RESOURCE SURVEY REPORT
Catch Summary
NOAA Fisheries Service
Northeast Fisheries Science Center
Autumn Bottom Trawl Survey
Cape Hatteras - Gulf of Maine
12 September – 19 Nov 2009

Submitted to: NOAA, NEFSC

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Date: 2009

Resource Survey Report

Bottom Trawl Survey

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NOAA FSV *Henry B. Bigelow*

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

NOAA FSV *Henry B Bigelow* in transit

Scientists sorting a catch on the conveyor belt

Streaming the survey net

A catch dumped into the back-deck checker

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 W. Brown, Chief
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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 2009 autumn bottom trawl survey aboard the NOAA FSV *Henry B. Bigelow*. Tows were made with a 400 x 12, 3-bridle bottom trawl rigged with a rockhopper sweep, 550 kg (1200lbs) 2.2 m Polyice oval doors, and 36.6 m (20 fathom) bridles. The cod end was lined with one-inch mesh to retain juvenile 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).

A new tow evaluation system has been implemented to validate all standard survey tows. These codes are exclusively used with the 400 x 12, 3-bridle bottom trawl rigged with the rockhopper sweep, towed by the FSV *Henry B. Bigelow*. Each standard survey tow is now validated based on four codes: Type, Operational, Gear and Acquisition (T.O.G.A.). T.O.G.A. provides a detailed analysis of survey trawl and vessel performance during each tow, utilizing available data from acoustic trawl mensuration equipment and vessel sensors not previously analyzed by the pre-2009 tow evaluation coding system.

These new NEFSC bottom trawl survey station validation codes serve as a guideline for qualifying a survey tow in a standardized manner and aid in the decision process for determining if a survey tow meets strict tolerance limits and optimal values that were originally calculated from data collected during the NEFSC calibration experiments. These tolerance limits are intended to promote consistency of trawl geometry and towing procedures to validate comparison of the collected trawl survey data with results from the calibration experiments.

For further information contact Russell Brown (508-495-2380), NOAA Fisheries Service, Northeast Fisheries Science Center, 166 Water Street, Woods Hole, MA 02543. To view a PDF of this report, go the Ecosystems Surveys Branch website at:
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- Resource Survey Reports
  - Available RSR
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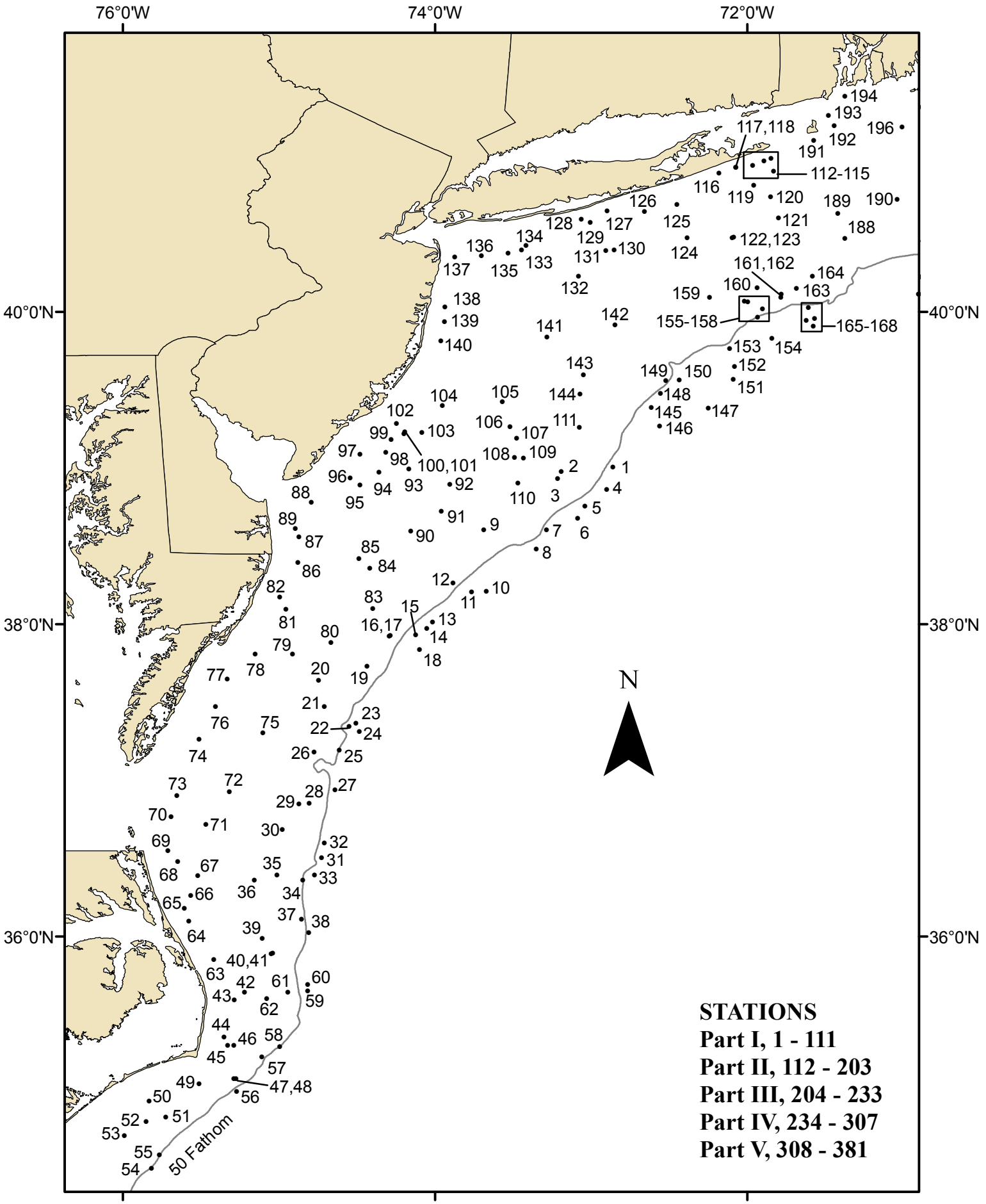


Figure 1. Trawl hauls made from NOAA FSV *Henry B Bigelow* (09-05), during NOAA Fisheries Service, Northeast Fisheries Science Center autumn bottom trawl survey, 12 September - 19 November 2009.

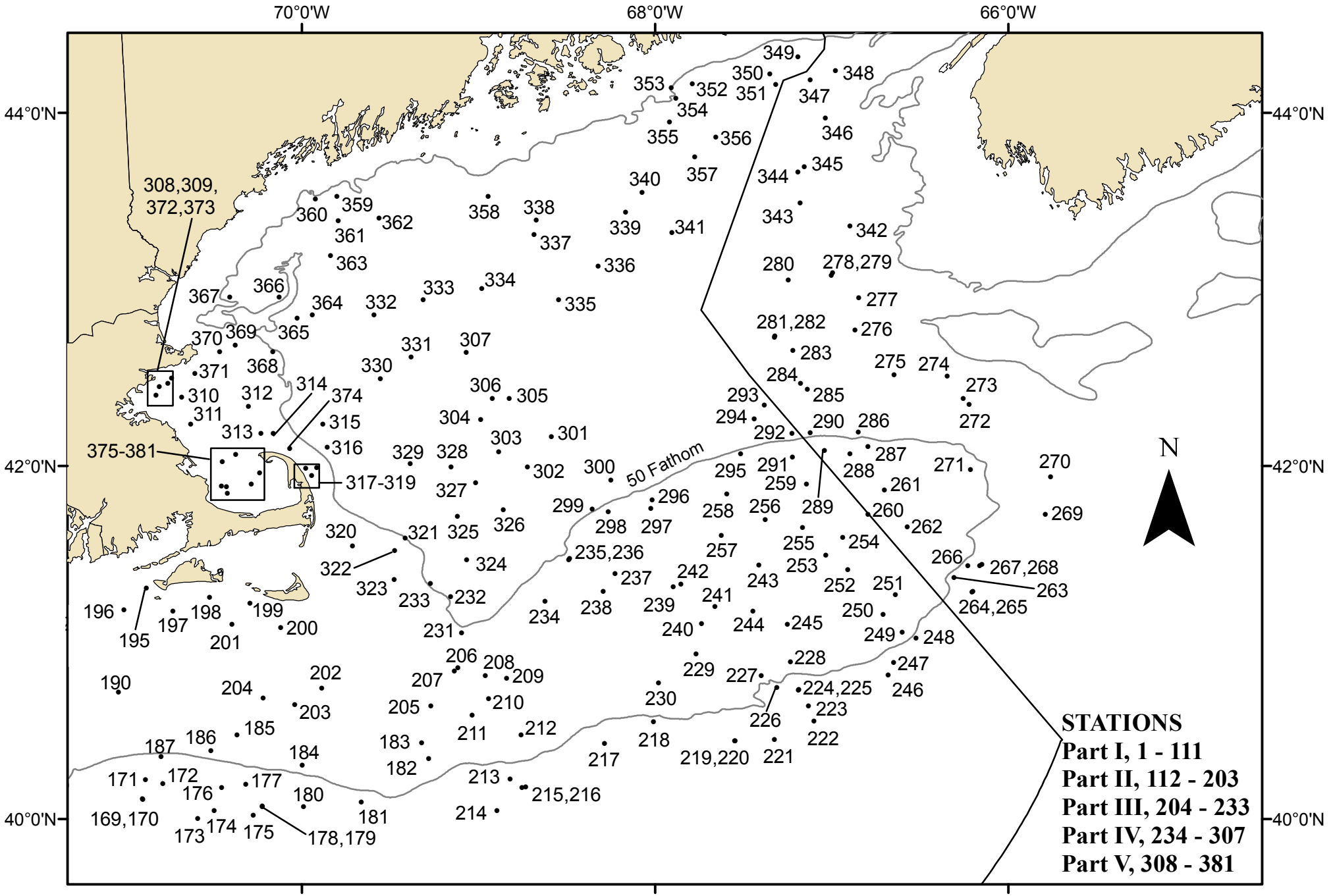


Figure 2. Trawl hauls made from NOAA FSV *Henry B Bigelow* (09-05), during NOAA Fisheries Service, Northeast Fisheries Science Center autumn bottom trawl survey, 12 September - 19 November 2009.

Field Notes

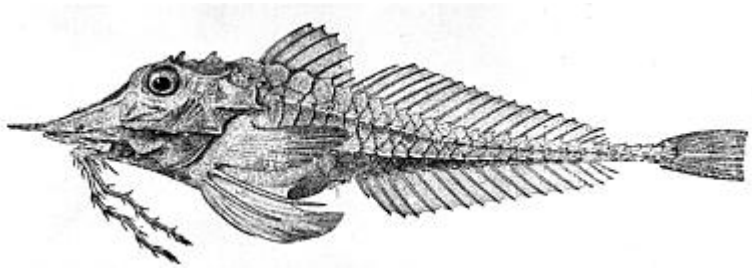
In an effort to share some of the natural history observations made during the bottom trawl survey, we have requested that the Chief Scientists on each part of the cruise comment on some of the more interesting catches that were brought aboard NOAA FSV *Henry B. Bigelow*.

Rays on the Increase

The southernmost leg of the survey was highlighted by diverse catches of rays. Bullnose rays were well represented; by weight, they ended up being roughly 27% of the total ray catch, just behind the traditional-bodied stingrays, the *Dasyatidae*, at roughly 32%. This was interesting since the bullnose rays (family *Myliobatidae*) are comprised of just one species in the survey area, whereas the *Dasyatidae* are composed primarily of three species in the survey area: bluntnose stingrays, southern stingrays, and the often large roughtail stingrays. Cownosed rays, although similar in appearance to bullnose rays, and often thought of in the same vein, are actually in a separate family called the *Rhinopteridae*. These rays made up roughly only 18% of the total ray catch. The remaining ray component of the survey catch is the family *Gymnuridae*, or butterfly rays, which, like the roughtail stingrays, often attain huge size. These butterfly rays round out the rest of the survey ray catch at roughly 23% of the total.

More Armored Searobins

Once you've seen an armored searobin, you almost certainly remember its day glow crimson coloring, tough rows of bony plates, spines, and almost plastic looking barbels around its mouth. I've always enjoyed seeing this unique fish, and this fall, south of the Nantucket Lightship area at station 180, we were treated to a catch of 65 individuals in one tow, the 2nd largest in the survey's history. The largest catch of 75 individuals occurred in 1975. Armored searobin catches have been increasing since the late 90s. While this isn't a fish I'd expect anyone would want to eat, it features a biological design to be admired!



Armored sea robin

Juvenile Red Cornetfish

Red Cornetfish *(Fistularia petimba)* were seen in larger than usual numbers with a total of 17 individuals captured this fall. The largest seasonal catch occurred the previous fall, 2008, when 28 individuals were seen on the survey. The majority of individuals this year were juveniles, with most measuring less than 12 inches in length.

Large Catches of *Illex* Squid
Leg III saw the continuance of large catches of shortfin squid *(Illex illecebrosus).* Though the numbers and weights pale in comparison to our largest haul of shortfin squid caught (26,880 individuals, weighing 21,124 pounds in 1977), station 233 produced 830 individuals, weighing 285 pounds with an average mantle length of 7.4 inches. After querying our historical database (circa 1964 -present) for stations where shortfin squid were caught, this haul ranked #135 of 13,566 total stations, based on overall biomass. The survey also detected larger numbers of smaller shortfin squid at stations 27 and 33.

Missing Haddock
Due to some weather delays earlier in the survey, Leg IV sampled eastern Georges Bank a little later in the season than normal. Possibly due to this delay, we did not see the large haddock catches as anticipated in closed area II or on the Canadian side of the northeast peak.

Large Silver Hake
On Leg V, we encountered large silver hake greater than 16 inches in length. Some were as large as 21 inches and greater than two pounds in weight. Almost all of the large silver hake were female, and most of them had at least 1, but up to 3 whole, large (> 10 inches) Atlantic herring in the stomach in a partial state of digestion. They are certainly voracious predators, and capable of eating fish that are half or more of their length.

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NOAA Fisheries Service FALL BOTTOM TRAWL SURVEY
2009 STATION INFORMATION

Station	Date	Time	Lat	Lon	Loran TD's		Course	Bottom Depth (FM)	Temp (F)
0001	Sep-13	0024	3900.6	7251.5	X26368.0	Y42826.4	024	64.5	55.9
0002	Sep-13	0308	3858.6	7311.4	X26491.7	Y42802.7	205	36.9	48.7
0003	Sep-13	0436	3856.2	7312.9	X26499.1	Y42778.4	192	41.6	47.9
0004	Sep-13	0910	3851.9	7253.9	X26379.2	Y42743.1	036	192.7	53.1
0005	Sep-13	1254	3845.3	7302.4	X26427.7	Y42676.4	009	129.3	
0006	Sep-13	1504	3840.8	7305.1	X26441.9	Y42631.0	039	145.7	50.6
0007	Sep-13	1710	3836.3	7317.1	X26509.9	Y42580.3	195	59.9	57.5
0008	Sep-13	1940	3828.8	7321.1	X26527.6	Y42503.5	058	67.5	
0009	Sep-13	2210	3836.3	7341.2	X26651.4	Y42565.4	072	35.3	49.4
0010	Sep-14	0234	3812.8	7340.2	X26622.3	Y42326.5	198	176.1	51.7
0011	Sep-14	0437	3812.5	7345.9	X26652.8	Y42317.3	012	65.6	56.9
0012	Sep-14	0633	3816.0	7353.0	X26695.7	Y42346.5	223	42.9	55.6
0013	Sep-14	0929	3801.0	7400.9	X26721.5	Y42183.0	049	64.0	57.1
0014	Sep-14	1109	3758.5	7403.1	X26730.1	Y42153.9	224	67.8	
0015	Sep-14	1238	3756.2	7407.3	X26749.7	Y42124.8	209	61.5	56.1
0016	Sep-14	1421	3755.8	7417.1	X26800.0	Y42108.0	215	41.0	55.0
0017	Sep-14	1544	3755.6	7417.6	X26801.8	Y42105.4	042	40.5	
0018	Sep-14	1922	3750.4	7405.9	X26735.7	Y42066.1	012	182.6	48.1
0019	Sep-14	2206	3743.9	7426.1	X26830.0	Y41969.8	234	36.4	51.8
0020	Sep-15	0022	3738.7	7444.6	X26913.7	Y41886.6	179	27.6	64.7
0021	Sep-15	0217	3728.5	7442.5	X26889.0	Y41780.2	189	33.1	54.1
0022	Sep-15	0443	3720.9	7433.1	X26834.4	Y41714.4	022	56.0	56.1
0023	Sep-15	0607	3722.1	7430.4	X26823.3	Y41732.3	001	64.0	56.8
0024	Sep-15	0847	3718.8	7429.1	X26813.4	Y41700.1	172	147.1	47.7
0025	Sep-15	1110	3711.7	7436.8	X26840.6	Y41610.8	205	50.9	55.1
0026	Sep-15	1249	3710.9	7446.4	X26883.5	Y41584.2	227	36.1	50.0
0027	Sep-15	1549	3656.4	7438.4	X26830.1	Y41447.7	173	70.0	54.6
0028	Sep-15	1743	3651.2	7448.3	X26867.3	Y41372.3	251	30.6	52.9
0029	Sep-15	1915	3651.1	7452.2	X26884.0	Y41362.1	225	25.4	69.3
0030	Sep-15	2058	3641.2	7458.7	X26899.8	Y41243.3	168	18.6	71.5
0031	Sep-16	0137	3630.4	7443.5	X26824.0	Y41168.7	321	181.5	
0032	Sep-16	0503	3635.9	7442.5	X26825.4	Y41227.3	181	159.4	45.5
0033	Sep-16	0857	3623.8	7446.3	X26828.6	Y41095.2	162	103.3	54.3
0034	Sep-16	1121	3621.8	7450.9	X26845.3	Y41062.3	183	42.4	63.2
0035	Sep-16	1305	3623.9	7500.6	X26887.6	Y41058.7	249	20.8	67.7
0036	Sep-16	1427	3621.6	7509.3	X26920.0	Y41013.1	187	19.1	71.2
0037	Sep-16	1730	3606.9	7451.3	X26832.1	Y40912.3	181	51.7	57.7
0038	Sep-16	1932	3601.5	7448.4	X26815.3	Y40868.8	200	81.2	53.2
0039	Sep-16	2154	3559.2	7506.3	X26883.0	Y40793.1	195	16.1	73.3
0040	Sep-16	2332	3553.5	7502.8	X26863.7	Y40747.2	197	20.2	75.8
0041	Sep-17	0103	3553.8	7502.2	X26861.5	Y40751.4	024	22.4	
0042	Sep-17	0340	3538.8	7513.2	X26887.8	Y40571.4	221	19.4	80.2
0043	Sep-17	0522	3535.6	7517.0	X26898.8	Y40528.3	116	14.5	74.8
0044	Sep-17	0812	3521.5	7521.0	X26898.7	Y40381.5	111	14.2	79.1
0045	Sep-17	1022	3518.2	7519.6	X26890.8	Y40355.5	018	14.2	79.2
0046	Sep-17	1143	3518.1	7517.2	X26882.1	Y40364.0	020	13.4	79.5
0047	Sep-17	1404	3505.5	7517.2	X26870.4	Y40251.7	042	40.2	80.1
0048	Sep-17	1441	3505.6	7516.4	X26867.7	Y40256.0	034	38.0	

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2009 STATION INFORMATION

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0049	Sep-17	1659	3503.6	7530.7	X26915.2	Y40183.0	073	15.6	80.8
0050	Sep-17	1922	3456.7	7549.8	X26973.1	Y40045.6	109	14.5	80.3
0051	Sep-17	2054	3450.6	7543.3	X26945.3	Y40019.0	037	20.8	80.5
0052	Sep-17	2248	3449.0	7550.9	X26968.9	Y39973.6	050	16.4	80.8
0053	Sep-18	0056	3443.6	7559.2	X26990.6	Y39891.9	068	18.0	81.5
0054	Sep-18	0341	3431.1	7548.9	X26944.5	Y39836.4	051	58.5	75.8
0055	Sep-18	0514	3436.4	7545.8	X26939.6	Y39891.2	060	36.9	82.9
0056	Sep-18	0915	3500.5	7516.2	X26862.3	Y40213.0	017	81.5	70.4
0057	Sep-18	1252	3513.7	7506.5	X26839.8	Y40364.2	032	36.1	79.7
0058	Sep-18	1431	3517.9	7459.7	X26819.1	Y40425.6	048	62.1	72.0
0059	Sep-18	1828	3539.2	7448.9	X26797.5	Y40655.7	152	62.6	58.9
0060	Sep-18	2049	3541.6	7448.9	X26799.4	Y40678.1	123	116.7	53.0
0061	Sep-18	2233	3538.9	7456.4	X26825.4	Y40627.6	302	29.0	76.7
0062	Sep-19	0016	3536.3	7504.7	X26853.7	Y40575.8	356	21.9	74.7
0063	Sep-19	0300	3551.2	7524.9	X26944.9	Y40656.5	329	14.8	74.4
0064	Sep-19	0512	3605.9	7534.6	X26999.8	Y40779.2	003	13.7	73.7
0065	Sep-19	0732	3611.0	7536.3	X27012.7	Y40829.4	016	13.7	73.1
0066	Sep-19	0908	3615.9	7533.8	X27009.6	Y40888.2	029	14.8	72.8
0067	Sep-19	1105	3623.6	7531.0	X27009.4	Y40978.0	328	14.5	71.6
0068	Sep-19	1246	3628.9	7538.8	X27047.7	Y41016.1	315	13.1	73.1
0069	Sep-19	1429	3633.2	7542.6	X27069.2	Y41055.1	316	12.3	73.3
0070	Sep-19	1701	3646.0	7541.3	X27084.0	Y41200.6	096	12.6	73.1
0071	Sep-19	1929	3643.2	7527.9	X27024.9	Y41199.1	048	15.9	71.4
0072	Sep-19	2130	3655.8	7519.0	X27005.9	Y41356.0	038	18.0	69.7
0073	Sep-20	0045	3654.2	7539.1	X27088.1	Y41297.1	090	12.3	73.0
0074	Sep-20	0343	3715.8	7530.6	X27088.6	Y41557.3	064	12.3	72.0
0075	Sep-20	0634	3718.3	7506.0	X26983.0	Y41628.0	341	17.2	68.7
0076	Sep-20	0911	3728.4	7524.3	X27082.7	Y41710.2	070	12.8	71.4
0077	Sep-20	1131	3739.0	7519.7	X27080.9	Y41836.5	202	11.2	71.0
0078	Sep-20	1346	3748.7	7509.1	X27048.4	Y41962.2	025	12.0	70.3
0079	Sep-20	1533	3748.7	7454.7	X26978.4	Y41981.2	044	15.3	69.2
0080	Sep-20	1744	3753.1	7439.9	X26912.0	Y42050.5	024	24.6	68.6
0081	Sep-20	2012	3805.7	7457.3	X27021.7	Y42167.7	336	13.1	70.2
0082	Sep-20	2138	3810.7	7459.6	X27043.0	Y42220.8	024	12.0	70.5
0083	Sep-21	0051	3806.1	7423.8	X26848.9	Y42210.6	257	22.7	70.1
0084	Sep-21	0345	3821.7	7425.0	X26879.3	Y42377.1	239	21.3	71.2
0085	Sep-21	0541	3825.3	7429.2	X26908.4	Y42412.2	007	20.2	66.4
0086	Sep-21	0900	3823.9	7452.7	X27033.0	Y42375.7	036	11.8	70.3
0087	Sep-21	1058	3833.6	7452.2	X27050.4	Y42484.7	357	13.1	70.5
0088	Sep-21	1507	3846.9	7447.5	X27052.7	Y42636.6	095	9.6	70.4
0089	Sep-21	1706	3836.7	7453.5	X27064.4	Y42519.0	161	12.3	70.5
0090	Sep-21	2112	3836.0	7409.2	X26813.2	Y42542.9	049	29.3	57.7
0091	Sep-21	2309	3843.6	7357.5	X26756.3	Y42631.2	340	26.5	55.0
0092	Sep-22	0101	3853.9	7354.3	X26752.4	Y42740.9	331	22.7	57.8
0093	Sep-22	0315	3859.8	7410.1	X26858.2	Y42796.6	260	19.1	65.4
0094	Sep-22	0455	3858.5	7421.5	X26925.2	Y42777.8	226	16.4	67.1
0095	Sep-22	0648	3853.6	7428.8	X26958.9	Y42721.9	310	12.3	68.7
0096	Sep-22	0819	3856.3	7432.6	X26986.8	Y42749.7	026	10.4	69.2

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2009 STATION INFORMATION

Station	Date	Time	Lat	Lon	Loran TD's		Course	Bottom Depth (FM)	Temp (F)
0097	Sep-22	1004	3905.4	7428.8	X26983.5	Y42851.1	044	10.4	69.0
0098	Sep-22	1128	3906.2	7418.9	X26924.3	Y42862.3	051	16.7	67.4
0099	Sep-22	1249	3911.1	7416.7	X26921.0	Y42915.8	036	10.7	67.9
0100	Sep-22	1412	3913.3	7411.9	X26895.1	Y42940.3	044	15.0	67.9
0101	Sep-22	1514	3914.0	7411.5	X26894.1	Y42947.6	235	14.2	
0102	Sep-22	1648	3917.2	7414.8	X26921.3	Y42981.5	138	10.9	68.5
0103	Sep-22	1825	3913.7	7405.0	X26852.5	Y42946.3	034	15.6	67.9
0104	Sep-22	2119	3924.2	7357.2	X26821.1	Y43056.5	043	15.3	66.6
0105	Sep-22	2332	3925.6	7334.2	X26670.0	Y43069.7	071	19.4	58.7
0106	Sep-23	0125	3916.0	7331.1	X26636.2	Y42972.9	185	24.6	55.4
0107	Sep-23	0252	3911.5	7328.6	X26614.4	Y42927.9	215	27.3	52.9
0108	Sep-23	0438	3904.1	7329.4	X26610.3	Y42852.9	194	29.3	52.7
0109	Sep-23	0642	3903.9	7326.0	X26588.6	Y42852.0	147	31.7	52.0
0110	Sep-23	0833	3854.3	7328.1	X26591.6	Y42754.9	197	36.4	50.7
0111	Sep-23	1215	3915.8	7304.6	X26461.2	Y42971.6	034	38.8	51.6
0112	Sep-28	1751	4059.2	7150.8	X25981.8	Y43826.5	204	15.6	63.4
0113	Sep-28	1842	4058.2	7153.5	X26003.4	Y43822.4	259	15.9	
0114	Sep-28	2040	4054.2	7149.9	X25966.8	Y43787.1	166	22.7	58.7
0115	Sep-28	2218	4056.3	7157.9	X26039.6	Y43813.9	252	15.6	63.7
0116	Sep-29	0011	4053.4	7210.7	X26146.3	Y43808.3	196	16.1	62.6
0117	Sep-29	0146	4055.6	7204.4	X26095.0	Y43817.6	133	16.1	63.2
0118	Sep-29	0303	4055.6	7204.3	X26094.4	Y43817.1	178	16.1	
0119	Sep-29	0437	4048.7	7157.4	X26024.8	Y43753.2	124	23.0	61.2
0120	Sep-29	0556	4044.3	7151.0	X25965.9	Y43710.9	187	28.7	53.2
0121	Sep-29	0741	4036.3	7148.0	X25934.8	Y43643.4	237	33.9	51.4
0122	Sep-29	0955	4028.8	7205.1	X26071.0	Y43600.0	245	32.5	52.5
0123	Sep-29	1059	4028.5	7205.7	X26075.9	Y43598.6	253	32.3	
0124	Sep-29	1345	4028.6	7223.0	X26217.2	Y43617.4	220	29.8	53.1
0125	Sep-29	1649	4041.3	7227.0	X26266.4	Y43730.4	248	19.7	56.7
0126	Sep-29	1853	4038.6	7239.4	X26366.4	Y43722.1	237	19.1	66.7
0127	Sep-29	2044	4038.9	7253.8	X26486.4	Y43742.6	273	15.0	66.7
0128	Sep-29	2216	4035.9	7303.7	X26562.3	Y43727.3	252	12.8	66.5
0129	Sep-29	2334	4034.4	7300.2	X26531.2	Y43710.0	213	14.5	66.7
0130	Sep-30	0138	4023.9	7251.2	X26439.2	Y43605.5	239	23.8	
0131	Sep-30	0252	4023.7	7254.2	X26463.5	Y43606.7	269	23.2	64.0
0132	Sep-30	0445	4013.7	7304.9	X26531.4	Y43524.8	097	24.6	66.1
0133	Sep-30	0729	4023.9	7326.8	X26722.9	Y43641.5	335	15.0	66.0
0134	Sep-30	0858	4025.6	7325.0	X26712.6	Y43656.2	021	14.5	66.1
0135	Sep-30	1033	4022.8	7332.0	X26761.2	Y43635.9	281	14.5	66.2
0136	Sep-30	1212	4021.6	7342.1	X26837.5	Y43634.3	138	14.5	65.0
0137	Sep-30	1358	4021.2	7352.3	X26915.2	Y43640.0	184	12.8	57.6
0138	Sep-30	1644	4002.2	7356.1	X26895.3	Y43449.9	051	12.6	65.7
0139	Sep-30	1810	3956.5	7356.4	X26884.0	Y43392.2	200	12.8	65.5
0140	Sep-30	1951	3948.9	7357.7	X26875.8	Y43313.8	096	10.7	66.5
0141	Sep-30	2329	3950.5	7316.9	X26586.0	Y43311.5	320	24.6	63.2
0142	Oct-01	0228	3955.2	7250.8	X26400.1	Y43342.3	328	29.5	56.4
0143	Oct-01	0513	3935.9	7302.9	X26467.7	Y43165.1	190	34.4	52.6
0144	Oct-01	0702	3928.6	7304.1	X26469.2	Y43095.2	100	37.5	52.5

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0145	Oct-01	0944	3923.4	7236.8	X26280.3	Y43042.0	221	61.5	56.3
0146	Oct-01	1126	3916.1	7233.6	X26257.4	Y42973.9	125	77.6	53.6
0147	Oct-01	1415	3923.3	7215.0	X26135.0	Y43037.4	010	143.3	49.4
0148	Oct-01	1702	3928.8	7233.3	X26258.1	Y43090.5	014	56.3	56.4
0149	Oct-01	1842	3933.8	7231.3	X26246.2	Y43136.6	160	51.1	58.7
0150	Oct-01	2203	3934.0	7226.0	X26209.7	Y43136.5	190	140.3	46.9
0151	Oct-02	0145	3934.2	7205.3	X26067.6	Y43132.7	234	124.4	52.6
0152	Oct-02	0340	3939.2	7204.8	X26063.2	Y43175.6	329	83.4	55.3
0153	Oct-02	0533	3945.9	7206.7	X26074.9	Y43235.3	049	62.3	56.4
0154	Oct-02	0808	3949.8	7150.5	X25959.3	Y43260.9	215	99.8	52.3
0155	Oct-02	1003	3958.2	7156.0	X25994.9	Y43335.7	038	50.0	59.1
0156	Oct-02	1145	4001.2	7154.1	X25980.6	Y43359.4	061	47.3	56.7
0157	Oct-02	1330	4003.8	7159.8	X26022.2	Y43385.8	278	43.7	54.2
0158	Oct-02	1408	4004.2	7201.0	X26031.9	Y43389.5	287	42.7	
0159	Oct-02	1542	4005.7	7214.5	X26133.7	Y43412.3	301	40.2	50.7
0160	Oct-02	1805	4009.3	7156.2	X25995.2	Y43429.6	149	43.2	51.4
0161	Oct-02	1938	4005.6	7147.1	X25927.2	Y43392.0	115	45.7	51.6
0162	Oct-02	2028	4006.8	7146.8	X25924.8	Y43401.6	123	44.8	
0163	Oct-02	2158	4009.0	7141.0	X25880.7	Y43415.5	139	46.8	51.2
0164	Oct-02	2351	4014.0	7134.9	X25832.5	Y43451.2	150	47.6	54.6
0165	Oct-03	0205	4001.6	7136.5	X25851.9	Y43351.7	180	53.0	55.1
0166	Oct-03	0332	3956.7	7137.3	X25861.5	Y43311.9	138	65.1	56.1
0167	Oct-03	0508	3954.6	7134.6	X25844.2	Y43292.8	065	115.9	52.1
0168	Oct-03	0653	3957.6	7134.1	X25838.6	Y43317.1	082	62.6	55.8
0169	Oct-03	1200	4006.8	7054.0	X25552.1	Y43365.1	118	80.9	54.6
0170	Oct-03	1306	4007.0	7054.1	X25552.5	Y43366.3	299	80.4	
0171	Oct-03	1452	4013.6	7053.1	X25533.3	Y43415.8	148	70.3	55.1
0172	Oct-03	1644	4012.3	7047.2	X25496.7	Y43401.8	142	70.8	56.1
0173	Oct-03	1957	4000.3	7035.3	X25453.4	Y43304.3	257	134.2	
0173	Oct-03	1957	4000.3	7035.3	X25453.4	Y43304.3	257	134.2	49.4
0174	Oct-03	2206	4003.1	7029.7	X25414.9	Y43321.9	219	131.8	47.5
0175	Oct-04	0036	4001.6	7016.4	X25349.5	Y43303.1	276	132.1	52.1
0176	Oct-04	0353	4010.9	7027.1	X25379.1	Y43377.4	044	65.9	56.8
0177	Oct-04	0524	4011.8	7019.0	X25332.3	Y43379.1	111	60.4	56.7
0178	Oct-04	0715	4004.6	7013.4	X25325.7	Y43323.2	070	88.3	52.9
0179	Oct-04	0758	4004.4	7013.5	X25326.7	Y43321.9	261	90.5	
0180	Oct-04	1009	4004.4	6959.4	W14212.1	Y43314.3	138	80.1	54.1
0181	Oct-04	1226	4005.9	6939.7	W14107.7	Y43313.9	197	57.7	56.3
0182	Oct-04	1534	4020.8	6916.9	W13944.5	Y43400.4	183	45.1	53.4
0183	Oct-04	1724	4026.0	6919.3	W13937.9	Y43436.5	180	41.6	54.2
0184	Oct-04	2300	4018.5	6959.8	W14170.3	Y43413.5	247	48.1	55.0
0185	Oct-05	0131	4028.7	7022.0	X25298.3	Y43502.6	265	38.0	52.1
0186	Oct-05	0309	4023.4	7030.9	X25367.2	Y43471.9	260	46.2	55.5
0187	Oct-05	0510	4021.4	7047.8	X25481.9	Y43470.9	282	52.2	56.9
0188	Oct-05	0818	4028.2	7122.5	X25728.8	Y43553.4	314	39.4	53.0
0189	Oct-05	1009	4038.1	7125.1	X25746.1	Y43632.1	300	34.7	49.6
0190	Oct-05	1258	4043.2	7102.3	X25558.1	Y43646.4	268	32.8	53.2
0191	Oct-05	1741	4106.1	7134.4	X25847.6	Y43855.9	318	14.2	63.0

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0192	Oct-05	1935	4111.7	7126.6	X25788.5	Y43885.7	339	18.3	60.8
0193	Oct-05	2102	4115.7	7128.7	X25816.1	Y43917.8	143	21.9	61.3
0194	Oct-05	2308	4123.0	7122.5	X25778.9	Y43960.5	002	17.8	62.1
0195	Oct-06	0224	4118.7	7052.8	X25499.2	Y43887.0	305	17.0	62.3
0196	Oct-06	0425	4111.1	7100.4	X25552.0	Y43845.1	250	20.2	61.8
0197	Oct-06	0841	4110.7	7043.8	X25402.3	Y43819.8	274	18.0	59.5
0198	Oct-06	1042	4115.5	7031.3	X25296.7	Y43835.9	300	15.0	60.6
0199	Oct-06	1239	4113.4	7017.6	X25168.9	Y43804.4	128	14.2	60.8
0200	Oct-06	1439	4105.2	7007.1	X25090.2	Y43738.2	276	15.0	61.5
0201	Oct-06	1647	4106.2	7023.8	X25221.9	Y43764.3	271	21.3	58.9
0202	Oct-06	2046	4044.7	6953.2	W14046.5	Y43587.3	252	24.1	59.8
0203	Oct-06	2220	4038.9	7002.4	X25159.8	Y43556.7	269	27.6	57.3
0204	Oct-19	1541	4041.1	7013.2	X25207.9	Y43581.9	332	24.6	55.5
0205	Oct-19	2049	4038.6	6916.1	W13876.1	Y43515.8	019	30.9	55.5
0206	Oct-19	2309	4051.6	6906.9	W13779.9	Y43590.0	018	43.2	54.4
0207	Oct-20	0102	4050.3	6908.2	W13791.1	Y43583.2	026	39.1	
0208	Oct-20	0353	4049.0	6857.6	W13743.6	Y43565.9	350	38.3	56.0
0209	Oct-20	0559	4048.0	6850.4	W13712.2	Y43553.9	012	36.9	57.3
0210	Oct-20	0804	4041.1	6856.6	W13769.5	Y43516.0	033	37.2	56.5
0211	Oct-20	1020	4035.4	6902.1	W13818.4	Y43484.6	211	37.5	55.4
0212	Oct-20	1250	4028.7	6845.5	W13763.2	Y43430.9	083	41.6	54.7
0213	Oct-20	1504	4013.7	6849.2	W13835.3	Y43338.6	279	63.4	54.0
0214	Oct-20	1802	4003.0	6853.7	W13893.6	Y43271.8	237	162.1	
0215	Oct-20	2043	4011.0	6844.0	W13820.3	Y43318.5	250	81.2	54.5
0216	Oct-20	2146	4010.8	6845.2	W13826.2	Y43318.2	077	80.4	
0217	Oct-21	0106	4025.9	6817.2	W13641.6	Y43396.5	236	62.3	53.4
0218	Oct-21	0336	4033.1	6800.6	W13539.0	Y43429.7	352	53.6	53.3
0219	Oct-21	0732	4026.7	6732.8	W13444.3	Y43376.9	069	75.2	56.9
0220	Oct-21	0856	4026.7	6732.9	W13444.4	Y43377.2	056	74.9	
0221	Oct-21	1127	4027.1	6719.4	W13386.8	Y43372.6	245	143.8	49.5
0222	Oct-21	1429	4033.2	6706.0	W13307.5	Y43400.2	213	124.1	54.9
0223	Oct-21	1643	4038.5	6707.9	W13293.5	Y43430.2	056	67.5	53.6
0224	Oct-21	1826	4043.9	6711.2	W13284.5	Y43461.6	051	53.3	56.3
0225	Oct-21	1954	4044.1	6711.1	W13283.2	Y43462.6	049	53.3	
0226	Oct-21	2151	4044.9	6718.6	W13310.8	Y43471.4	137	52.5	56.4
0227	Oct-21	2332	4048.8	6723.9	W13316.2	Y43496.0	250	47.8	56.6
0228	Oct-22	0137	4053.6	6714.1	W13254.9	Y43516.3	263	46.5	58.3
0229	Oct-22	0431	4056.2	6746.0	W13379.2	Y43552.6	006	31.7	54.9
0230	Oct-22	0655	4046.3	6758.9	W13477.6	Y43505.6	339	39.1	56.0
0231	Oct-22	1310	4103.4	6905.7	W13725.5	Y43662.1	168	44.3	50.8
0232	Oct-22	1558	4115.6	6909.4	W13692.9	Y43740.0	328	53.9	46.4
0233	Oct-22	1754	4120.1	6916.3	W13709.1	Y43774.2	328	53.9	44.1
0234	Oct-27	2355	4114.1	6837.4	W13538.5	Y43698.3	025	34.7	54.3
0235	Oct-28	0220	4128.3	6829.3	W13434.8	Y43771.6	191	48.7	47.3
0236	Oct-28	0334	4128.6	6829.0	W13431.9	Y43772.4	211	48.1	
0237	Oct-28	0602	4123.4	6813.6	W13382.9	Y43728.1	330	26.2	57.9
0238	Oct-28	0904	4117.6	6817.5	W13427.8	Y43699.5	226	29.5	57.7
0239	Oct-28	1225	4119.2	6753.8	W13311.5	Y43686.5	057	20.8	57.7

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0240	Oct-29	1712	4106.6	6744.2	W13325.9	Y43608.7	014	25.2	55.7
0241	Oct-29	1947	4112.2	6739.6	W13280.4	Y43636.4	224	27.3	55.8
0242	Oct-29	2227	4120.0	6751.2	W13296.3	Y43688.3	235	18.6	57.6
0243	Oct-30	0208	4126.4	6724.8	W13151.3	Y43699.8	030	24.9	56.6
0244	Oct-30	0508	4110.7	6726.8	W13232.6	Y43617.5	196	29.0	54.6
0245	Oct-30	0706	4106.2	6715.1	W13203.9	Y43584.6	221	34.2	54.7
0246	Oct-30	1217	4049.1	6640.8	W13143.1	Y43471.6	229	120.0	54.6
0247	Oct-30	1431	4053.3	6638.9	W13117.3	Y43492.9	253	65.9	56.1
0248	Oct-30	1710	4101.7	6631.3	W13052.1	Y43531.7	232	54.1	51.5
0249	Oct-30	1837	4103.6	6636.1	W13061.6	Y43544.4	132	48.7	50.7
0250	Oct-30	2038	4109.8	6642.4	W13058.3	Y43580.2	210	43.7	50.9
0251	Oct-30	2231	4116.3	6638.4	W13013.1	Y43610.7	296	45.9	50.1
0252	Oct-31	0043	4124.8	6654.5	W13035.5	Y43666.3	333	38.0	53.3
0253	Oct-31	0225	4129.8	6702.0	W13041.7	Y43697.6	343	36.1	53.9
0254	Oct-31	0411	4135.8	6656.2	W12989.9	Y43723.4	089	35.5	54.0
0255	Oct-31	0602	4139.2	6709.9	W13028.3	Y43752.3	206	30.9	54.9
0256	Oct-31	0817	4142.0	6722.5	W13066.7	Y43778.2	233	27.1	56.0
0257	Oct-31	1039	4136.5	6737.5	W13157.4	Y43764.4	351	26.8	56.0
0258	Oct-31	1318	4150.6	6735.7	W13079.8	Y43835.2	349	24.1	55.7
0259	Oct-31	1648	4153.9	6708.6	W12949.1	Y43825.0	109	29.0	55.1
0260	Oct-31	1946	4143.7	6647.6	W12917.4	Y43755.5	156	37.5	52.0
0261	Oct-31	2156	4152.0	6642.0	W12855.1	Y43790.7	222	37.7	51.4
0262	Nov-01	0051	4139.3	6634.4	W12889.4	Y43722.3	170	38.3	50.8
0263	Nov-01	0519	4122.4	6618.5	W12911.5	Y43626.9	192	54.1	48.2
0264	Nov-01	0753	4117.4	6612.0	W12911.2	Y43598.0	182	119.5	53.4
0265	Nov-01	0927	4117.2	6612.2	W12912.8	Y43597.4	220	114.8	
0266	Nov-01	1147	4126.3	6613.7	W12876.0	Y43642.9	073	58.2	48.6
0267	Nov-01	1327	4126.5	6609.0	W12858.6	Y43640.7	240	65.6	47.8
0268	Nov-01	1421	4126.1	6609.6	W12862.6	Y43639.1	038	67.0	
0269	Nov-01	1731	4143.8	6547.3	W12702.9	Y43707.1	020	85.3	44.9
0270	Nov-01	1943	4156.5	6545.6	W12635.4	Y43764.3	072	126.9	44.0
0271	Nov-01	2253	4158.7	6612.8	W12715.2	Y43797.1	319	46.2	48.8
0272	Nov-02	0228	4221.2	6613.2	W12600.2	Y43900.3	007	132.3	47.9
0273	Nov-02	0403	4223.0	6615.2	W12597.3	Y43910.5	036	134.8	47.9
0274	Nov-02	0603	4230.7	6620.7	W12574.7	Y43950.1	107	123.9	48.0
0275	Nov-02	0842	4231.2	6638.8	W12635.8	Y43971.0	089	142.4	47.9
0276	Nov-02	1202	4246.4	6652.0	W12598.9	Y44053.2	124	113.7	48.2
0277	Nov-02	1522	4257.2	6650.7	W12530.9	Y44098.8	020	106.4	48.3
0278	Nov-02	1834	4305.7	6659.7	W12513.9	Y44145.6	154	101.4	48.2
0279	Nov-02	1941	4304.8	6700.1	W12520.3	Y44142.5	200	103.1	
0280	Nov-02	2231	4303.2	6714.7	W12586.4	Y44153.7	039	126.9	48.1
0281	Nov-03	0247	4243.8	6719.4	W12720.9	Y44073.6	019	117.0	47.3
0282	Nov-03	0406	4244.2	6719.3	W12718.4	Y44075.3	343	117.8	
0283	Nov-03	0656	4239.5	6713.2	W12720.9	Y44046.6	094	146.5	47.9
0284	Nov-03	1006	4228.2	6710.6	W12774.2	Y43991.8	143	191.7	47.7
0285	Nov-03	1324	4226.1	6708.3	W12776.6	Y43979.5	276	197.7	
0285	Nov-03	1324	4226.1	6708.3	W12776.6	Y43979.5	276	197.7	47.5
0286	Nov-03	1704	4211.6	6650.9	W12787.6	Y43892.7	358	114.8	46.2

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0287	Nov-03	1842	4206.7	6647.7	W12800.9	Y43866.7	080	38.3	47.3
0288	Nov-03	2026	4204.2	6653.8	W12837.3	Y43860.7	072	36.1	52.1
0289	Nov-03	2211	4205.3	6702.3	W12865.0	Y43874.6	327	33.6	53.6
0290	Nov-04	0027	4211.4	6707.2	W12852.1	Y43909.0	262	97.9	44.3
0291	Nov-04	0215	4203.1	6713.3	W12920.6	Y43875.0	325	25.4	54.2
0292	Nov-04	0430	4211.2	6713.4	W12878.4	Y43914.4	355	96.0	43.0
0293	Nov-04	0903	4220.8	6722.9	W12865.4	Y43970.7	312	176.6	47.7
0294	Nov-04	1253	4216.1	6726.3	W12905.4	Y43952.1	297	154.2	47.5
0294	Nov-04	1253	4216.1	6726.3	W12905.4	Y43952.1	297	154.2	47.6
0295	Nov-04	1508	4204.2	6731.0	W12989.1	Y43898.8	224	42.1	48.4
0296	Nov-04	1828	4148.6	6800.9	W13202.3	Y43851.5	092	27.9	51.9
0297	Nov-04	2001	4145.7	6801.4	W13218.8	Y43836.9	069	20.8	54.6
0298	Nov-04	2205	4144.6	6815.9	W13291.9	Y43846.7	245	37.2	54.4
0299	Nov-04	2348	4145.5	6821.3	W13313.9	Y43857.2	059	62.6	49.9
0300	Nov-05	0155	4155.4	6815.0	W13234.0	Y43902.9	024	124.1	45.0
0301	Nov-05	0511	4210.0	6835.2	W13256.3	Y44003.9	118	101.4	42.2
0302	Nov-05	0810	4159.7	6843.3	W13350.9	Y43960.2	144	84.5	42.0
0303	Nov-05	1130	4204.8	6853.1	W13374.5	Y44000.1	130	76.0	41.7
0304	Nov-05	1410	4215.9	6859.2	W13348.1	Y44067.3	072	108.5	42.4
0305	Nov-05	1649	4223.2	6849.6	W13258.5	Y44091.2	321	112.1	45.1
0306	Nov-05	1824	4223.1	6855.3	W13288.4	Y44099.2	261	118.9	44.8
0307	Nov-05	2120	4238.6	6904.1	W13249.3	Y44189.9	287	101.2	44.0
0308	Nov-09	1735	4224.1	7049.5	X25807.2	Y44290.2	175	18.9	50.6
0309	Nov-09	1909	4227.2	7048.4	X25818.7	Y44305.5		23.5	50.5
0310	Nov-09	2118	4223.4	7040.7	X25744.6	Y44270.0	332	34.4	49.8
0311	Nov-10	0015	4214.3	7037.8	X25667.8	Y44213.0	129	18.6	51.7
0312	Nov-10	0305	4220.5	7018.2	X25589.1	Y44213.9	127	18.6	50.7
0313	Nov-10	0951	4211.1	7013.9	X25501.4	Y44154.1	013	15.6	50.9
0314	Nov-10	1725	4211.1	7009.7	X25479.0	Y44147.3	077	23.5	50.6
0315	Nov-10	2009	4214.3	6952.8	W13655.1	Y44137.9	219	105.5	43.4
0316	Nov-10	2205	4206.6	6951.4	W13685.6	Y44092.8	177	74.1	43.6
0317	Nov-10	2335	4159.5	6954.9	W13741.0	Y44057.9	150	29.5	49.8
0318	Nov-11	0148	4159.4	6958.6	W13763.1	Y44062.7	162	14.5	50.6
0319	Nov-11	0314	4156.9	6956.7	W13764.0	Y44045.2	323	15.3	50.6
0320	Nov-11	0628	4132.8	6942.7	W13795.7	Y43882.9	352	15.9	51.2
0321	Nov-11	1206	4135.7	6924.9	W13685.6	Y43877.2	282	51.4	45.1
0322	Nov-11	1453	4131.4	6928.4	W13723.9	Y43856.1	292	29.3	50.9
0323	Nov-11	1630	4121.5	6928.6	W13768.4	Y43796.7	169	19.1	51.2
0324	Nov-11	2049	4128.1	6904.0	W13609.5	Y43808.0	052	80.1	43.9
0325	Nov-12	0038	4142.9	6907.1	W13556.9	Y43896.8	046	94.1	42.8
0326	Nov-12	0341	4145.3	6851.5	W13464.2	Y43891.6	293	89.1	41.8
0327	Nov-12	0617	4154.5	6900.9	W13468.0	Y43954.2	127	99.0	42.7
0328	Nov-12	0952	4159.9	6909.2	W13484.8	Y43994.8	318	112.1	43.1
0329	Nov-12	1215	4200.8	6923.2	W13555.4	Y44019.2	307	110.5	43.4
0330	Nov-12	1545	4229.8	6933.3	W13460.9	Y44190.2	318	145.2	44.6
0331	Nov-12	1831	4237.0	6922.8	W13361.3	Y44210.8	014	128.0	44.3
0332	Nov-12	2157	4251.4	6935.5	W13351.2	Y44303.1	354	97.3	43.6
0333	Nov-13	0039	4256.7	6918.7	W13223.4	Y44301.0	172	84.5	44.9

NOAA Fisheries Service FALL BOTTOM TRAWL SURVEY
2009 STATION INFORMATION

Station	Date	Time	Lat	Lon	Loran TD's		Course	Bottom Depth (FM)	Temp (F)
0334	Nov-13	0332	4300.4	6858.8	W13091.7	Y44286.7	141	47.8	45.9
0335	Nov-13	0817	4256.6	6832.7	W12978.6	Y44229.7	300	106.6	
0336	Nov-13	1128	4308.2	6819.4	W12841.3	Y44262.4	113	112.9	44.7
0337	Nov-13	1431	4318.7	6841.1	W12883.4	Y44341.6	061	77.1	49.7
0338	Nov-13	1610	4323.6	6840.3	W12847.5	Y44361.5	356	73.0	50.1
0339	Nov-13	1925	4326.3	6809.9	W12680.1	Y44326.9	034	102.3	45.1
0340	Nov-13	2118	4333.2	6804.4	W12608.2	Y44347.5	073	104.4	46.0
0341	Nov-14	0016	4319.5	6754.2	W12652.1	Y44275.5	148	129.9	46.1
0342	Nov-14	0554	4321.6	6653.7	W12394.1	Y44204.6	187	115.9	47.4
0343	Nov-14	0851	4329.5	6710.7	W12406.3	Y44258.5	183	122.8	
0344	Nov-14	1118	4339.9	6711.4	W12341.4	Y44300.7	205	82.6	47.0
0345	Nov-14	1346	4341.9	6709.3	W12320.4	Y44305.8	156	76.3	47.8
0346	Nov-14	1648	4358.4	6702.1	W12184.6	Y44359.2	152	92.1	47.6
0347	Nov-14	1925	4411.3	6707.2	W12114.3	Y44413.2	170	67.3	49.8
0348	Nov-14	2144	4414.5	6658.7	W12063.2	Y44413.1	202	93.2	49.0
0349	Nov-15	0022	4419.2	6711.5	W12073.4	Y44447.2	170	94.3	48.2
0350	Nov-15	0222	4413.4	6721.0	W12148.8	Y44439.8	212	122.5	47.5
0351	Nov-15	0416	4409.7	6719.0	W12167.5	Y44423.4	200	100.9	47.5
0352	Nov-15	0929	4410.0	6747.4	W12278.3	Y44464.9	156	82.0	50.0
0353	Nov-15	1131	4408.7	6754.5	W12318.0	Y44470.8	170	53.9	50.2
0354	Nov-15	1314	4405.1	6753.0	W12337.4	Y44455.1	179	55.5	50.2
0355	Nov-15	1856	4357.0	6755.1	W12403.6	Y44427.9	056	82.6	48.8
0356	Nov-15	2125	4352.0	6739.3	W12371.2	Y44385.8	217	114.6	46.1
0357	Nov-15	2317	4345.0	6746.5	W12448.9	Y44369.1	198	123.3	46.6
0358	Nov-16	0517	4331.7	6856.7	W12881.1	Y44421.7	035	59.9	50.2
0359	Nov-16	1200	4331.7	6948.1	W13177.7	Y44509.6	215	70.0	
0360	Nov-16	1407	4330.7	6955.4	W13229.1	Y44518.2	080	60.7	49.9
0361	Nov-16	1653	4323.5	6947.7	W13227.9	Y44472.9	057	78.2	49.2
0362	Nov-16	1927	4324.3	6933.8	W13139.7	Y44452.0	264	92.7	44.4
0363	Nov-16	2155	4311.6	6950.3	W13317.9	Y44424.1	232	96.8	42.7
0364	Nov-17	0038	4251.4	6956.4	W13474.9	Y44338.6	245	112.1	
0365	Nov-17	0137	4250.4	7001.5	X25700.5	Y44342.6	324	86.1	46.5
0366	Nov-17	0339	4257.5	7007.7	X25774.2	Y44389.0	233	73.5	45.7
0367	Nov-17	0603	4257.5	7024.4	X25859.4	Y44419.6	349	61.0	49.4
0368	Nov-17	0924	4239.1	7009.9	X25668.6	Y44299.7	359	53.0	48.6
0369	Nov-17	1116	4241.2	7022.5	X25748.5	Y44333.2	036	29.5	49.8
0370	Nov-17	1240	4239.0	7027.8	X25764.6	Y44331.6	223	26.8	49.6
0371	Nov-17	1535	4231.7	7036.4	X25769.1	Y44307.8	342	34.7	50.1
0372	Nov-17	1751	4228.3	7045.4	X25805.6	Y44305.9	021	25.4	50.7
0373	Nov-17	1900	4230.0	7044.2	X25807.9	Y44313.0	046	25.4	50.4
0374	Nov-17	2319	4206.2	7004.2	X25415.8	Y44110.2	310	24.1	50.2
0375	Nov-18	0140	4203.9	7022.5	X25501.4	Y44126.6	003	32.3	50.4
0376	Nov-18	0527	4201.5	7027.0	X25513.1	Y44119.6	042	26.2	51.5
0377	Nov-18	0751	4153.3	7027.3	X25460.8	Y44071.3	158	15.9	51.9
0378	Nov-18	0925	4150.8	7025.3	X25429.9	Y44052.7	269	15.3	51.6
0379	Nov-18	1040	4153.1	7025.6	X25447.5	Y44067.2	202	17.8	51.9
0380	Nov-18	1222	4153.9	7017.2	X25398.9	Y44058.6	268	18.6	51.7
0381	Nov-18	1356	4157.8	7014.3	X25409.9	Y44077.6	219	20.5	51.3

NOAA FISHERIES SERVICE-NEFSC FALL BOTTOM TRAWL SURVEY SEPTEMBER 12 - NOVEMBER 19, 2009
CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

STA	ATLANTIC COD	HADDOCK	POLLOCK	WHITE HAKE	SILVER HAKE	ACADIAN REDFISH	GOOSEFISH	SPINY DOGFISH	YELLOWTAIL FLOUNDER	WINTER FLOUNDER	AMERICAN PLAICE	WITCH FFLOUNDER	WINDOWPANE FLDR	SUMMER FLOUNDER	BLUEFISH	WEAKFISH	SCUP	BLACK SEA BASS	SPOT	ATLANTIC CROAKER	BUTTERFISH	AMERICAN LOBSTER	LOLIGO	ILLEX	TOTAL * OTHER	TOTAL ALL
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55	0	1	19	35	110
2	0	0	0	0	7	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	63	0	3	0	912	987
3	0	0	0	0	7	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	31	0	3	0	271	314
4	0	0	0	0	0	0	21	0	0	0	0	1	0	0	0	0	0	0	0	0	3	0	0	52	24	101
5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4	21	31
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	114	14	131
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	0	69	4	35	135
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	3	58	72
9	0	0	0	0	38	0	11	8	2	0	0	0	0	0	0	0	0	0	0	0	14	0	2	0	572	647
10	0	0	0	0	0	0	16	1	0	0	0	20	0	0	0	0	0	0	0	0	1	3	0	164	29	234
11	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0	11	7	26	50
12	0	0	0	0	2	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	64	0	65	0	227	361
13	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	42	3	32	86
14	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47	4	12	65
15	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	13	0	30	2	39	85
16 **	0	0	0	0	5	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	15	0	517	542
17	0	0	0	0	17	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	25	0	242	308
18	0	0	0	0	1	0	49	0	0	0	0	13	0	0	0	0	0	0	0	0	0	2	0	59	73	197
19	0	0	0	0	24	0	11	6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	9	2	413	466
20	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	1	0	0	0	1	21	0	306	334
21	0	0	0	0	14	0	4	0	0	0	0	0	8	0	0	0	0	9	0	0	0	0	21	0	1214	1270
22	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	5	2	53	64
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	68	23	94
24	0	0	0	0	1	0	1	15	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	90	96	209
25	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	86	9	54	154
26	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	16	0	586	620
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	364	146	510
28	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	4	0	0	0	0	17	2	764	790
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	168	185
30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	7	0	19	27
31	0	0	0	3	0	0	2	0	0	0	0	6	0	0	0	0	0	0	0	0	0	13	0	27	43	94
32	0	0	0	0	1	0	2	1	0	0	0	6	0	0	0	0	0	0	0	0	0	0	1	95	61	167
33	0	0	0	0	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	4250	0	113	293	237	4897
34	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95	1	12	109
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	13	20
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	3	12
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	819	0	20	11	126	976

NOAA FISHERIES SERVICE-NEFSC FALL BOTTOM TRAWL SURVEY SEPTEMBER 12 - NOVEMBER 19, 2009
CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

	ATLANTIC COD	HADDOCK	POLLOCK	WHITE HAKE	SILVER HAKE	ACADIAN REDFISH	GOOSEFISH	SPINY DOGFISH	YELLOWTAIL FLOUNDER	WINTER FLOUNDER	AMERICAN PLAICE	WITCH FFLOUNDER	WINDOWPANE FLDR	SUMMER FLOUNDER	BLUEFISH	WEAKFISH	SCUP	BLACK SEA BASS	SPOT	ATLANTIC CROAKER	BUTTERFISH	AMERICAN LOBSTER	LOLIGO	ILLEX	TOTAL * OTHER	TOTAL ALL
38	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	9	907	919
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	108	0	0	0	2	0	21	1	55	187
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	0	1	0	0	0	16	0	7	94
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	108	0	0	1	1	0	25	0	18	153
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	53	0	95	222	1	0	9	0	24	405
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6	47	0	71	110	22	0	9	0	83	351
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	135	0	9	17	3	0	23	0	375	563
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	110	0	5	15	1	0	15	0	84	231
46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	91	0	0	1	0	0	19	0	140	251
47 **	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	5	8
48 **	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	11	14
49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	0	53	12	17	0	14	0	104	237
50	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4	0	32	38
51	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3	0	0	0	0	0	1	0	32	37
52	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	5	0	44	51
53	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	15	0	0	0	0	0	4	0	28	48
54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	9	0	40	50
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	195	198
56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	795	795
57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	103	0	251	354
58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63	0	0	0	0	0	8	0	12	83
59	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	62	16	278	359
60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	1	38	59	104
61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	23	0	38	8	7	0	32	1	48	158
62	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	132	0	30	116	3	0	6	0	79	367
63	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	2	97	0	70	153	5	0	4	0	71	406
64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5	75	0	130	170	17	0	4	0	389	793
65	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	4	39	0	35	26	8	0	5	0	198	323
66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	44	0	51	101	24	0	2	0	538	763
67	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	6	0	1	0	0	0	17	0	360	386
68	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	1	15	0	43	13	2	0	5	0	59	142
69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	15	114	0	162	190	22	0	14	0	314	837
70	0	0	0	0	0	0	0	0	0	0	0	0	0	2	9	8	76	1	30	179	24	0	3	0	2189	2521
71	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	1	70	2	43	535	0	0	7	0	116	781
72	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	63	15	5	363	0	0	2	0	496	947
73	0	0	0	0	0	0	0	0	0	0	0	0	0	7	1	19	186	1	61	162	2	0	5	0	182	626
74	0	0	0	0	0	0	0	0	0	0	0	0	0	7	3	1	102	1	4	11	0	0	14	0	130	273
75	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	26	102	0	0	0	0	15	0	105	252

NOAA FISHERIES SERVICE-NEFSC FALL BOTTOM TRAWL SURVEY SEPTEMBER 12 - NOVEMBER 19, 2009
CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

	ATLANTIC COD	HADDOCK	POLLOCK	WHITE HAKE	SILVER HAKE	ACADIAN REDFISH	GOOSEFISH	SPINY DOGFISH	YELLOWTAIL FLOUNDER	WINTER FLOUNDER	AMERICAN PLAICE	WITCH FFLOUNDER	WINDOWPANE FLDR	SUMMER FLOUNDER	BLUEFISH	WEAKFISH	SCUP	BLACK SEA BASS	SPOT	ATLANTIC CROAKER	BUTTERFISH	AMERICAN LOBSTER	LOLIGO	ILLEX	TOTAL * OTHER	TOTAL ALL
76	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	21	1	2	0	2	0	7	0	229	268
77	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2	38	6	0	9	19	3	0	5	0	411	497
78	0	0	0	0	0	0	0	0	0	0	0	0	0	5	3	3	40	0	2	43	1	0	5	0	169	271
79	0	0	0	0	0	0	0	0	0	0	0	0	1	4	53	0	13	1	0	0	0	0	4	0	63	139
80	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	22	1	0	5	0	0	49	0	114	194
81	0	0	0	0	0	0	0	0	0	0	0	0	5	3	0	0	63	2	5	363	0	2	2	0	168	613
82	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	29	29	0	10	501	5	0	2	0	293	872
83	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	45	0	2008	2056
84	0	0	0	0	0	0	0	0	0	0	0	0	0	57	0	0	17	0	0	0	0	0	29	0	475	578
85	0	0	0	0	0	0	0	0	0	0	0	0	2	4	0	0	16	0	0	0	0	0	18	0	103	143
86	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	3	0	0	4	0	0	1	0	224	236
87	0	0	0	0	0	0	0	0	0	0	0	0	1	3	32	18	25	4	32	9168	7	1	2	0	371	9664
88	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	36	1	0	6	0	0	3	0	103	157
89	0	0	0	0	0	0	0	0	0	0	0	0	2	3	8	41	30	18	11	723	13	0	1	0	392	1242
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	255	265
91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	490	510
92	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	3	0	964	970
93	0	0	0	0	0	0	0	0	0	0	0	0	1	28	0	0	8	1	0	5	1	0	6	0	549	599
94	0	0	0	0	0	0	0	0	0	0	0	0	2	34	1	0	46	41	0	140	0	0	3	0	695	962
95	0	0	0	0	0	0	0	0	0	0	0	0	0	15	4	0	0	1	0	2	0	0	1	0	338	361
96	0	0	0	0	0	0	0	0	0	0	0	0	0	3	11	1	0	1	0	2	0	0	2	0	228	248
97	0	0	0	0	0	0	0	0	0	0	0	0	1	5	1	0	0	3	0	0	0	0	1	0	579	590
98	0	0	0	0	0	0	0	0	0	0	0	0	1	15	1	0	28	1	0	0	0	0	16	0	181	243
99	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	4	0	474	481
100	0	0	0	0	0	0	0	0	0	0	0	0	1	18	0	0	23	2	0	0	0	0	1	0	79	124
101	0	0	0	0	0	0	0	0	0	0	0	0	1	6	0	0	15	5	0	0	0	0	4	0	174	205
102	0	0	0	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	1	0	68	74
103	0	0	0	0	0	0	0	0	0	1	0	0	1	24	0	0	99	109	0	373	2	1	7	0	367	984
104	0	0	0	0	0	0	0	0	0	0	0	0	1	42	0	0	0	4	0	6	0	0	2	0	178	233
105	0	0	0	0	2	0	0	0	0	0	0	0	1	20	0	0	0	0	0	0	5	0	25	0	433	486
106	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	4	0	630	647
107	0	0	0	0	29	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	6	0	8	0	326	370
108	0	0	0	0	61	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	44	0	1121	1229
109	0	0	0	0	14	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	11	0	55	0	565	646
110	0	0	0	0	11	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	167	0	303	487
111	0	0	0	0	4	0	8	1	0	0	0	0	0	0	0	0	0	0	0	0	14	0	30	0	302	359
112 **	0	0	0	0	0	0	0	242	0	2	0	0	5	10	80	0	57	15	0	0	2	3	26	0	593	1035
113	0	0	0	0	1	0	0	163	0	0	0	0	6	27	0	0	12	3	0	0	3	0	4	0	1761	1980

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CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

	ATLANTIC COD	HADDOCK	POLLOCK	WHITE HAKE	SILVER HAKE	ACADIAN REDFISH	GOOSEFISH	SPINY DOGFISH	YELLOWTAIL FLOUNDER	WINTER FLOUNDER	AMERICAN PLAICE	WITCH FFLOUNDER	WINDOWPANE FLDR	SUMMER FLOUNDER	BLUEFISH	WEAKFISH	SCUP	BLACK SEA BASS	SPOT	ATLANTIC CROAKER	BUTTERFISH	AMERICAN LOBSTER	LOLIGO	ILLEX	TOTAL * OTHER	TOTAL ALL
114	0	0	0	0	5	0	0	1967	0	4	0	0	22	64	0	0	28	0	0	0	7	3	4	0	521	2625
115	0	0	0	0	0	0	0	175	0	0	0	0	4	16	9	0	2	6	0	0	4	1	7	0	891	1115
116	0	0	0	0	5	0	0	72	0	0	0	0	6	18	0	0	2	1	0	0	16	0	27	0	323	470
117	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
118	0	0	0	0	2	0	0	47	0	0	0	0	12	23	0	0	5	0	0	0	20	0	34	0	442	585
119	0	0	0	0	6	0	0	156	0	1	0	0	5	20	0	0	0	0	0	0	1	0	37	0	370	596
120	0	0	0	0	9	0	0	705	2	13	0	0	0	6	0	0	1	0	0	0	69	1	23	0	70	899
121	0	0	0	0	11	0	1	93	25	0	0	0	0	0	0	0	0	0	0	0	30	3	38	0	181	382
122	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
123	0	0	0	0	6	0	12	27	0	1	0	0	0	0	0	0	0	0	0	0	5	0	11	0	27	89
124	0	0	0	0	21	0	0	97	0	8	0	0	0	17	0	0	0	0	0	0	5	5	53	0	232	438
125	0	0	0	0	0	0	0	60	0	0	0	0	0	14	0	0	1	0	0	0	10	0	37	0	213	335
126	0	0	0	0	0	0	0	0	0	0	0	0	2	55	4	0	15	0	0	0	7	0	12	0	56	151
127	0	0	0	0	3	0	0	0	0	6	0	0	3	13	0	1	6	0	0	0	3	2	5	0	169	211
128	0	0	0	0	1	0	0	0	0	0	0	0	2	6	0	3	6	0	0	0	4	0	4	0	288	314
129	0	0	0	0	1	0	0	0	0	0	0	0	5	3	2	0	3	0	0	0	2	0	12	0	65	93
130	0	0	0	0	2	0	0	5	0	0	0	0	0	50	12	0	0	0	0	0	0	0	16	0	225	310
131	0	0	0	0	1	0	0	11	0	0	0	0	1	50	0	0	0	0	0	0	0	0	28	0	297	388
132	0	0	0	0	0	0	0	19	0	0	0	0	0	143	10	0	0	0	0	0	0	0	14	0	498	684
133	0	0	0	0	0	0	0	0	0	0	0	0	1	6	0	0	4	0	0	0	20	0	13	0	404	448
134	0	0	0	0	0	0	0	0	0	4	0	0	1	0	0	0	4	0	0	0	21	0	13	0	383	426
135	0	0	0	0	0	0	0	0	0	1	0	0	1	3	407	0	1	0	0	0	30	0	10	0	65	518
136	0	0	0	0	0	0	0	0	0	3	0	0	0	13	3	0	9	0	0	0	12	0	9	0	49	98
137	0	0	0	0	1	0	0	0	0	14	0	0	0	9	0	0	1	0	0	0	22	3	15	0	88	153
138	0	0	0	0	0	0	0	0	0	0	0	0	3	34	0	0	7	0	0	0	9	0	3	0	568	624
139	0	0	0	0	0	0	0	0	0	0	0	0	14	13	0	0	9	62	0	0	0	0	1	0	183	282
140	0	0	0	0	0	0	0	0	0	1	0	0	7	6	0	0	4	2	0	0	0	0	6	0	958	984
141	0	0	0	0	1	0	0	0	0	3	0	0	2	6	0	0	0	0	0	0	0	0	0	0	843	855
142	0	0	0	0	16	0	5	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	26	0	318	369
143	0	0	0	0	22	0	2	0	5	0	0	0	0	0	8	0	0	0	0	0	11	0	52	0	426	526
144	0	0	0	0	43	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	142	1	422	620
145	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	20	1	33	62
146	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	3	28	45
147	0	0	0	0	0	0	68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	8	67	145
148	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	677	0	81	5	54	822
149	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	1	117	10	69	278
150	0	0	0	0	0	0	96	208	0	0	0	1	0	0	0	0	0	0	0	0	5	11	0	4	146	471
151	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	7	23	48

NOAA FISHERIES SERVICE-NEFSC FALL BOTTOM TRAWL SURVEY SEPTEMBER 12 - NOVEMBER 19, 2009
CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

	ATLANTIC COD	HADDOCK	POLLOCK	WHITE HAKE	SILVER HAKE	ACADIAN REDFISH	GOOSEFISH	SPINY DOGFISH	YELLOWTAIL FLOUNDER	WINTER FLOUNDER	AMERICAN PLAICE	WITCH FFLOUNDER	WINDOWPANE FLDR	SUMMER FLOUNDER	BLUEFISH	WEAKFISH	SCUP	BLACK SEA BASS	SPOT	ATLANTIC CROAKER	BUTTERFISH	AMERICAN LOBSTER	LOLIGO	ILLEX	TOTAL * OTHER	TOTAL ALL
152	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	14	1	28	47
153	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	289	4	1025	21	55	1402
154	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1	0	4	51	78
155	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	513	3	104	12	45	679
156	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	55	1	45	132
157 **	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
158	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	36	0	62	103
159	0	0	0	0	4	0	8	0	0	0	0	0	0	6	0	0	0	0	0	0	5	0	25	0	61	109
160	0	0	0	0	36	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	48	0	146	266
161 **	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
162	0	0	0	0	5	0	14	8	0	0	0	0	0	0	0	0	0	0	0	0	4	1	6	0	81	119
163	0	0	0	0	5	0	5	28	0	0	0	0	0	0	0	0	0	0	0	0	322	1	24	0	45	430
164	0	0	0	0	11	0	27	257	0	0	0	0	0	0	0	0	0	0	0	0	96	1	35	0	72	499
165	0	0	0	0	2	0	34	11	0	0	0	0	0	0	0	0	0	2	0	0	6	0	14	1	72	142
166 **	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
167	0	0	0	0	0	0	21	53	0	0	0	0	0	0	0	0	0	0	0	0	0	4	28	5	18	129
168	0	0	0	0	0	0	4	11	0	0	0	0	0	0	0	0	0	0	0	0	13	0	176	18	61	283
169 **	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
170	0	0	0	0	1	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	6	2	14	3	55	87
171	0	0	0	0	0	0	23	14	0	0	0	0	0	0	0	0	0	0	0	0	1	0	23	1	20	82
172	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	1	13	80
173	0	0	0	0	1	0	30	3	0	0	0	1	0	0	0	0	0	0	0	0	0	9	0	0	39	83
174	0	0	0	0	6	0	136	6	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	38	188
175	0	0	0	0	2	0	19	9	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	3	30	75
176	0	0	0	0	8	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	383	2	14	0	56	473
177	0	0	0	0	17	0	23	0	0	0	0	0	0	0	18	0	0	0	0	0	192	4	57	2	30	343
178 **	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
179	0	0	0	0	2	0	16	6	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	69	111
180	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	47	1	44	94
181	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	25	0	132	8	21	187
182	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	3	15	0	36	69
183	0	0	0	0	60	0	1	0	6	2	0	0	0	0	9	0	0	0	0	0	2	0	8	0	228	316
184	0	0	0	0	32	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2	2	0	43	91
185	0	0	0	0	56	0	5	0	0	0	0	0	0	7	0	0	0	0	0	0	1	0	3	0	84	156
186	0	0	0	0	25	0	8	0	0	0	0	0	0	3	0	0	0	0	0	0	9	6	0	0	54	105
187	0	0	0	0	18	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	50	1	29	0	48	152
188	0	0	0	0	13	0	14	86	0	0	0	0	0	0	0	0	0	0	0	0	10	0	29	0	69	221
189	0	0	0	0	12	0	19	49	0	0	0	0	0	0	0	0	0	0	0	0	24	0	71	0	103	278

NOAA FISHERIES SERVICE-NEFSC FALL BOTTOM TRAWL SURVEY SEPTEMBER 12 - NOVEMBER 19, 2009
CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

	ATLANTIC COD	HADDOCK	POLLOCK	WHITE HAKE	SILVER HAKE	ACADIAN REDFISH	GOOSEFISH	SPINY DOGFISH	YELLOWTAIL FLOUNDER	WINTER FLOUNDER	AMERICAN PLAICE	WITCH FFLOUNDER	WINDOWPANE FLDR	SUMMER FLOUNDER	BLUEFISH	WEAKFISH	SCUP	BLACK SEA BASS	SPOT	ATLANTIC CROAKER	BUTTERFISH	AMERICAN LOBSTER	LOLIGO	ILLEX	TOTAL * OTHER	TOTAL ALL
190	0	0	0	0	29	0	13	42	11	1	0	0	0	0	0	0	0	0	0	0	22	0	27	0	223	368
191	0	0	0	0	0	0	0	10	0	0	0	0	0	4	21	0	4	4	0	0	1	1	62	0	106	213
192	0	0	0	0	0	0	0	13	0	65	0	0	1	18	0	0	82	3	0	0	2	1	23	0	287	495
193	0	0	0	0	1	0	0	8	0	35	0	0	3	16	0	0	110	4	0	0	21	1	22	0	241	462
194	0	0	0	0	0	0	0	0	0	6	0	0	0	29	18	0	650	7	0	0	25	11	19	0	171	936
195	0	0	0	0	6	0	0	0	0	69	0	0	10	37	2	0	536	11	0	0	7	13	11	0	356	1058
196 **	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
197	0	0	0	0	0	0	0	71	0	8	0	0	0	3	0	0	2	3	0	0	1	0	31	0	78	197
198	0	0	0	0	0	0	0	0	0	8	0	0	0	15	12	0	59	0	0	0	35	2	68	0	59	258
199	0	0	0	0	0	0	0	0	0	1	0	0	0	0	5	0	1	0	0	0	4	2	25	0	15	53
200	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	1	0	0	0	11	0	12	0	84	117
201	0	0	0	0	11	0	0	29	0	18	0	0	7	18	14	0	9	0	0	0	39	0	48	0	161	354
202	0	0	0	0	2	0	0	22	0	1	0	0	19	113	0	0	0	0	0	0	1	0	35	0	190	383
203	0	0	0	0	110	0	0	298	4	13	0	0	26	42	11	0	0	0	0	0	0	0	2	0	828	1334
204	0	0	0	0	11	0	21	196	6	6	0	0	5	16	2	0	5	0	0	0	2	0	31	0	441	742
205	0	0	0	0	3	0	0	300	17	0	0	0	22	11	0	0	0	0	0	0	2	0	6	0	723	1084
206 **	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
207	25	0	0	0	32	0	6	2030	20	32	0	0	6	7	0	0	0	0	0	0	1	7	20	1	853	3040
208 **	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
209	9	0	0	0	8	0	0	681	5	0	0	0	17	2	105	0	0	0	0	0	22	0	3	2	315	1169
210	0	0	0	0	2	0	12	187	9	0	0	0	4	7	0	0	0	0	0	0	34	11	6	1	247	520
211	0	0	0	0	0	0	6	88	2	0	0	0	1	2	0	0	0	0	0	0	6	0	5	0	60	170
212	0	0	0	0	1	0	0	1624	0	0	0	0	0	0	0	0	0	0	0	0	271	0	40	3	54	1993
213	0	0	0	0	11	0	1	1013	0	0	0	0	0	0	0	0	0	0	0	0	2	0	17	3	12	1059
214	0	0	0	0	86	0	6	14	0	0	0	2	0	0	0	0	0	0	0	0	0	29	0	2	119	258
215	0	0	0	0	45	0	0	132	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	51	230
216	0	0	0	0	40	0	0	169	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	2	58	273
217	0	0	0	0	15	0	0	1758	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	101	1879
218	0	0	0	4	26	0	3	294	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	169	499
219	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
220	0	0	0	2	2	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	45
221	0	0	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	0	4	76	150
222	0	0	0	1	101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	16	28	156
223	0	0	0	5	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	286	101	569
224	0	0	0	3	48	0	0	48	3	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	40	147
225 **	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
226	0	0	0	0	59	0	0	106	12	0	1	0	0	0	0	0	0	0	0	0	1	11	1	4	104	299
227	0	0	0	3	34	0	24	106	69	0	0	0	0	12	0	0	0	0	0	0	5	6	1	1	329	590

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CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

	ATLANTIC COD	HADDOCK	POLLOCK	WHITE HAKE	SILVER HAKE	ACADIAN REDFISH	GOOSEFISH	SPINY DOGFISH	YELLOWTAIL FLOUNDER	WINTER FLOUNDER	AMERICAN PLAICE	WITCH FFLOUNDER	WINDOWPANE FLDR	SUMMER FLOUNDER	BLUEFISH	WEAKFISH	SCUP	BLACK SEA BASS	SPOT	ATLANTIC CROAKER	BUTTERFISH	AMERICAN LOBSTER	LOLIGO	ILLEX	TOTAL * OTHER	TOTAL ALL
228	0	0	0	3	70	0	9	40	117	0	2	0	0	4	0	0	0	0	0	0	7	13	12	2	652	931
229	0	1	0	0	4	0	0	227	4	14	0	0	18	0	0	0	0	0	0	0	4	0	4	3	871	1150
230	0	0	0	0	1	0	15	194	4	15	0	0	0	0	0	0	0	0	0	0	54	6	2	1	359	651
231	0	6	0	11	4	0	30	1334	27	239	0	0	0	0	0	0	0	0	0	0	17	0	0	3	458	2129
232	4	0	0	0	0	0	0	442	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	51	506
233	411	287	9	24	64	0	0	24	51	3	8	0	0	0	0	0	0	0	0	0	0	0	0	0	310	1191
234	0	0	0	0	94	0	0	402	2	311	0	0	1	0	0	0	0	0	0	0	10	62	0	3	695	1580
235	0	0	0	0	87	0	0	0	2	5	12	0	0	0	0	0	0	0	0	0	0	0	0	2	262	370
236	0	0	0	2	527	0	18	0	2	0	5	0	0	0	0	0	0	0	0	0	0	2	0	2	251	809
237	0	0	0	1	9	0	0	939	0	71	0	0	10	3	62	0	0	0	0	0	0	12	0	0	1010	2117
238	0	0	0	0	52	0	7	696	0	74	0	0	21	11	19	0	0	0	0	0	0	8	2	0	246	1136
239 **	0	0	0	0	1	0	0	102	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	109	214
240	0	0	0	0	0	0	0	52	3	4	1	0	10	0	0	0	0	0	0	0	0	0	0	0	196	266
241	0	1	0	0	4	0	0	90	0	1	0	0	19	4	0	0	0	0	0	0	5	0	1	0	364	489
242	0	0	0	0	1	0	0	142	0	4	0	0	23	15	0	0	0	0	0	0	2	0	0	0	624	811
243	0	0	0	0	1	0	0	95	7	3	0	0	8	2	0	0	0	0	0	0	5	2	18	0	394	535
244	0	0	0	0	2	0	0	176	53	79	0	0	7	0	0	0	0	0	0	0	2	0	9	0	802	1130
245	0	3	0	0	1	0	0	498	107	4	0	0	1	0	0	0	0	0	0	0	24	0	3	0	319	960
246	0	0	0	3	116	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	57	0	9	52	263
247	0	0	0	0	2	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	0	3	22	2	26	87
248	0	0	0	7	26	0	0	119	58	0	1	0	0	0	0	0	0	0	0	0	1	10	2	0	261	485
249	0	0	0	6	6	0	0	119	426	0	6	0	0	0	0	0	0	0	0	0	1	21	0	0	643	1228
250	0	1	0	1	6	0	1	355	246	0	2	0	1	0	0	0	0	0	0	0	1	9	0	0	411	1034
251	0	7	0	0	2	0	0	16	129	5	1	0	1	0	0	0	0	0	0	0	1	8	0	0	309	479
252	0	216	0	0	5	0	0	5	217	10	0	0	4	0	0	0	0	0	0	0	2	15	8	1	308	791
253	0	1069	0	1	2	0	0	9	30	8	0	0	1	4	0	0	0	0	0	0	3	6	22	1	335	1491
254	0	0	0	0	2	0	0	6	32	1	0	0	4	0	0	0	0	0	0	0	1	314	7	1	189	557
255	0	1722	0	0	0	0	0	73	12	52	0	0	4	0	0	0	0	0	0	0	2	23	10	2	158	2058
256	0	22	0	0	1	0	0	345	8	11	0	0	2	0	0	0	0	0	0	0	2	1	2	0	377	771
257	0	0	0	2	3	0	0	834	0	2	0	0	8	0	10	0	0	0	0	0	0	0	0	0	818	1677
258	0	20	0	3	31	0	0	52	0	55	0	0	8	0	9	0	0	0	0	0	0	0	1	0	2862	3041
259	0	41	0	0	2	0	0	17	5	29	0	0	23	0	0	0	0	0	0	0	0	0	1	1	544	663
260	0	131	0	1	4	0	0	0	21	5	0	0	12	0	0	0	0	0	0	0	1	3	0	0	296	474
261	20	52	0	2	3	0	0	0	7	4	0	0	3	0	0	0	0	0	0	0	0	30	0	0	575	696
262	0	22	0	4	3	0	0	0	22	4	0	0	9	0	0	0	0	0	0	0	0	31	0	0	359	454
263	0	72	0	1	7	0	0	0	19	0	44	1	0	0	0	0	0	0	0	0	0	18	1	0	95	258
264	0	217	0	43	71	1	0	6	0	0	1	0	0	0	0	0	0	0	0	0	0	174	0	1	198	712
265	0	59	0	28	89	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	56	0	3	114	351

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CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

	ATLANTIC COD	HADDOCK	POLLOCK	WHITE HAKE	SILVER HAKE	ACADIAN REDFISH	GOOSEFISH	SPINY DOGFISH	YELLOWTAIL FLOUNDER	WINTER FLOUNDER	AMERICAN PLAICE	WITCH FFLOUNDER	WINDOWPANE FLDR	SUMMER FLOUNDER	BLUEFISH	WEAKFISH	SCUP	BLACK SEA BASS	SPOT	ATLANTIC CROAKER	BUTTERFISH	AMERICAN LOBSTER	LOLIGO	ILLEX	TOTAL * OTHER	TOTAL ALL
266	0	21	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0	1	66	108
267	0	197	0	0	9	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	101	325
268	0	129	0	0	17	0	0	0	7	0	1	0	0	0	0	0	0	0	0	0	0	4	0	1	69	228
269	3	193	1	33	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	283
270	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
271	46	565	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	14	0	0	64	700
272	0	242	1	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	258
273	0	330	0	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34	375
274 **	0	17	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	7	33
275	0	448	7	5	16	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	70	575
276	2	19	0	22	46	4	5	0	0	0	1	1	0	0	0	0	0	0	0	0	0	4	0	1	45	150
277 **	0	28	0	1	3	67	0	0	0	0	4	6	0	0	0	0	0	0	0	0	0	16	0	1	26	152
278 **	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
279	0	5	0	18	1	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	2	0	1	10	40
280	0	3	0	55	197	94	4	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	31	385
281	16	26	8	14	6	367	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0	1	94	536
282	0	31	0	1	8	162	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	1	55	263
283	0	0	1	42	57	2	7	2	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	50	166
284	0	112	0	86	69	3	5	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	3	160	442
285	0	150	0	40	59	0	2	0	0	0	3	1	0	0	0	0	0	0	0	0	0	12	0	1	81	349
286	11	10	0	26	48	0	9	0	0	0	0	13	0	0	0	0	0	0	0	0	0	9	0	0	105	231
287	99	350	5	0	1	0	0	3	0	12	0	0	0	0	0	0	0	0	0	0	0	6	0	0	338	814
288	18	601	0	1	6	0	7	19	9	35	0	0	3	0	0	0	0	0	0	0	0	5	0	0	430	1134
289	53	489	0	1	20	0	0	24	29	169	0	0	1	0	0	0	0	0	0	0	0	14	0	0	1636	2436
290	0	3	0	9	64	0	10	0	0	0	14	47	0	0	0	0	0	0	0	0	0	0	0	0	208	355
291	44	119	0	0	25	0	0	32	1	83	0	0	13	0	0	0	0	0	0	0	0	0	1	0	703	1021
292	5	39	0	15	45	8	24	0	0	0	1	13	0	0	0	0	0	0	0	0	0	4	0	0	130	284
293	1	51	0	133	13	0	7	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	109	320
294	0	32	0	52	59	3	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	218
295	0	68	0	0	47	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	61	0	14	4669	4887
296	0	4	0	3	215	0	0	0	11	14	0	0	39	0	0	0	0	0	0	0	18	9	0	1	534	848
297	0	9	0	1	4	0	0	0	3	36	0	0	57	0	0	0	0	0	0	0	3	7	0	0	278	398
298	0	0	0	1	270	0	0	0	5	1	0	0	0	0	0	0	0	0	0	0	66	0	0	2	505	850
299	0	3	0	6	171	0	0	0	0	0	85	0	1	0	0	0	0	0	0	0	1	0	0	1	299	567
300	0	0	0	45	139	32	19	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	145	392
301	1	0	0	5	18	143	0	0	0	0	5	2	0	0	0	0	0	0	0	0	0	0	0	2	87	263
302	15	3	0	8	94	104	8	0	0	0	24	8	0	0	0	0	0	0	0	0	0	0	0	16	71	351
303	26	4	0	16	51	43	1	0	0	0	24	9	0	0	0	0	0	0	0	0	0	0	0	13	30	217

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CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

	ATLANTIC COD	HADDOCK	POLLOCK	WHITE HAKE	SILVER HAKE	ACADIAN REDFISH	GOOSEFISH	SPINY DOGFISH	YELLOWTAIL FLOUNDER	WINTER FLOUNDER	AMERICAN PLAICE	WITCH FFLOUNDER	WINDOWPANE FLDR	SUMMER FLOUNDER	BLUEFISH	WEAKFISH	SCUP	BLACK SEA BASS	SPOT	ATLANTIC CROAKER	BUTTERFISH	AMERICAN LOBSTER	LOLIGO	ILLEX	TOTAL * OTHER	TOTAL ALL
304	0	0	0	33	19	222	1	4	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	8	62	353
305	0	0	0	18	20	58	11	8	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	3	45	165
306	0	0	0	7	28	403	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	2	24	469
307	0	0	0	15	26	76	57	32	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3	38	249
308	533	0	1	55	52	0	0	166	318	268	0	0	14	0	0	0	0	0	0	0	0	44	2	0	198	1651
309 ***	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
310	290	64	0	1	198	19	2	199	8	343	50	2	4	0	0	0	0	0	0	0	2	52	0	1	160	1395
311	248	0	0	1	36	0	0	232	26	139	0	0	1	0	0	0	0	0	0	0	1	47	0	0	239	970
312	263	10	0	0	3	0	0	9086	30	136	0	0	0	0	0	0	0	0	0	0	0	19	8	0	1578	11133
313 **	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
314	825	51	0	6	231	0	27	4106	155	29	0	0	2	0	0	0	0	0	0	0	10	0	6	1	268	5717
315	0	6	0	8	92	345	25	51	0	0	16	4	0	0	0	0	0	0	0	0	0	0	0	0	55	602
316	59	0	0	1	14	117	9	105	0	0	4	3	0	0	0	0	0	0	0	0	0	1	0	1	67	381
317	236	0	6	18	211	0	13	335	4	39	0	0	0	0	0	0	0	0	0	0	1	105	1	3	301	1273
318	227	0	1	8	89	0	0	43	26	16	0	0	4	1	0	1	0	0	0	0	15	2	25	1	243	702
319	674	0	10	2	32	0	0	11	87	18	0	0	10	0	0	0	0	1	0	0	3	6	20	0	409	1283
320 **	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
321 **	471	9	11	0	0	0	0	17	0	12	1	0	0	0	0	0	0	0	0	0	0	12	1	0	26	560
322 **	12	0	0	0	0	0	0	111	0	8	0	0	0	0	0	0	0	0	0	0	0	13	12	4	61	221
323	111	0	0	0	0	0	0	1961	1	127	0	0	3	0	0	0	0	0	0	0	0	6	17	0	476	2702
324	47	988	3	14	31	575	3	16	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	79	1774
325	0	0	0	34	121	140	13	43	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	86	441
326	26	2	0	18	126	72	10	0	0	0	19	15	0	0	0	0	0	0	0	0	0	0	0	4	71	363
327	0	0	0	13	16	130	0	34	0	0	3	5	0	0	0	0	0	0	0	0	0	0	0	1	47	249
328	0	0	0	34	23	772	4	84	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	1	35	962
329 **	0	0	9	14	22	340	0	63	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	1	32	491
330	0	0	0	9	43	9	36	86	0	0	28	1	0	0	0	0	0	0	0	0	0	1	0	0	15	228
331	0	0	0	34	95	13	3	117	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	1	44	329
332	0	0	0	12	38	37	5	149	0	0	4	2	0	0	0	0	0	0	0	0	0	0	0	5	121	373
333	0	0	0	28	27	178	7	54	0	0	5	4	0	0	0	0	0	0	0	0	0	0	0	0	144	447
334	12	28	1	0	1	3	0	41	0	0	2	16	0	0	0	0	0	0	0	0	0	0	0	0	61	165
335	0	0	0	13	100	122	0	3	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	9	44	293
336	0	0	0	30	61	127	10	6	0	0	32	4	0	0	0	0	0	0	0	0	0	0	0	2	76	348
337	9	6	0	17	138	266	7	221	0	0	8	2	0	0	0	0	0	0	0	0	6	0	0	0	101	781
338	8	0	0	6	102	322	9	12	0	0	4	2	0	0	0	0	0	0	0	0	3	9	0	0	112	589
339	0	0	0	42	29	25	8	0	0	0	16	6	0	0	0	0	0	0	0	0	0	0	0	0	56	182
340	0	3	0	51	53	390	19	0	0	0	10	19	0	0	0	0	0	0	0	0	0	2	0	0	71	618
341	0	0	0	26	41	21	3	0	0	0	11	1	0	0	0	0	0	0	0	0	0	0	0	0	40	143

NOAA FISHERIES SERVICE-NEFSC FALL BOTTOM TRAWL SURVEY SEPTEMBER 12 - NOVEMBER 19, 2009
CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

		ATLANTIC COD	HADDOCK	POLLOCK	WHITE HAKE	SILVER HAKE	ACADIAN REDFISH	GOOSEFISH	SPINY DOGFISH	YELLOWTAIL FLOUNDER	WINTER FLOUNDER	AMERICAN PLAICE	WITCH FFLOUNDER	WINDOWPANE FLDR	SUMMER FLOUNDER	BLUEFISH	WEAKFISH	SCUP	BLACK SEA BASS	SPOT	ATLANTIC CROAKER	BUTTERFISH	AMERICAN LOBSTER	LOLIGO	ILLEX	TOTAL * OTHER	TOTAL ALL
342		0	6	0	27	8	62	56	0	0	0	2	6	0	0	0	0	0	0	0	0	0	5	0	2	11	185
343		9	0	0	139	19	1	11	0	0	0	1	18	0	0	0	0	0	0	0	0	0	4	0	0	77	279
344		13	139	0	26	17	122	8	4	0	0	2	5	0	0	0	0	0	0	0	0	1	2	0	1	35	375
345		25	53	0	30	17	47	0	29	0	2	0	2	0	0	0	0	0	0	0	0	1	13	0	2	18	239
346		12	3	0	26	33	4933	0	30	0	0	0	9	0	0	0	0	0	0	0	0	0	6	0	0	23	5075
347		0	0	0	13	102	0	5	0	0	1	8	5	0	0	0	0	0	0	0	0	0	11	0	1	80	226
348		25	0	0	50	25	924	0	8	0	2	0	25	0	0	0	0	0	0	0	0	0	1	0	0	60	1120
349		15	0	0	26	2	8	1	8	0	2	0	2	0	0	0	0	0	0	0	0	0	5	0	0	31	100
350		0	0	0	63	6	0	2	14	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	1	58	148
351		0	0	0	23	13	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	71
352		0	0	0	17	56	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	1	26	0	2	33	138
353		0	3	0	4	4	0	1	0	0	7	1	1	1	0	0	0	0	0	0	0	19	120	2	10	511	684
354		0	1	0	3	12	0	0	0	0	2	1	1	1	0	0	0	1	0	0	0	10	52	4	11	39	138
355		0	0	0	11	114	6	4	0	0	0	3	2	0	0	0	0	0	0	0	0	3	36	0	4	59	242
356		6	0	2	13	122	145	36	21	0	0	1	3	0	0	0	0	0	0	0	0	0	2	0	0	22	373
357		0	0	0	35	74	4	6	1	0	0	14	0	0	0	0	0	0	0	0	0	0	4	0	0	26	164
358		2	0	1	4	95	44	1	11	0	0	1	0	0	0	0	0	0	0	0	0	8	55	0	6	87	315
359		1	0	0	2	400	1	14	0	0	0	21	0	0	0	0	0	0	0	0	0	8	36	0	15	35	533
360		0	0	1	10	115	0	28	5	0	1	23	0	0	0	0	0	0	0	0	0	22	32	1	15	27	280
361		0	0	0	15	296	3	10	17	0	0	23	11	0	0	0	0	0	0	0	0	1	21	0	3	100	500
362		0	0	1	12	41	68	23	53	0	0	4	1	0	0	0	0	0	0	0	0	0	7	0	0	255	465
363		0	0	0	10	83	259	2	90	0	0	4	12	0	0	0	0	0	0	0	0	0	0	0	0	181	641
364	***	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
365		6	4	13	46	64	103	27	244	0	0	8	17	0	0	0	0	0	0	0	0	0	0	0	3	89	624
366		89	0	0	10	215	675	17	1595	0	0	20	5	0	0	0	0	0	0	0	0	0	0	0	0	83	2709
367		24	5	0	22	251	1	32	195	0	1	43	2	0	0	0	0	0	0	0	0	1	102	0	3	117	799
368		82	29	0	2	3	18	0	212	0	0	4	1	0	0	0	0	0	0	0	0	3	0	13	7	32	406
369		45	18	1	0	0	0	10	6	0	13	1	0	0	0	0	0	0	0	0	0	0	4	21	1	67	187
370		134	1	14	0	4	0	0	230	11	18	0	0	1	0	0	0	0	0	0	0	3	17	1	5	334	773
371		17	0	0	14	75	0	25	73	6	45	59	1	2	0	0	0	0	0	0	0	1	119	9	32	1285	1763
372		120	0	1	4	71	4	0	188	215	89	5	0	5	0	0	0	0	0	0	0	0	154	0	0	228	1084
373		22	0	0	24	104	0	8	44	639	92	8	2	9	0	0	0	0	0	0	0	0	85	0	0	292	1329
374		88	0	0	17	66	0	0	175	169	150	0	0	1	0	0	0	0	0	0	0	10	105	14	7	374	1176
375		3	0	0	8	54	0	0	171	11	30	17	0	1	0	0	0	0	0	0	0	20	53	3	0	509	880
376		2	0	0	9	107	0	24	113	8	20	2	0	2	3	0	0	0	0	0	0	13	36	11	1	544	895
377		0	0	0	4	24	0	0	0	0	22	0	0	0	0	0	0	4	0	0	0	50	11	9	0	433	557
378		0	0	0	1	11	0	0	0	0	21	0	0	0	0	0	0	1	0	0	0	11	9	24	0	335	413
379		0	0	0	5	32	0	0	0	0	26	0	0	0	3	0	0	2	0	0	0	27	5	52	0	569	721

NOAA FISHERIES SERVICE-NEFSC FALL BOTTOM TRAWL SURVEY SEPTEMBER 12 - NOVEMBER 19, 2009
CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

	ATLANTIC COD	HADDOCK	POLLOCK	WHITE HAKE	SILVER HAKE	ACADIAN REDFISH	GOOSEFISH	SPINY DOGFISH	YELLOWTAIL FLOUNDER	WINTER FLOUNDER	AMERICAN PLAICE	WITCH FFLOUNDER	WINDOWPANE FLDR	SUMMER FLOUNDER	BLUEFISH	WEAKFISH	SCUP	BLACK SEA BASS	SPOT	ATLANTIC CROAKER	BUTTERFISH	AMERICAN LOBSTER	LOLIGO	ILLEX	TOTAL * OTHER	TOTAL ALL
380	0	0	0	0	19	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	44	4	16	0	2098	2204
381	0	0	0	0	9	0	0	0	0	19	0	0	1	0	0	0	0	0	0	0	43	11	17	1	432	533
TOTAL	5600	9679	108	2115	9600	13259	1841	42372	3635	3423	828	398	638	1408	1020	201	4097	457	10081	3766	9813	2881	5783	2206	95055	231191

* "Total other" in southern areas was comprised primarily of rays; at station 295 and 380, "Total other" was primarily Atlantic Herring; at station 258, "Total other" was primarily winter skates.

** Excluded from stock assessment due to unacceptable tow evaluation code. See Catch Summary page for tow evaluation code explanation.

*** CTD or bongo only station.

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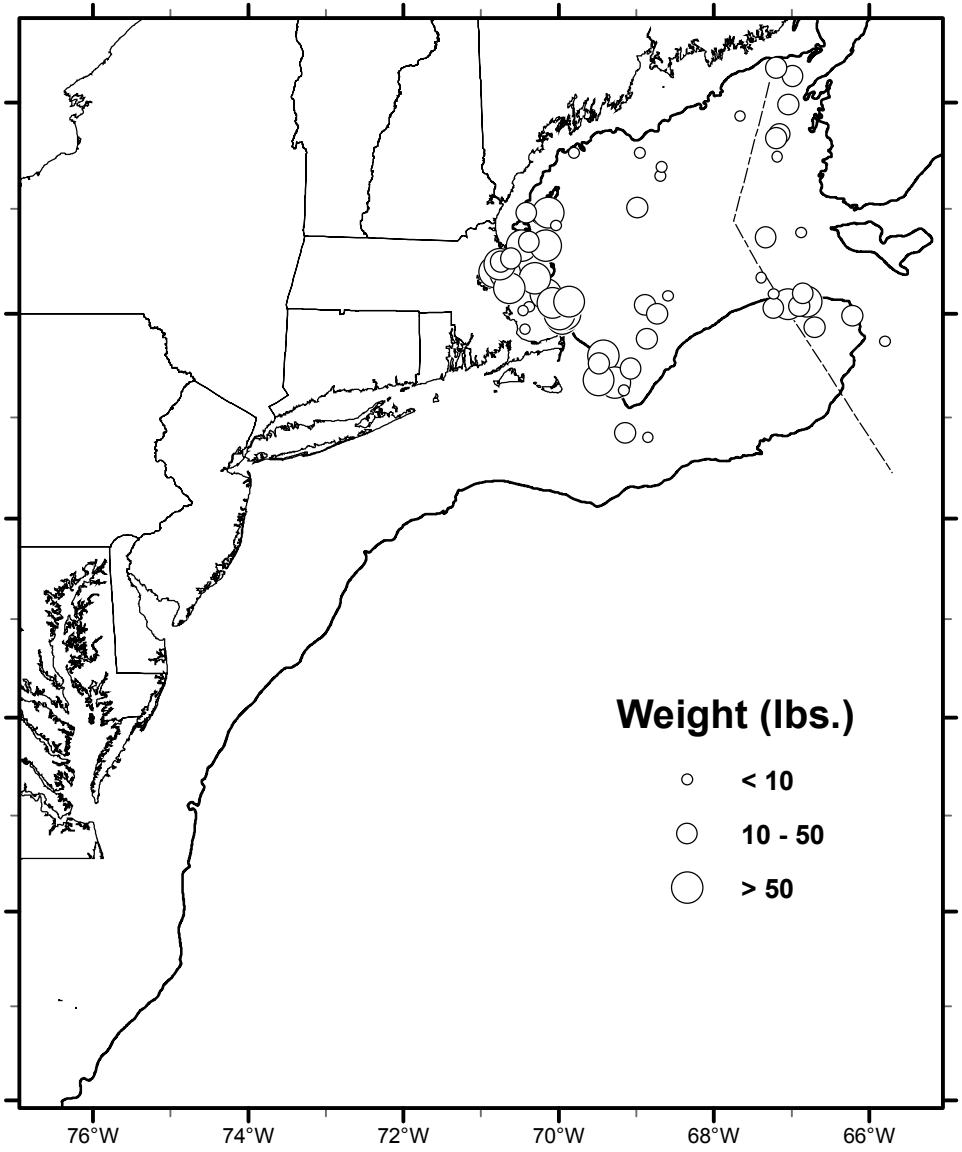
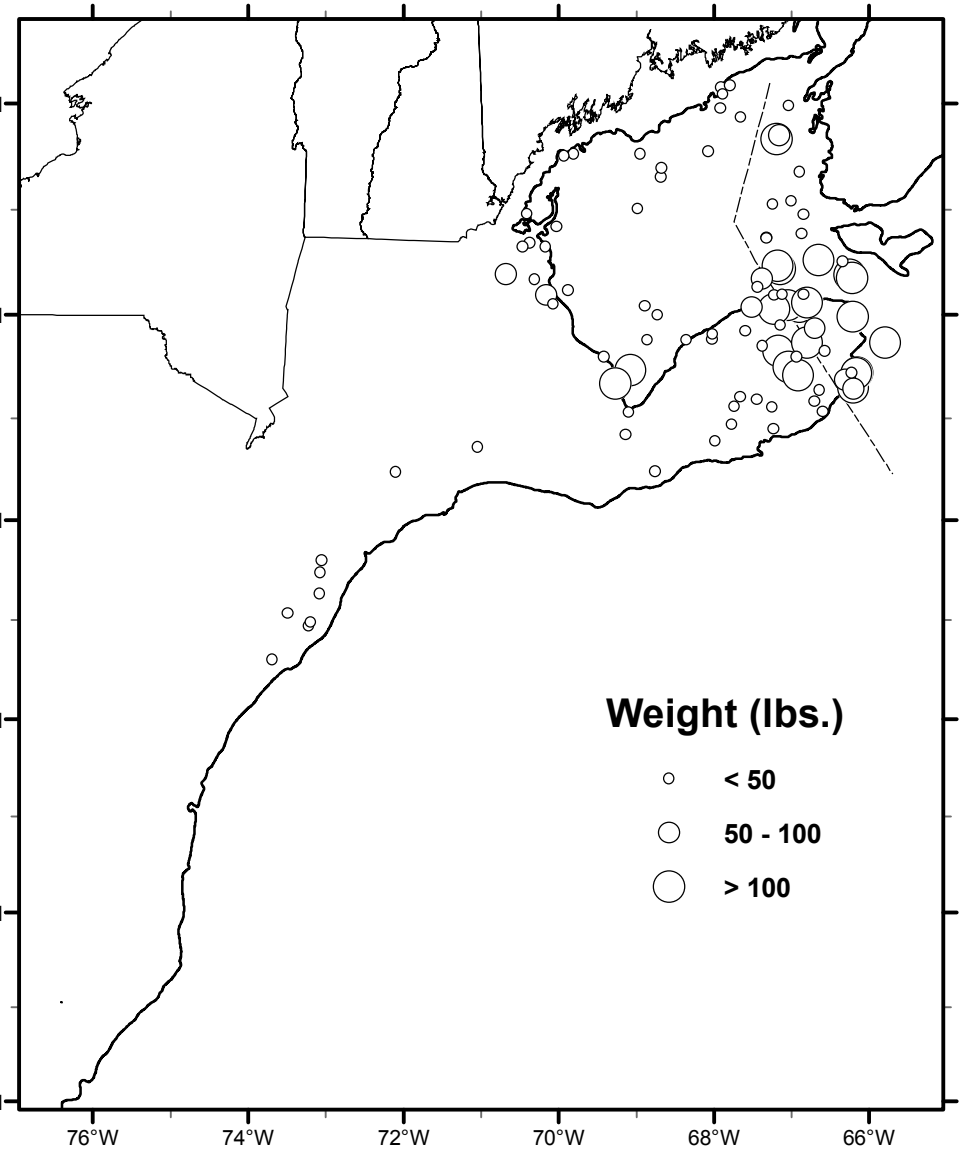
ATLANTIC COD



HADDOCK



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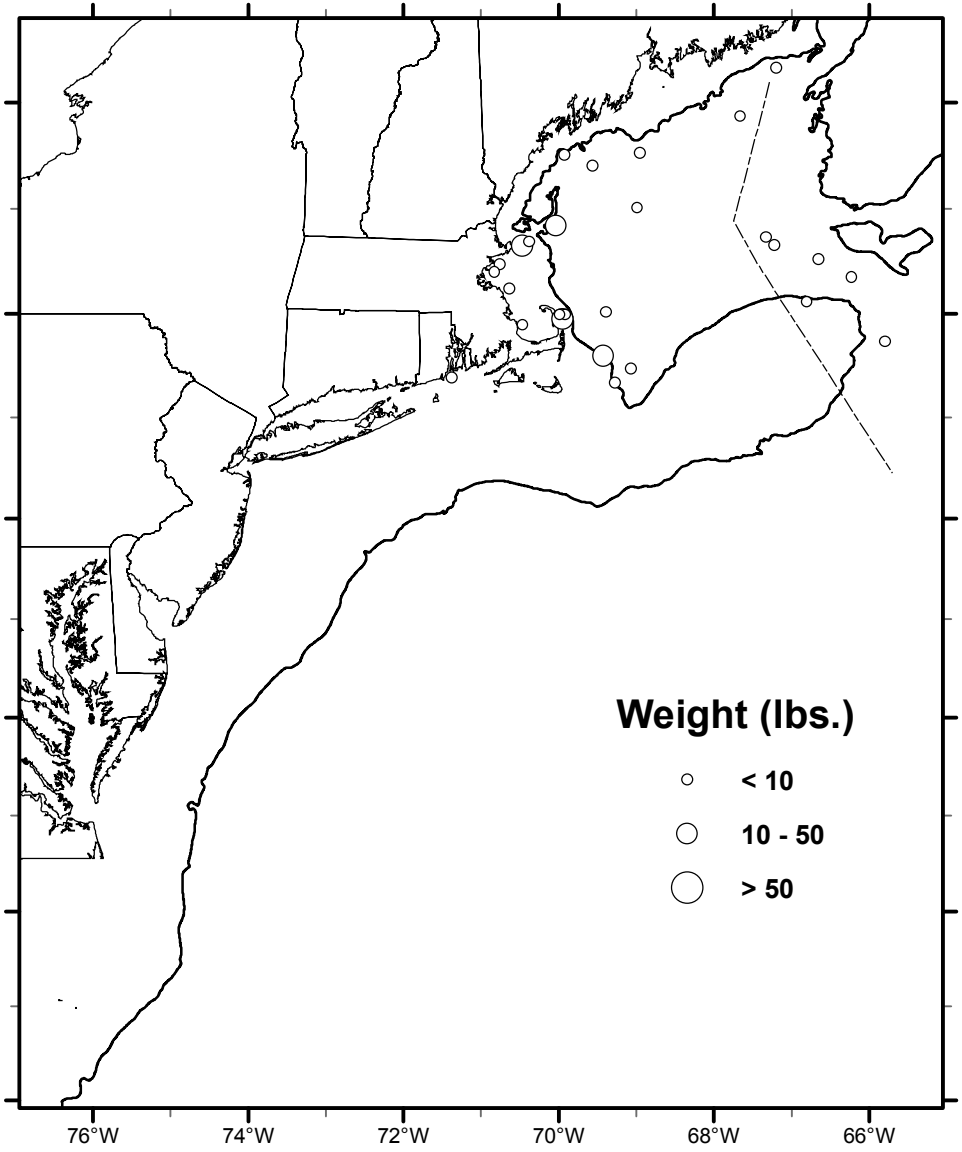
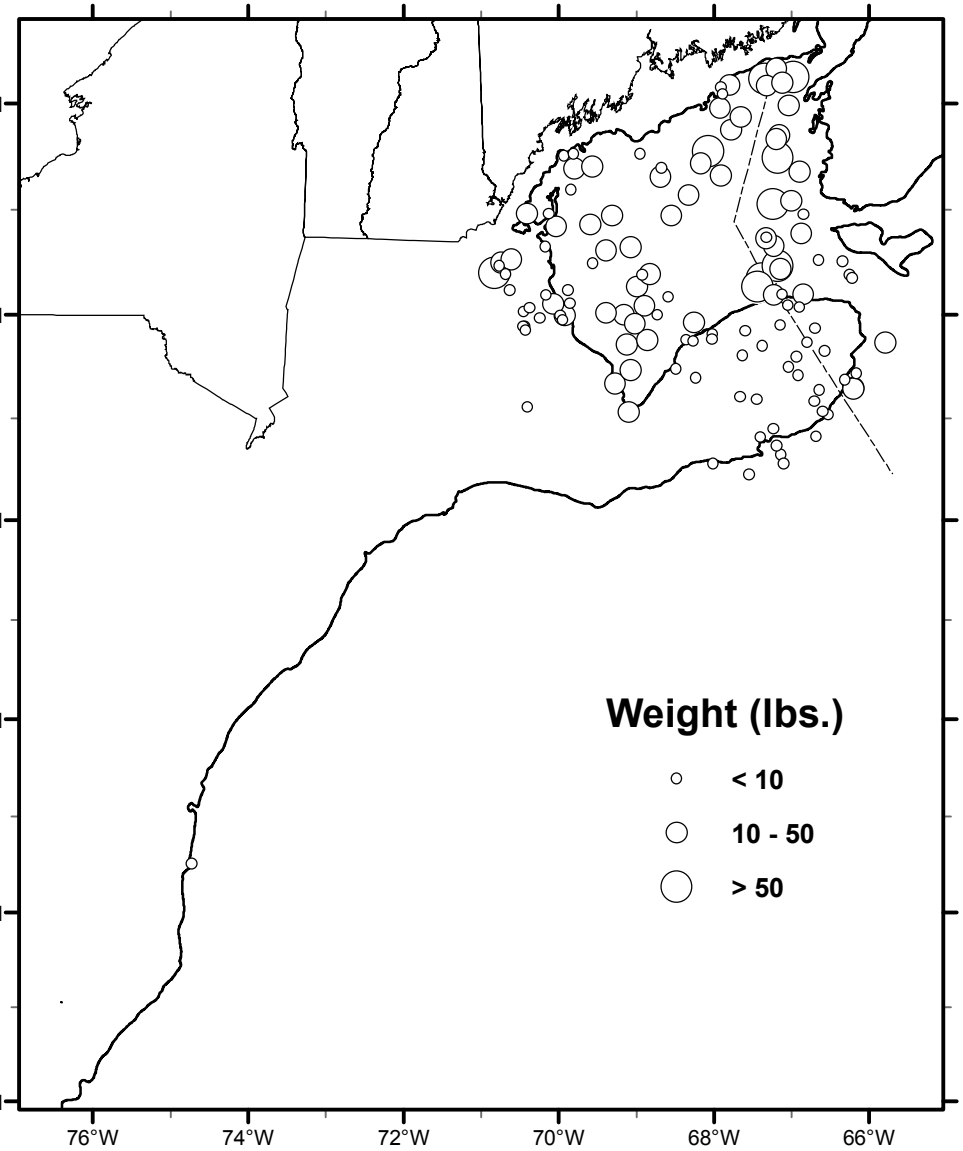
POLLOCK



WHITE HAKE



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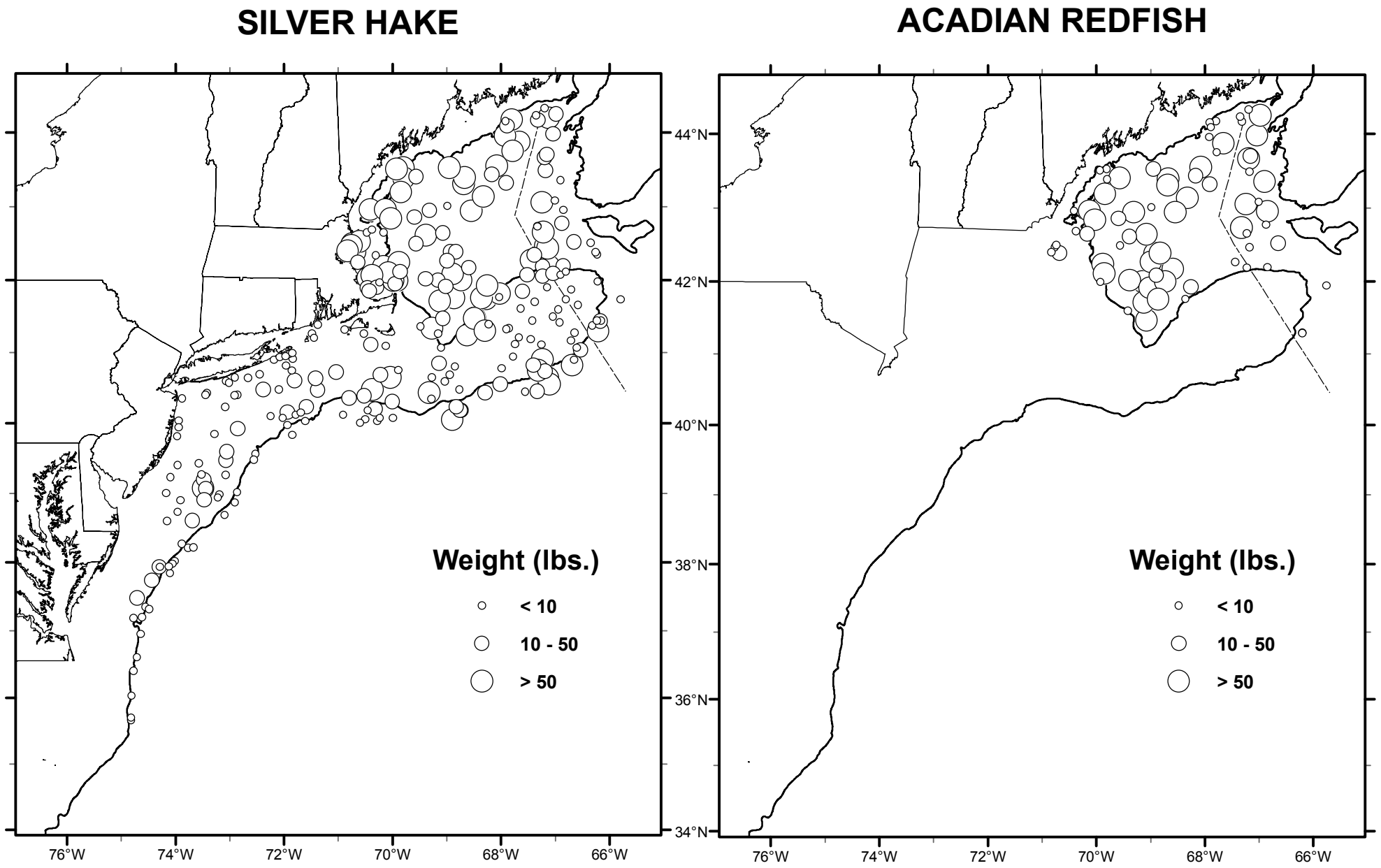

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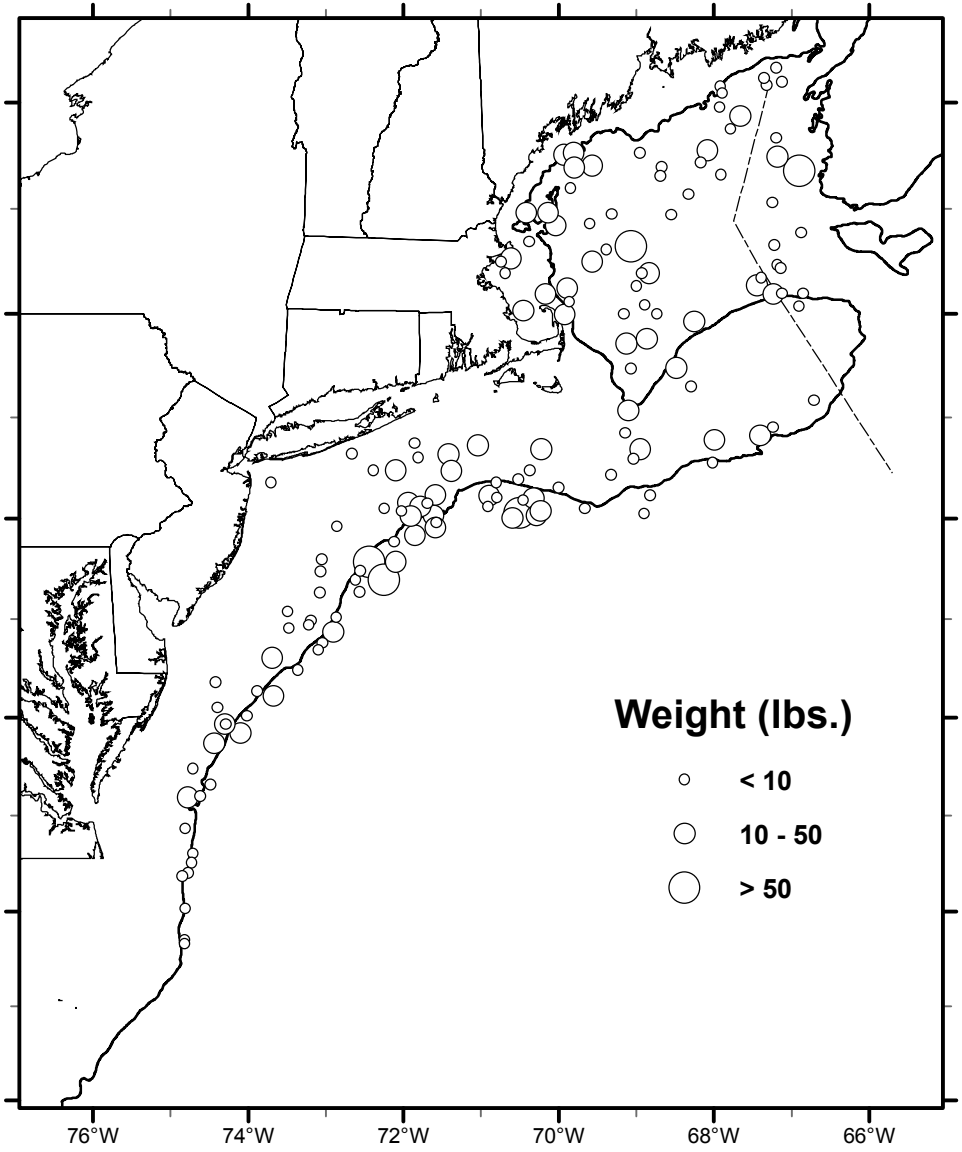
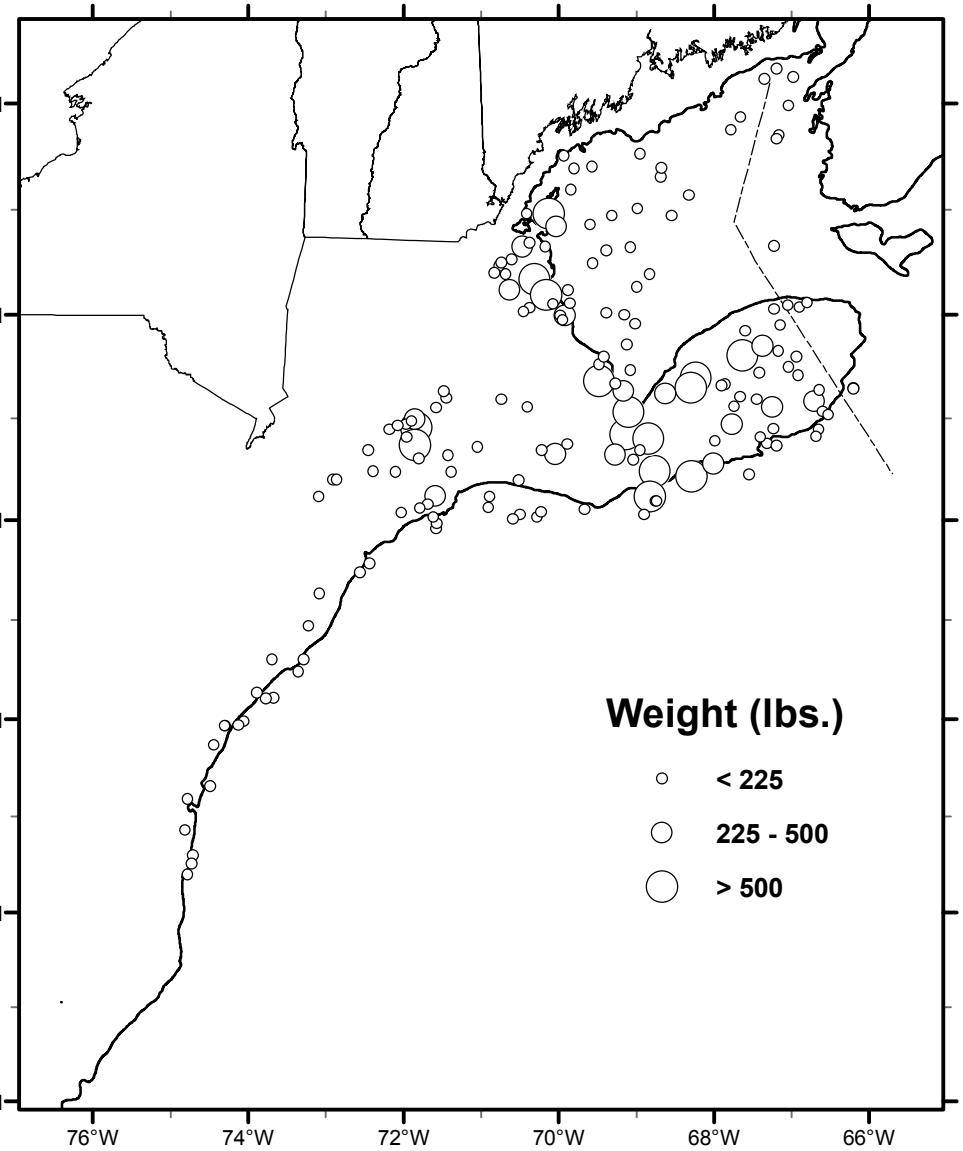
GOOSEFISH



SPINY DOGFISH



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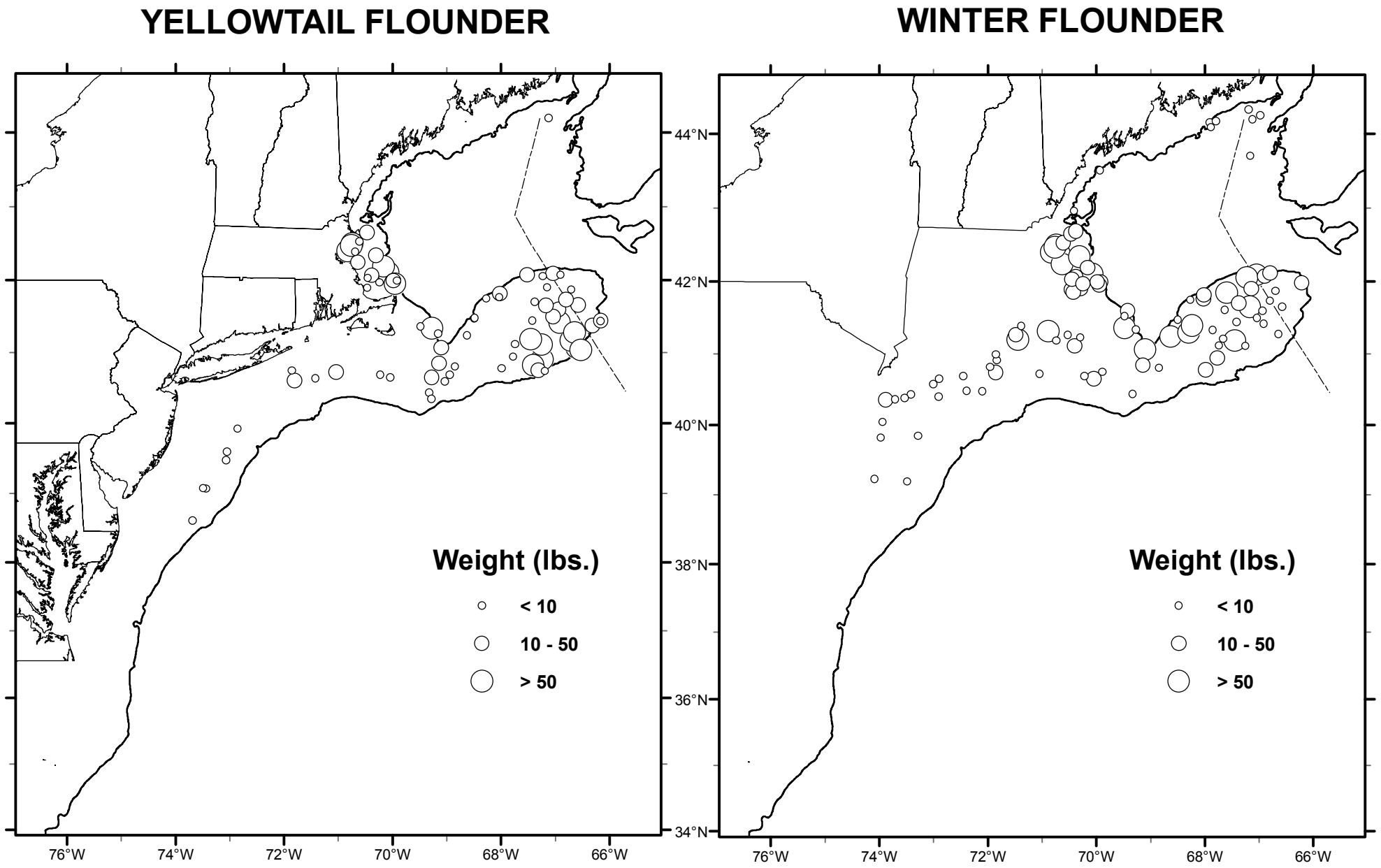

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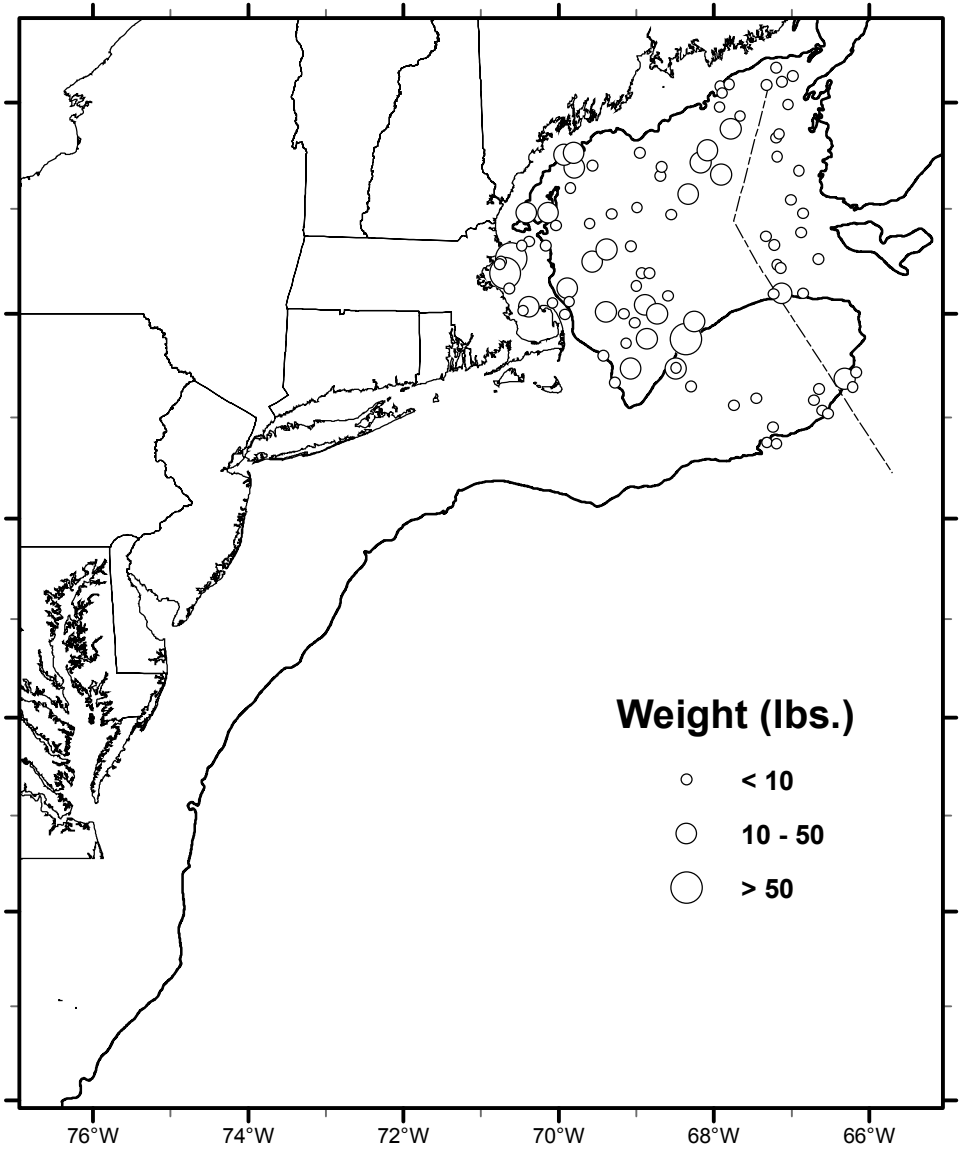
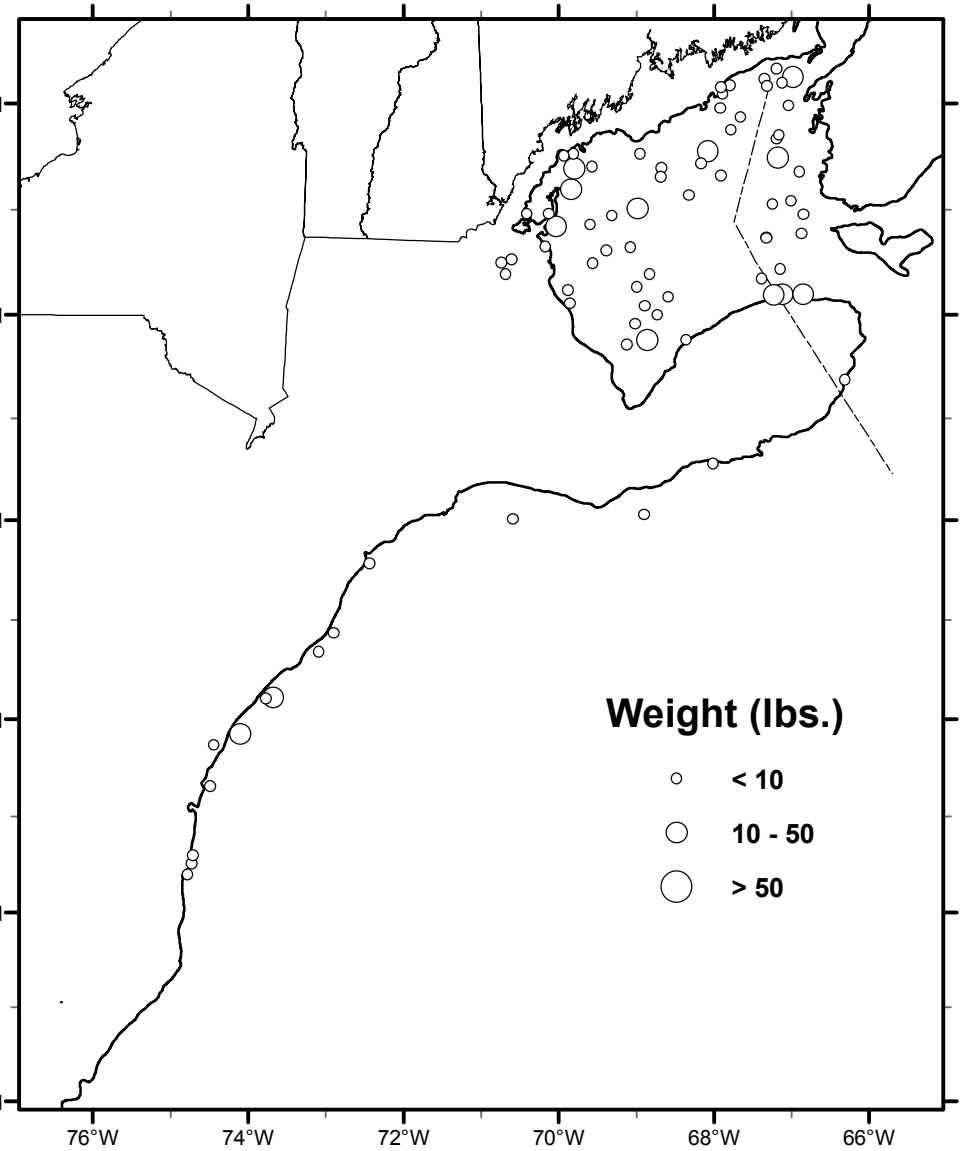
AMERICAN PLAICE



WITCH FLOUNDER



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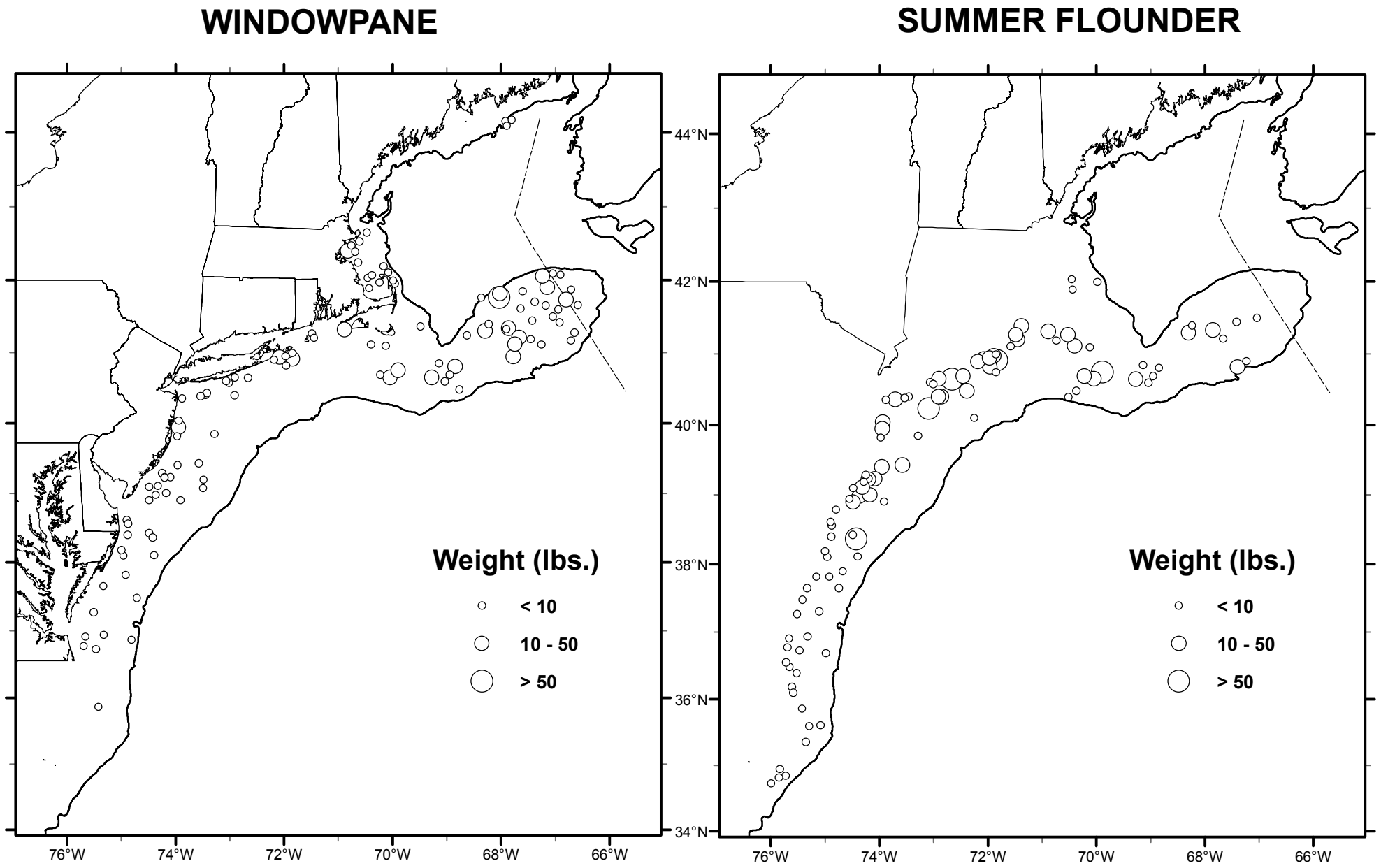

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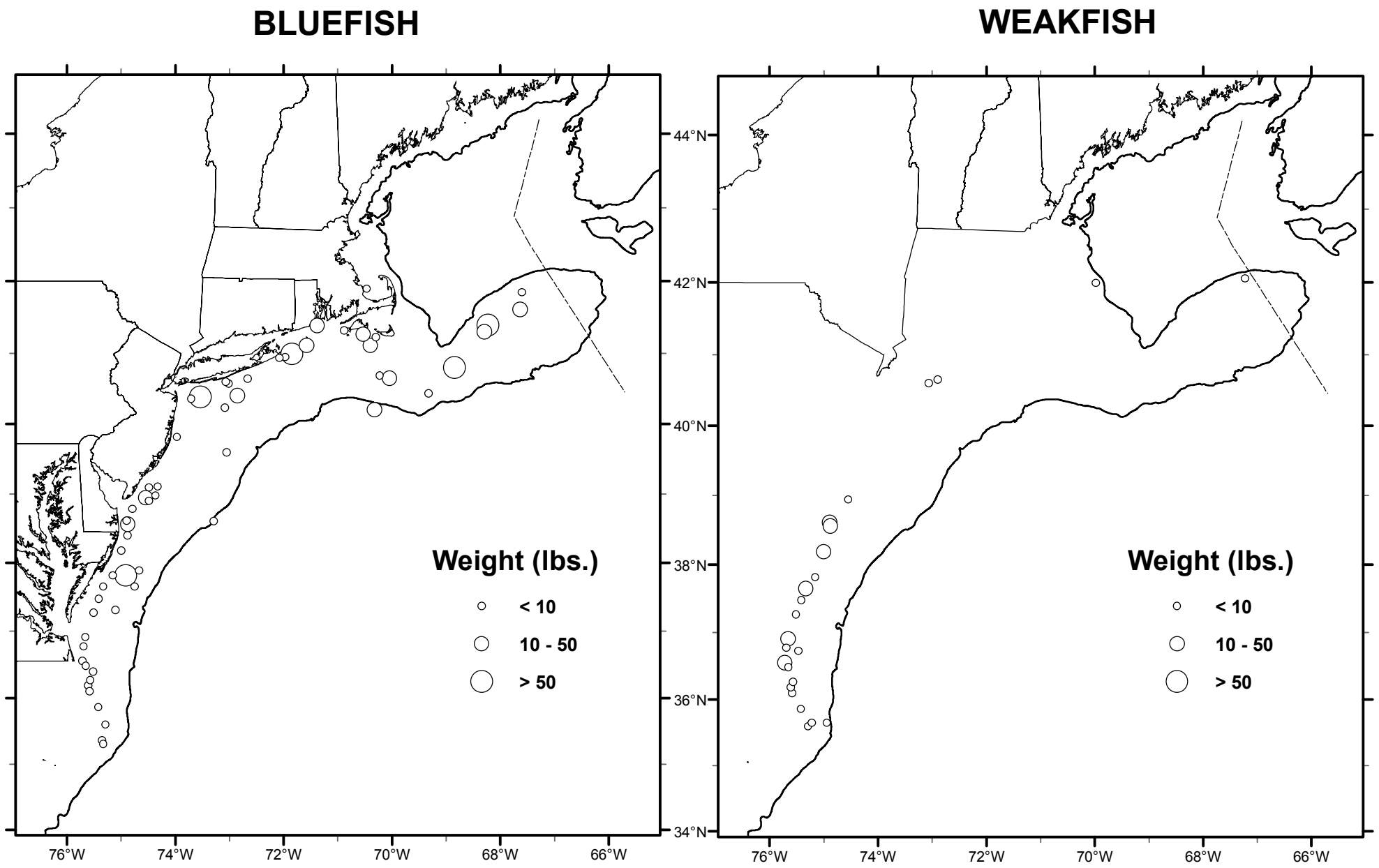

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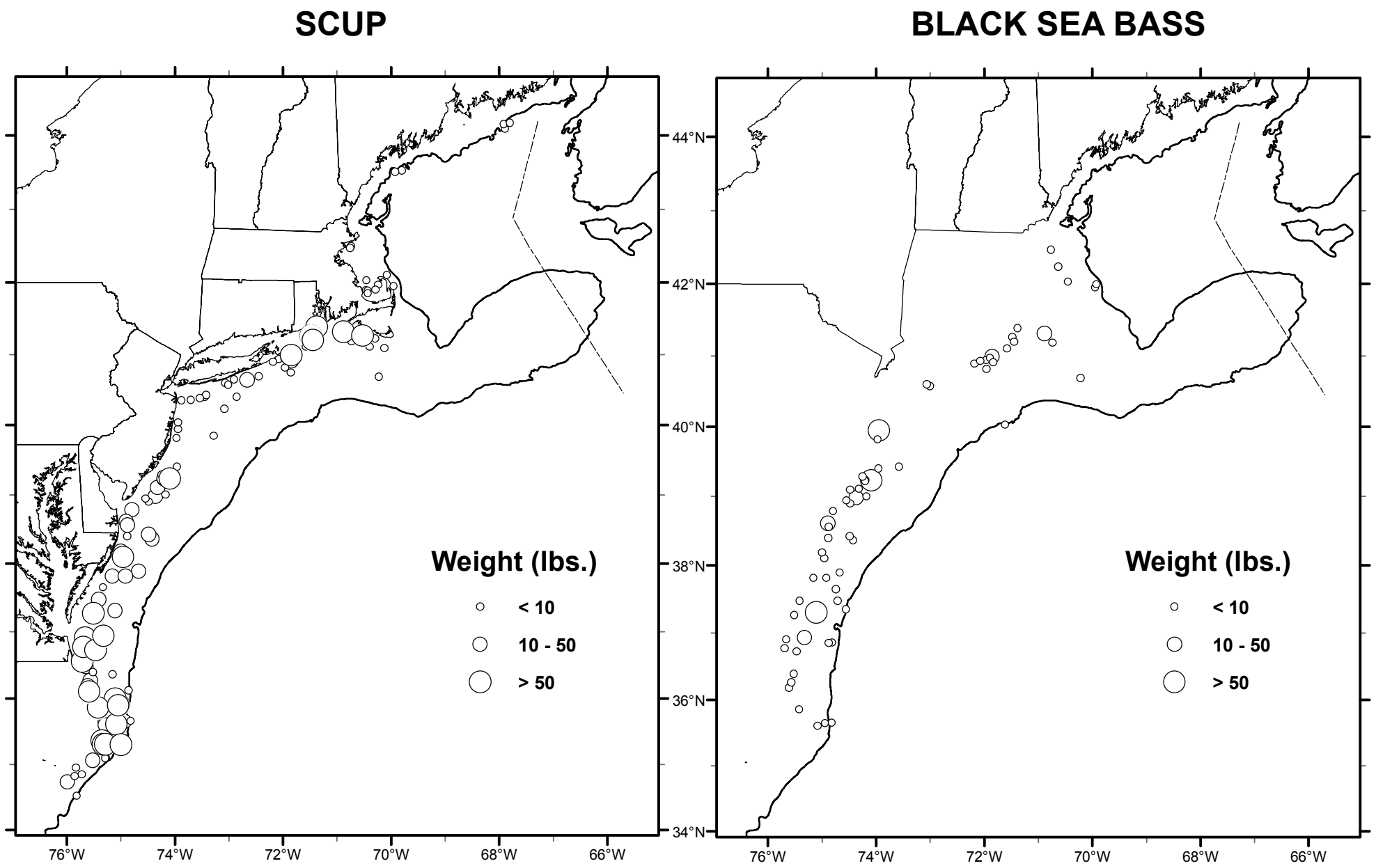

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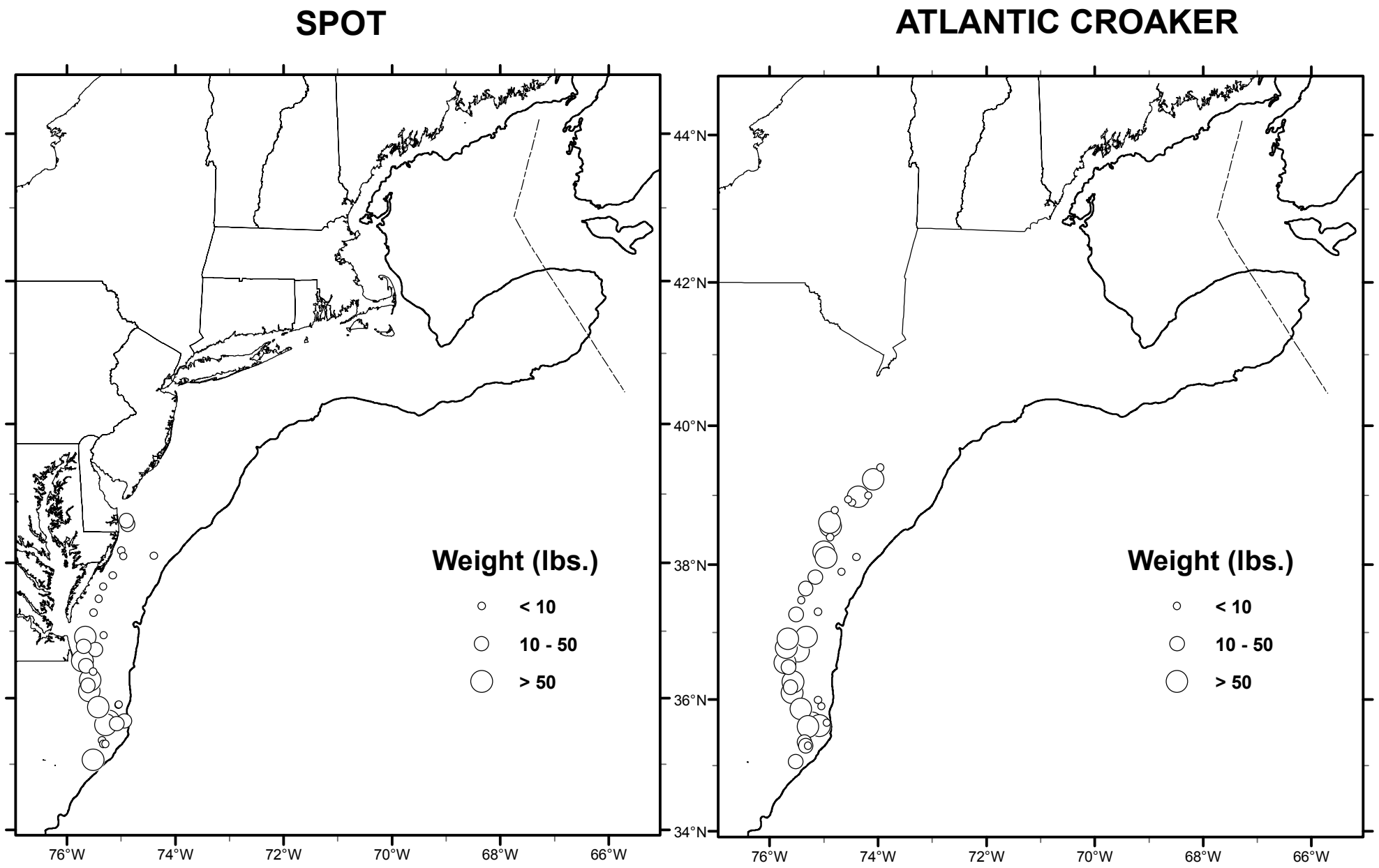

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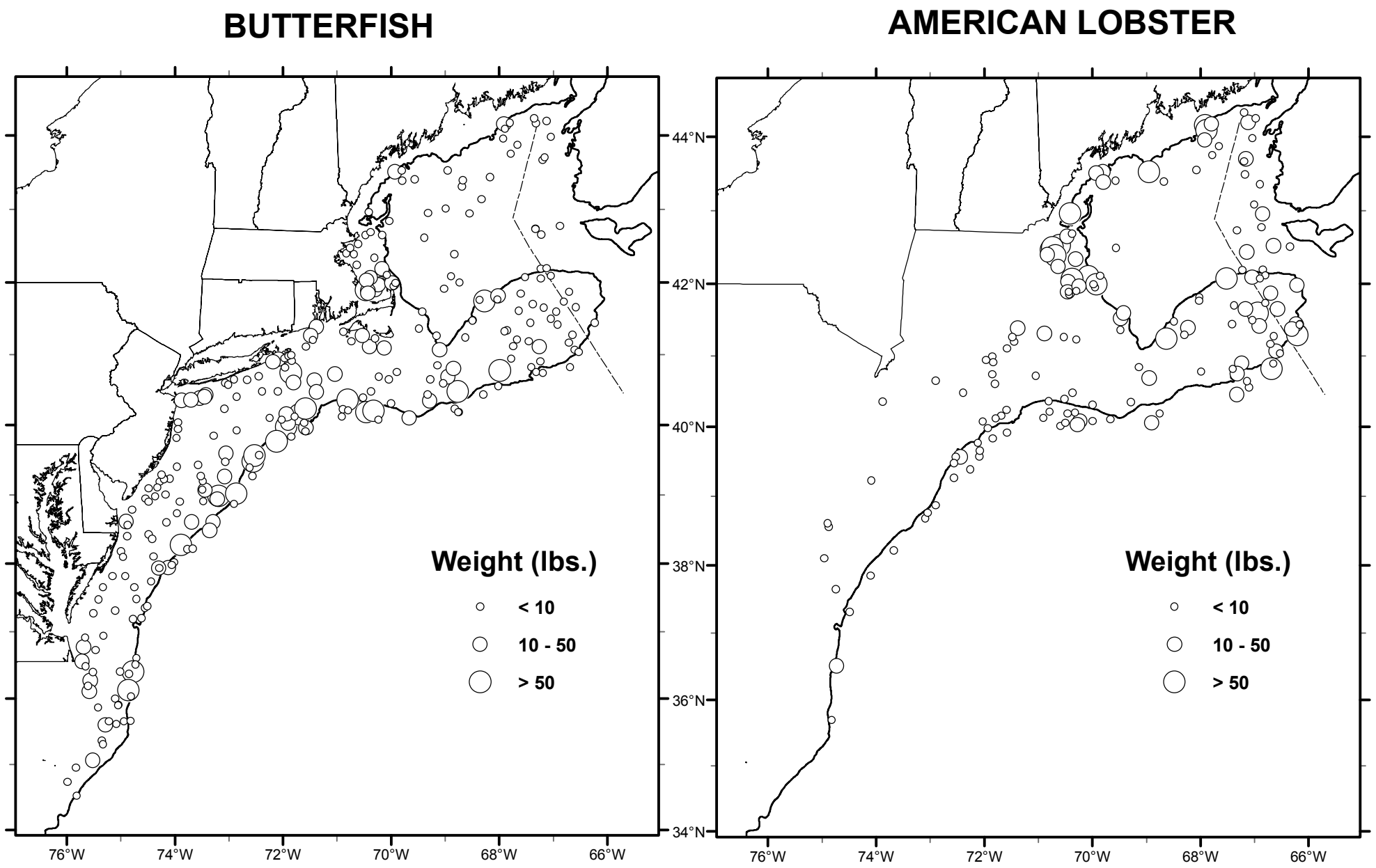
12 September to 19 November 2009



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