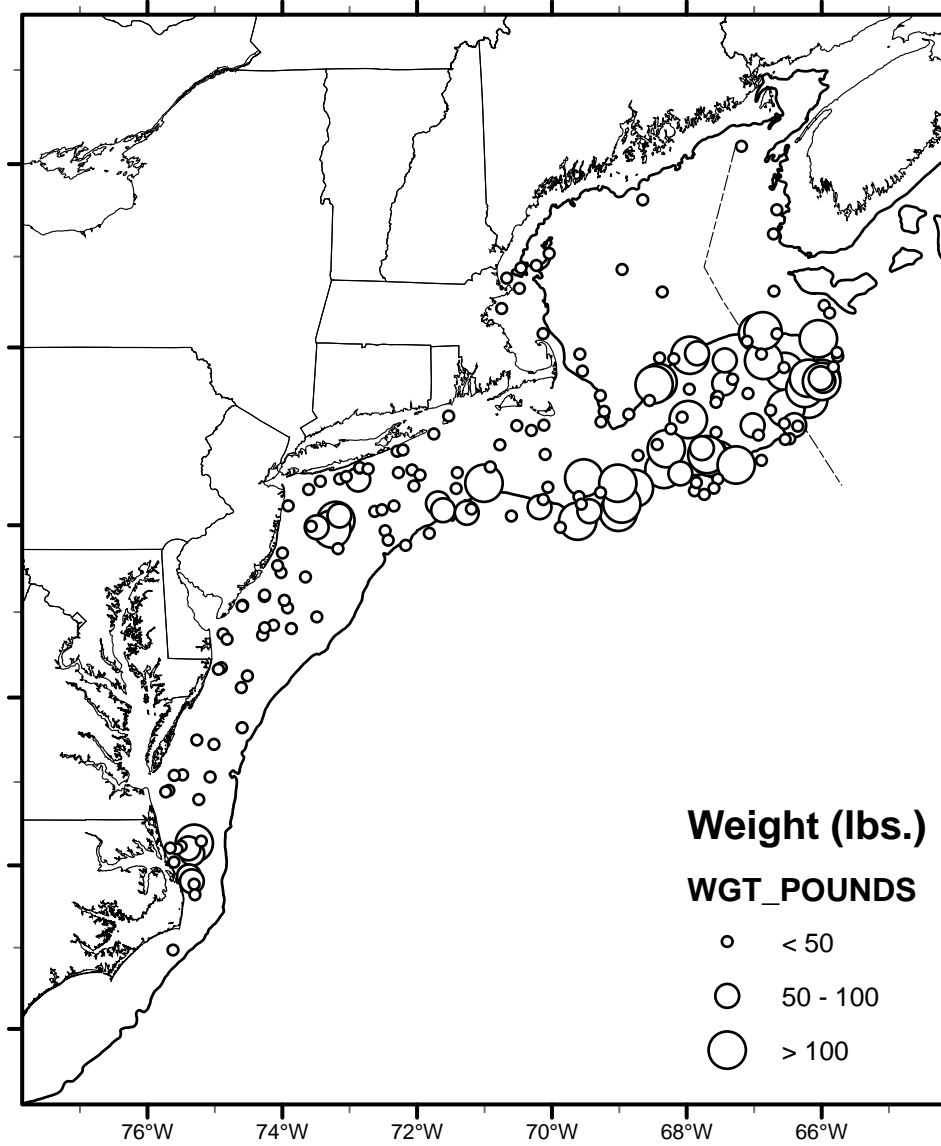


ATLANTIC MACKEREL

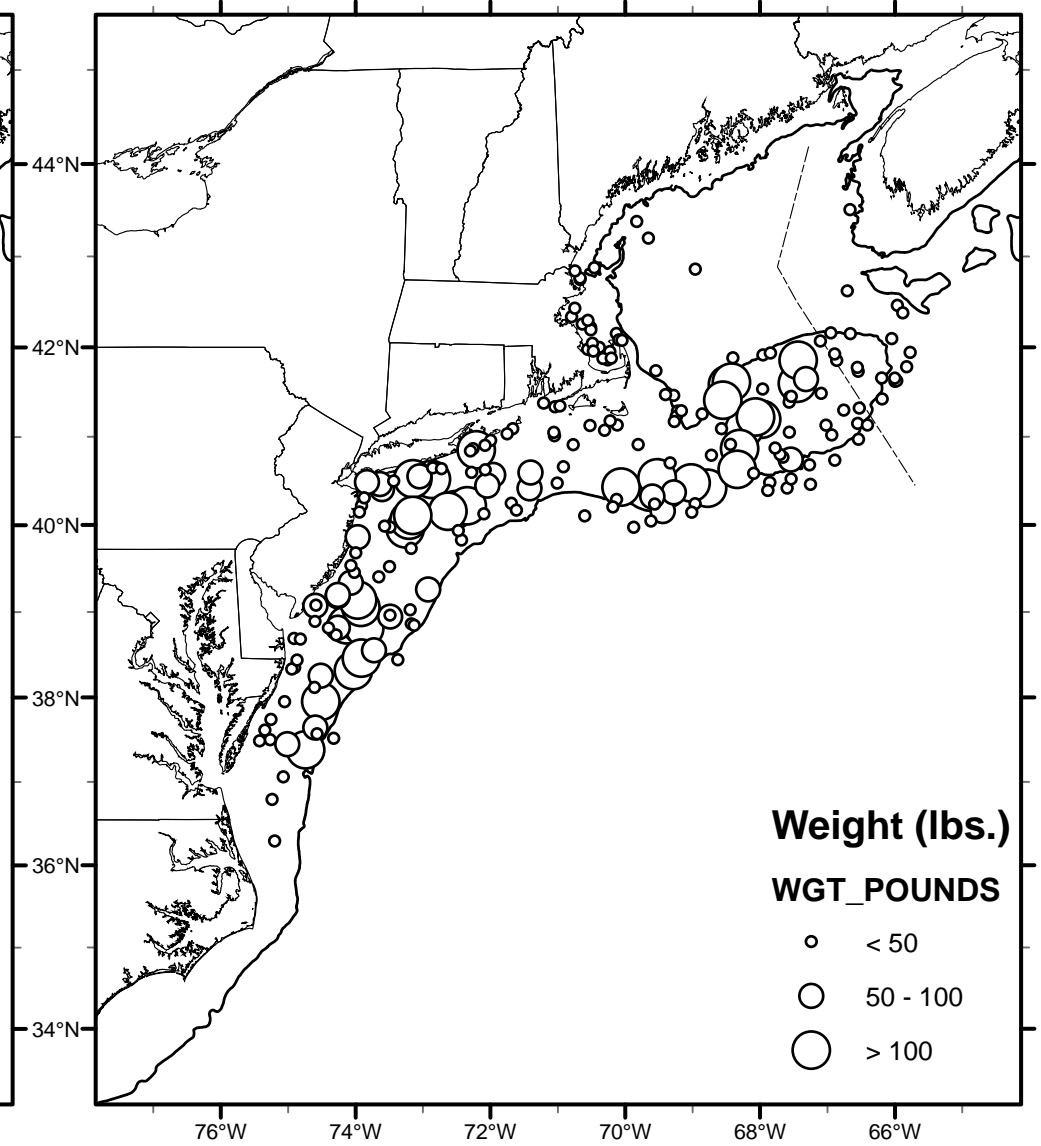


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WINTER SKATE

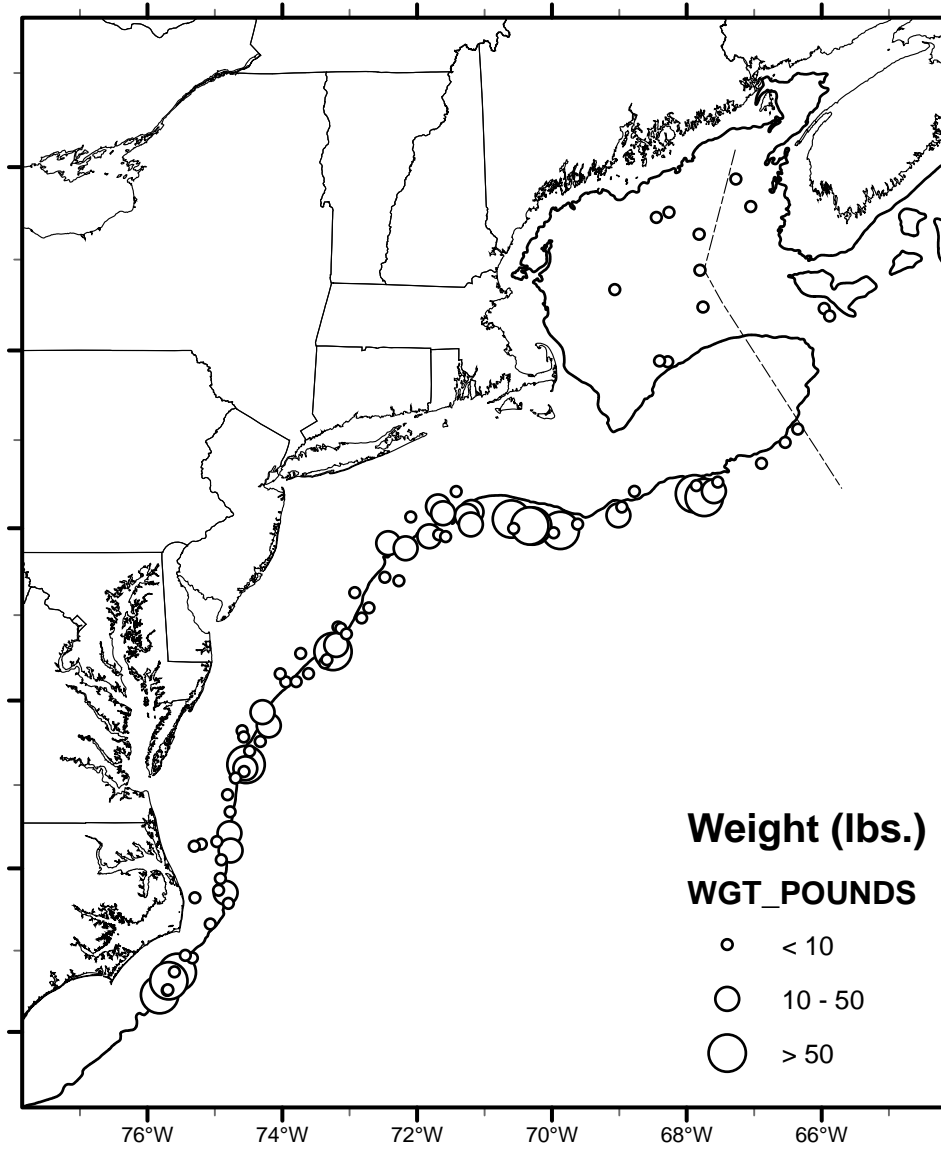


LITTLE SKATE

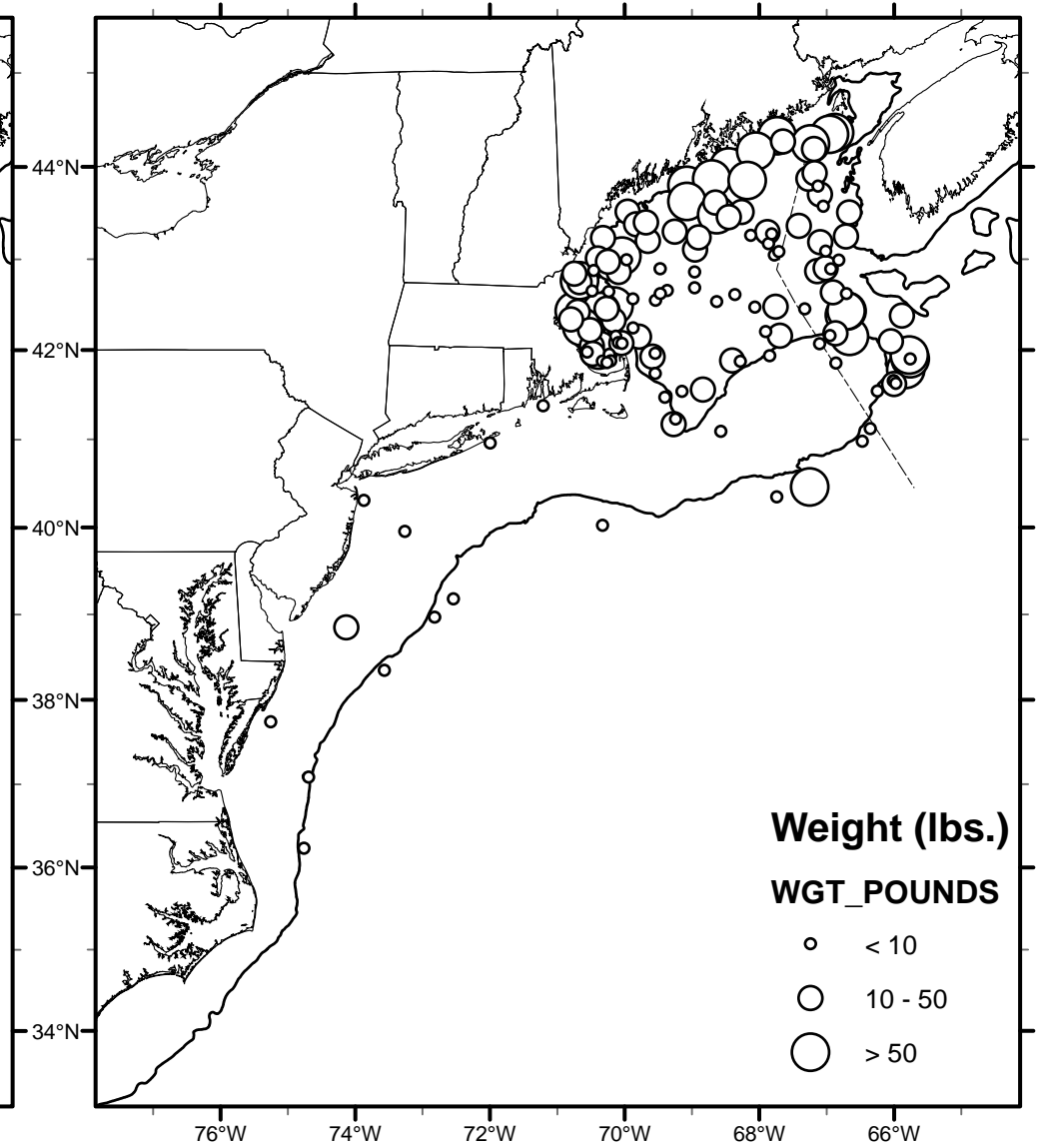


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BUTTERFISH

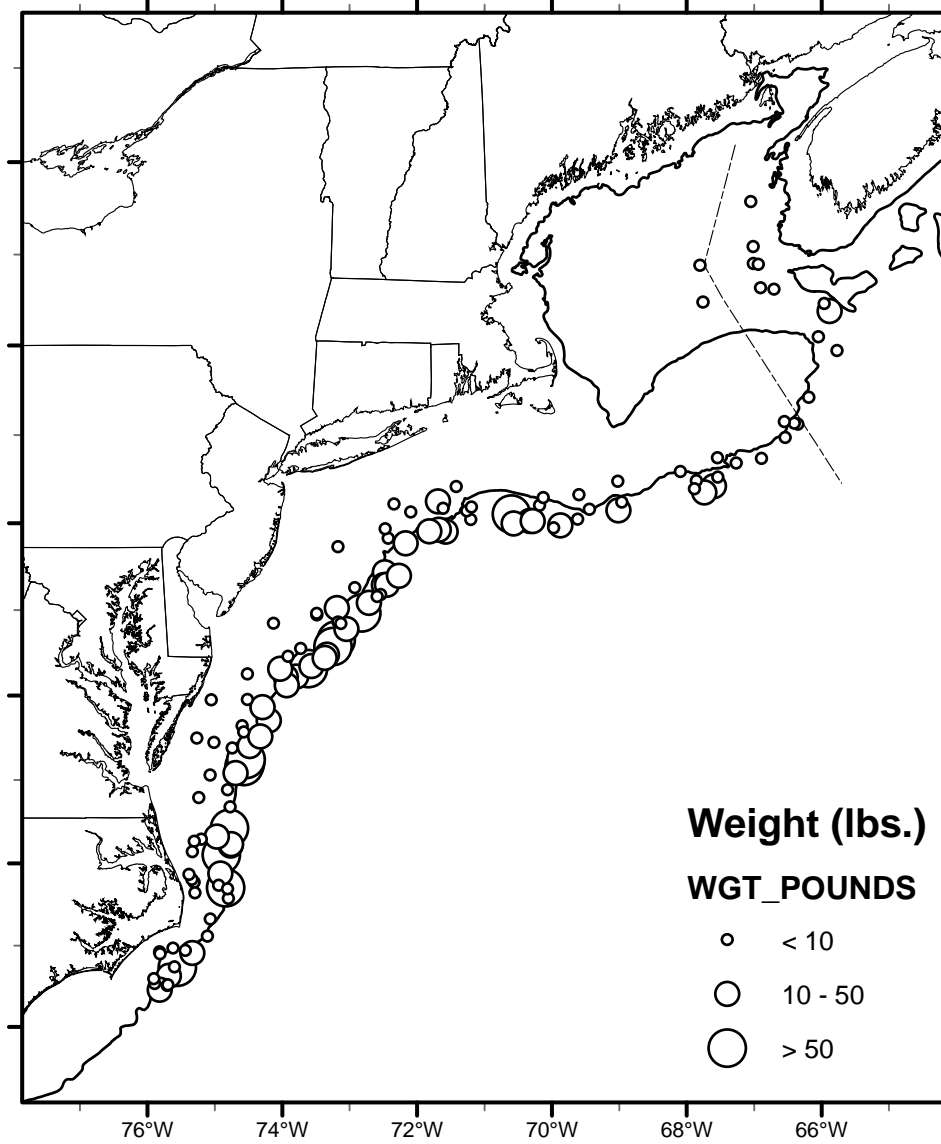


AMERICAN LOBSTER



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LOLIGO SQUID



ILLEX SQUID

