RESOURCE SURVEY REPORT
Catch Summary
NOAA Fisheries Service
Northeast Fisheries Science Center
Spring Bottom Trawl Survey
Cape Hatteras - Gulf of Maine
5 March – 9 May 2013

Submitted to: NOAA, NEFSC

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Date: 2013

Resource Survey Report

Bottom Trawl Survey

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NOAA FSV *Henry B Bigelow* (FSV 225)

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

NOAA FSV *Henry B Bigelow* (FSV 225) transiting through the Cape Cod Canal.

Blueback Herring (*Alosa aestivalis) (top),*
Alewife (*Alosa pseudoharengus) (middle) and*
Atlantic Herring (*Clupea harengus) (bottom)*

Scientists sorting a catch of
American lobster *(Homarus americanus)*

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

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Attached are field notes, station and catch summaries and a series of geographical plots of commercially and recreationally important species caught during the Northeast Fisheries Science Center's 2013 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, 550kg (1200lbs) Poly Ice Oval doors, and 36.6m (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 in PDF go to the Ecosystems Surveys Branch website at: **http://www.nefsc.noaa.gov/esb** and choose:

- Resource Survey Reports
  - Available RSR
    - Select season and year of interest

Field Notes

In an effort to share some of the natural history observations made during the bottom trawl survey, we have requested that the Chief Scientists on each part of the cruise comment on some of the more interesting catches that were brought aboard FSV *Henry B. Bigelow*.

Leg 1: A Surprise Visitor

This year on Leg I we received a surprise visitor to our survey; a 6.3 meter basking shark which we were able to successfully tag and release. We were alerted to something unusual late in the tow, as we watched our tension and current readings start to vary. Speculation on strange currents or environmental forces later gave way to the biological origin when the large shape became visible on deck. The animal was perfectly placed at the seam of our cod end and tailpiece, and the deck crew quickly cut an opening whereupon the shark undulated right out of the net in about 3 tail shakes. After tagging, and taking measurements, the huge animal swam off in good condition.

Leg 2: At-Sea Transfer

Leg 2 began with an at-sea transfer of scientific staff aboard the HB Bigelow. The scientific party boarded a launch in Cape May, NJ that brought them to the vessel which was waiting in Delaware Bay. The purpose of the transfer was to save time as the survey was significantly behind at the end of leg 1. After the unusual start, leg 2 went very smoothly and we were able to make up a lot of lost time. The catches were relatively light inshore, as expected during the spring

The FSV *Henry B. Bigelow* in Delaware Bay after an at-sea crew transfer.

Leg 3: Challenges Around Every Corner

This was a cruise that managed to achieve considerable success despite considerable adversity. A variety of mechanical issues affected the trip. First off, the multibeam-sounder was not operating

properly at the beginning of the cruise, just as we were working our way through the treacherous Great South Channel. Amazingly we only suffered one torn net. Second, a piston in one of the four generators blew-out; thankfully no injuries occurred, but the event was a sobering one nonetheless. Finally, we encountered the customary rough spring Georges Bank weather which slowed operations. In contrast, the catches were quite manageable and we were able to successfully complete the leg.

Leg 4: The Finale

Leg IV of the 2013 Spring Bottom Trawl Survey completed the remaining stations in the central and western Gulf of Maine. We then moved inshore to finish up in Massachusetts and Cape Cod Bays. One of our volunteers during this leg was author Rowan Jacobsen, who was writing an article for Yankee Magazine. Rowan was a fully-fledged member of the scientific watch, working a 12 hour shift alongside the center's other scientists and volunteers. He was fully immersed in the sorting of species, taking biological samples and electronic entry of data. He also found time to interview members of the ship's crew to complete his picture of a bottom trawl survey. His article "Counting fish: estimating the Gulf of Maine's fish population" appeared in the November/December 2013 edition of Yankee Magazine. The article can be found at the following link: http://www.yankeemagazine.com/article/features/counting-fish

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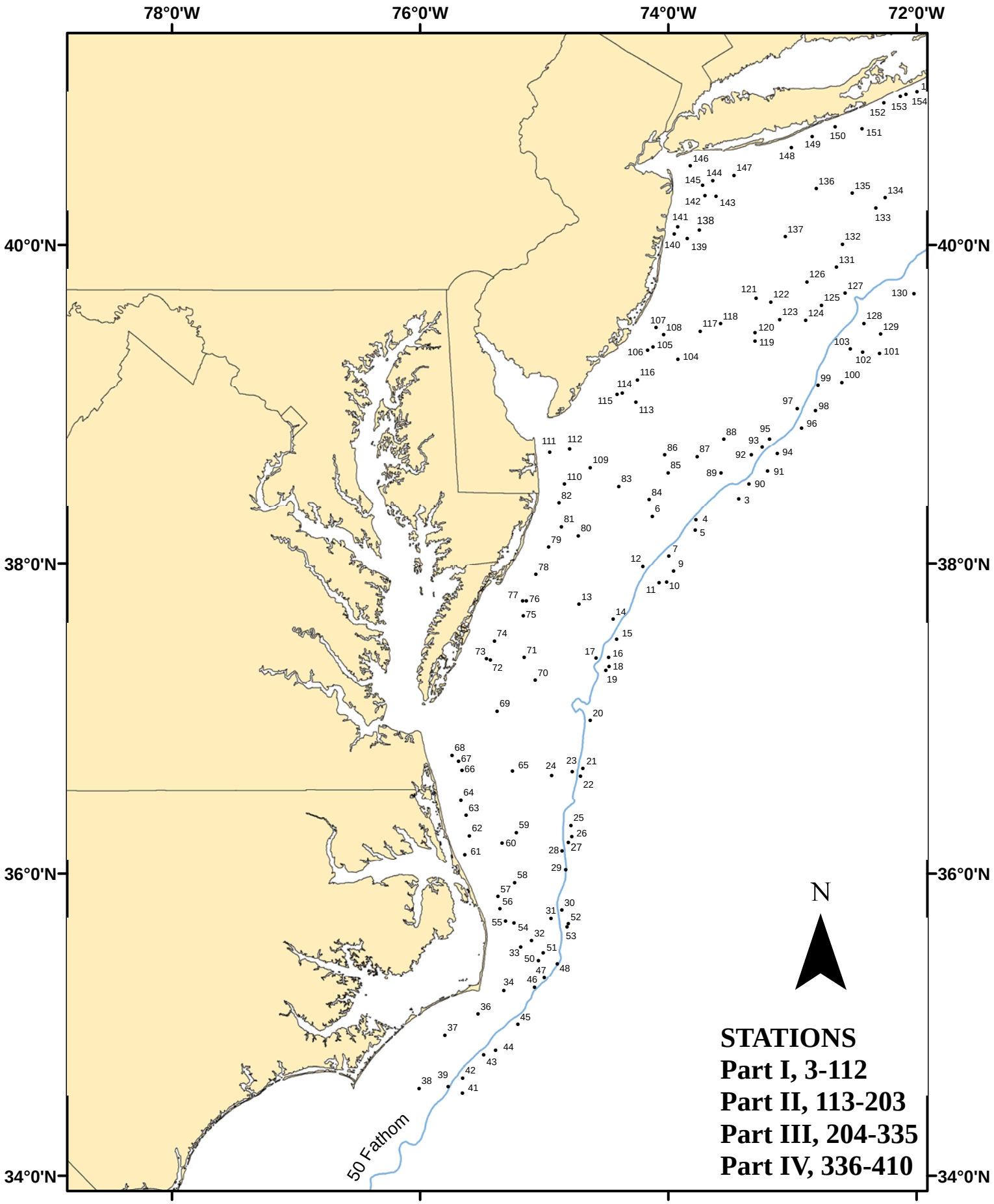

Figure 1. Trawl hauls made from NOAA FSV *Henry B. Bigelow* (13-02), during NOAA Fisheries Service, Northeast Fisheries Center Spring Bottom Trawl Survey, 5 March - 9 May 2013

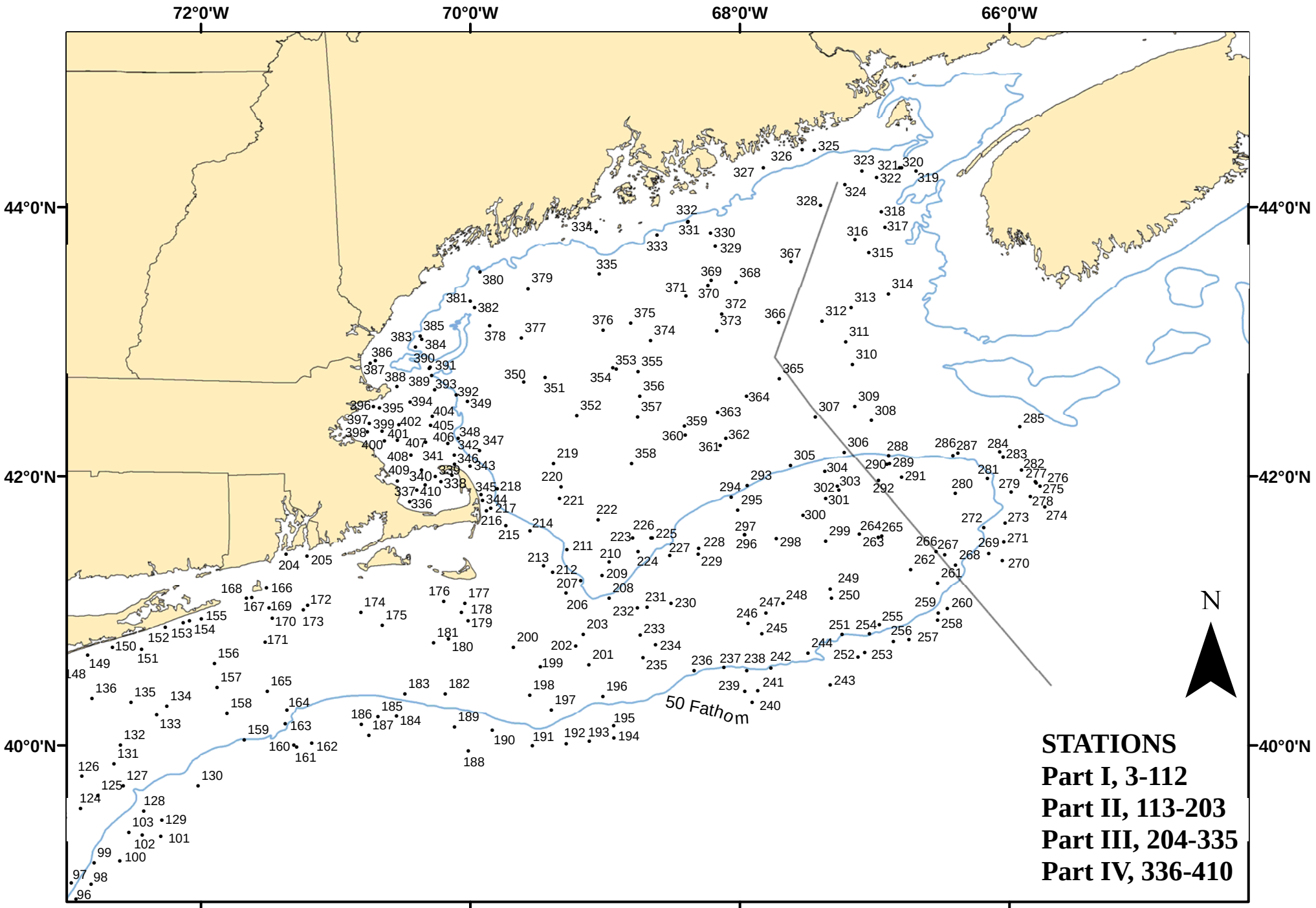

Figure 2. Trawl hauls made from NOAA FSV *Henry B. Bigelow* (13-02), during NOAA Fisheries Service, Northeast Fisheries Center Spring Bottom Trawl Survey, 5 March - 9 May 2013

NOAA Fisheries Service SPRING BOTTOM TRAWL SURVEY
2013 STATION INFORMATION

Station	Date	Time	Lat	Lon	Loran TD's		Course	Bottom Depth (FM)	Temp (F)
0001	Mar-05	0420	4059.0	7048.0	X25432.4	Y43743.6	320	27.3	
0003	Mar-15	1325	3824.7	7325.9	X26551.9	Y42458.2	232	65.1	54.8
0004	Mar-15	1702	3816.6	7346.6	X26661.1	Y42359.4	265	60.1	54.4
0005	Mar-15	1838	3812.8	7346.9	X26659.0	Y42319.7	269	63.4	55.1
0006	Mar-15	2108	3818.0	7407.6	X26778.7	Y42353.8	247	33.9	49.0
0007	Mar-16	0026	3802.9	7359.7	X26717.4	Y42204.2	224	62.3	54.2
0009	Mar-16	0332	3757.2	7357.4	X26699.1	Y42147.4	211	109.9	55.2
0010	Mar-16	0509	3753.0	7400.8	X26712.2	Y42099.5	222	131.2	55.2
0011	Mar-16	0750	3752.6	7404.5	X26730.7	Y42090.8	253	131.2	55.8
0012	Mar-16	0948	3758.8	7412.3	X26778.7	Y42146.5	027	42.1	54.8
0013	Mar-16	1334	3744.4	7443.1	X26914.9	Y41951.1	186	25.7	45.2
0014	Mar-16	1547	3738.7	7426.6	X26825.8	Y41913.6	218	38.3	53.3
0015	Mar-16	1733	3731.0	7425.0	X26808.2	Y41835.3	212	53.0	55.2
0016	Mar-16	1929	3723.9	7428.8	X26818.2	Y41754.1	149	104.4	54.9
0017	Mar-16	2117	3723.8	7434.9	X26846.7	Y41742.6	012	47.0	53.2
0018	Mar-16	2311	3720.6	7428.6	X26813.2	Y41719.1	200	115.4	55.7
0019	Mar-17	0043	3719.1	7430.2	X26818.8	Y41701.3	208	82.6	55.8
0020	Mar-17	0336	3659.7	7437.8	X26830.8	Y41482.9	017	67.3	55.5
0021	Mar-17	0710	3641.1	7441.3	X26825.9	Y41282.8	007	81.5	55.3
0022	Mar-17	0905	3638.0	7442.3	X26827.1	Y41249.3	012	126.3	55.3
0023	Mar-17	1033	3639.9	7446.4	X26846.4	Y41259.1	007	37.2	55.3
0024	Mar-17	1229	3638.3	7456.3	X26886.5	Y41218.4	065	16.4	
0025	Mar-17	1706	3618.8	7447.0	X26826.5	Y41043.0	001	105.0	55.1
0026	Mar-17	1910	3614.6	7446.6	X26820.8	Y41002.2	327	107.2	54.7
0027	Mar-17	2055	3612.1	7448.2	X26825.0	Y40973.2	021	61.2	55.3
0028	Mar-17	2236	3608.9	7451.3	X26834.2	Y40932.1	024	48.7	52.2
0029	Mar-18	0046	3601.5	7449.6	X26819.9	Y40864.4	015	57.4	55.7
0030	Mar-18	0401	3545.7	7451.4	X26812.5	Y40708.1	347	65.6	50.4
0031	Mar-18	0542	3542.4	7456.7	X26829.5	Y40660.0	006	31.2	47.4
0032	Mar-18	0756	3533.7	7506.0	X26856.2	Y40546.8	049	21.3	49.2
0033	Mar-18	0937	3531.1	7511.4	X26873.4	Y40504.5	357	20.8	55.3
0034	Mar-18	1226	3513.9	7519.5	X26886.1	Y40317.3	020	9.8	58.1
0036	Mar-18	1521	3504.5	7532.0	X26920.6	Y40185.7	077	14.2	60.6
0037	Mar-18	1753	3456.2	7548.0	X26966.5	Y40048.3	040	14.2	62.7
0038	Mar-18	2105	3435.0	7600.5	X26985.6	Y39814.8	039	23.5	66.2
0039	Mar-18	2256	3435.7	7546.4	X26940.8	Y39883.1	052	36.1	63.5
0041	Mar-19	0220	3433.2	7539.5	X26915.9	Y39894.7	208	195.2	
0042	Mar-19	0427	3439.2	7539.4	X26921.1	Y39941.4	220	73.3	61.6
0043	Mar-19	0711	3448.4	7529.3	X26896.1	Y40058.8	223	89.7	62.7
0044	Mar-19	0950	3450.2	7523.5	X26878.0	Y40097.4	217	184.8	51.3
0045	Mar-19	1254	3500.5	7512.7	X26850.4	Y40226.8	218	182.1	52.4
0046	Mar-19	1530	3515.3	7504.6	X26834.4	Y40385.4	219	38.3	65.0
0047	Mar-19	1721	3519.2	7459.8	X26820.8	Y40436.6	216	43.2	61.9
0048	Mar-19	1939	3524.4	7453.5	X26802.3	Y40505.2	206	62.3	52.4
0050	Mar-19	2212	3525.7	7502.8	X26837.0	Y40484.7	351	20.2	57.2
0051	Mar-20	0050	3528.8	7500.5	X26831.4	Y40520.8	352	23.0	47.2

NOAA Fisheries Service SPRING BOTTOM TRAWL SURVEY
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Station	Date	Time	Lat	Lon	Loran TD's		Course	Bottom Depth (FM)	Temp (F)
0052	Mar-20	0325	3540.4	7448.2	X26796.0	Y40668.7	353	111.0	
0053	Mar-20	0501	3539.1	7448.9	X26797.3	Y40654.5	356	62.9	52.7
0054	Mar-20	0928	3540.7	7514.6	X26894.8	Y40585.1	005	18.0	44.0
0055	Mar-20	1042	3541.2	7518.6	X26910.5	Y40577.3	006	13.1	43.7
0056	Mar-20	1155	3546.1	7521.4	X26926.1	Y40616.3	000	12.6	43.6
0057	Mar-20	1312	3550.9	7522.3	X26934.8	Y40661.4	346	14.8	43.7
0058	Mar-20	1547	3556.5	7514.3	X26910.7	Y40741.9	005	18.6	46.4
0059	Mar-20	1818	3616.0	7513.4	X26929.6	Y40943.6	350	17.0	47.0
0060	Mar-20	2010	3612.0	7520.4	X26952.3	Y40883.4	001	17.0	45.9
0061	Mar-20	2237	3607.3	7538.4	X27015.9	Y40784.7	001	12.6	43.5
0062	Mar-21	0027	3614.9	7536.2	X27017.7	Y40871.1	312	14.8	43.7
0063	Mar-21	0154	3622.8	7537.7	X27034.6	Y40952.4	350	12.6	43.7
0064	Mar-21	0308	3628.8	7540.2	X27053.1	Y41011.7	333	11.5	43.6
0065	Mar-21	0700	3640.1	7515.4	X26968.2	Y41193.0	058	19.1	44.3
0066	Mar-21	0953	3640.3	7539.7	X27068.4	Y41140.1	003	10.4	43.4
0067	Mar-21	1119	3643.8	7541.3	X27080.6	Y41175.8	351	9.3	43.1
0068	Mar-21	1226	3646.2	7544.5	X27097.3	Y41196.1	317	10.4	43.0
0069	Mar-21	1655	3703.3	7522.8	X27033.6	Y41431.5		15.9	44.4
0070	Mar-21	1946	3715.2	7504.3	X26970.8	Y41597.9	358	19.7	44.9
0071	Mar-21	2206	3724.0	7509.6	X27008.3	Y41685.2	029	16.4	43.7
0072	Mar-22	0030	3723.0	7526.0	X27080.7	Y41646.3	304	14.2	42.8
0073	Mar-22	0142	3723.5	7527.9	X27089.9	Y41648.1	337	13.7	42.6
0074	Mar-22	0318	3730.4	7524.1	X27085.3	Y41732.4	002	13.7	42.7
0075	Mar-22	0545	3740.0	7510.1	X27037.6	Y41863.0	025	13.7	43.1
0076	Mar-22	0719	3745.8	7508.5	X27040.6	Y41929.7	212	15.9	42.7
0077	Mar-22	0901	3745.8	7510.4	X27049.6	Y41927.6	241	13.7	
0078	Mar-22	1213	3755.9	7504.0	X27036.9	Y42049.6	033	12.0	42.4
0079	Mar-22	1737	3806.3	7457.9	X27025.8	Y42173.9	006	12.0	42.3
0080	Mar-22	1946	3810.6	7443.4	X26959.1	Y42237.3	246	18.6	43.0
0081	Mar-22	2130	3814.1	7451.6	X27008.2	Y42267.0	201	13.1	42.6
0082	Mar-23	0017	3823.2	7452.8	X27032.3	Y42367.5		12.0	42.3
0083	Mar-23	0310	3829.4	7423.9	X26885.9	Y42461.9	043	23.5	43.3
0084	Mar-23	0526	3824.4	7409.2	X26796.3	Y42420.4	019	29.5	45.3
0085	Mar-23	0737	3834.6	7400.1	X26758.7	Y42534.9	351	29.0	45.1
0086	Mar-23	0903	3841.3	7401.7	X26777.7	Y42604.1	352	28.4	44.4
0087	Mar-23	1118	3840.7	7346.1	X26685.0	Y42607.3	358	30.6	43.9
0088	Mar-23	1315	3847.2	7333.1	X26615.1	Y42681.2	044	31.7	46.9
0089	Mar-23	1538	3834.5	7334.6	X26610.5	Y42550.9	210	38.8	52.4
0090	Mar-23	1807	3830.4	7321.0	X26528.1	Y42518.6	232	64.5	55.0
0091	Mar-23	2100	3835.3	7312.0	X26479.0	Y42573.2	004	135.6	51.4
0092	Mar-23	2253	3841.3	7319.8	X26529.3	Y42628.3	233	44.8	53.7
0093	Mar-24	0059	3844.2	7314.6	X26500.3	Y42659.4	253	47.6	54.7
0094	Mar-24	0338	3842.0	7307.2	X26455.1	Y42641.2	047	78.7	
0095	Mar-24	0517	3847.3	7311.0	X26481.0	Y42692.1	056	44.3	54.9
0096	Mar-24	0725	3851.5	7255.6	X26389.2	Y42738.4	020	108.8	56.0
0097	Mar-24	0908	3858.7	7257.7	X26405.6	Y42807.4	045	48.1	54.6
0098	Mar-24	1143	3858.1	7248.9	X26350.5	Y42803.3	000	162.4	
0099	Mar-24	1344	3907.5	7247.5	X26345.5	Y42892.9	031	62.9	54.8

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Station	Date	Time	Lat	Lon	Loran TD's		Course	Bottom Depth (FM)	Temp (F)
0100	Mar-24	1551	3908.6	7236.1	X26272.2	Y42904.2	022	144.9	52.1
0101	Mar-24	1831	3919.6	7217.9	X26154.6	Y43004.5	041	123.0	53.8
0102	Mar-24	2026	3920.0	7226.1	X26208.5	Y43009.6	037	77.6	55.3
0103	Mar-24	2212	3921.2	7232.0	X26247.8	Y43020.9	024	72.2	55.2
0104	Mar-25	0449	3917.2	7355.3	X26796.5	Y42984.2	091	19.1	42.0
0105	Mar-25	0702	3921.9	7407.3	X26883.5	Y43032.8	087	13.1	40.6
0106	Mar-25	0822	3920.6	7410.0	X26897.8	Y43019.1	045	15.3	40.7
0107	Mar-25	1020	3929.2	7405.9	X26889.5	Y43110.0	028	11.5	40.0
0108	Mar-25	1225	3926.5	7402.3	X26859.6	Y43080.9	046	13.7	40.3
0109	Mar-25	2048	3836.6	7437.7	X26976.2	Y42529.0	035	17.5	42.0
0110	Mar-25	2337	3830.2	7450.2	X27032.1	Y42448.6	072	13.1	41.6
0111	Mar-26	0242	3842.2	7457.3	X27097.0	Y42578.1	069	10.4	41.6
0112	Mar-26	0440	3843.5	7447.6	X27046.1	Y42598.5	055	10.4	41.3
0113	Mar-26	1857	3901.4	7415.6	X26894.9	Y42811.6	043	16.4	42.5
0114	Mar-26	2040	3904.6	7422.2	X26941.8	Y42844.3	065	15.9	41.1
0115	Mar-26	2201	3904.1	7424.8	X26956.2	Y42837.4	074	15.3	40.9
0116	Mar-26	2335	3909.6	7414.9	X26906.6	Y42900.2	071	15.9	40.9
0117	Mar-27	0308	3927.9	7344.6	X26744.3	Y43094.1	033	18.0	42.8
0118	Mar-27	0443	3930.6	7334.7	X26681.6	Y43121.0	052	21.3	43.1
0119	Mar-27	0707	3924.3	7318.1	X26559.8	Y43054.9	275	30.1	43.0
0120	Mar-27	0856	3927.2	7318.1	X26563.4	Y43084.4	262	19.7	43.2
0121	Mar-27	1112	3940.3	7317.5	X26575.7	Y43212.2	312	23.0	42.7
0122	Mar-27	1305	3938.7	7310.3	X26523.2	Y43194.9	267	23.5	42.7
0123	Mar-27	1503	3932.2	7306.1	X26486.5	Y43130.4	207	25.7	42.9
0124	Mar-27	1709	3931.8	7253.6	X26399.3	Y43124.0	254	33.4	42.8
0125	Mar-27	1910	3937.6	7245.9	X26349.5	Y43175.6	233	38.3	45.0
0126	Mar-27	2116	3946.3	7253.0	X26407.2	Y43260.3	246	39.9	42.5
0127	Mar-27	2343	3942.0	7234.5	X26271.5	Y43212.8	188	42.1	44.3
0128	Mar-28	0217	3930.8	7225.4	X26205.1	Y43107.5	302	77.6	52.0
0129	Mar-28	0437	3926.8	7217.3	X26150.3	Y43069.4	317	107.2	55.0
0130	Mar-28	0740	3941.9	7201.2	X26037.0	Y43197.9	012	86.9	53.2
0131	Mar-28	1136	3951.7	7238.7	X26307.0	Y43302.8	308	33.9	43.7
0132	Mar-28	1328	4000.3	7235.8	X26292.0	Y43379.1	328	34.4	43.7
0133	Mar-28	1642	4013.6	7219.6	X26177.3	Y43485.1	316	33.4	41.7
0134	Mar-28	1817	4017.6	7215.1	X26144.5	Y43515.3	009	33.4	42.1
0135	Mar-28	2020	4019.2	7231.1	X26272.1	Y43543.7	256	29.5	40.7
0136	Mar-28	2223	4020.8	7248.5	X26412.8	Y43575.0	240	26.2	40.9
0137	Mar-29	0108	4003.0	7303.4	X26504.1	Y43423.4	274	25.2	42.0
0138	Mar-29	0447	4005.4	7344.9	X26820.7	Y43475.8	350	17.5	42.1
0139	Mar-29	0650	4002.3	7350.8	X26857.1	Y43448.6	198	14.2	41.1
0140	Mar-29	0824	4004.2	7357.1	X26907.6	Y43471.2	033	12.6	40.3
0141	Mar-29	0925	4006.7	7355.4	X26901.2	Y43495.6	028	12.0	41.1
0142	Mar-29	1143	4018.2	7342.3	X26830.9	Y43601.5	329	14.8	40.9
0143	Mar-29	1310	4018.0	7336.9	X26788.5	Y43594.6	320	14.2	40.9
0144	Mar-29	1424	4023.8	7338.5	X26814.5	Y43652.4	329	12.0	41.2
0145	Mar-29	1544	4022.2	7343.4	X26849.2	Y43641.2	322	14.2	41.4
0146	Mar-29	1720	4029.2	7349.3	X26913.4	Y43716.8	067	12.6	41.8
0147	Mar-29	1945	4025.8	7328.2	X26738.6	Y43660.9	075	13.7	40.9

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0148	Mar-29	2229	4036.1	7300.5	X26536.6	Y43725.4	048	13.1	40.9
0149	Mar-29	2357	4040.1	7250.3	X26460.3	Y43749.1	063	15.9	40.4
0150	Mar-30	0139	4043.7	7239.3	X26374.3	Y43766.3	073	15.3	40.0
0151	Mar-30	0317	4042.8	7226.4	X26263.6	Y43742.0	067	19.1	39.8
0152	Mar-30	0509	4052.5	7215.8	X26188.8	Y43808.5	070	12.6	39.7
0153	Mar-30	0652	4054.7	7207.9	X26123.7	Y43815.3	081	14.8	39.5
0154	Mar-30	0750	4055.4	7205.1	X26100.7	Y43817.0	071	14.8	39.4
0155	Mar-30	0854	4056.5	7159.8	X26056.0	Y43818.3	081	15.3	39.5
0156	Mar-30	1137	4036.4	7153.9	X25983.6	Y43650.8	237	30.6	42.1
0157	Mar-30	1321	4026.0	7152.8	X25969.9	Y43564.5	236	36.6	43.1
0158	Mar-30	1519	4014.4	7148.3	X25934.2	Y43465.2	249	42.1	43.0
0159	Mar-30	1745	4002.4	7140.7	X25882.0	Y43360.8	253	51.4	51.1
0160	Mar-30	2125	4000.0	7118.5	X25727.5	Y43327.5	085	101.7	55.7
0161	Mar-30	2358	3959.2	7117.3	X25720.1	Y43320.3	254	136.7	
0162	Mar-31	0153	4001.0	7110.6	X25672.5	Y43330.4	254	139.4	
0163	Mar-31	0408	4009.5	7122.4	X25743.6	Y43405.8	266	49.8	46.9
0164	Mar-31	0651	4015.6	7121.7	X25732.4	Y43453.5	258	48.1	44.8
0165	Mar-31	0850	4024.1	7130.4	X25792.8	Y43528.7	292	43.2	
0166	Mar-31	1504	4110.3	7130.8	X25823.4	Y43881.9		18.6	39.7
0167	Mar-31	1657	4106.0	7137.3	X25873.8	Y43859.4	252	17.5	39.5
0168	Mar-31	1753	4105.7	7139.7	X25894.4	Y43860.5	238	18.0	39.9
0169	Mar-31	1944	4101.4	7129.7	X25798.7	Y43814.3	104	26.8	40.2
0170	Mar-31	2114	4056.8	7128.2	X25780.4	Y43778.4	143	30.1	40.3
0171	Mar-31	2321	4045.9	7131.4	X25800.0	Y43699.6	169	34.4	41.8
0172	Apr-01	0311	4102.5	7112.4	X25647.3	Y43799.5	242	22.4	
0173	Apr-01	0445	4100.4	7114.4	X25662.7	Y43786.6	255	26.2	39.9
0174	Apr-01	0806	4059.2	7048.7	X25438.5	Y43746.5	125	27.9	41.1
0175	Apr-01	0953	4053.4	7039.2	X25361.9	Y43694.5	101	27.9	41.3
0176	Apr-01	1248	4104.2	7011.8	X25127.0	Y43737.0	166	14.8	42.0
0177	Apr-01	1418	4103.2	7002.5	X25068.4	Y43719.9	268	12.6	42.0
0178	Apr-01	1605	4059.4	7004.1	X25091.8	Y43696.3	277	13.7	42.0
0179	Apr-01	1807	4055.6	7001.0	X25090.5	Y43668.0	258	12.6	
0180	Apr-01	1958	4047.6	7009.8	X25166.7	Y43622.7	175	21.9	42.1
0181	Apr-01	2152	4045.9	7016.3	X25211.2	Y43617.6	123	25.2	42.0
0182	Apr-02	0101	4023.0	7011.2	X25257.3	Y43453.7	332	43.7	45.5
0183	Apr-02	0334	4023.1	7029.1	X25357.2	Y43467.9	327	46.5	45.5
0184	Apr-02	0651	4013.1	7032.9	X25406.6	Y43397.7	275	64.0	51.1
0185	Apr-02	0828	4012.8	7041.2	X25457.4	Y43401.6	196	66.7	50.7
0186	Apr-02	1001	4009.3	7048.5	X25511.8	Y43379.9	211	72.7	54.9
0187	Apr-02	1142	4004.5	7045.1	X25501.3	Y43341.8	298	76.0	56.0
0188	Apr-02	1709	3957.4	7000.9	X25291.2	Y43264.9	283	121.4	54.8
0189	Apr-02	2004	4008.1	7007.1	X25285.0	Y43345.0	260	68.4	53.2
0190	Apr-02	2235	4006.7	6950.2	W14158.1	Y43325.4	244	58.5	51.4
0191	Apr-03	0143	3959.7	6932.4	W14091.0	Y43267.5	317	70.5	54.8
0192	Apr-03	0452	4000.7	6917.3	W14013.9	Y43267.5	252	70.5	54.7
0193	Apr-03	0734	4001.7	6907.0	W13961.0	Y43269.6		106.1	54.8
0194	Apr-03	1007	4003.2	6856.1	W13904.1	Y43274.7	259	119.2	54.7
0195	Apr-03	1241	4008.8	6856.2	W13885.8	Y43310.5	286	76.0	54.2

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0196	Apr-03	1806	4021.8	6901.0	W13863.0	Y43397.2	300	48.7	45.7
0197	Apr-03	2057	4015.8	6923.9	W13996.6	Y43371.8	244	44.8	46.5
0198	Apr-03	2339	4022.3	6933.6	W14022.7	Y43421.8	314	38.3	44.4
0199	Apr-04	0224	4035.1	6928.8	W13953.8	Y43502.8	327	30.1	43.0
0200	Apr-04	0429	4043.7	6940.8	W13984.3	Y43569.3	309	24.6	42.1
0201	Apr-04	0817	4035.8	6907.2	W13841.7	Y43491.0	330	39.9	43.0
0202	Apr-04	1050	4044.2	6913.0	W13839.3	Y43548.9	000	33.4	42.2
0203	Apr-04	1254	4049.5	6909.8	W13802.3	Y43579.4	019	38.3	42.6
0204	Apr-09	1049	4125.1	7122.0	X25780.2	Y43974.4	157	15.3	40.6
0205	Apr-09	1237	4124.4	7112.7	X25694.5	Y43955.1	083	13.1	41.7
0206	Apr-10	0130	4107.9	6917.4	W13766.9	Y43701.0	330	29.0	42.3
0207	Apr-10	0404	4113.4	6910.8	W13709.3	Y43728.1	344	49.8	42.5
0208	Apr-10	0715	4105.8	6858.3	W13678.0	Y43669.1	104	50.3	43.0
0209	Apr-10	1015	4115.6	6901.4	W13651.5	Y43731.4	190	83.1	43.4
0210	Apr-10	1307	4121.7	6858.2	W13608.5	Y43763.7	352	79.8	43.3
0211	Apr-10	1600	4127.2	6917.0	W13681.2	Y43817.8	002	50.9	42.1
0212	Apr-10	1924	4117.3	6923.3	W13758.3	Y43765.0	269	25.7	42.2
0213	Apr-10	2049	4120.0	6927.4	W13768.4	Y43786.1	178	18.6	42.4
0214	Apr-10	2352	4135.5	6933.5	W13732.7	Y43887.2	113	35.5	41.9
0215	Apr-11	0201	4138.0	6944.2	W13780.4	Y43916.2	160	21.9	41.3
0216	Apr-11	0414	4144.6	6952.8	W13799.4	Y43967.1	183	12.0	
0217	Apr-11	0801	4145.7	6950.9	W13783.1	Y43971.3	175	25.2	
0218	Apr-11	1014	4154.4	6948.1	W13726.3	Y44018.0	343	55.8	42.2
0219	Apr-11	1344	4205.7	6923.0	W13530.1	Y44045.6	074	115.4	43.8
0220	Apr-11	1731	4155.4	6919.6	W13563.1	Y43983.9	117	108.8	43.8
0221	Apr-11	1940	4150.0	6920.3	W13593.2	Y43954.1	097	103.3	43.8
0222	Apr-11	2257	4140.7	6903.1	W13546.4	Y43879.5	087	90.8	43.2
0223	Apr-12	0157	4132.4	6847.7	W13506.4	Y43814.2	184	85.3	43.1
0224	Apr-12	0346	4126.5	6845.3	W13521.6	Y43778.0		74.4	43.5
0225	Apr-12	0556	4132.6	6839.0	W13462.0	Y43805.9	053	72.7	
0226	Apr-12	0729	4132.6	6839.5	W13464.9	Y43806.3	044	73.3	43.4
0227	Apr-12	0959	4124.6	6831.2	W13461.4	Y43752.4	084	45.9	43.7
0228	Apr-12	1345	4127.8	6818.3	W13384.7	Y43757.0	093	28.4	43.3
0229	Apr-12	1658	4125.2	6818.6	W13397.8	Y43743.1	089	29.0	43.3
0230	Apr-12	2328	4103.3	6830.7	W13552.9	Y43629.4	183	29.5	43.4
0231	Apr-13	0222	4101.5	6841.3	W13612.3	Y43627.9	263	37.2	43.5
0232	Apr-13	0401	4101.3	6845.7	W13634.6	Y43630.4	285	35.0	43.6
0233	Apr-13	0726	4049.3	6844.4	W13677.4	Y43557.1	068	37.2	43.8
0234	Apr-13	0952	4044.8	6837.5	W13662.5	Y43524.5	266	32.3	43.8
0235	Apr-13	1144	4039.0	6843.2	W13712.2	Y43493.5	242	35.5	43.9
0236	Apr-13	1454	4033.3	6820.4	W13627.8	Y43443.0	243	50.9	45.4
0237	Apr-13	1728	4034.8	6807.1	W13561.2	Y43443.9	241	51.4	45.1
0238	Apr-13	1937	4033.4	6756.9	W13521.4	Y43429.2	042	53.0	45.7
0239	Apr-13	2219	4024.1	6757.8	W13562.0	Y43374.8	016	77.1	53.1
0240	Apr-14	0102	4019.1	6754.6	W13566.7	Y43344.1	029	111.5	53.9
0241	Apr-14	0315	4024.2	6752.0	W13536.1	Y43372.8	235	129.6	52.4
0242	Apr-14	0550	4034.6	6746.2	W13469.7	Y43429.8	077	51.4	44.5
0243	Apr-14	0949	4026.9	6719.8	W13389.2	Y43371.7	068	142.2	48.8

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0244	Apr-14	1226	4041.2	6729.7	W13372.3	Y43457.4	137	49.8	45.6
0245	Apr-14	1511	4049.8	6750.2	W13424.7	Y43519.5	302	36.6	44.0
0246	Apr-14	1658	4054.5	6756.4	W13432.7	Y43550.3	062	31.7	43.6
0247	Apr-14	1835	4058.9	6748.4	W13378.1	Y43569.2	072	29.0	43.4
0248	Apr-14	2005	4103.4	6740.8	W13325.3	Y43588.5	062	31.2	43.3
0249	Apr-14	2230	4109.8	6719.8	W13207.1	Y43607.4	032	31.2	43.1
0250	Apr-14	2359	4105.6	6719.3	W13223.9	Y43584.5	184	34.4	
0251	Apr-15	0243	4049.4	6714.4	W13274.5	Y43493.6	274	50.9	44.9
0252	Apr-15	0500	4039.3	6707.4	W13288.5	Y43434.0	045	64.0	52.5
0253	Apr-15	0700	4041.3	6704.4	W13268.4	Y43443.2	062	67.8	49.9
0254	Apr-15	0847	4049.7	6702.2	W13224.1	Y43487.4	009	50.3	46.5
0255	Apr-15	1027	4053.9	6657.9	W13188.5	Y43507.5	248	48.7	44.4
0256	Apr-15	1237	4046.5	6651.7	W13196.0	Y43464.1	067	62.3	49.3
0257	Apr-15	1431	4047.2	6644.8	W13166.3	Y43463.9	205	129.0	50.8
0258	Apr-15	1759	4056.0	6632.0	W13079.7	Y43502.5	219	114.3	48.4
0259	Apr-15	2000	4059.0	6631.6	W13065.3	Y43517.7	048	64.0	47.2
0260	Apr-15	2128	4101.0	6627.7	W13041.9	Y43525.5	020	94.6	49.1
0261	Apr-15	2354	4112.3	6632.0	W13007.3	Y43586.0	238	49.2	44.4
0262	Apr-16	0158	4118.3	6600.4	W12866.9	Y43594.6	232	42.7	42.9
0263	Apr-16	0527	4134.1	6706.8	W13040.4	Y43724.0	286	29.5	43.2
0264	Apr-16	0740	4133.4	6656.8	W13003.7	Y43711.9	225	36.1	
0265	Apr-16	0837	4132.6	6658.3	W13013.5	Y43709.2	051	35.5	43.1
0266	Apr-16	1151	4126.4	6632.7	W12944.5	Y43657.4	119	48.7	42.9
0267	Apr-16	1306	4125.0	6628.8	W12936.6	Y43647.7	145	50.9	42.8
0268	Apr-16	1434	4120.4	6624.0	W12940.6	Y43621.1	157	52.5	43.1
0269	Apr-16	1701	4125.7	6609.2	W12863.1	Y43636.7	251	68.4	46.0
0270	Apr-16	1915	4122.5	6603.2	W12856.9	Y43616.9	225	121.4	51.8
0271	Apr-16	2138	4130.7	6602.4	W12815.9	Y43656.3	223	67.8	45.9
0272	Apr-16	2349	4137.0	6611.4	W12817.3	Y43693.0	154	52.5	43.7
0273	Apr-17	0143	4139.2	6601.9	W12773.9	Y43696.3	176	50.9	44.6
0274	Apr-17	0504	4146.3	6544.3	W12681.2	Y43716.2	174	167.3	
0275	Apr-17	0936	4155.5	6546.4	W12642.8	Y43760.4	335	107.2	
0276	Apr-17	1201	4157.1	6548.1	W12640.8	Y43768.9	141	104.4	
0277	Apr-17	1320	4157.6	6548.5	W12639.3	Y43771.5	140	105.0	
0278	Apr-17	1648	4150.9	6550.7	W12679.6	Y43742.5	349	71.1	47.3
0279	Apr-17	1838	4153.0	6559.2	W12697.5	Y43759.1	314	50.9	
0280	Apr-17	2137	4152.4	6624.0	W12786.5	Y43777.1	029	46.5	42.9
0281	Apr-17	2354	4159.0	6609.8	W12703.6	Y43795.7	024	49.2	43.1
0282	Apr-18	0248	4202.8	6554.6	W12633.2	Y43800.3	133	109.9	48.4
0283	Apr-18	0700	4208.7	6602.7	W12630.4	Y43834.0	298	120.3	
0284	Apr-18	0827	4210.9	6604.3	W12624.1	Y43845.5	288	127.4	48.4
0285	Apr-18	1229	4222.2	6555.4	W12535.8	Y43888.2	163	120.3	49.4
0286	Apr-18	1546	4210.3	6623.0	W12691.3	Y43859.9	085	104.4	46.0
0287	Apr-18	1756	4209.1	6625.2	W12705.4	Y43856.5	274	94.6	45.4
0288	Apr-18	2049	4209.2	6653.8	W12811.0	Y43884.5	271	56.3	
0289	Apr-19	0026	4205.7	6653.4	W12828.2	Y43867.2	045	36.6	43.4
0290	Apr-19	0150	4205.3	6654.5	W12834.7	Y43866.5	274	36.6	43.5
0291	Apr-19	0424	4159.5	6648.0	W12839.7	Y43832.6	203	37.2	43.2

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0292	Apr-19	0655	4158.2	6658.2	W12885.7	Y43836.2	169	33.9	43.2
0293	Apr-19	2048	4156.0	6756.8	W13145.8	Y43885.4	246	60.1	43.6
0294	Apr-19	2231	4150.7	6803.8	W13204.8	Y43865.8	269	44.3	43.9
0295	Apr-20	0058	4145.0	6801.0	W13220.7	Y43832.4	204		
0296	Apr-20	1246	4133.8	6757.9	W13261.2	Y43770.0	181	18.0	
0297	Apr-20	1356	4133.8	6758.0	W13261.4	Y43769.9	204	18.0	45.0
0298	Apr-20	1916	4132.2	6743.8	W13205.8	Y43747.4	155	21.3	44.8
0299	Apr-20	2314	4130.9	6721.8	W13117.2	Y43720.7	207	29.5	44.5
0300	Apr-21	0149	4142.5	6731.9	W13103.4	Y43790.2	135	27.9	44.6
0301	Apr-21	0414	4150.1	6721.8	W13023.1	Y43818.8	166	32.8	44.4
0302	Apr-21	0713	4153.8	6715.9	W12979.9	Y43831.5	153	29.0	44.3
0303	Apr-21	0908	4155.5	6716.6	W12974.0	Y43840.6	358	28.4	44.3
0304	Apr-21	1047	4202.1	6722.2	W12962.8	Y43879.2	352	26.8	44.2
0305	Apr-21	1317	4204.7	6737.4	W13014.2	Y43908.5	248	89.1	44.1
0306	Apr-21	1704	4210.5	6713.6	W12882.8	Y43911.4	269	95.1	46.6
0307	Apr-21	2053	4226.4	6726.5	W12849.4	Y44001.4	211	172.2	47.3
0308	Apr-22	0041	4225.0	6701.4	W12755.7	Y43966.6	113	197.4	46.8
0309	Apr-22	0313	4231.0	6708.8	W12751.2	Y44002.9	258	180.4	47.1
0310	Apr-22	0701	4249.7	6709.8	W12648.2	Y44088.4	075	122.5	48.8
0311	Apr-22	0956	4259.9	6712.8	W12599.2	Y44137.1	066	114.8	48.2
0312	Apr-22	1234	4309.2	6723.4	W12584.9	Y44190.6	073	91.9	46.7
0313	Apr-22	1539	4315.3	6710.5	W12495.8	Y44199.6	245	123.0	47.0
0314	Apr-22	1847	4321.4	6653.9	W12395.9	Y44203.9	180	115.4	46.2
0315	Apr-22	2208	4339.8	6702.6	W12310.0	Y44288.6	180	83.1	45.9
0316	Apr-23	0040	4345.5	6708.7	W12294.6	Y44319.0	336	99.0	46.6
0317	Apr-23	0351	4351.1	6655.4	W12210.0	Y44323.0		88.6	44.3
0318	Apr-23	0552	4358.1	6657.0	W12169.0	Y44351.2	211	91.3	44.7
0319	Apr-23	0905	4416.2	6641.5	W11997.3	Y44396.7	205	102.8	44.1
0320	Apr-23	1056	4417.7	6648.0	W12007.0	Y44410.4	035	99.5	
0321	Apr-23	1204	4417.5	6648.9	W12011.0	Y44410.7	063	100.6	44.4
0322	Apr-23	1415	4413.4	6659.1	W12072.1	Y44409.7	020	90.8	44.6
0323	Apr-23	1727	4416.2	6705.6	W12074.4	Y44428.6	229	70.5	
0324	Apr-23	1945	4410.0	6713.3	W12144.3	Y44416.9	221	75.5	44.7
0325	Apr-23	2304	4425.3	6726.9	W12085.6	Y44489.8	272	44.3	39.7
0326	Apr-24	0037	4425.8	6732.2	W12102.1	Y44499.3	042	42.7	39.8
0327	Apr-24	0322	4417.6	6749.6	W12232.3	Y44495.6	071	37.7	39.8
0328	Apr-24	0757	4400.9	6724.1	W12248.1	Y44398.5	058	99.0	46.8
0329	Apr-24	1309	4342.7	6810.9	W12574.7	Y44395.6	167	100.1	46.3
0330	Apr-24	1601	4348.5	6813.1	W12544.9	Y44421.8	275	100.6	45.8
0331	Apr-24	1837	4353.5	6823.2	W12559.6	Y44456.5	221	66.2	
0332	Apr-24	1955	4353.7	6823.1	W12557.6	Y44457.1	233	66.7	40.9
0333	Apr-24	2330	4347.4	6836.9	W12670.2	Y44454.2	192	71.6	40.8
0334	Apr-25	0345	4349.1	6904.0	W12803.5	Y44504.6	197	43.2	41.1
0335	Apr-25	0734	4330.1	6902.6	W12923.6	Y44424.7	264	74.4	42.3
0336	Apr-30	1850	4148.5	7027.0	X25426.8	Y44041.5	002	12.0	44.7
0337	Apr-30	2017	4153.8	7023.8	X25440.8	Y44068.8	210	18.0	43.9
0338	Apr-30	2229	4157.6	7013.1	X25401.5	Y44074.4	279	18.6	44.5
0339	May-01	0025	4200.6	7008.2	X25396.2	Y44084.4	161	12.6	45.8

NOAA Fisheries Service SPRING BOTTOM TRAWL SURVEY
2013 STATION INFORMATION

Station	Date	Time	Lat	Lon	Loran TD's		Course	Bottom Depth (FM)	Temp (F)
0340	May-01	0223	4200.0	7015.6	X25433.2	Y44092.7	262	25.7	43.8
0341	May-01	0446	4202.8	7021.8	X25489.3	Y44118.9	034		40.6
0342	May-01	0809	4209.4	7007.1	X25453.4	Y44133.1	230	25.7	42.7
0343	May-01	1036	4204.6	7000.1	X25385.2	Y44095.0	144		43.0
0344	May-01	1314	4149.1	6954.5	W13787.9	Y43996.6	347	12.6	44.7
0345	May-01	1412	4151.8	6955.2	W13779.2	Y44013.6	352	13.1	
0346	May-01	1832	4205.3	7007.0	X25424.3	Y44110.0	288	13.1	45.1
0347	May-01	2131	4211.6	6956.0	W13687.6	Y44127.8	023	95.1	41.9
0348	May-02	0003	4217.0	7005.4	X25498.7	Y44173.6	201	50.3	
0349	May-02	0251	4233.3	7001.3	X25589.4	Y44254.8	213	80.4	42.5
0350	May-02	0657	4242.0	6936.2	W13409.1	Y44257.9	307	137.8	46.0
0351	May-02	0905	4243.9	6926.7	W13343.9	Y44251.8	319	105.0	44.3
0352	May-02	1256	4227.0	6912.6	W13359.9	Y44144.4	124	120.3	45.3
0353	May-02	1717	4247.9	6855.1	W13146.7	Y44221.8	321	48.7	
0354	May-02	1853	4248.3	6856.6	W13152.4	Y44225.9	120		42.4
0355	May-02	2108	4246.8	6845.3	W13101.8	Y44201.9	015	113.2	44.6
0356	May-02	2357	4235.8	6844.5	W13161.9	Y44147.4	033	105.5	46.0
0357	May-03	0259	4226.3	6845.5	W13220.4	Y44101.6	084	114.8	45.0
0358	May-03	0703	4205.6	6848.2	W13345.2	Y43998.0	095	89.1	43.9
0359	May-03	1126	4222.6	6824.7	W13136.4	Y44054.6	045	112.1	45.5
0360	May-03	1349	4218.3	6824.3	W13157.5	Y44032.7	028	112.1	45.9
0361	May-03	1710	4213.8	6808.7	W13107.2	Y43990.5	018		45.2
0362	May-03	1911	4217.0	6806.3	W13078.7	Y44003.0	064	96.8	44.9
0363	May-03	2154	4228.5	6810.0	W13032.1	Y44064.8	091	85.3	44.8
0364	May-04	0040	4235.6	6757.0	W12931.3	Y44082.4	052	111.5	46.0
0365	May-04	0408	4243.6	6742.5	W12820.1	Y44101.0	023	101.2	46.1
0366	May-04	0804	4308.7	6742.7	W12669.2	Y44213.6	011	102.8	46.3
0367	May-04	1127	4335.9	6737.2	W12471.1	Y44319.6	034	129.0	48.0
0368	May-04	1517	4326.3	6801.8	W12641.6	Y44315.2	028	127.4	47.9
0369	May-04	1736	4327.4	6812.8	W12686.0	Y44335.7	025	100.1	46.9
0370	May-04	1926	4325.1	6814.2	W12708.2	Y44328.3	032	97.9	46.9
0371	May-04	2139	4320.3	6824.1	W12787.2	Y44322.3	031	99.0	44.9
0372	May-05	0011	4312.3	6808.1	W12761.4	Y44264.5	091	108.3	45.4
0373	May-05	0318	4304.9	6810.2	W12817.6	Y44235.1	359	109.9	43.9
0374	May-05	0653	4300.5	6839.8	W12991.2	Y44257.9	025	103.9	44.4
0375	May-05	0920	4308.2	6848.6	W12989.3	Y44306.2	137	93.5	44.0
0376	May-05	1145	4305.0	6900.9	W13074.8	Y44311.3	121	53.6	42.4
0377	May-05	1514	4301.5	6937.3	W13301.2	Y44354.7	040	79.8	42.4
0378	May-05	1728	4307.0	6951.4	W13352.3	Y44404.9	030	94.6	43.2
0379	May-05	2023	4323.7	6934.3	W13146.2	Y44450.5	234	95.7	42.8
0380	May-05	2315	4331.2	6955.7	W13227.8	Y44520.7	093	62.9	40.7
0381	May-06	0152	4318.0	7000.0	X25859.0	Y44470.9	142	74.9	41.3
0382	May-06	0300	4315.4	6958.1	W13342.6	Y44455.5	160	67.8	41.2
0383	May-06	0709	4302.5	7022.3	X25877.4	Y44439.6	222	64.5	41.0
0384	May-06	0830	4301.0	7021.6	X25865.2	Y44431.2	249	70.5	41.3
0385	May-06	1001	4257.6	7024.4	X25859.9	Y44420.0	020	62.9	40.8
0386	May-06	1247	4251.5	7042.2	X25925.0	Y44423.1	005	24.6	42.0
0387	May-06	1405	4250.5	7044.6	X25933.4	Y44422.5	332	18.0	42.7

NOAA Fisheries Service SPRING BOTTOM TRAWL SURVEY
2013 STATION INFORMATION

Station	Date	Time	Lat	Lon	Loran TD's		Course	Bottom Depth (FM)	Temp (F)
0388	May-06	1712	4240.0	7032.7	X25799.3	Y44345.9	195	29.5	
0389	May-06	1950	4248.7	7018.0	X25771.0	Y44363.5	238	30.6	
0390	May-06	2110	4248.1	7018.3	X25769.1	Y44361.0	189	31.7	
0391	May-06	2324	4244.9	7017.2	X25743.7	Y44343.0	021	34.4	41.5
0392	May-07	0245	4236.2	7006.3	X25632.4	Y44278.7	327	53.0	41.2
0393	May-07	0425	4238.5	7015.9	X25695.3	Y44307.1	167	44.8	41.2
0394	May-07	0707	4233.1	7026.9	X25721.3	Y44298.2	107	55.2	
0395	May-07	0908	4230.5	7040.5	X25787.3	Y44309.1	040	33.4	41.9
0396	May-07	1045	4231.0	7043.2	X25807.4	Y44316.5	040	26.2	42.2
0397	May-07	1313	4223.5	7044.9	X25773.0	Y44278.3	321	23.0	42.8
0398	May-07	1517	4219.9	7045.8	X25756.8	Y44259.7	213	17.0	44.3
0399	May-07	1744	4220.0	7039.3	X25714.4	Y44248.5	129	32.3	41.8
0400	May-07	1930	4215.6	7038.3	X25679.7	Y44221.6	111	21.9	43.2
0401	May-07	2103	4216.0	7032.5	X25644.9	Y44213.7	134	36.6	41.1
0402	May-07	2302	4222.9	7031.8	X25685.3	Y44251.3	139	49.8	40.1
0404	May-08	0220	4226.8	7016.9	X25624.6	Y44246.6		38.8	41.2
0405	May-08	0502	4222.7	7017.7	X25601.2	Y44225.3	149	21.9	42.8
0406	May-08	0852	4214.6	7010.0	X25505.3	Y44167.7	156	26.8	42.0
0407	May-08	1049	4215.2	7019.9	X25563.3	Y44187.3	191	32.3	41.3
0408	May-08	1311	4209.5	7026.5	X25563.8	Y44165.7	333	34.4	41.1
0409	May-08	1639	4157.9	7032.5	X25525.8	Y44107.0	322	14.8	46.1
0410	May-08	1945	4156.2	7020.2	X25434.0	Y44077.5	245	21.3	44.3

* Missing sequential numbers or missing "Lat" "Lon" data indicate either a test-tow, aborted-tow or no-trawl-was-attempted.

NOAA FISHERIES SERVICE-NEFSC SPRING BOTTOM TRAWL SURVEY 2013
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 [1]	TOTAL ALL
1[2]	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
3	0	0	0	0	8	0	0	5	0	0	0	0	0	25	14	0	0	0	0	0	5	0	8	0	23	88
4	0	0	0	0	10	0	18	404	0	0	0	0	0	36	5	39	0	0	0	0	14	0	4	0	34	564
5	0	0	0	0	6	0	2	59	0	0	0	0	0	6	4	1	0	0	0	0	3	0	9	0	44	134
6	0	0	0	0	1	0	0	1002	0	0	0	0	0	22	95	2	0	0	11	176	2	0	0	0	411	1722
7	0	0	0	0	3	0	5	88	0	0	0	0	0	26	23	26	0	0	0	7	3	0	8	0	238	427
8[2]	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
9	0	0	0	0	4	0	0	1	0	0	0	1	0	0	0	8	0	0	0	1	0	0	79	0	43	137
10	0	0	0	0	16	0	6	580	0	0	0	0	0	4	0	0	0	0	0	0	0	0	36	0	55	697
11	0	0	0	0	38	0	17	735	0	0	0	3	0	0	0	0	0	0	0	0	0	0	20	0	59	872
12	0	0	0	0	0	0	0	435	0	0	0	0	0	5	1	3	0	0	0	30	8	0	5	0	125	612
13	0	0	0	0	0	0	0	2186	0	0	0	0	0	3	0	0	9	0	11	117	1	0	2	0	8	2337
14	0	0	0	0	1	0	0	2714	0	0	0	0	0	7	1	6	0	0	0	34	3	0	5	0	266	3037
15	0	0	0	0	3	0	0	71	0	0	0	0	0	18	4	7	0	0	0	2	4	0	14	0	72	195
16	0	0	0	0	15	0	7	1383	0	0	0	0	0	28	0	0	0	0	0	0	0	0	27	0	127	1587
17	0	0	0	0	3	0	0	781	0	0	0	0	0	25	0	1	0	0	0	18	1	0	2	0	87	918
18	0	0	0	0	10	0	2	892	0	0	0	0	0	8	0	0	0	0	0	1	0	0	4	0	66	983
19	0	0	0	0	1	0	0	321	0	0	0	0	0	25	0	0	0	0	0	0	9	0	37	0	112	505
20	0	0	0	0	4	0	0	1567	0	0	0	0	0	6	2	8	0	0	0	0	0	0	153	0	389	2129
21	0	0	0	0	4	0	0	259	0	0	0	0	0	26	0	8	0	0	0	0	25	0	48	0	709	1079
22	0	0	0	0	36	0	13	638	0	0	0	0	0	37	0	0	0	0	0	0	16	0	22	1	804	1567
23	0	0	0	0	0	0	0	75	0	0	0	0	0	3	0	0	0	0	0	0	0	0	4	0	185	267
24	0	0	0	0	0	0	0	4531	0	0	0	0	0	4	0	0	0	78	0	0	0	0	2	0	29	4644
25	0	0	0	0	19	0	0	150	0	0	0	0	0	2	0	1	0	0	0	0	2	0	28	1	320	523
26	0	0	0	0	11	0	9	223	0	0	0	0	0	0	0	2	0	0	0	0	1	0	18	0	431	695
27	0	0	0	0	0	0	7	110	0	0	0	0	0	6	0	0	0	0	0	0	2	0	46	0	579	750
28	0	0	0	0	0	0	4	32	0	0	0	0	0	5	0	0	0	0	0	0	0	0	6	0	286	333
29	0	0	0	0	0	0	10	49	0	0	0	0	0	0	0	8	0	0	0	0	1	0	64	0	7104	7236
30	0	0	0	0	1	0	0	1274	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	1	316	1636
31	0	0	0	0	2	0	0	1379	0	0	0	0	0	4	0	0	0	0	0	0	0	0	3	0	146	1534
32	0	0	0	0	0	0	4	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	939	946
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	3123	3130
34	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	26	32

NOAA FISHERIES SERVICE-NEFSC SPRING BOTTOM TRAWL SURVEY 2013
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 [1]	TOTAL ALL
36	0	0	0	0	0	0	13	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	601	616
37	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	19	0	3	0	118	145
38	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	118	121
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	14	0	1086	1102
41	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	106	108
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	53	0	160	221
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	82	1	546	629
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	366	367
45	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	315	323
46	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	17	0	21	0	644	684
47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1162	1164
48	0	0	0	0	8	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	119	0	60	205
49[2]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53	0	0	0	1291	1344
50	0	0	0	0	0	0	17	13	0	0	0	0	0	0	0	0	0	0	0	0	7	0	1	0	8029	8067
51	0	0	0	0	0	0	9	319	0	0	0	0	0	3	0	0	0	0	0	0	1	0	3	0	104	439
52[2]	0	0	0	0	9	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	3	0	976	1005
53	0	0	0	0	0	0	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	0	3564	3652
54	0	0	0	0	0	0	0	438	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	123	562
55	0	0	0	0	0	0	7	316	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	78	420
56	0	0	0	0	0	0	0	299	0	0	0	0	0	0	0	0	10	0	16	0	0	0	0	0	72	397
57	0	0	0	0	0	0	0	369	0	0	0	0	0	0	0	0	43	0	9	0	0	0	0	0	51	472
58	0	0	0	0	0	0	0	593	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	118	711
59	0	0	0	0	0	0	0	1641	0	0	0	0	0	0	1	0	0	0	0	3	0	0	0	0	208	1853
60	0	0	0	0	0	0	8	484	0	0	0	0	3	5	0	0	12	2	0	3	0	0	0	0	73	590
61	0	0	0	0	1	0	0	130	0	0	0	0	1	1	0	0	2	0	15	0	0	0	0	0	44	194
62	0	0	0	0	1	0	0	138	0	0	0	0	0	0	0	0	13	0	0	1	0	0	0	0	24	177
63	0	0	0	0	1	0	0	92	0	0	0	0	1	0	0	0	30	0	30	1	0	0	0	0	103	258
64	0	0	0	0	1	0	0	19	0	0	0	0	0	0	0	0	16	0	45	0	0	0	0	0	19	100
65	0	0	0	0	0	0	0	145	0	0	0	0	0	7	0	0	0	2	14	3	0	0	0	0	63	234
66	0	0	0	0	0	0	0	39	0	0	0	0	1	0	0	0	39	13	16	0	0	0	0	0	12	120
67	0	0	0	0	0	0	0	50	0	0	0	0	0	0	0	0	61	0	24	0	0	0	0	0	89	224
68	0	0	0	0	0	0	0	82	0	0	0	0	1	0	0	0	140	2	46	0	0	0	0	0	31	302
69	0	0	0	0	0	0	0	152	0	0	0	0	0	1	0	0	13	6	17	14	0	0	0	0	7	210
70	0	0	0	0	2	0	0	960	0	0	0	0	1	8	0	0	32	14	0	26	0	0	0	0	24	1067

NOAA FISHERIES SERVICE-NEFSC SPRING BOTTOM TRAWL SURVEY 2013
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 [1] OTHER	TOTAL ALL
71	0	0	0	0	2	0	0	287	0	0	0	0	2	5	0	0	2	1	0	40	0	0	0	0	104	443
72	0	0	0	0	6	0	0	53	0	0	0	0	4	4	0	0	33	0	61	23	0	0	0	0	14	198
73	0	0	0	0	13	0	0	42	0	0	0	0	3	0	0	0	18	1	0	19	0	0	0	0	23	119
74	0	0	0	0	4	0	0	63	0	0	0	0	4	11	0	0	41	112	11	17	0	0	0	0	30	293
75	0	0	0	0	0	0	0	190	0	0	0	0	2	10	0	0	35	1	5	16	0	0	0	0	5	264
76	0	0	0	0	0	0	0	191	0	0	0	0	1	0	0	0	0	1	8	8	0	0	0	0	8	217
77[2]	0	0	0	0	0	0	0	202	0	0	0	0	0	3	0	0	0	0	4	15	0	0	0	0	14	238
78	0	0	0	0	0	0	0	235	0	0	0	0	1	3	0	0	0	0	0	18	0	0	0	0	1	258
79	0	0	0	0	0	0	0	132	0	0	0	0	1	0	0	0	106	0	1	12	0	0	0	0	16	268
80	0	0	0	0	6	0	10	107	0	0	0	0	3	0	0	0	280	83	40	48	0	18	0	0	8	603
81	0	0	0	0	1	0	0	61	0	0	0	0	4	0	0	0	10	15	8	32	0	0	0	0	8	139
82	0	0	0	0	1	0	0	29	0	0	0	0	6	0	0	0	38	17	7	41	0	1	0	0	53	193
83	0	0	0	0	2	0	0	1562	0	0	0	0	5	10	0	0	185	11	11	386	0	0	0	0	15	2187
84	0	0	0	0	1	0	14	714	0	0	0	0	0	8	0	0	44	9	7	172	0	0	0	0	33	1002
85	0	0	0	0	0	0	4	666	0	0	0	0	0	2	0	0	87	4	0	96	1	0	0	0	364	1224
86	0	0	0	0	0	0	0	1258	0	0	0	0	0	0	0	0	3	4	0	28	0	0	0	0	34	1327
87	0	0	0	0	0	0	17	980	0	0	0	0	0	0	13	0	0	1	6	30	0	0	0	0	11	1058
88	0	0	0	0	1	0	0	1050	0	0	0	1	0	13	6	0	0	0	20	111	0	0	1	0	42	1245
89	0	0	0	0	1	0	0	574	0	0	0	0	0	7	14	10	0	0	0	5	1	0	3	0	68	683
90	0	0	0	0	6	0	3	147	0	0	0	0	0	12	52	31	0	0	0	0	1	0	14	0	42	308
91	0	0	0	0	53	0	7	1106	0	0	0	3	0	4	0	0	0	0	0	0	0	0	0	0	74	1247
92	0	0	0	0	8	0	0	2	0	0	0	1	0	10	10	23	0	0	0	15	2	0	0	0	315	386
93	0	0	0	0	17	0	9	0	0	0	0	1	0	12	13	107	0	0	0	17	6	0	1	0	150	333
94	0	0	0	0	25	0	0	369	0	0	0	0	0	2	8	19	0	0	0	7	50	0	35	0	105	620
95	0	0	0	0	10	0	0	9	0	0	0	0	0	30	4	309	0	0	0	15	2	0	6	0	112	497
96	0	0	0	0	69	0	7	276	0	0	0	7	0	6	0	0	0	0	0	1	0	0	10	5	95	476
97	0	0	0	0	3	0	0	0	0	0	0	0	0	16	88	12	0	0	0	3	1	0	10	0	9	142
98	0	0	0	0	183	0	49	6662	0	0	0	24	0	0	0	0	0	0	0	0	0	4	1	2	167	7092
99	0	0	0	0	5	0	3	86	0	0	0	1	0	4	22	114	0	0	0	0	27	0	7	0	32	301
100	0	0	0	0	113	0	15	2332	0	0	0	2	0	0	0	0	0	0	0	0	0	2	9	0	85	2558
101	0	0	0	0	5	0	7	250	0	0	0	0	0	0	0	0	0	0	0	0	0	2	7	0	49	320
102	0	0	0	0	0	0	0	18	0	0	0	0	0	3	0	0	0	0	0	0	0	0	22	0	12	55
103	0	0	0	0	0	0	0	58	0	0	0	0	0	3	0	1	0	0	0	0	0	0	20	0	5	87
104	0	0	0	0	1	0	0	64	0	0	0	0	1	4	0	0	68	3	18	119	0	0	1	0	6	285

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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 [1] OTHER	TOTAL ALL
105	0	0	0	0	0	0	0	43	0	0	0	0	2	0	0	0	509	1	18	8	0	0	0	0	1	582
106	0	0	0	0	0	0	0	41	0	0	0	0	1	0	0	0	220	0	8	24	0	0	0	0	21	315
107	0	0	0	0	0	0	0	104	0	1	0	0	2	0	0	0	13	0	19	12	0	0	0	0	2	153
108	0	0	0	0	0	0	0	57	0	0	0	0	2	0	0	0	101	0	2	11	0	0	0	0	3	176
109	0	0	0	0	1	0	0	21	0	0	0	0	3	0	0	0	9	0	19	59	0	0	0	0	19	131
110	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	30	0	4	72	0	2	0	0	8	118
111	0	0	0	0	2	0	0	0	0	0	0	0	3	4	0	0	9	0	4	78	0	0	0	0	28	128
112	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	8	0	56	60	0	0	0	0	6	137
113	0	0	0	0	2	0	0	20	0	0	0	0	4	7	0	0	40	0	8	114	0	0	0	0	16	211
114	0	0	0	0	3	0	9	6	0	1	0	0	1	0	0	0	1	0	0	195	0	0	0	0	14	230
115	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	200	0	1	0	0	8	211
116	0	0	0	0	1	0	0	6	0	2	0	0	6	6	0	0	1	0	9	203	0	5	0	0	16	255
117	0	0	0	0	0	0	0	58	1	0	0	0	8	0	0	0	45	15	26	349	0	3	0	0	146	651
118	0	0	0	0	1	0	0	206	3	0	0	0	4	2	0	0	202	48	23	224	0	0	0	0	82	795
119	0	0	0	0	0	0	0	380	7	0	0	1	1	8	0	0	2	0	2	81	0	0	0	0	24	506
120	0	0	0	0	0	0	0	262	2	0	0	0	4	0	0	0	45	60	13	17	0	0	0	0	4	407
121	0	0	0	0	0	0	0	697	2	0	0	0	0	4	0	0	64	0	18	22	0	0	0	0	18	825
122	0	0	0	0	0	0	0	594	0	0	0	0	0	4	0	0	254	1	95	64	0	0	0	0	7	1019
123	0	0	0	0	0	0	0	942	0	0	0	0	0	1	0	0	0	0	0	7	0	0	0	0	12	962
124	0	0	0	0	4	0	4	1624	0	0	0	0	0	9	0	0	23	9	0	25	0	0	2	0	11	1711
125	0	0	0	0	24	0	3	1262	0	0	0	0	0	12	0	0	3	0	0	96	0	0	1	0	67	1468
126	0	0	0	0	45	0	8	1718	0	0	0	1	0	3	0	0	18	0	0	233	0	0	1	0	92	2119
127	0	0	0	0	35	0	4	319	0	0	0	2	0	8	0	2	0	0	0	71	0	0	1	0	80	522
128	0	0	0	0	42	0	6	618	0	0	0	1	0	16	0	2	0	0	0	6	10	0	18	0	119	838
129	0	0	0	0	37	0	19	2066	0	0	0	1	0	35	0	0	0	1	0	1	0	0	21	0	103	2284
130	0	0	0	0	9	0	26	201	0	0	0	0	0	37	0	1	0	0	0	0	5	0	6	0	150	435
131	0	0	0	0	5	0	1	2751	0	0	0	1	0	11	0	0	0	0	5	18	0	0	0	0	27	2819
132	0	0	0	0	2	0	4	1005	0	0	0	0	0	6	0	0	0	0	0	34	0	0	0	0	23	1074
133	0	0	0	0	2	0	17	622	1	0	0	0	0	18	0	0	0	0	0	69	0	0	0	0	11	740
134	0	0	0	0	6	0	0	541	13	0	0	0	0	8	0	0	8	13	14	125	0	0	0	0	24	752
135	0	0	0	0	7	0	0	71	2	0	0	0	0	7	0	0	11	1	4	241	0	0	0	0	29	373
136	0	0	0	0	6	0	13	23	19	0	0	0	7	5	0	0	17	0	55	214	0	0	0	0	25	384
137	18	0	0	0	13	0	0	71	5	0	0	0	3	11	0	0	16	0	7	137	0	0	0	0	28	309
138	0	0	0	0	3	0	0	66	5	2	0	0	18	7	0	0	1	0	13	160	0	6	0	0	70	351

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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 [1] OTHER	TOTAL ALL
139	0	0	0	0	0	0	0	76	1	6	0	0	2	0	0	0	64	4	30	29	0	0	0	0	7	219
140	0	0	0	0	0	0	0	31	0	12	0	0	9	1	0	0	203	0	23	46	0	0	0	0	11	336
141	0	0	0	0	0	0	0	74	0	0	0	0	1	0	0	0	1	0	9	14	0	0	0	0	3	102
142	0	0	0	0	0	0	0	6	0	0	0	0	5	2	0	0	0	0	2	23	0	0	0	0	2	40
143	0	0	0	0	0	0	0	15	0	4	0	0	1	2	0	0	32	0	3	38	0	0	0	0	259	354
144	3	0	0	0	1	0	0	0	2	8	0	0	4	5	0	0	213	0	12	54	0	0	0	0	5	307
145	0	0	0	0	1	0	0	10	0	11	0	0	1	10	0	0	4	0	3	31	0	0	0	0	5	76
146	0	0	0	0	16	0	0	9	0	15	0	0	8	2	0	0	5	0	35	95	0	0	0	0	71	256
147	0	0	0	0	1	0	0	0	0	7	0	0	9	2	0	0	1	0	38	417	0	1	0	0	19	495
148	0	0	0	0	1	0	0	0	0	3	0	0	2	0	0	0	3	0	17	102	0	0	0	0	6	134
149	0	0	0	0	2	0	0	0	0	10	0	0	2	3	0	0	0	0	22	174	0	0	0	0	10	223
150	0	0	0	0	2	0	0	0	0	11	0	0	6	5	0	0	0	0	58	190	0	0	0	0	71	343
151	0	0	0	0	4	0	0	0	3	1	0	0	0	5	0	0	1	0	54	162	0	0	0	0	15	245
152	0	0	0	0	0	0	0	0	0	3	0	0	2	0	0	0	0	0	24	46	0	0	0	0	3	78
153	0	0	0	0	0	0	0	0	0	5	0	0	2	0	0	0	0	0	7	56	0	0	0	0	2	72
154	0	0	0	0	0	0	0	0	0	9	0	0	1	3	0	0	0	0	4	10	0	0	0	0	4	31
155	0	0	0	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0	8	14	0	0	0	0	1	27
156	0	0	1	0	1	0	2	205	13	0	0	0	1	22	0	0	0	0	8	42	0	0	0	0	5	300
157	0	0	0	0	4	0	21	819	1	0	0	0	0	8	0	0	2	7	9	24	0	0	0	0	17	912
158	0	0	0	0	8	0	14	302	0	0	0	2	0	30	0	0	407	10	10	32	0	0	0	0	49	864
159	0	0	0	0	88	0	9	29	1	0	0	0	0	18	215	11	2	0	26	2	12	0	2	0	73	488
160	0	0	0	0	76	0	86	336	0	0	0	0	0	0	1	0	0	0	0	0	56	0	2	0	38	595
161	0	0	0	0	75	0	51	87	0	0	0	2	0	0	0	0	0	0	1	0	0	0	1	0	56	273
162	0	0	0	0	24	0	18	6	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3	0	26	79
163	0	0	0	0	59	0	21	0	0	0	0	0	0	55	2	0	0	0	54	6	35	0	3	0	268	503
164	0	0	0	0	8	0	16	244	0	0	0	0	0	39	0	0	5	0	19	0	55	0	2	0	72	460
165	0	0	0	0	10	0	69	349	6	0	0	1	0	17	0	0	187	4	83	29	0	2	1	0	59	817
166	0	0	0	0	0	0	0	4	1	8	0	0	0	0	0	0	0	0	9	14	0	0	0	0	6	42
167	0	0	0	0	0	0	0	0	2	12	0	0	1	0	0	0	0	0	11	19	0	0	0	0	5	50
168	0	0	0	0	0	0	0	0	0	12	0	0	2	0	0	0	0	0	2	33	0	0	0	0	2	51
169	5	0	0	0	8	0	0	0	23	26	0	0	9	5	0	0	5	0	311	405	0	0	0	0	38	835
170	2	0	0	0	2	0	0	0	15	0	0	0	12	3	0	0	13	1	142	154	0	0	0	0	22	366
171	2	0	0	0	5	0	3	233	6	0	0	0	2	3	0	0	22	7	58	106	0	0	0	0	21	468
172[2]	0	0	0	0	0	0	0	0	3	3	0	0	1	0	0	0	0	0	48	143	0	0	0	0	4	202

NOAA FISHERIES SERVICE-NEFSC SPRING BOTTOM TRAWL SURVEY 2013
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 [1]	TOTAL ALL
173	7	0	0	0	6	0	0	0	23	4	0	0	21	2	0	0	24	0	728	602	0	0	0	0	23	1440
174	0	0	0	0	0	0	0	0	5	0	0	0	1	0	0	0	28	0	26	14	0	1	0	0	9	84
175	0	0	0	0	1	0	3	0	4	0	0	0	1	1	0	0	338	0	14	6	0	0	0	0	7	375
176	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	189	0	4	3	0	0	0	0	6	204
177	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	171	0	2	1	0	0	0	0	1	176
178	0	0	0	0	0	0	0	0	0	8	0	0	1	0	0	0	77	0	0	0	0	0	0	0	1	87
179	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	6	0	1	1	0	0	0	0	3	15
180	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	208	0	25	44	0	0	0	0	3	283
181	0	0	0	0	1	0	0	0	2	1	0	0	1	0	0	0	65	1	493	562	0	0	0	0	9	1135
182	0	0	0	0	1	0	5	0	1	0	0	0	5	0	0	0	0	1	69	86	0	1	0	0	49	218
183	0	0	0	0	1	0	55	6595	0	0	0	0	1	5	0	0	9	1	39	11	0	0	1	0	32	6750
184	0	0	0	0	4	0	26	10	0	0	0	0	0	96	0	5	0	0	27	0	10	0	7	0	32	217
185	0	0	0	0	2	0	30	9	0	0	0	0	0	89	0	1	0	0	7	0	21	1	12	0	42	214
186	0	0	0	0	0	0	54	6	0	0	0	0	0	38	17	0	0	0	0	1	13	0	32	0	16	177
187	0	0	0	0	16	0	20	68	0	0	0	0	0	39	0	1	0	0	0	0	188	0	47	0	128	507
188	0	0	0	0	12	0	3	1088	0	0	0	7	0	0	0	0	0	0	15	0	2	0	11	0	92	1230
189	0	0	0	0	15	0	13	1393	0	0	0	0	0	14	0	1	0	0	4	0	62	0	5	0	48	1555
190	0	0	0	0	31	0	5	113	0	0	0	0	6	32	0	2	0	0	28	0	24	0	0	0	46	287
191	0	0	0	0	35	0	30	7001	0	0	0	6	0	28	0	27	0	0	149	2	16	0	1	0	84	7379
192	0	0	0	0	11	0	2	35	0	0	0	5	0	63	0	2	0	0	30	2	102	4	7	0	63	326
193	0	0	0	0	20	0	0	949	0	0	0	0	0	5	0	0	0	0	0	0	13	1	16	0	206	1210
194	0	0	0	0	38	0	18	2227	0	0	0	0	0	4	0	0	0	0	16	0	0	0	34	0	127	2464
195	0	0	0	0	6	0	3	27	0	0	0	1	1	122	0	0	0	0	11	0	58	0	16	0	54	299
196	0	0	0	0	7	0	2	2	1	0	0	0	3	0	0	0	1	0	10	14	3	0	1	0	8	52
197	0	0	0	0	6	0	0	0	1	0	0	0	5	1	0	0	1	0	37	197	0	0	0	0	43	291
198	2	0	0	0	3	0	14	0	3	0	0	1	2	0	0	0	3	1	150	182	0	0	0	0	27	388
199	0	0	0	0	0	0	0	0	5	0	0	0	1	0	0	0	0	0	246	116	0	0	0	0	7	375
200	0	0	0	0	0	0	0	0	0	4	0	0	3	0	0	0	0	0	39	34	0	0	0	0	136	216
201	0	2	0	0	1	0	0	2	2	1	0	0	4	0	0	0	45	1	11	19	0	0	0	0	20	108
202	0	0	0	0	0	0	0	0	0	5	0	0	1	0	0	0	10	8	1	4	0	0	0	0	12	41
203	0	0	0	0	0	0	0	0	1	12	0	0	0	0	0	0	14	0	2	1	0	0	0	0	41	71
204	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	47	0	0	0	0	6	59
205	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	2	0	1	0	0	1	8
206	2	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	5	0	0	0	0	0	0	0	29	49

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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 [1]	TOTAL ALL
207	0	0	0	0	2	0	0	0	0	3	0	0	1	0	0	0	0	0	3	4	0	0	0	0	9	22
208	0	1	0	0	0	0	0	1	2	0	0	0	0	0	0	0	12	10	0	3	0	0	0	0	6	35
209	5	48	1	0	1	39	0	0	0	0	0	1	0	0	0	1	43	42	1	0	2	19	1	0	30	234
210	0	33	0	0	0	2	0	0	0	0	0	0	0	0	0	0	65	32	0	0	0	9	1	0	11	153
211	0	1	0	0	2	0	0	0	0	1	0	0	2	0	0	0	238	2	0	3	0	0	0	0	10	259
212	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	6	0	0	0	0	0	0	0	7	15
213	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	1	0	0	0	0	0	0	13	32
214	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	33	36
215	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	12
216[2]	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
217[2]	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	345	20	0	0	0	0	0	0	17	384
218	0	3	0	0	15	0	1	0	4	1	1	0	0	0	0	0	3	8	0	0	0	5	0	0	55	96
219	0	2	10	4	100	11	55	29	0	1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	68	287
220	0	2	0	0	93	3	13	5	0	0	7	1	0	0	0	0	1	1	8	0	0	0	0	0	35	169
221	0	2	0	0	84	1	1	0	0	0	3	0	0	0	0	1	1	0	4	0	0	0	0	0	50	147
222	2	10	0	0	87	6	0	0	0	0	2	0	0	0	0	0	5	1	0	0	0	9	0	0	37	159
223	1	14	0	0	18	6	0	7	0	0	2	1	0	0	0	0	2	1	0	0	0	10	0	0	27	89
224	0	10	0	0	17	0	3	0	0	0	0	0	0	0	0	0	17	6	0	0	1	0	0	0	40	94
225[2]	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	4	2	0	0	0	0	0	0	7	15
226	0	26	0	0	10	0	0	0	0	0	5	0	0	0	0	0	32	113	1	0	4	0	20	0	63	274
227	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	135	41	12	38	0	0	4	0	29	261
228	0	0	0	0	0	0	0	0	0	1	1	0	3	0	0	0	793	21	23	34	0	0	0	0	26	902
229	0	0	0	0	0	0	0	0	1	6	0	0	0	0	0	0	16	177	80	32	0	0	0	0	58	370
230	0	0	0	0	2	0	0	0	0	3	0	0	2	0	0	0	18	1	8	48	0	5	0	0	33	120
231	1	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	1	0	51	86	0	0	0	0	27	170
232	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	10	1	11	30	0	0	0	0	22	76
233	1	1	0	0	1	0	0	3	2	0	0	0	1	0	0	0	7	0	5	33	0	1	0	0	10	65
234	0	0	0	0	1	0	0	2	0	0	0	0	2	0	0	0	3	0	19	41	0	0	1	0	11	80
235	0	1	0	0	2	0	0	4	1	0	0	0	2	0	0	0	39	147	3	40	0	2	0	0	10	251
236	0	1	0	0	3	0	12	18	0	0	0	1	0	2	0	0	11	1	24	18	3	0	2	0	45	141
237	0	0	0	0	11	0	0	68	0	0	0	3	0	1	0	0	4	1	30	41	1	0	2	0	55	217
238	0	0	0	1	12	0	14	4	1	0	0	0	1	0	0	0	0	0	0	64	0	0	1	0	224	322
239	0	0	0	0	46	0	2	29	0	0	0	1	0	13	0	2	0	0	15	14	4	0	4	0	167	297
240	0	0	0	0	183	0	0	64	0	0	0	0	0	7	0	0	0	0	0	0	0	0	3	0	114	371

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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 [1] OTHER	TOTAL ALL
241	0	0	0	0	63	0	68	12	0	0	0	8	0	0	0	0	0	0	13	0	8	0	9	0	283	464
242	0	0	0	0	9	0	0	0	0	0	0	1	0	0	0	0	0	0	0	10	0	0	1	0	27	48
243	0	0	0	0	444	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	24	2	2	106	584
244	0	0	0	3	6	0	7	2	2	0	0	1	0	0	0	0	4	1	21	35	0	0	6	0	105	193
245	0	0	0	0	4	0	0	0	2	0	0	0	1	0	0	0	0	0	27	52	0	0	0	0	7	93
246	0	0	0	0	1	0	0	1	1	1	0	0	1	0	0	0	0	0	30	37	0	0	0	0	17	89
247	0	0	0	0	14	0	0	0	1	4	0	0	12	0	0	0	31	0	52	75	0	0	0	0	38	227
248	3	0	0	0	15	0	0	0	0	3	0	0	8	0	0	0	3	0	254	309	0	0	0	0	38	633
249	0	0	0	0	2	0	0	0	0	2	1	0	17	0	0	0	0	0	138	74	0	0	0	0	28	262
250[2]	4	7	0	0	4	0	0	0	2	0	1	0	19	0	0	0	0	0	309	286	0	0	0	0	42	674
251	0	0	0	0	53	0	6	0	2	0	0	2	9	0	0	0	1	0	55	78	0	0	2	0	67	275
252	0	0	0	1	564	0	20	0	0	0	0	0	0	0	0	0	0	1	0	6	3	0	6	0	69	670
253	0	0	0	2	275	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	1	9	1	0	30	321
254	1	5	0	1	21	0	6	0	3	0	0	0	0	0	0	0	0	0	9	18	0	0	6	0	250	320
255	2	6	0	1	7	0	6	0	3	0	0	1	0	0	0	0	0	0	25	25	0	0	4	0	498	578
256	0	1	0	1	37	0	0	0	0	0	0	0	0	0	0	0	0	0	13	8	0	0	11	0	41	112
257	0	0	0	1	339	0	67	6	0	0	0	4	0	8	0	0	0	0	39	0	12	0	2	0	498	976
258	0	0	0	1	1620	0	122	0	0	0	0	3	0	15	0	0	0	0	131	1	16	4	3	0	1184	3100
259	0	0	0	1	292	0	0	0	4	0	0	0	6	0	0	0	0	0	20	8	0	0	10	0	128	469
260	0	0	0	0	280	0	47	0	0	0	0	5	0	3	0	0	0	0	668	36	1	9	2	0	692	1743
261	2	9	0	2	17	0	0	0	16	0	0	1	10	0	0	0	0	0	105	29	0	0	4	0	78	273
262	0	229	0	0	3	0	0	0	11	0	0	0	10	0	0	0	0	0	61	71	0	0	1	0	13	399
263	2	116	0	0	1	0	0	0	0	2	0	0	1	0	0	0	0	0	34	7	0	0	0	0	6	169
264[2]	0	8	0	1	0	0	0	0	4	0	1	0	7	0	0	0	0	0	54	24	0	0	0	0	16	115
265	31	900	0	0	1	0	0	0	8	0	2	0	1	0	0	0	33	0	7	8	0	0	0	0	14	1005
266	2	31	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	5	48
267	0	70	0	0	1	0	0	0	7	0	0	0	2	0	0	0	0	0	57	3	0	0	4	0	10	154
268	1	94	0	0	1	0	0	0	5	0	0	0	1	0	0	0	0	0	9	12	0	131	3	0	123	380
269	0	10	0	1	102	0	0	0	4	0	0	1	0	0	0	0	0	0	14	0	0	11	3	0	47	193
270	0	35	11	11	452	0	0	9	0	0	0	0	0	0	0	0	0	0	0	2	3	47	31	1	175	777
271	4	4	0	1	142	0	0	0	2	0	0	0	4	0	0	0	0	0	21	80	0	7	2	0	56	323
272	1	14	0	1	57	0	0	0	11	5	2	0	4	0	0	0	0	0	20	40	0	23	0	0	34	212
273	0	6	0	0	13	0	0	0	30	4	0	0	5	0	0	0	0	0	19	36	0	13	1	0	16	143
274[2]	6	0	0	1	103	6	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	22	0	0	31	171

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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 [1] OTHER	TOTAL ALL
275[2]	5	3	3	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	6	12	0	5	41
276	23	16	1191	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	8	13	0	8	1264
277[2]	2	44	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	22	20	0	15	107
278	9	116	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	13	0	6	3	0	70	220
279[2]	10	48	0	0	1	0	0	0	8	33	3	0	1	0	0	0	0	0	5	11	0	0	2	0	30	152
280	53	44	0	0	0	0	0	0	16	18	0	0	1	0	0	0	0	0	32	50	0	16	0	0	114	344
281	51	362	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	30	3	0	0	0	0	74	534
282	27	68	0	11	12	0	0	0	0	0	1	0	0	0	0	0	0	0	0	6	0	38	1	0	60	224
283[2]	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
284	9	33	0	14	3	0	0	0	0	0	0	0	0	0	0	0	0	0	11	3	0	131	2	0	7	213
285	12	40	0	0	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	0	6	12	0	46	529
286	40	24	0	8	145	0	35	0	0	0	0	2	0	0	0	0	0	0	12	2	0	9	0	0	78	355
287	45	91	8	5	23	1	2	0	0	0	2	0	0	0	0	0	0	0	2	0	0	17	0	0	27	223
288[2]	8	494	15	0	35	0	0	0	12	4	1	2	0	0	0	0	0	0	16	0	0	320	0	0	127	1034
289	1511	2392	10	0	2	0	0	0	6	0	0	0	0	0	0	0	0	0	14	16	0	0	0	0	109	4060
290	128	1474	4	0	0	0	39	0	31	0	0	0	0	0	0	0	6	0	26	7	0	0	0	0	74	1789
291	37	341	1	0	0	0	0	0	25	14	0	0	0	0	0	0	1	0	18	7	0	0	0	0	51	495
292	9	856	3	0	0	0	0	0	55	154	3	0	0	0	0	0	0	0	76	37	0	5	0	0	30	1228
293	0	121	0	0	242	0	0	0	1	11	6	2	2	0	0	0	1	0	68	10	0	0	0	0	20	484
294	0	1132	0	0	128	0	0	0	0	1	5	0	2	0	0	0	9	0	64	59	0	0	0	0	55	1455
295[2]	0	2	0	0	6	0	0	0	0	22	0	0	5	0	0	0	4	0	40	44	0	11	0	0	19	153
296[2]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63	1	1	0	0	0	1	0	3	69
297	0	0	0	0	0	0	0	0	0	11	0	0	1	0	0	0	10	78	0	2	0	0	0	0	21	123
298	0	0	0	0	4	0	0	0	2	8	1	0	7	0	0	0	1	0	143	345	0	0	1	0	51	563
299	9	3	0	0	3	0	0	0	0	47	0	0	8	0	0	0	0	0	165	112	0	0	0	0	15	362
300	14	0	0	0	6	0	0	0	1	22	0	0	13	0	0	0	0	0	81	85	0	0	0	0	14	236
301	46	113	0	0	1	0	0	0	7	37	1	0	4	0	0	0	62	3	90	60	0	11	0	0	87	522
302	7	388	0	0	0	0	0	0	1	84	0	0	1	0	0	0	1	0	26	18	0	0	0	0	49	575
303	134	477	0	0	0	0	0	0	1	9	0	0	0	0	0	0	0	0	20	3	0	0	0	0	30	674
304	39	187	0	0	0	0	0	0	4	35	0	0	0	0	0	0	27	0	22	2	0	0	0	0	20	336
305	8	33	0	3	675	0	0	0	0	0	2	6	0	0	0	0	1	0	0	0	0	5	0	0	56	789
306	18	18	0	7	512	0	6	0	0	0	4	9	0	0	0	0	0	0	0	0	0	19	0	0	60	653
307	3	7	0	39	797	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	10	0	0	44	905
308	1	3	0	183	170	1	35	0	0	0	3	0	0	0	0	0	0	0	0	0	0	81	0	0	579	1056

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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 [1] OTHER	TOTAL ALL
309	0	0	0	95	603	0	89	0	0	0	4	0	0	0	0	0	0	0	0	0	0	7	0	0	89	887
310	10	40	0	33	22	42	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	16	0	0	52	220
311	12	3	0	10	39	102	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	23	1	0	22	214
312	0	3	19	20	176	14	7	9	0	0	0	4	0	0	0	0	1	0	0	0	1	2	1	0	96	353
313	0	4	0	33	163	2	11	6	0	0	0	2	0	0	0	0	0	0	0	0	0	5	1	0	20	247
314	22	5	0	9	11	104	0	0	0	0	0	1	0	0	0	0	6	0	0	0	0	64	0	0	25	247
315	23	60	1	1	713	8	0	0	0	2	0	0	0	0	0	0	36	34	0	0	0	8	0	0	56	942
316	0	1	1	6	91	298	4	0	0	0	1	5	0	0	0	0	6	1	0	0	1	5	0	0	12	432
317	3	4	1	1	24	24	0	0	0	0	0	2	0	0	0	0	2	5	0	0	0	8	0	0	20	94
318	0	17	1	0	16	31	0	0	0	0	0	0	0	0	0	0	3	9	0	0	0	5	0	0	8	90
319	6	12	1	5	18	74	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	12	0	0	19	160
320[2]	0	0	2	2	6	23	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	14	0	0	7	56
321	7	0	1	2	24	87	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	7	0	0	18	148
322	17	1	1	8	104	371	0	0	0	1	0	1	0	0	0	0	0	2	0	0	0	18	0	0	23	547
323	1	13	0	1	44	3	0	0	0	4	0	2	0	0	0	0	1	0	0	0	0	15	0	0	20	104
324	2	4	0	28	124	0	2	15	0	0	9	5	0	0	0	0	7	7	0	0	0	3	0	0	35	241
325	0	0	0	0	6	0	0	0	0	22	2	0	1	0	0	0	132	1	0	0	0	128	0	0	40	332
326	0	0	0	0	1	0	0	0	0	9	2	0	1	0	0	0	4	0	0	1	0	125	0	0	39	182
327	0	3	0	0	5	0	0	0	0	3	0	0	0	0	0	0	5	0	0	0	0	253	0	0	16	285
328	0	0	0	37	106	0	3	23	0	0	10	4	0	0	0	0	1	1	0	0	0	4	0	0	46	235
329	0	0	0	15	226	0	3	8	0	0	9	3	0	0	0	0	3	0	0	0	1	4	0	0	28	300
330	0	3	0	7	240	4	0	0	0	0	5	2	0	0	0	0	2	0	0	0	2	15	0	0	22	302
331[2]	0	0	0	0	51	0	0	0	0	1	1	0	1	0	0	0	1	0	0	0	0	46	0	0	30	131
332	0	1	0	0	68	0	1	0	0	3	7	0	3	0	0	0	1	0	0	0	0	23	0	0	29	136
333	0	0	0	1	22	0	0	0	0	2	3	1	1	0	0	0	4	0	0	0	0	37	0	0	30	101
334	0	0	0	0	3	0	0	0	0	1	6	0	0	0	0	0	60	0	0	0	0	325	0	0	28	423
335	0	27	1	1	73	0	10	0	0	0	10	1	0	0	0	0	8	5	0	0	0	10	0	0	22	168
336	0	0	0	0	66	0	0	0	0	20	0	0	0	0	0	0	0	0	0	51	0	35	0	0	72	244
337	0	0	0	0	67	0	0	0	1	11	0	0	1	0	0	0	0	0	2	33	0	99	0	0	332	546
338	0	0	0	0	174	0	0	0	0	14	0	0	8	0	0	0	1	0	2	6	0	21	0	0	33	259
339	0	0	0	0	25	0	0	0	0	14	0	0	2	0	0	0	1	0	26	271	0	5	0	0	508	852
340	0	0	0	0	70	0	0	0	1	7	1	0	2	2	0	0	2	0	7	21	0	73	0	0	47	233
341	0	0	0	0	26	0	0	0	3	6	4	0	0	0	0	0	19	0	11	19	0	31	0	0	34	153
342	4	0	0	0	2	0	0	0	2	4	1	0	0	0	0	0	444	1972	0	3	0	1	0	0	37	2470

NOAA FISHERIES SERVICE-NEFSC SPRING BOTTOM TRAWL SURVEY 2013
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 [1] OTHER	TOTAL ALL
343	3	0	0	0	3	0	0	7	11	3	2	0	0	0	0	0	223	119	1	2	1	1	0	0	148	524
344	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	653	5	0	0	0	1	0	0	10	672
345[2]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	2	5
346	0	0	0	0	2	0	0	8	0	11	0	0	2	0	0	0	35	470	0	2	0	3	0	0	138	671
347	2	6	0	0	28	2	2	11	0	0	6	2	0	0	0	0	2	2	0	0	0	39	0	0	39	141
348[2]	3	0	0	0	2	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	15	39
349	11	0	0	0	57	37	3	1	0	0	11	9	0	0	0	0	4	0	0	0	0	20	0	0	62	215
350	0	0	4	32	140	2	2	11	0	0	4	0	0	0	0	0	0	1	0	0	0	0	1	0	43	240
351	0	0	4	10	83	43	11	1	0	0	7	0	0	0	0	0	1	1	0	0	0	0	2	0	49	212
352	0	0	0	53	108	14	20	57	0	0	7	0	0	0	0	0	2	2	0	0	0	0	1	0	48	312
353[2]	0	127	13	0	3	0	11	8	0	0	8	1	0	0	0	0	0	0	0	0	0	4	3	0	35	213
354	13	115	35	0	4	0	0	0	0	0	7	2	0	0	0	0	1	0	0	0	0	0	0	0	29	206
355	0	0	0	21	121	13	5	88	0	0	3	0	0	0	0	0	8	2	0	0	0	0	1	0	20	282
356	0	1	0	6	246	64	11	207	0	0	1	3	0	0	0	0	4	1	0	0	0	1	0	0	18	563
357	0	0	0	13	120	9	4	283	0	0	11	1	0	0	0	0	12	1	0	0	0	0	0	0	13	467
358	7	104	0	0	161	162	8	409	0	0	4	5	0	0	0	0	9	14	0	0	1	2	2	0	42	930
359	0	0	0	9	72	60	5	1263	0	0	1	1	0	0	0	0	4	2	0	0	0	0	1	0	47	1465
360	0	0	0	2	123	12	31	1993	0	0	8	0	0	0	0	0	3	0	0	0	1	2	1	0	59	2235
361	0	16	6	6	105	259	21	5	0	0	0	1	0	0	0	0	1	0	0	0	0	1	1	0	70	492
362	8	12	3	7	114	482	13	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	63	705
363	5	9	0	3	135	28	2	41	0	0	2	2	0	0	0	0	2	0	0	0	0	0	0	0	32	261
364	0	0	4	44	222	469	0	0	0	0	0	1	0	0	0	0	3	0	0	0	0	4	0	0	102	849
365	7	5	11	4	105	1857	17	0	0	0	1	2	0	0	0	0	2	1	0	0	0	5	0	0	23	2040
366	0	6	7	16	61	32	9	10	0	0	2	9	0	0	0	0	4	0	0	0	0	4	0	0	42	202
367	0	0	0	41	69	11	0	8	0	0	1	1	0	0	0	0	1	1	0	0	0	2	0	0	26	161
368	0	0	0	11	95	0	13	0	0	0	2	2	0	0	0	0	3	0	0	0	0	9	0	0	19	154
369	0	0	8	7	58	0	8	0	0	0	14	2	0	0	0	0	4	4	0	0	0	11	1	0	25	142
370	0	0	0	5	96	2	3	0	0	0	8	3	0	0	0	0	12	19	0	0	0	3	0	0	18	169
371	0	0	0	8	84	20	24	16	0	0	6	2	0	0	0	0	3	1	0	0	0	9	0	0	24	197
372	0	0	12	10	180	6	2	11	0	0	3	1	0	0	0	0	15	5	0	0	0	4	0	0	26	275
373	0	1	0	1	178	110	26	11	0	0	9	4	0	0	0	0	12	1	0	0	0	1	0	0	8	362
374	0	0	0	2	148	262	22	32	0	0	3	0	0	0	0	0	11	2	0	0	0	3	0	0	21	506
375	0	0	0	1	574	6	20	12	0	0	0	4	0	0	0	0	15	6	0	0	0	8	0	0	29	675
376	3	145	1	0	2	2	4	0	0	0	0	1	0	0	0	0	0	3	0	0	0	10	1	0	20	192

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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 [1] OTHER	TOTAL ALL
377	5	0	58	1	28	392	3	40	0	0	1	2	0	0	0	0	0	7	0	0	0	10	1	0	44	592
378	0	0	68	4	496	118	12	17	0	0	5	3	0	0	0	0	2	3	0	0	0	0	1	0	69	798
379	0	0	37	0	208	25	2	2	0	0	6	6	0	0	0	0	57	3	0	0	0	4	0	0	23	373
380	0	0	0	0	75	0	2	0	2	0	27	0	0	0	0	0	1	1	0	0	0	47	0	0	14	169
381	0	2	0	0	121	8	15	2	0	0	9	5	0	0	0	0	1	0	0	0	0	25	0	0	18	206
382	23	0	0	0	21	86	3	8	0	0	10	4	0	0	0	0	0	0	0	0	0	44	0	0	37	236
383	15	11	0	0	55	2	16	41	12	3	62	0	0	0	0	0	15	0	0	0	0	42	0	0	24	298
384	5	9	6	0	28	5	2	1385	4	0	19	1	0	0	0	0	13	0	0	0	0	26	0	0	18	1521
385	94	13	70	0	50	4	3	1999	15	1	47	2	0	0	0	0	461	0	0	0	0	20	0	0	58	2837
386	1	0	0	0	1	0	0	5	48	16	6	1	0	0	0	0	3	0	0	0	0	135	0	0	24	240
387	0	0	0	0	0	0	0	0	14	17	0	0	0	0	0	0	1	0	0	0	0	30	1	0	18	81
388[2]	0	0	0	0	6	0	0	0	36	21	3	0	0	0	0	0	0	0	7	11	0	57	0	0	26	167
389[2]	41	512	2	0	0	2	0	194	1	15	2	0	0	0	0	0	2	0	0	0	0	3	0	0	50	824
390[2]	14	624	29	0	0	2	0	116	3	10	1	0	0	0	0	0	2	1	0	0	0	7	0	0	36	845
391	36	100	6	0	4	0	2	616	221	16	8	0	0	0	0	0	0	0	1	0	0	12	0	0	178	1200
392	16	16	0	0	1	14	0	6	2	2	6	4	0	0	0	0	0	0	0	0	0	11	0	0	17	95
393	46	197	0	0	0	30	0	67	0	2	1	0	0	0	0	0	0	0	0	0	0	2	0	0	34	379
394[2]	9	0	0	0	2	91	0	56	23	4	49	1	0	0	0	0	0	10	3	0	0	3	0	0	3	254
395	35	5	0	0	12	93	0	0	181	52	130	1	0	0	0	0	1	0	0	0	0	48	0	0	26	584
396	52	0	0	0	1	1	0	0	344	105	7	0	0	0	0	0	196	2	2	14	0	61	0	0	58	843
397	9	0	0	0	1	1	0	0	74	43	1	0	0	0	0	0	3	0	7	1	0	43	0	0	26	209
398	7	0	0	0	0	0	0	0	39	41	0	0	0	0	0	0	100	1	6	1	0	100	0	0	45	340
399	30	0	0	0	12	0	1	0	72	29	60	0	0	0	0	0	7	0	2	0	0	7	0	0	252	472
400	19	0	0	0	12	0	0	0	112	41	4	0	1	0	0	0	0	0	68	1	0	60	0	0	96	414
401	3	0	0	0	109	1	1	0	31	13	41	5	0	0	0	0	0	0	10	0	0	12	0	0	74	300
402	5	0	0	1	17	68	0	0	28	6	111	2	0	0	0	0	0	0	2	2	0	16	0	0	34	292
403[2]	5	0	0	0	0	2	0	6	5	4	2	0	0	0	0	0	0	1	1	0	0	6	0	0	19	51
404	254	86	6	0	4	9	0	237	182	11	11	0	0	0	0	0	1	0	1	0	0	27	0	0	112	941
405	27	0	1	0	0	0	0	329	31	32	2	0	0	0	0	0	0	0	5	0	0	5	0	0	33	465
406	14	2	0	0	2	0	0	646	30	5	2	0	0	0	0	0	0	0	0	2	0	0	0	0	13	716
407	4	0	0	0	1	0	0	4	34	36	8	0	0	0	0	1	0	0	4	7	0	14	0	0	96	209
408	5	0	0	0	10	0	0	0	5	15	21	0	0	0	0	0	316	0	3	3	0	25	0	0	49	452
409	0	0	0	0	7	0	0	0	2	33	0	0	1	0	0	0	75	27	0	14	0	45	0	0	83	287
410	0	0	0	0	85	0	0	0	0	3	0	0	2	0	0	0	0	1	3	10	0	196	0	0	20	320

NOAA FISHERIES SERVICE-NEFSC SPRING BOTTOM TRAWL SURVEY 2013
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 [1]	TOTAL ALL
TOTAL	3311	12967	1678	938	18685	6184	2085	97440	2065	1539	938	269	472	1611	618	806	10547	4049	7854	12736	1063	3889	1678	16	56795	250233

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

[2] Excluded from stock assessement due to an unacceptable tow evaluation code

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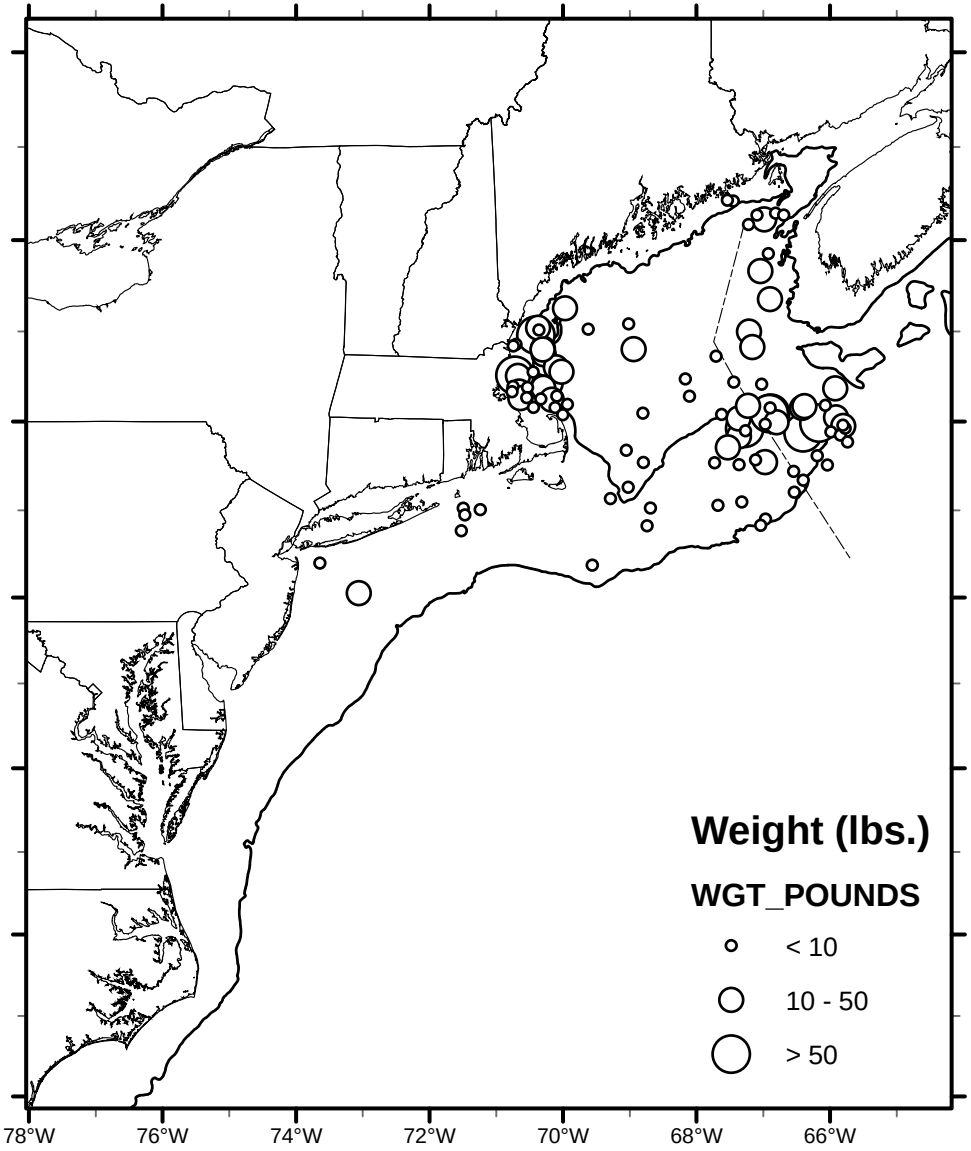
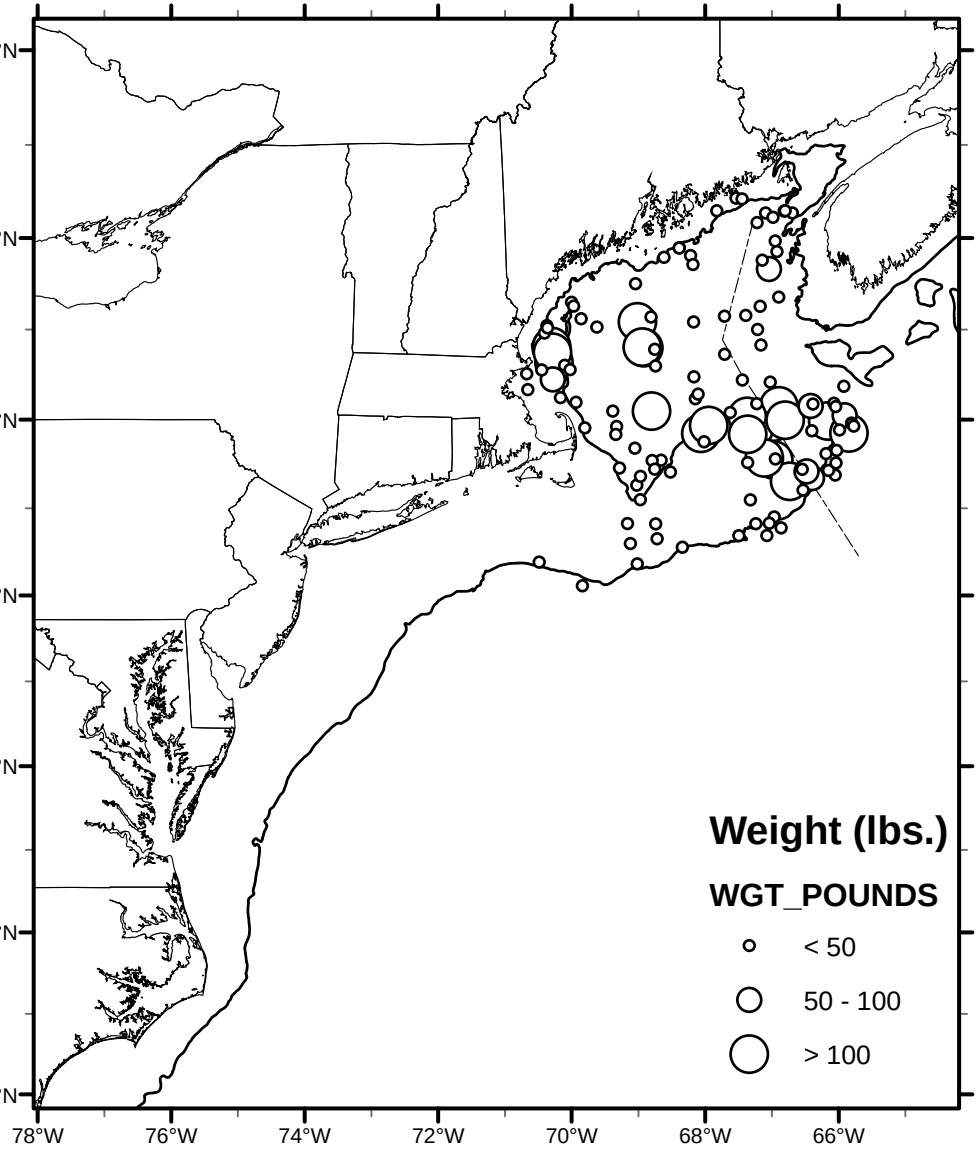
ATLANTIC COD



HADDOCK



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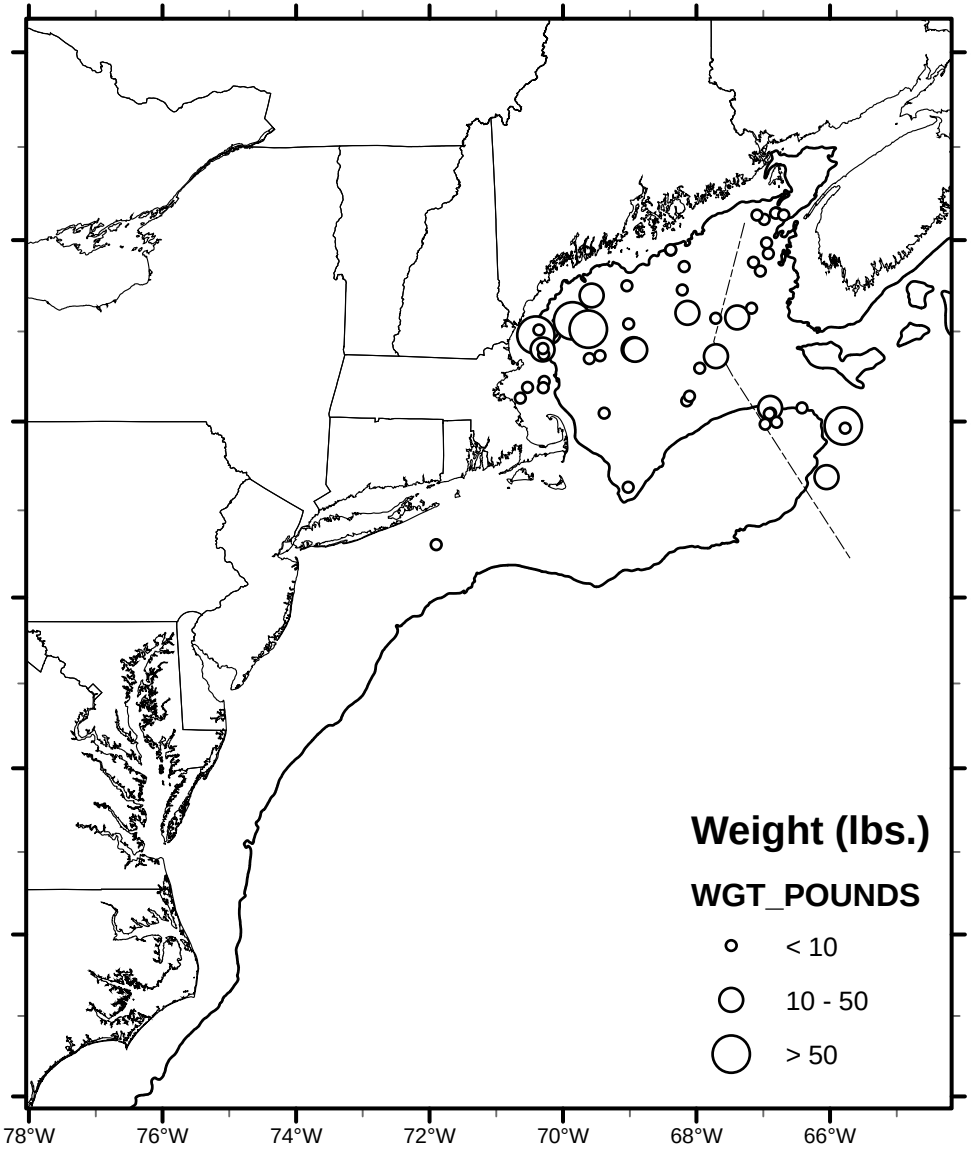
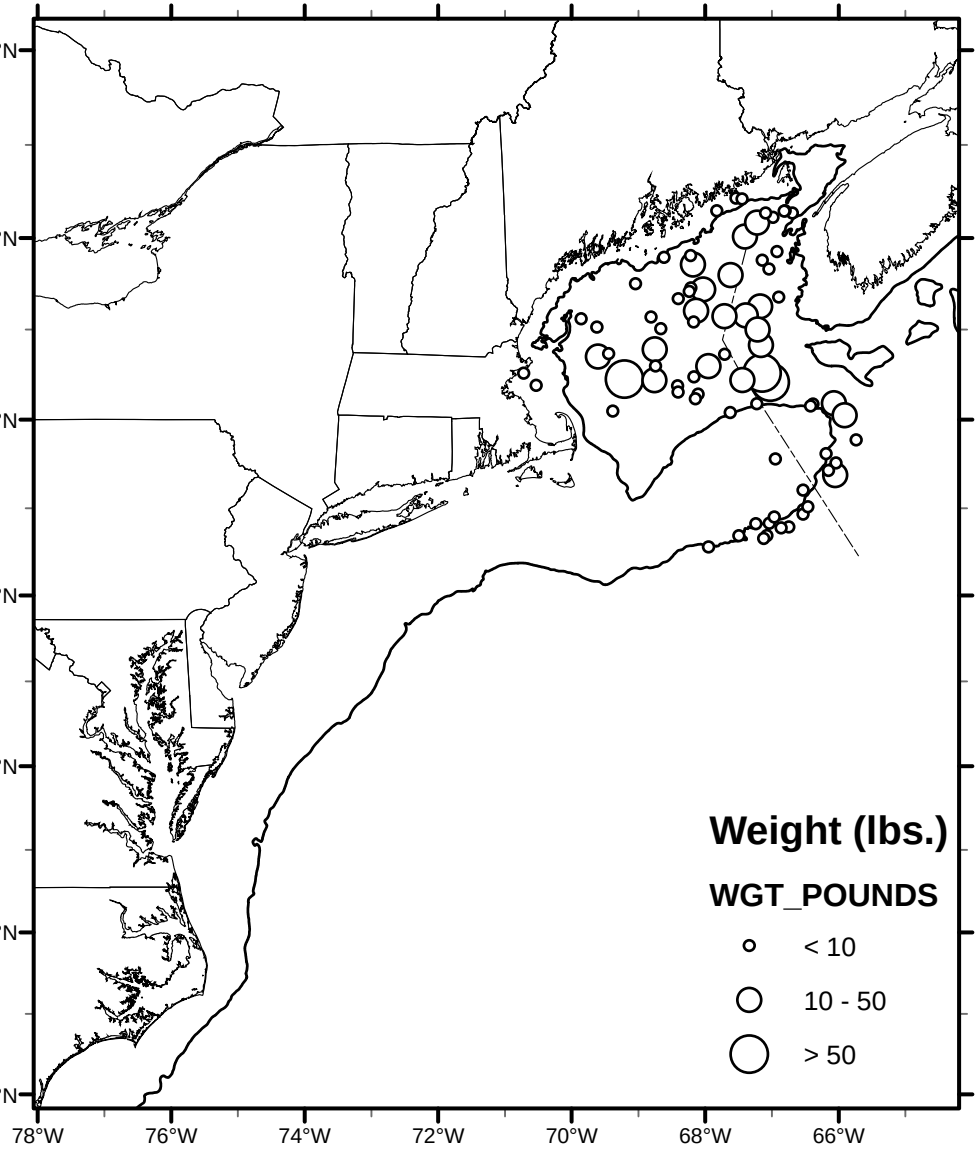
POLLOCK



WHITE HAKE



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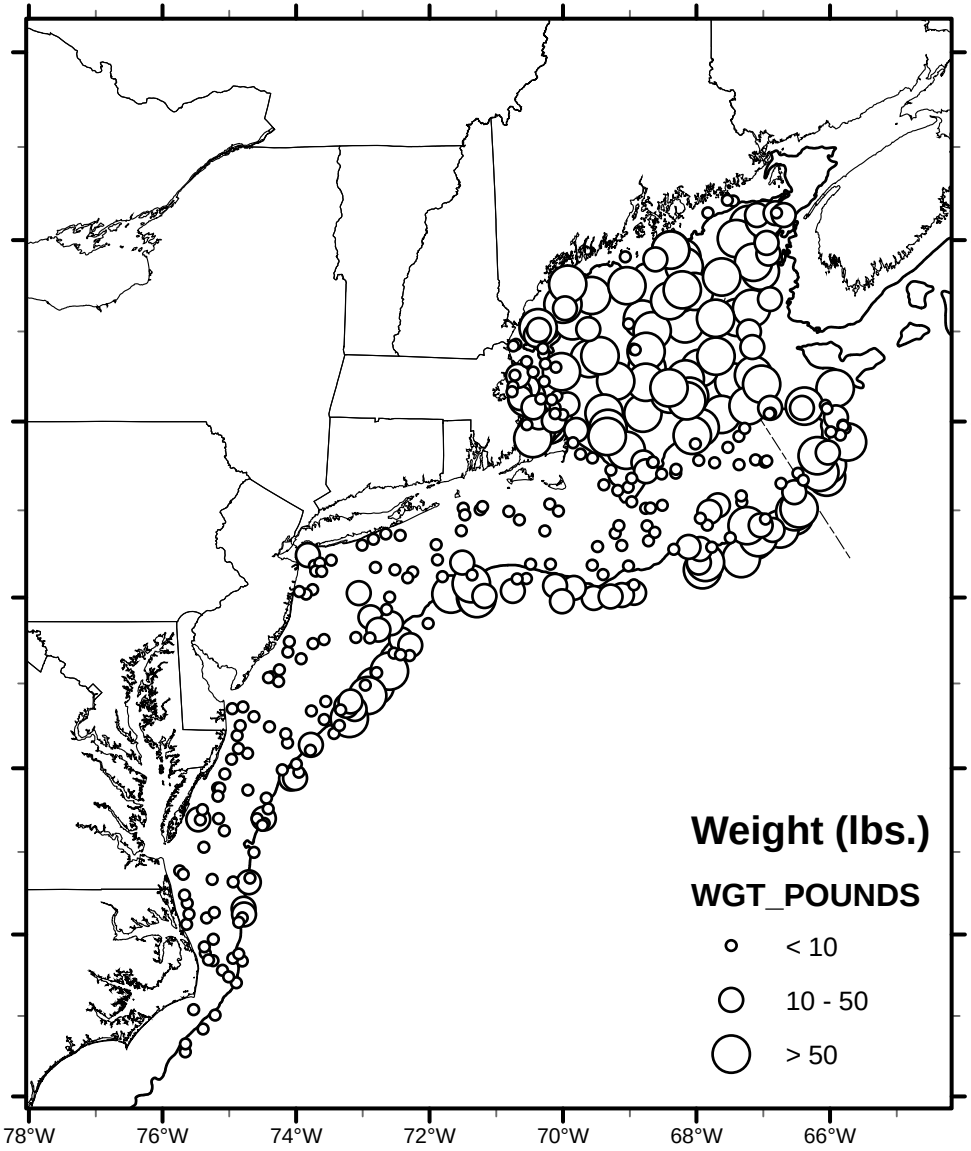
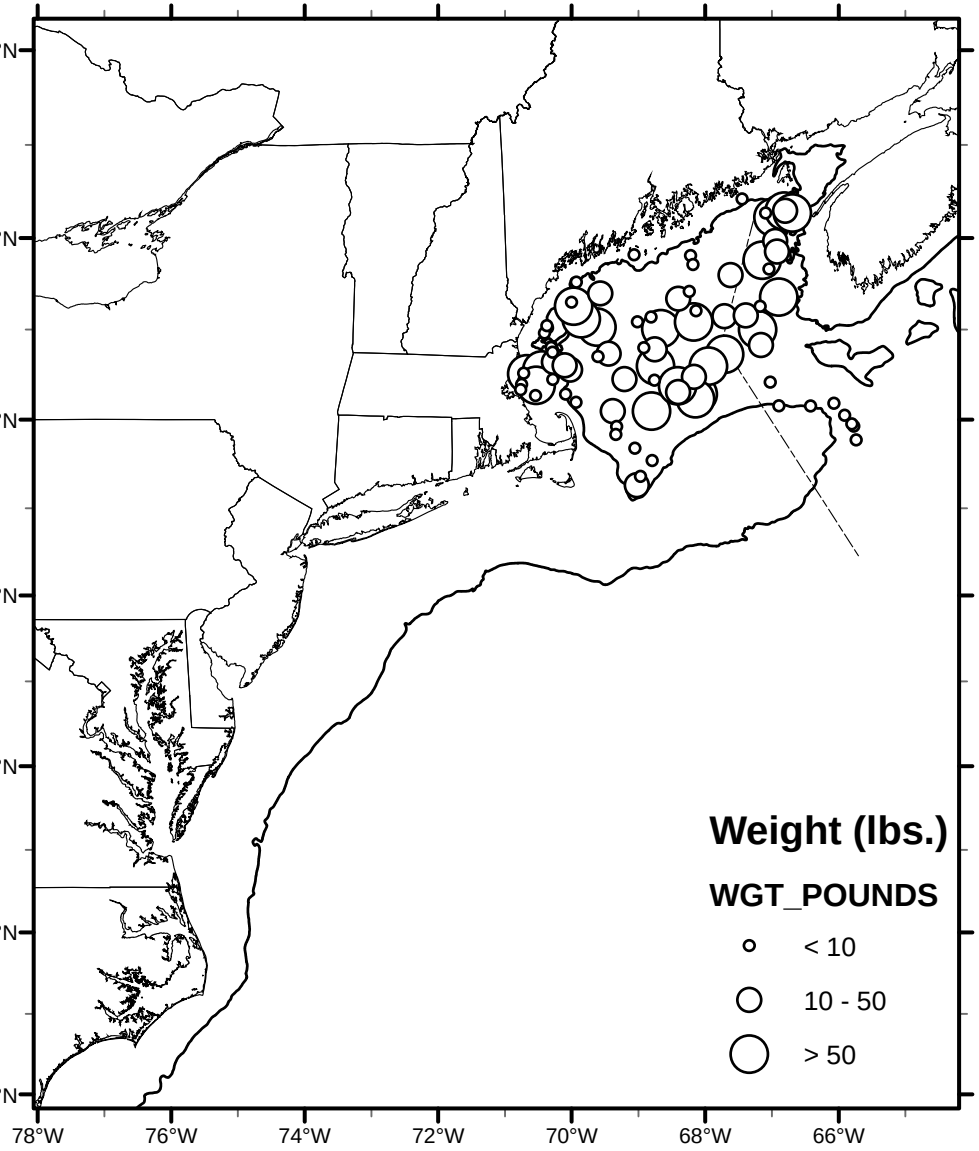
SILVER HAKE



ACADIAN REDFISH



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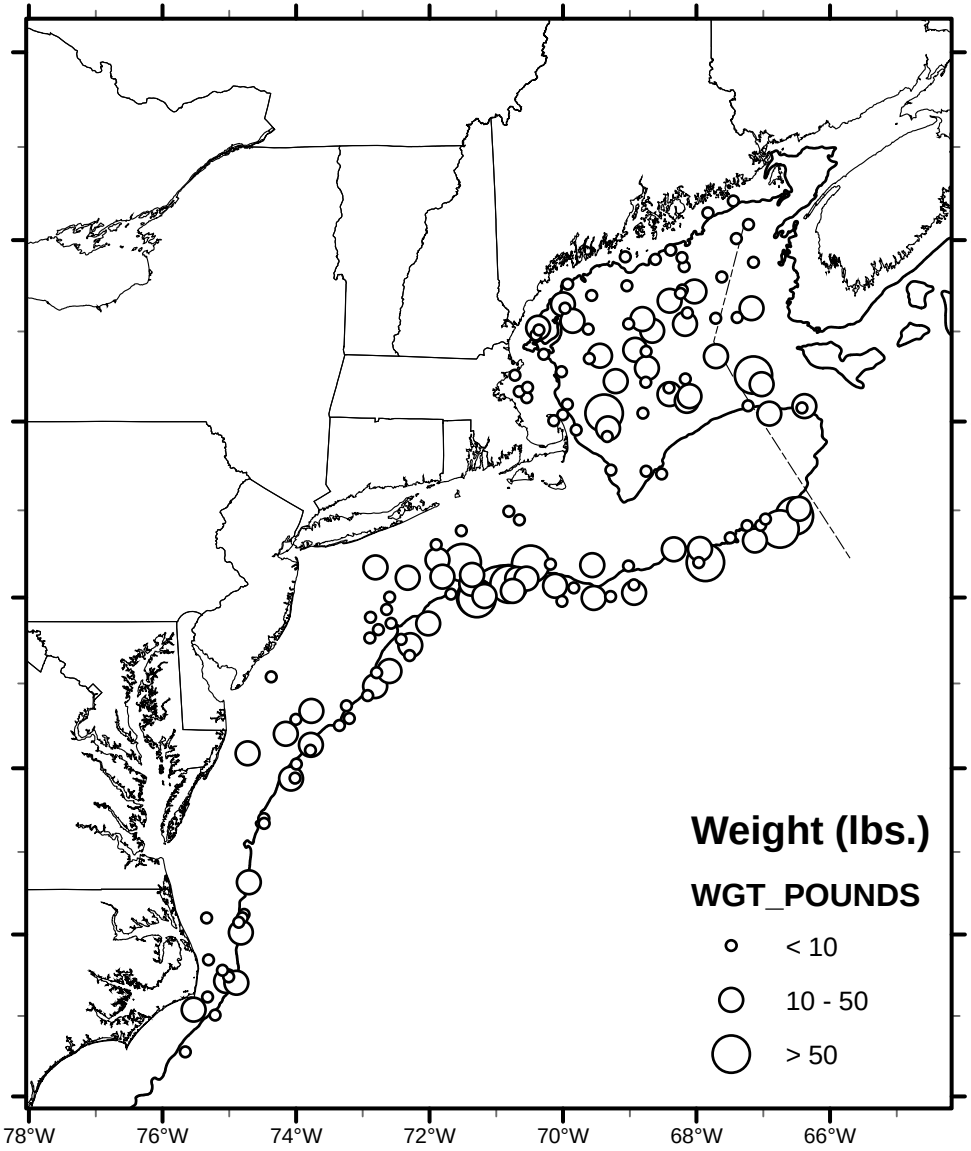
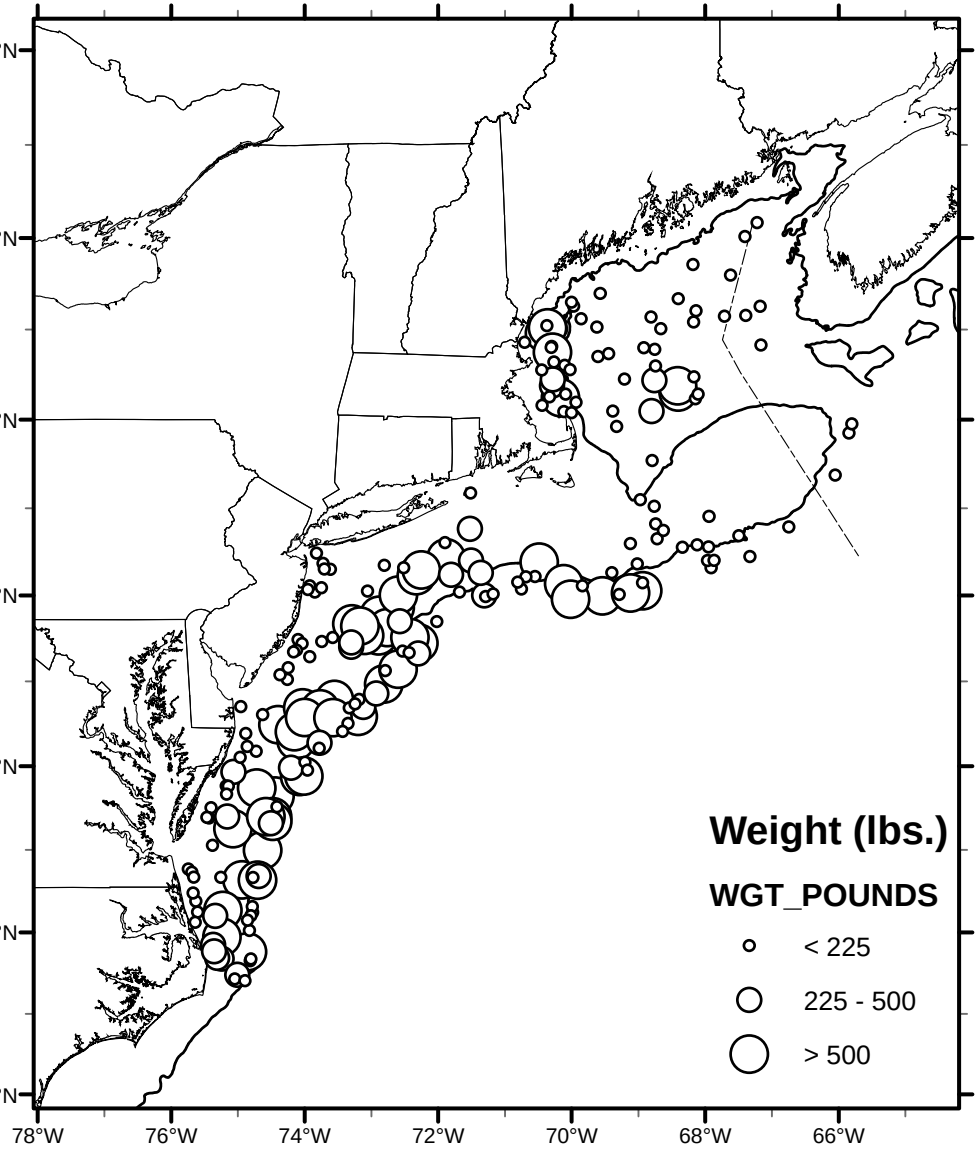
GOOSEFISH



SPINY DOGFISH



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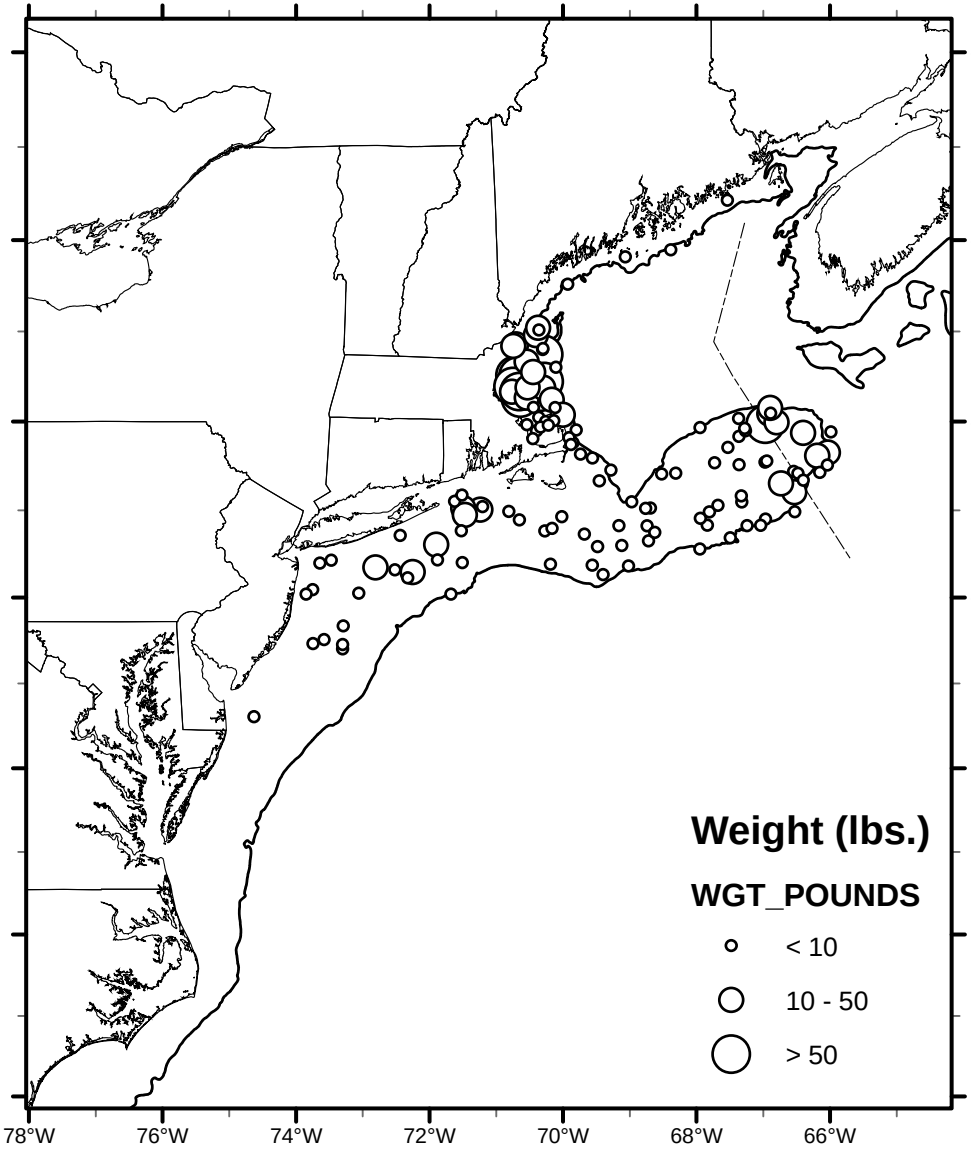
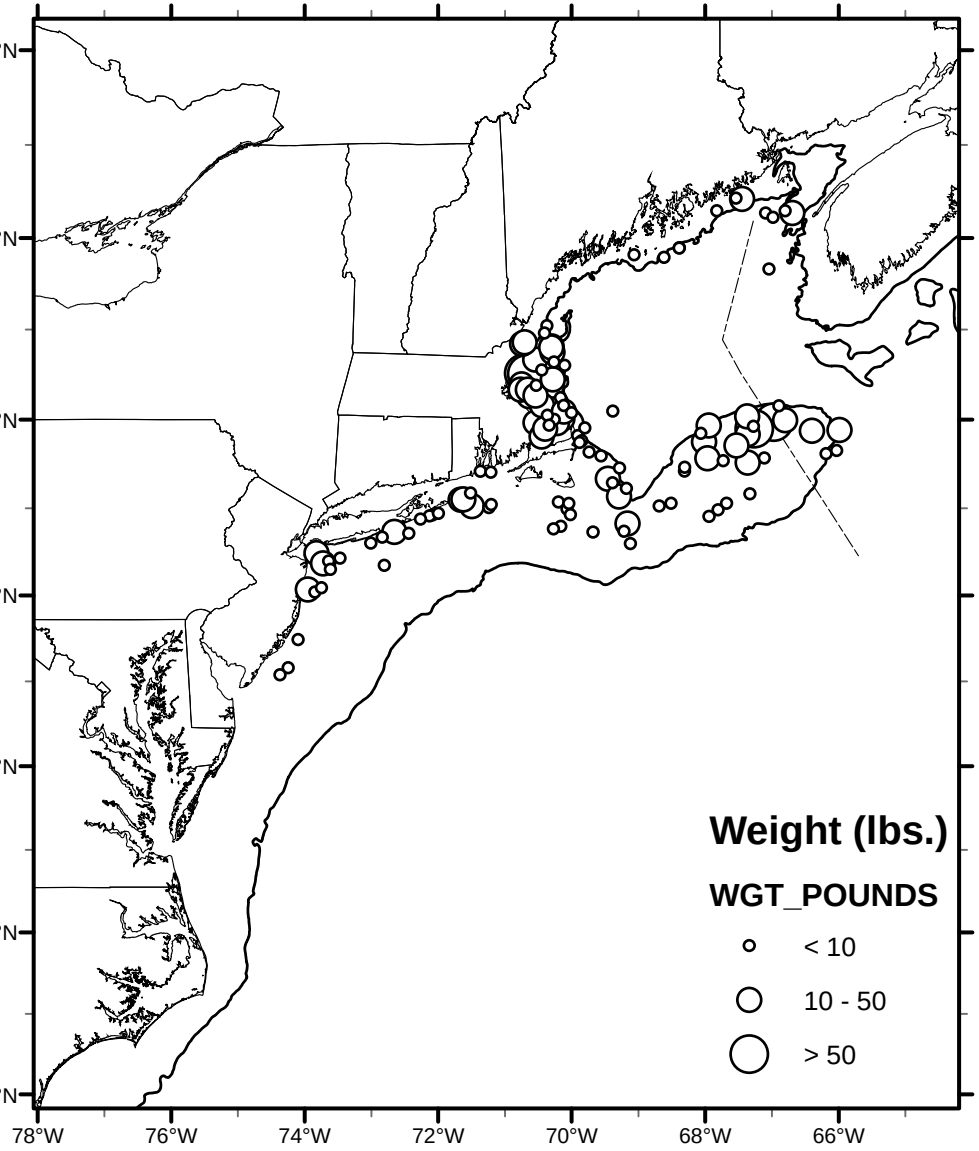
YELLOWTAIL FLOUNDER



WINTER FLOUNDER



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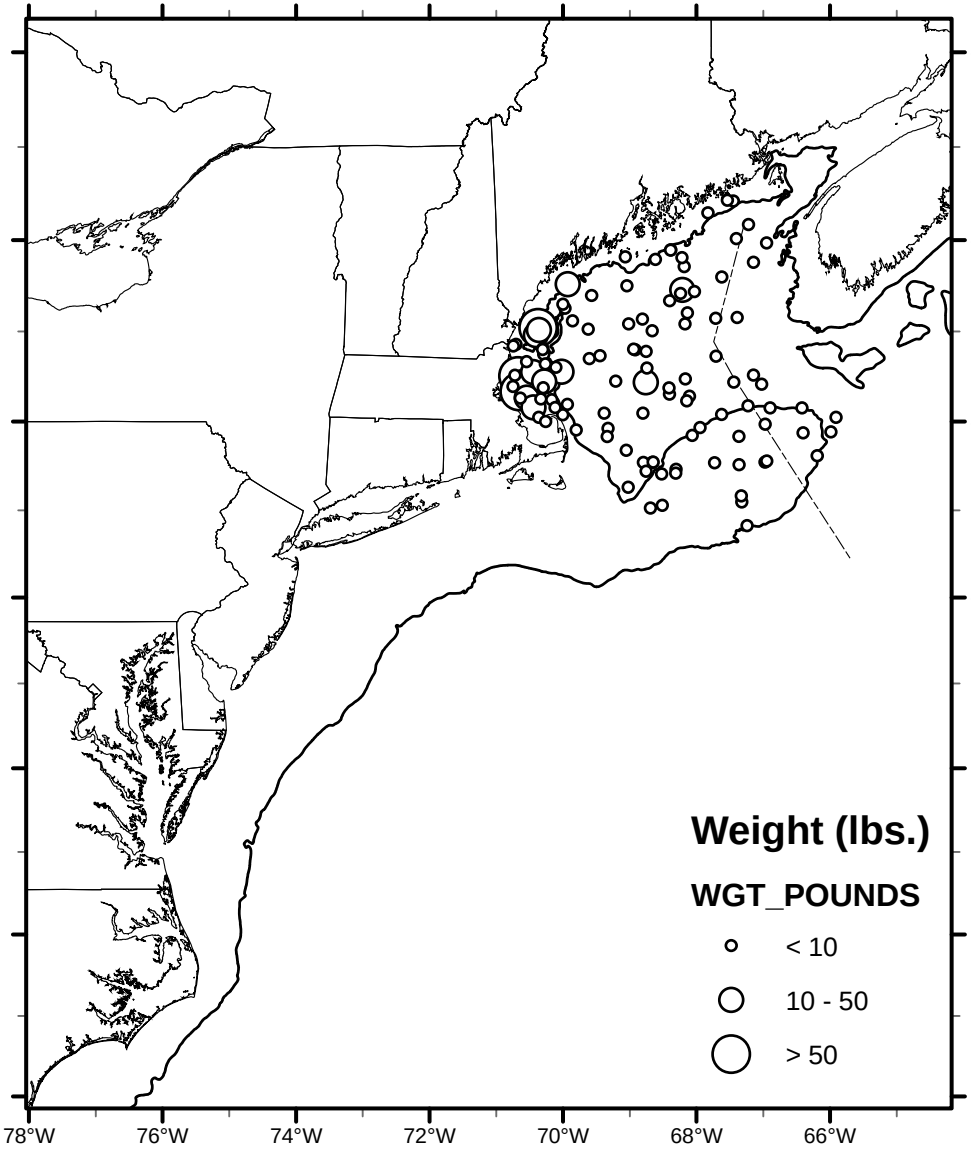
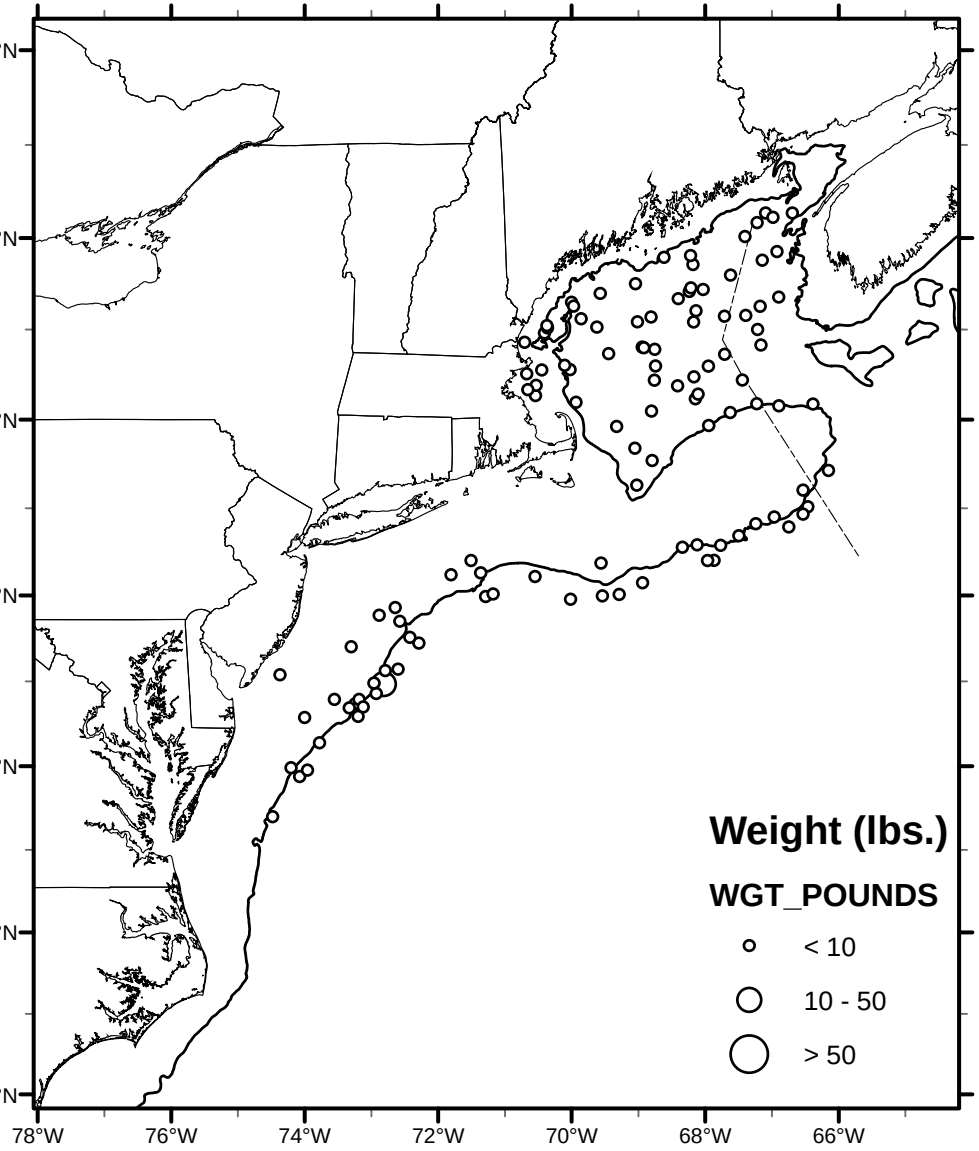
AMERICAN PLAICE



WITCH FLOUNDER



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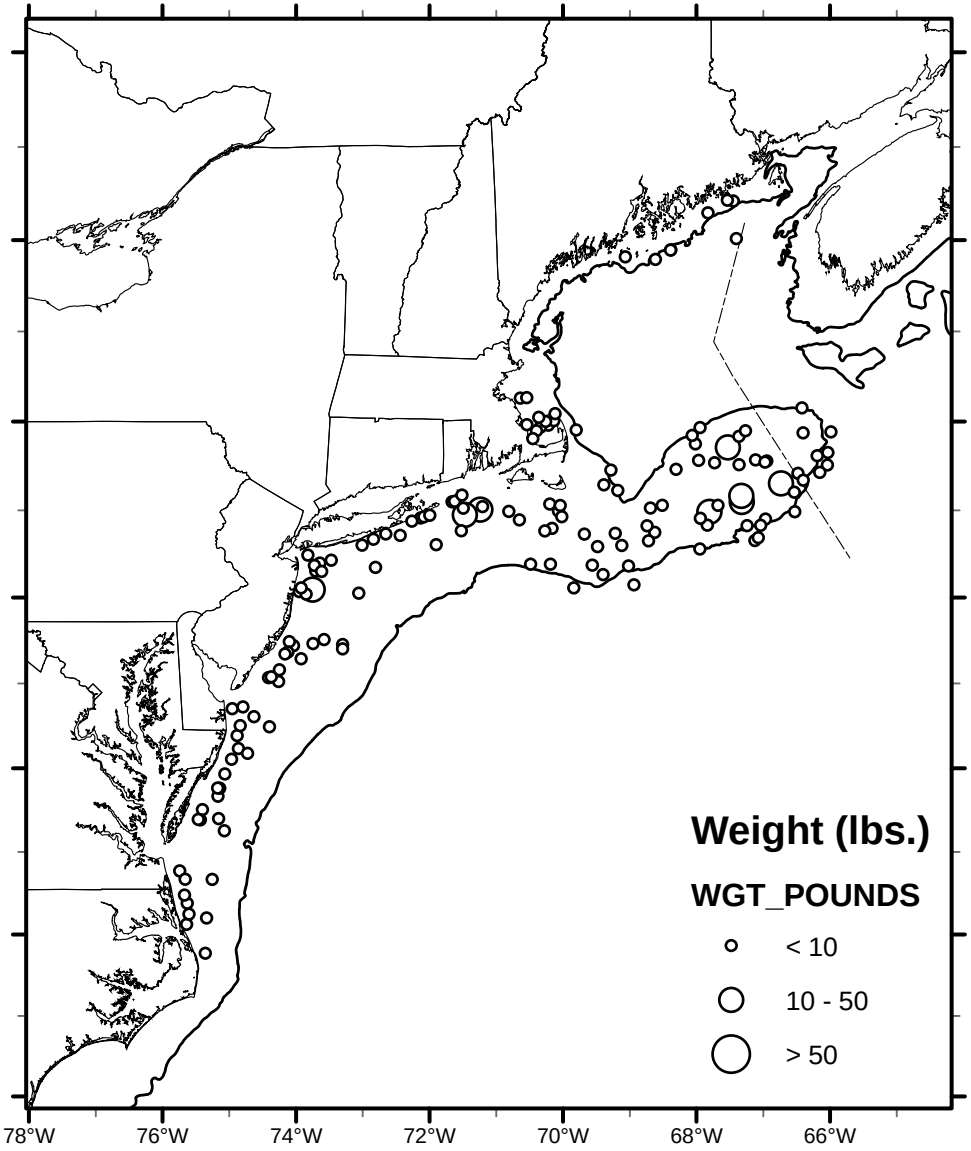
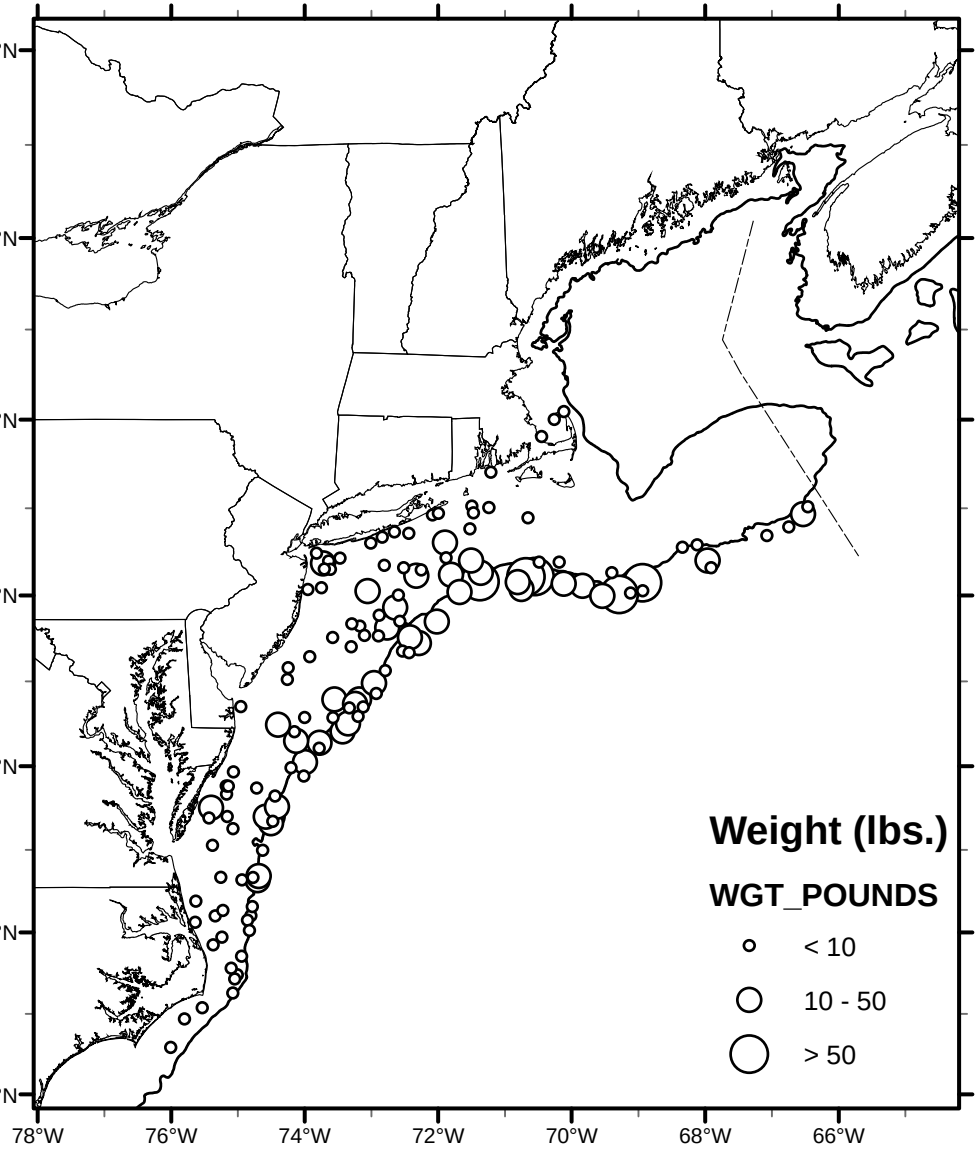
WINDOWPANE



SUMMER FLOUNDER



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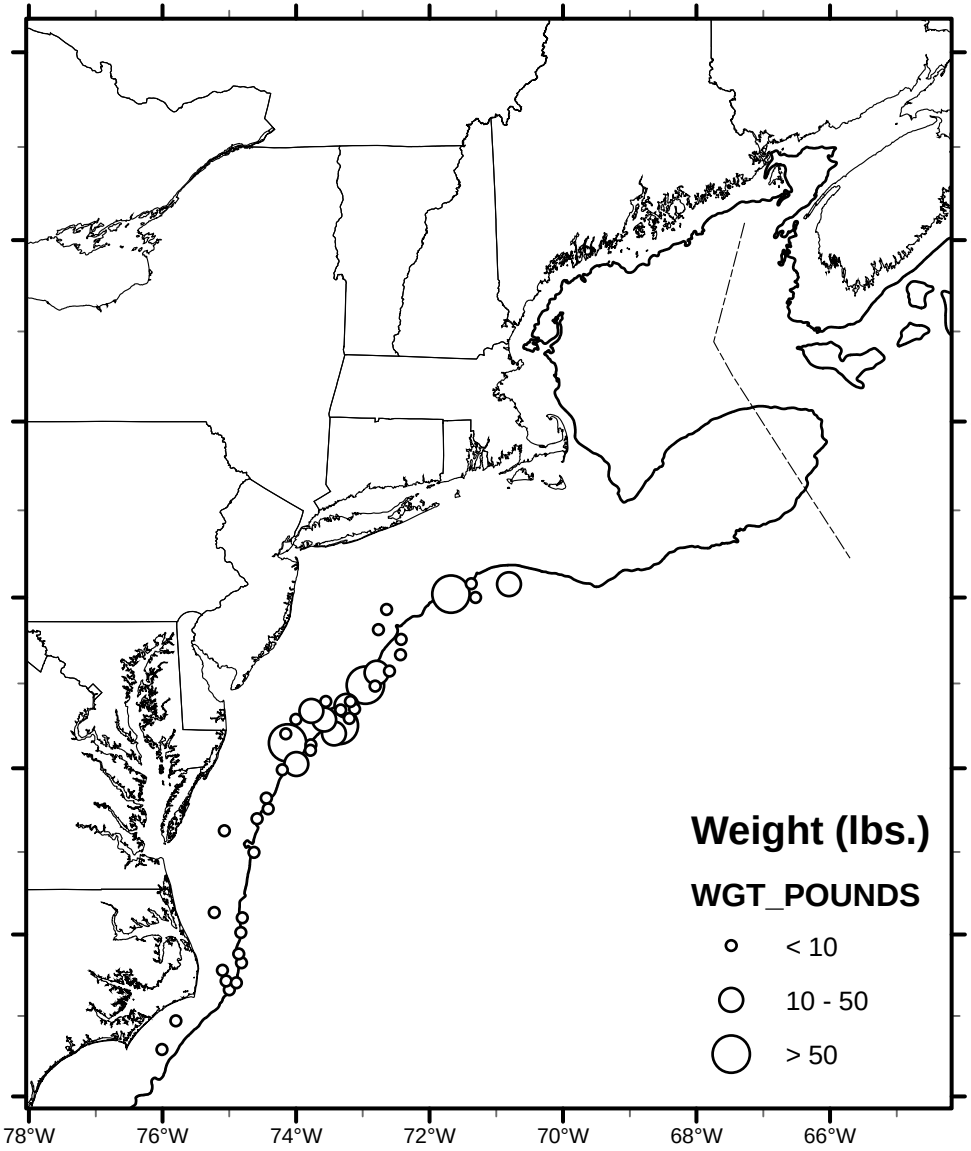
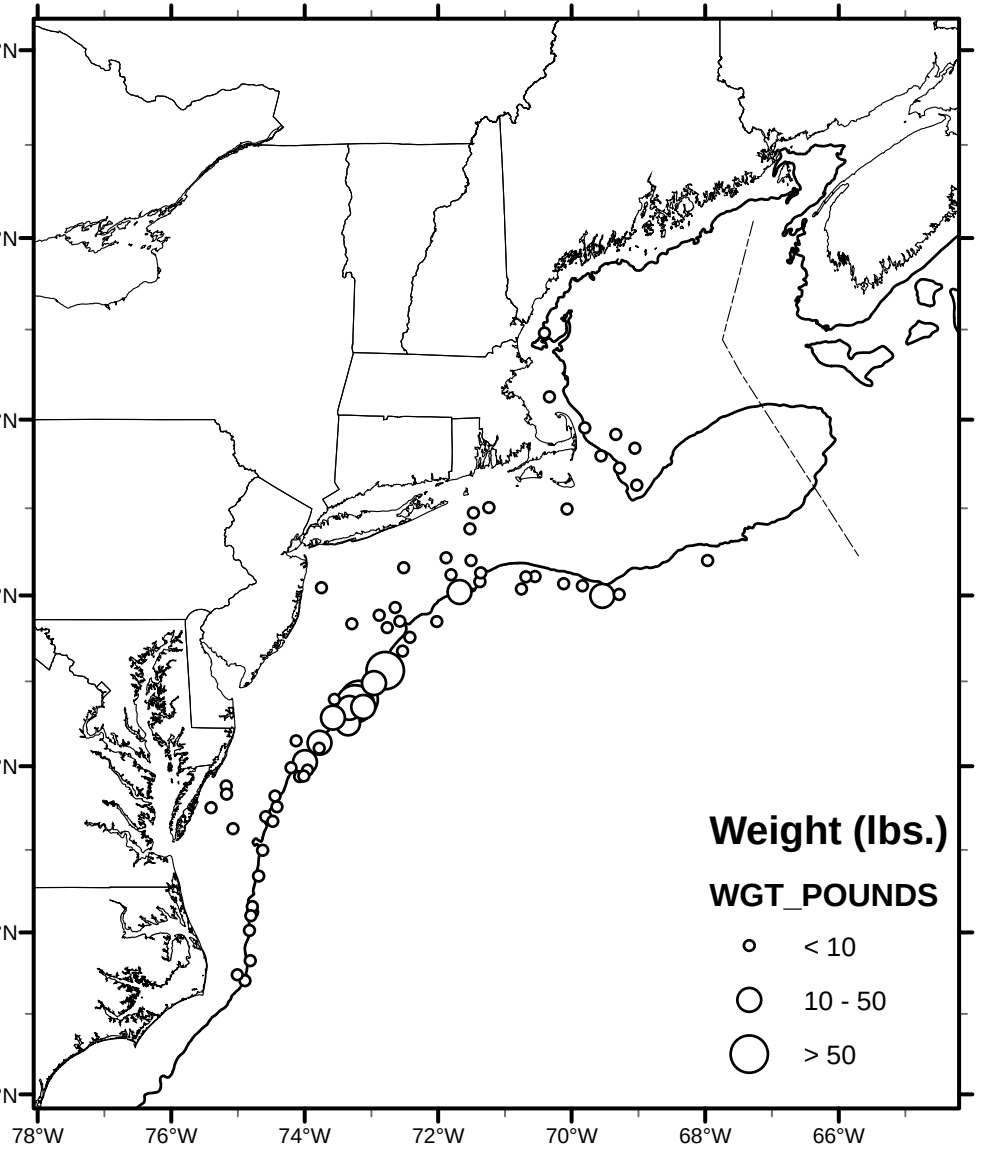
SCUP



BLACK SEA BASS



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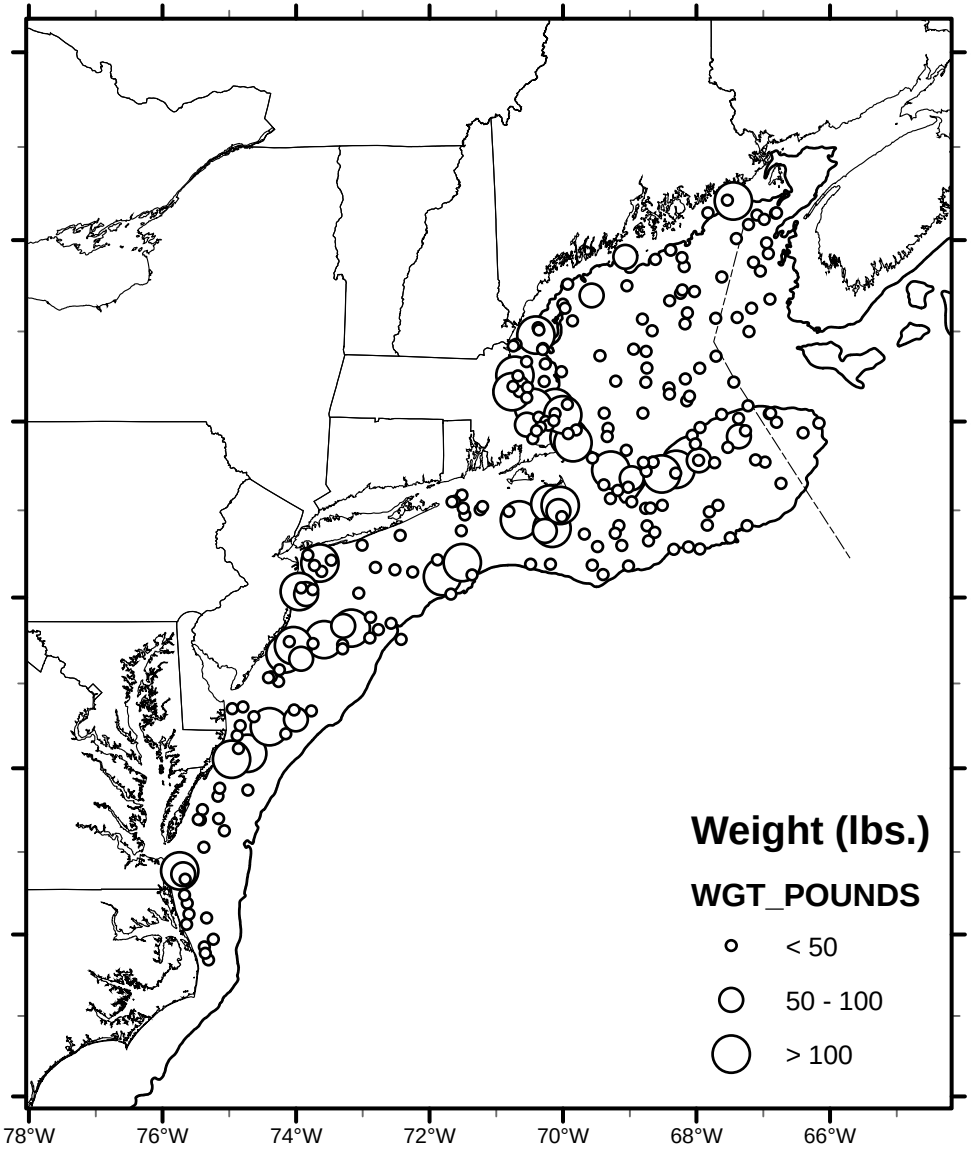
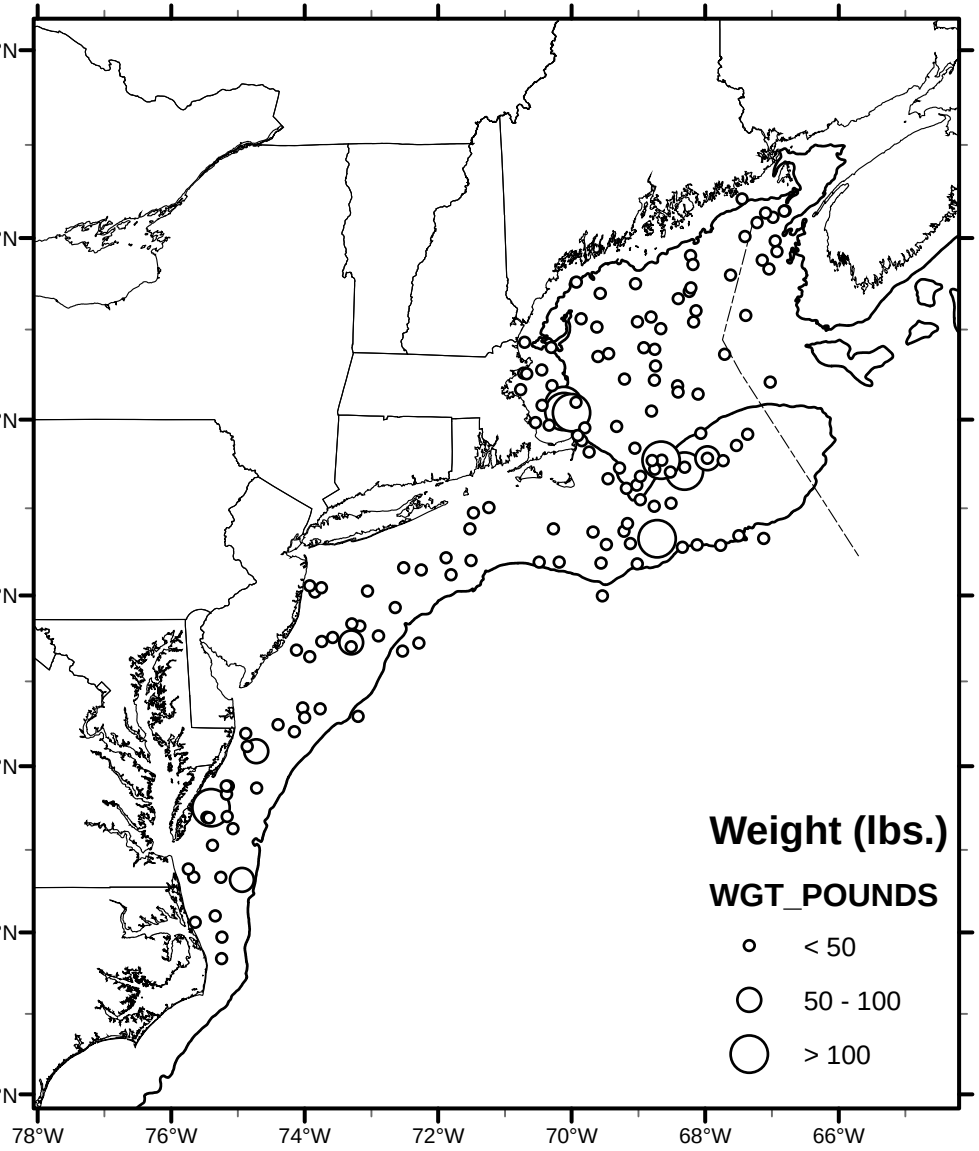
ATLANTIC HERRING



ATLANTIC MACKERAL



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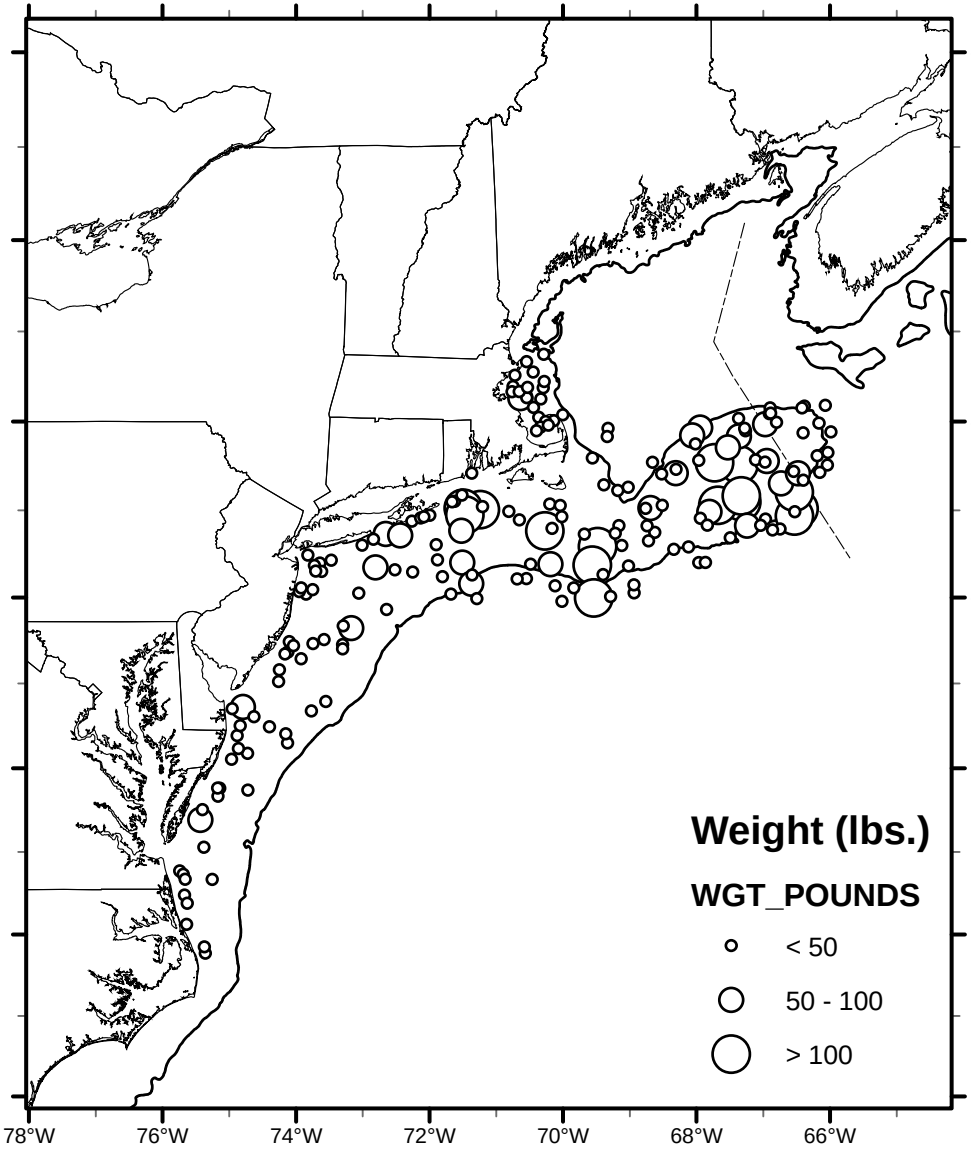
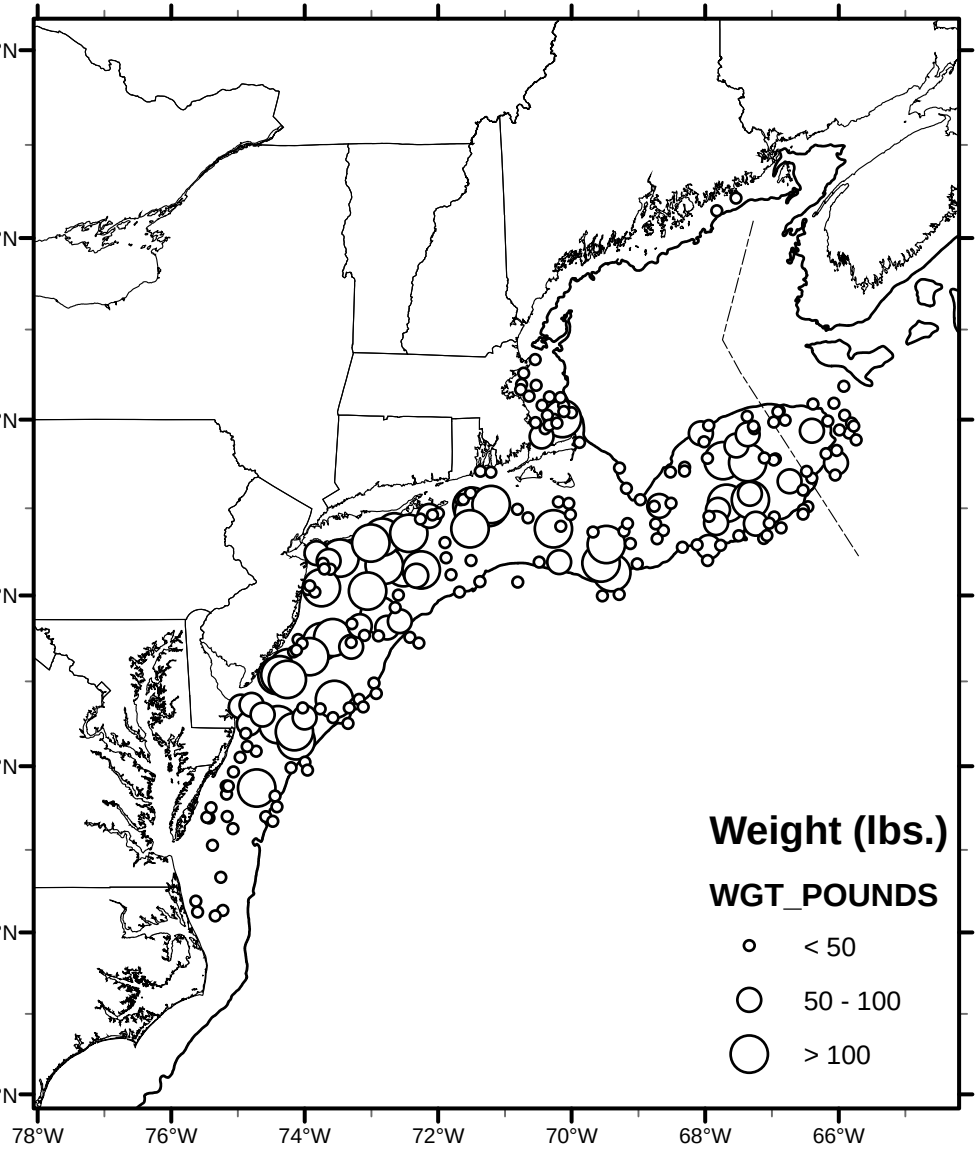
WINTER SKATE



LITTLE SKATE



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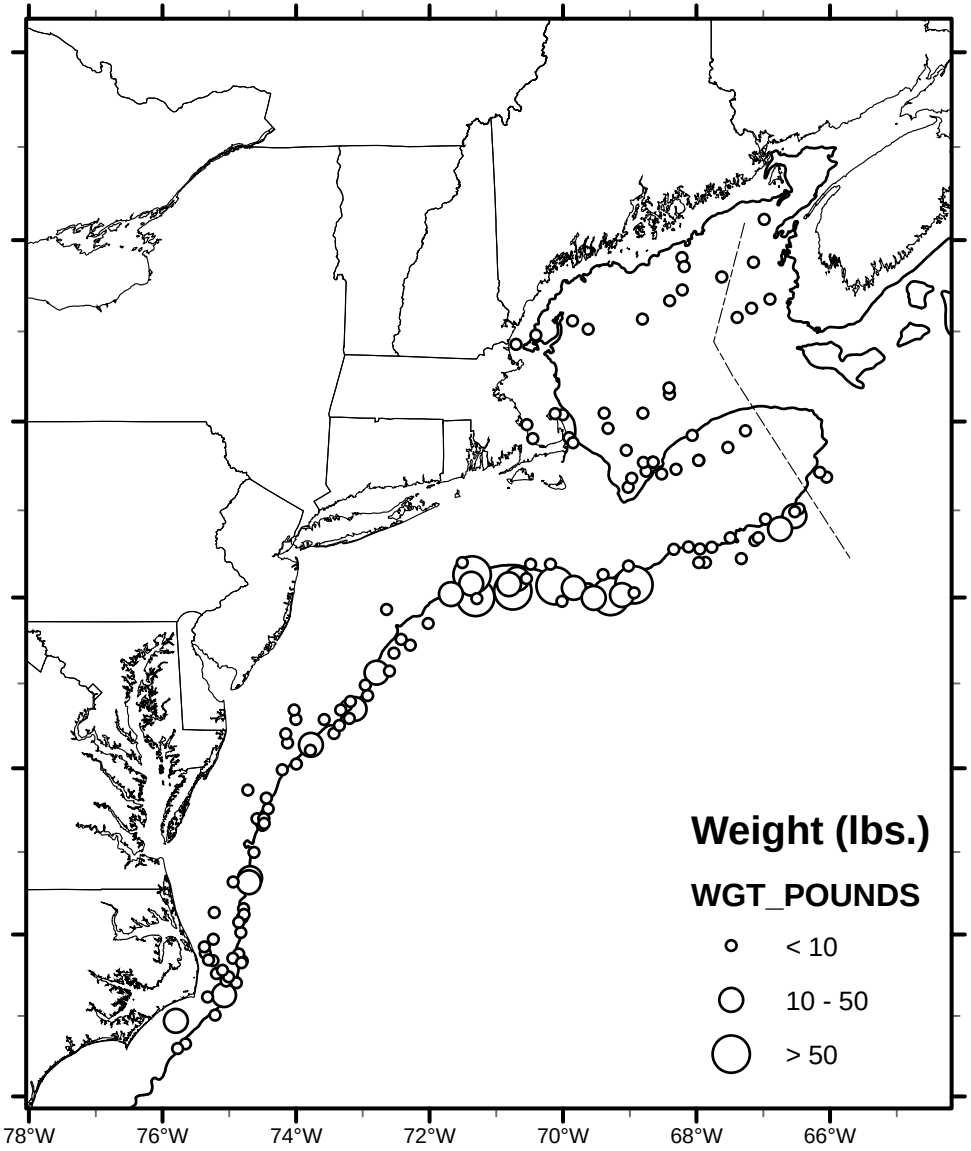
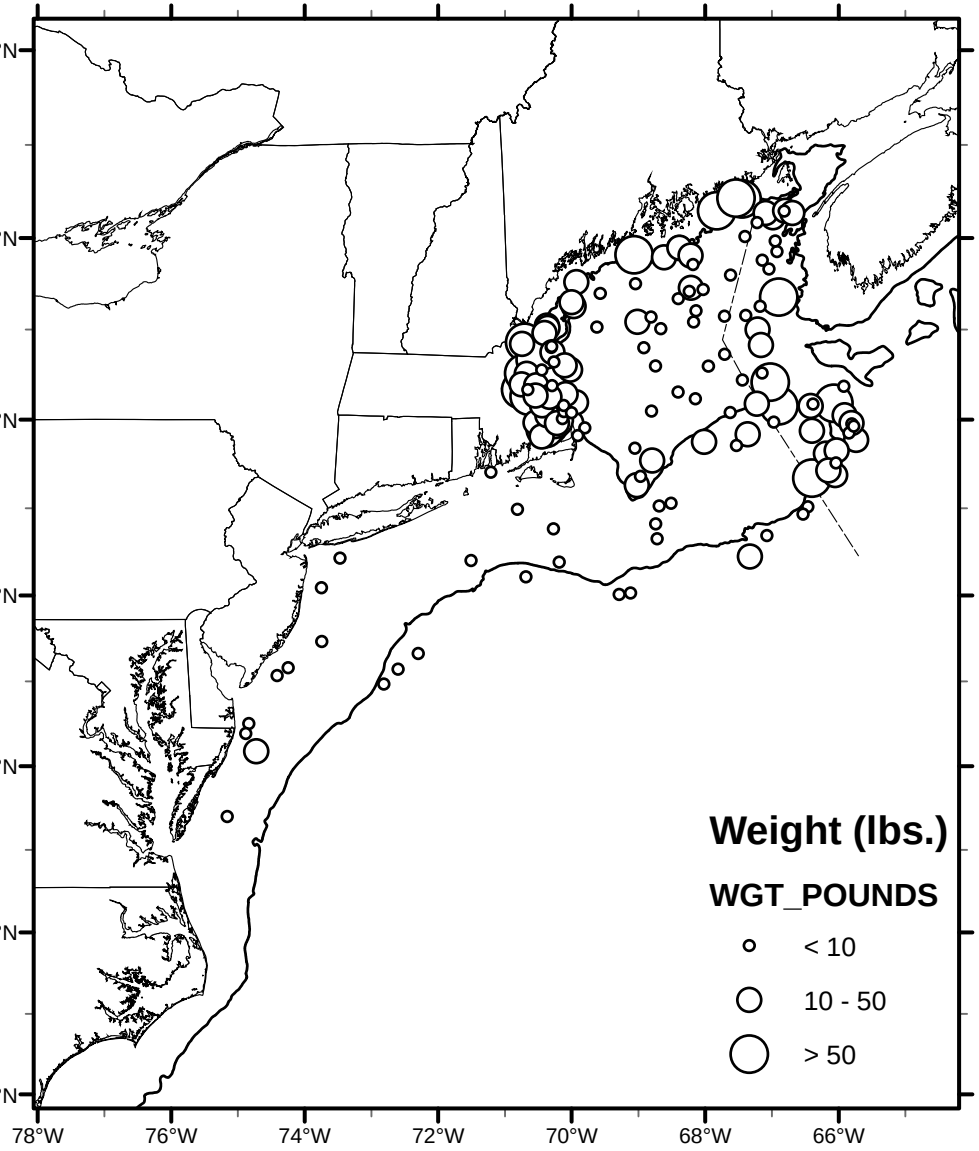
BUTTERFISH



AMERICAN LOBSTER



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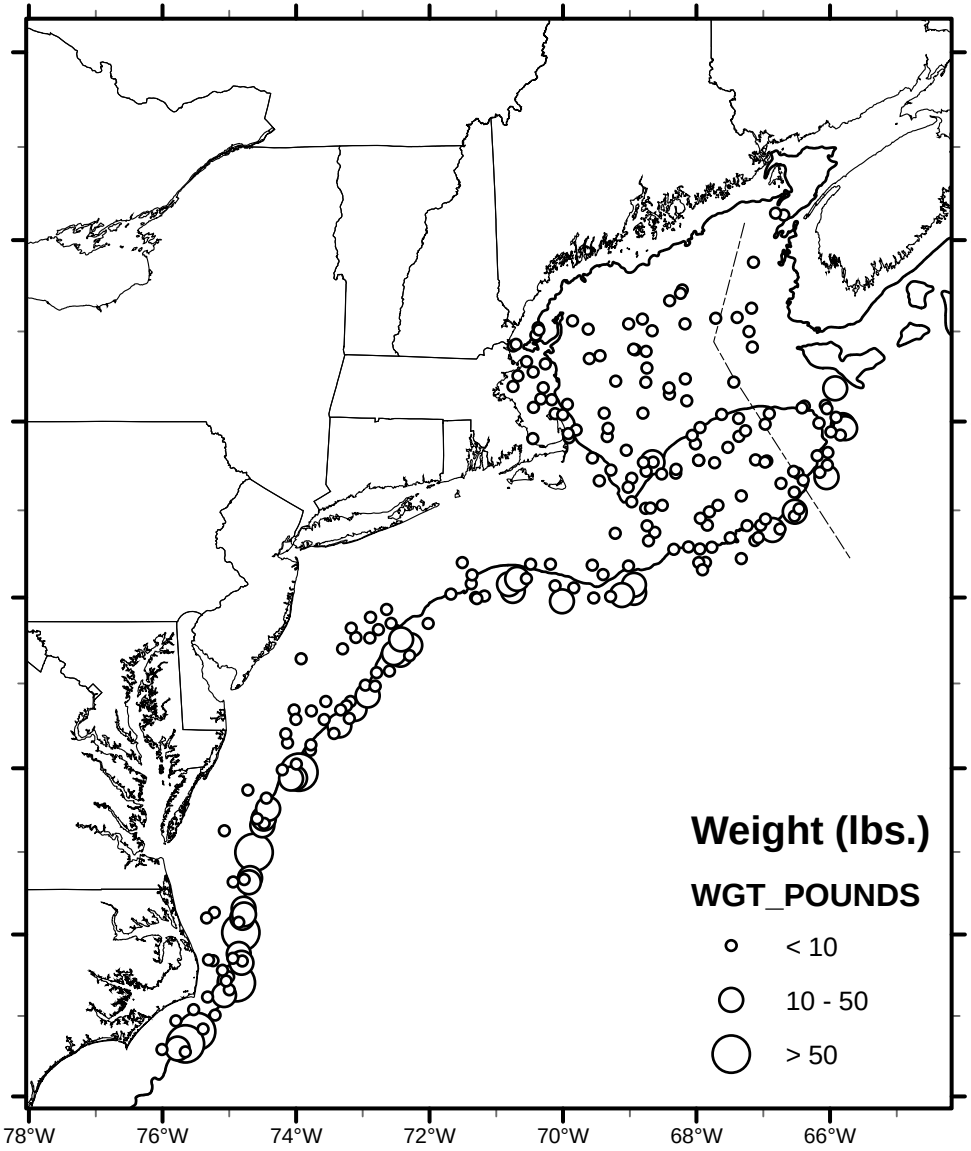
LOLIGO SQUID



ILLEX SQUID