

RESOURCE SURVEY REPORT
Preliminary Catch Summary
National Marine Fisheries Service
Northeast Fisheries Science Center
Winter Bottom Trawl Survey
Cape Hatteras - Southern New England
February 4 - March 1, 2003

Submitted to: NOAA, NEFSC

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Science Center, 166 Water Street, Woods Hole, MA
02543.

Date: 2003

Resource Survey Report

Bottom Trawl Survey

Cape Hatteras - Southern New England
February 4 - March 1, 2003

FRV DELAWARE II



National Marine Fisheries Service
Northeast Fisheries Science Center
Woods Hole, MA 02543



Sorting a catch during a Winter Bottom Trawl Survey

RESOURCE SURVEY REPORT
Preliminary Catch Summary

National Marine Fisheries Service
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Winter Bottom Trawl Survey
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The enclosed listed and plotted data are of important commercial and recreational species caught during the Northeast Fisheries Science Center's 2003 winter bottom trawl survey aboard the *FRV DELAWARE II*. Tows were made with a standardized #36 Yankee flat trawl equipped with a rubber disc covered chain sweep, 30 fathom ground cables, 5 fathom legs and 1000 pound polyvalent doors. The cod end and upper belly were lined with 1/2-inch mesh to retain young-of-the-year fish.

Because of the 30-minute tow duration, and random selection of station locations, catches can be light compared to 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 useful information about distribution and relative abundance of fish from Cape Hatteras to Southern New England.

In an effort to make this report timely, the data are summarized from unaudited catch files generated from the Fisheries Scientific Computer System (FSCS). Therefore, data records in this report are provisional and subject to change.

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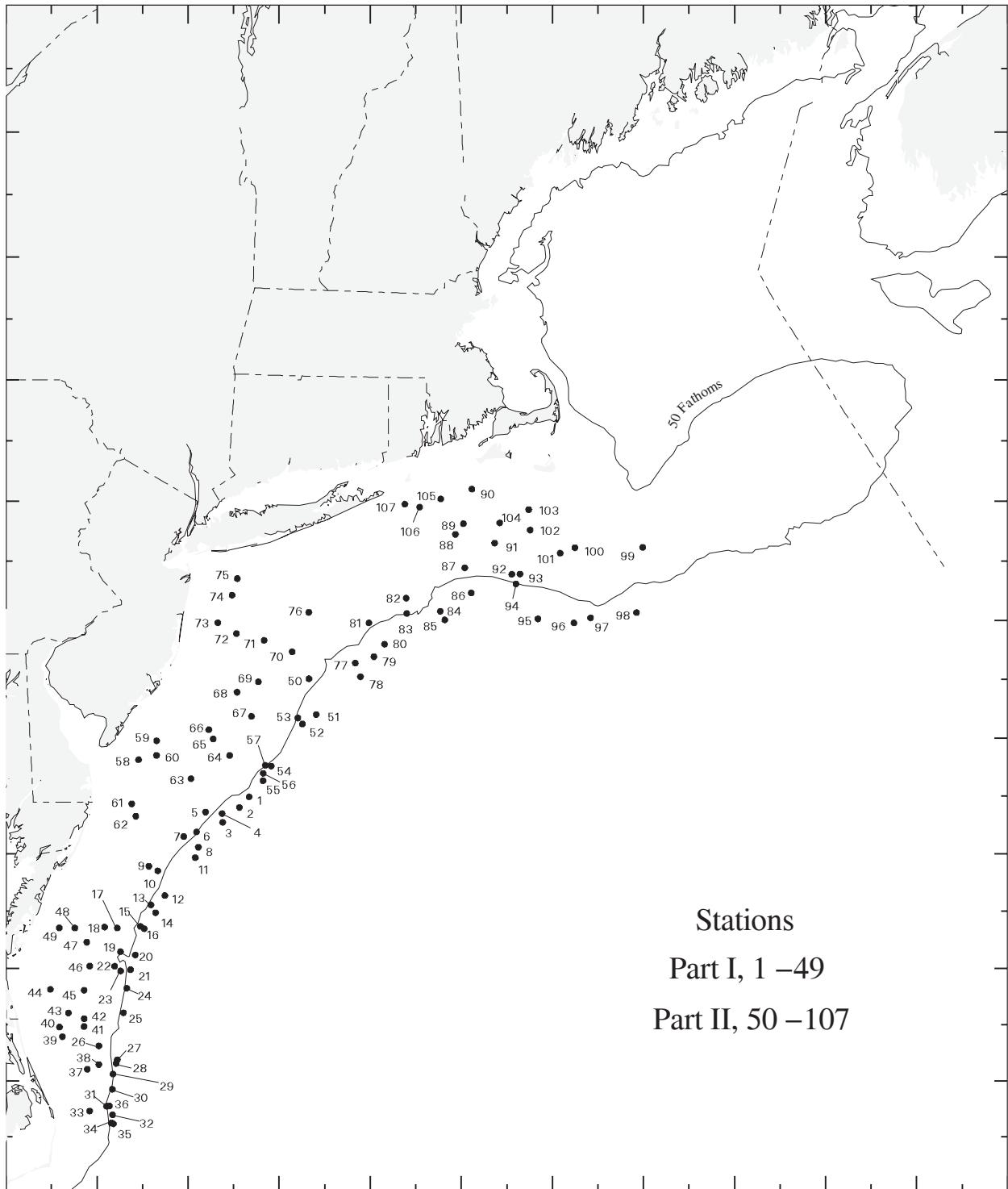


Figure 1. Trawl hauls made from the FRV Delaware II, during National Marine Fisheries Service, Northeast Fisheries Science Center winter bottom trawl survey (2003 –02), February 4 –March 1, 2003.

NMFS-NEFSC WINTER BOTTOM TRAWL SURVEY
2003 STATION INFORMATION

Station	Date	Time	Lat	Lon	Loran TD's		Course	Bottom Depth (FM)	Temp (F)
0001	FEB-06	1024	3829.6	7319.8	X26520.9	Y42512.0	039	71.4	51.3
0002	FEB-06	1258	3824.2	7326.2	X26553.4	Y42453.0	229	67.3	50.9
0003	FEB-06	1619	3816.5	7337.2	X26608.9	Y42366.0	037	164.3	43.7
0004	FEB-06	1936	3821.0	7337.6	X26615.1	Y42411.8	247	68.1	50.2
0005	FEB-06	2135	3821.8	7348.5	X26676.9	Y42410.3	204	42.7	48.8
0006	FEB-06	2346	3811.4	7354.5	X26698.6	Y42297.9	246	46.8	49.3
0007	FEB-07	0136	3809.0	7402.9	X26741.4	Y42264.3	119	42.9	46.3
0008	FEB-07	0345	3803.5	7353.3	X26683.6	Y42217.1	215	76.0	49.1
0009	FEB-07	0852	3751.7	7420.7	X26812.9	Y42060.3		35.0	49.7
0010	FEB-07	2128	3751.2	7420.0	X26808.8	Y42055.6	026	39.1	49.7
0011	FEB-08	0126	3758.0	7355.3	X26688.6	Y42158.7	213	178.3	47.7
0012	FEB-08	0534	3738.2	7415.3	X26769.5	Y41926.0	227	85.8	52.9
0013	FEB-08	0830	3733.3	7424.5	X26808.6	Y41860.4	159	53.0	50.2
0014	FEB-08	1042	3729.2	7421.4	X26788.9	Y41822.3	223	184.5	47.9
0015	FEB-08	1336	3720.9	7428.9	X26814.9	Y41721.6	174	98.2	51.5
0016	FEB-08	1526	3720.9	7429.0	X26815.3	Y41722.1	205	91.9	
0017	FEB-08	1805	3721.2	7446.7	X26898.3	Y41693.9	285	26.8	50.6
0018	FEB-08	2102	3721.7	7455.0	X26937.9	Y41684.6	149	21.9	45.9
0019	FEB-08	2335	3708.7	7444.6	X26872.3	Y41564.5	112	48.9	53.8
0020	FEB-09	0133	3707.0	7434.8	X26826.0	Y41565.2	202	60.7	53.6
0021	FEB-09	0346	3659.2	7438.0	X26831.3	Y41477.3	190	64.2	54.2
0022	FEB-09	0715	3701.0	7448.4	X26879.8	Y41475.3	128	34.2	53.6
0023	FEB-09	1033	3658.6	7444.5	X26859.4	Y41457.4	159	45.4	52.2
0024	FEB-09	1232	3649.4	7440.4	X26831.0	Y41370.7	197	53.6	54.0
0025	FEB-09	1620	3636.4	7442.7	X26826.6	Y41231.4	195	131.2	49.3
0026	FEB-09	2018	3618.8	7458.8	X26874.3	Y41011.3	129	21.3	54.0
0027	FEB-09	2307	3611.3	7446.6	X26817.7	Y40969.7	006	133.7	46.6
0028	FEB-10	0207	3609.4	7447.4	X26819.1	Y40948.5	188	84.2	53.6
0029	FEB-10	0458	3603.7	7449.5	X26821.9	Y40886.6	220	54.4	52.9
0030	FEB-10	0802	3555.6	7449.9	X26815.8	Y40806.9	195	82.3	55.1
0031	FEB-10	1041	3546.5	7453.8	X26822.2	Y40708.0	168	42.9	53.8
0032	FEB-10	1508	3541.9	7449.8	X26803.0	Y40677.5	003	116.2	53.5
0033	FEB-10	2332	3543.9	7504.8	X26861.7	Y40648.1	330	20.5	58.1
0034	FEB-11	0309	3537.4	7450.5	X26801.9	Y40634.0	281	40.5	52.4
0035	FEB-11	0604	3537.1	7449.3	X26797.0	Y40634.5	345	53.0	52.0
0036	FEB-11	1041	3546.6	7451.9	X26815.4	Y40715.0	163	63.2	57.2
0037	FEB-11	1611	3606.3	7506.4	X26890.9	Y40864.0	071	19.4	49.7
0038	FEB-11	1847	3608.8	7458.8	X26863.8	Y40910.2	302	21.1	50.4
0039	FEB-11	2209	3623.7	7522.8	X26976.7	Y40999.8	340	15.6	44.3
0040	FEB-11	2344	3628.8	7524.7	X26991.2	Y41049.3	091	15.3	43.4
0041	FEB-12	0155	3629.1	7508.6	X26926.1	Y41092.4	358	14.8	47.2
0042	FEB-12	0355	3633.2	7508.4	X26930.7	Y41136.8	293	15.9	46.1
0043	FEB-12	0543	3636.3	7518.9	X26977.6	Y41144.3	311	18.0	45.5
0044	FEB-12	0829	3648.8	7530.8	X27044.9	Y41254.0	090	10.9	41.0
0045	FEB-12	1105	3648.4	7508.5	X26950.6	Y41297.8	002	17.5	43.9
0046	FEB-12	1323	3701.1	7504.8	X26952.4	Y41443.3	358	21.6	47.3
0047	FEB-12	1534	3713.7	7506.7	X26979.3	Y41576.9	317	18.0	46.3
0048	FEB-12	1727	3721.2	7514.6	X27026.4	Y41645.1	272	13.9	41.6

NMFS-NEFSC WINTER BOTTOM TRAWL SURVEY
2003 STATION INFORMATION

Station	Date	Time	Lat	Lon	Loran		Course	Bottom	Temp
					TD's	(FM)			
0049	FEB-12	1916	3721.3	7524.9	X27072.8	Y41628.6	048	11.5	40.0
0050	FEB-20	0846	3930.4	7240.4	X26307.4	Y43106.9	167	44.0	45.5
0051	FEB-20	1243	3912.0	7235.6	X26269.8	Y42936.1	267	78.7	48.4
0052	FEB-20	1454	3907.2	7244.7	X26327.3	Y42890.5	218	67.3	48.2
0053	FEB-20	1716	3910.3	7247.7	X26347.6	Y42919.3	190	54.4	46.1
0054	FEB-20	2053	3845.5	7305.2	X26445.2	Y42677.1	202	75.2	49.0
0055	FEB-20	2356	3838.0	7310.7	X26473.0	Y42600.3	255	122.2	50.8
0056	FEB-21	0302	3841.8	7310.5	X26474.6	Y42638.1	016	66.4	47.7
0057	FEB-21	0517	3845.9	7309.1	X26468.7	Y42679.1	227	52.8	48.2
0058	FEB-21	1321	3848.8	7432.6	X26971.7	Y42667.5	039	10.9	37.1
0059	FEB-21	1548	3858.6	7420.7	X26920.7	Y42779.6	194	17.0	36.2
0060	FEB-21	1723	3851.0	7420.8	X26906.7	Y42698.0	207	16.7	37.6
0061	FEB-21	2057	3826.0	7437.1	X26953.0	Y42413.5	152	16.7	37.3
0062	FEB-21	2243	3819.6	7434.4	X26927.0	Y42345.5	061	18.3	37.8
0063	FEB-22	0318	3839.0	7358.1	X26753.4	Y42582.9	056	26.0	46.8
0064	FEB-22	0702	3851.0	7332.7	X26616.2	Y42719.5	272	31.4	44.6
0065	FEB-22	0920	3859.5	7343.5	X26693.3	Y42802.6	324	23.2	41.2
0066	FEB-22	1108	3904.3	7346.4	X26718.3	Y42851.2	068	23.0	39.6
0067	FEB-22	1452	3911.1	7318.2	X26546.4	Y42925.2	145	33.1	43.0
0068	FEB-22	1900	3923.5	7327.8	X26624.0	Y43048.3	142	22.1	43.2
0069	FEB-22	2215	3928.8	7313.7	X26535.3	Y43099.0	138	22.1	41.4
0070	FEB-23	0213	3944.1	7251.4	X26393.6	Y43238.9	304	39.4	43.2
0071	FEB-23	0657	3949.9	7309.9	X26534.5	Y43302.4	181	25.4	40.0
0072	FEB-23	1043	3953.4	7328.1	X26672.8	Y43345.8	190	21.9	39.4
0073	FEB-23	1358	3958.8	7340.4	X26772.9	Y43406.9	138	19.1	38.5
0074	FEB-24	0328	4012.8	7300.3	X26494.4	Y43512.5	113	19.7	37.6
0075	FEB-24	1137	4021.2	7327.6	X26723.1	Y43616.2	116	16.4	35.6
0076	FEB-24	1617	4004.1	7240.4	X26330.4	Y43417.1	157	32.5	43.0
0077	FEB-24	2032	3938.4	7209.9	X26098.0	Y43170.4	122	76.6	47.7
0078	FEB-24	2355	3931.4	7206.4	X26076.4	Y43107.8	052	169.0	46.4
0079	FEB-25	0219	3941.6	7157.6	X26012.3	Y43194.0	211	133.1	52.6
0080	FEB-25	0602	3948.0	7150.6	X25960.9	Y43245.4	233	112.4	52.7
0081	FEB-25	0907	3958.8	7200.9	X26031.1	Y43343.2	322	44.6	42.8
0082	FEB-25	1300	4011.3	7136.3	X25844.7	Y43430.3	097	47.0	42.5
0083	FEB-25	1603	4003.5	7135.9	X25846.4	Y43367.0	093	49.8	46.6
0084	FEB-25	1914	4004.7	7113.8	X25688.6	Y43361.3	257	86.9	52.2
0085	FEB-25	2206	4000.3	7110.9	X25675.2	Y43324.8	262	149.3	47.5
0086	FEB-26	0228	4013.9	7053.4	X25534.5	Y43418.6	293	68.4	49.7
0087	FEB-26	0535	4026.6	7057.7	X25542.1	Y43518.0	254	46.2	38.2
0088	FEB-26	0835	4043.4	7103.9	X25571.0	Y43649.4	082	32.5	
0089	FEB-26	1036	4048.8	7058.7	X25525.2	Y43683.0	000	30.9	
0090	FEB-26	1651	4106.0	7053.0	X25479.1	Y43799.5	072	21.1	36.7
0091	FEB-26	2041	4039.0	7038.0	X25376.6	Y43590.9	140	33.4	38.3
0092	FEB-26	2332	4023.4	7026.7	X25341.9	Y43468.1	153	45.7	37.8
0093	FEB-27	0318	4023.5	7021.3	X25310.1	Y43464.6	247	44.8	
0094	FEB-27	0516	4018.5	7024.0	X25340.0	Y43430.6	248	52.8	
0095	FEB-27	0842	4000.8	7009.5	X25318.6	Y43294.0	155	120.6	
0096	FEB-27	1252	3958.8	6945.8	W14160.2	Y43267.5	275	78.7	

NMFS-NEFSC WINTER BOTTOM TRAWL SURVEY
2003 STATION INFORMATION

Station	Date	Time	Lat	Lon	Loran TD's		Course	Bottom Depth (FM)	Temp (F)
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0097	FEB-27	1604	4001.3	6934.8	W14097.9	Y43279.9	091	64.5	45.0
0098	FEB-27	2106	4004.0	6904.6	W13941.9	Y43283.2	027	125.8	49.9
0099	FEB-28	0407	4036.9	6900.5	W13804.6	Y43492.8	034	37.2	40.0
0100	FEB-28	0900	4036.7	6945.1	W14032.2	Y43526.8	058	31.7	38.0
0101	FEB-28	1130	4033.9	6954.8	W14092.9	Y43516.1	052	33.9	37.6
0102	FEB-28	1636	4045.5	7014.6	X25202.0	Y43613.7	068	23.5	35.1
0103	FEB-28	1944	4055.8	7015.6	X25176.7	Y43684.4	073	18.9	35.8
0104	FEB-28	2255	4049.1	7034.7	X25332.5	Y43659.3	066	29.3	37.1
0105	MAR-01	0324	4101.1	7113.5	X25656.1	Y43791.0	343	26.8	38.3
0106	MAR-01	0538	4057.0	7127.4	X25773.5	Y43778.8	252	30.1	38.5
0107	MAR-01	0724	4058.5	7137.2	X25861.2	Y43802.7	060	24.3	38.5

NMFS-NEFSC WINTER BOTTOM TRAWL SURVEY
 DELAWARE II FEB 04 - MAR 01, 2003
 CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

STATION	SPINY DOGFISH	WINTER SKATE	LITTLE SKATE	ATLANTIC HERRING	SILVER HAKE	ATLANTIC COD	HADDOCK	POLLOCK	WHITE HAKE	RED HAKE	AMERICAN PLAICE	SUMMER FLDR	YELLOWTAIL FLDR	WINTER FLDR	WITCH FLDR	WINDOWPANE FLDR	ATLANTIC MACKEREL	BUTTERFISH	ACADIAN REDFISH	LONGHORN SCULPI	OCEAN POUT	GOOSEFISH	AMERICAN LOBSTEI	LONGFIN SQUID	TOTAL* OTHER	TOTAL ALL
1	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	3	0	0	0	16	0	17	30	82
2	98	0	0	0	0	0	0	0	0	0	0	188	0	0	0	0	0	0	0	0	0	23	0	43	339	691
3	358	0	0	0	0	0	5	0	5	8	0	6	0	0	71	0	0	0	0	0	0	150	14	2	239	858
4	211	0	0	0	0	0	0	0	0	0	0	16	0	0	1	0	0	0	0	0	0	22	0	205	60	515
5	11	0	68	0	0	0	0	0	0	0	0	25	0	0	4	0	0	3	0	0	0	38	0	8	155	312
6	34	0	0	0	0	0	0	0	0	0	0	70	0	0	0	0	0	0	0	0	0	26	0	58	87	275
7	11	0	26	0	1	0	0	0	0	0	0	42	0	0	0	0	0	0	0	0	0	23	0	16	76	195
8	586	0	1	0	0	0	0	0	0	0	0	25	0	0	0	0	0	1	0	0	0	10	0	162	49	834
9	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
10	1247	0	65	0	0	0	0	0	0	0	0	91	0	0	4	0	1	1	0	0	0	20	0	51	193	1673
11	549	0	0	0	0	0	0	0	0	2	0	0	0	0	8	0	0	0	0	0	0	128	22	0	114	823
12	1884	0	0	0	0	0	0	0	0	0	0	116	0	0	1	0	0	4	0	0	0	25	0	17	314	2361
13	16	0	0	0	1	0	0	0	0	0	0	32	0	0	2	0	0	0	0	0	0	4	2	63	192	312
14	6128	0	0	0	10	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	163	0	17	149	6486
15	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	14
16	2137	0	1	0	1	0	0	0	0	0	0	113	0	0	5	0	0	0	0	0	0	62	0	70	232	2621
17	3977	0	138	0	0	0	0	0	0	0	0	127	0	0	0	0	1	3	0	0	0	3	0	86	221	4556
18	1269	0	89	0	0	0	0	0	0	0	0	102	0	0	1	0	0	3	0	0	0	0	0	47	95	1606
19	1176	0	2	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	26	0	63	217	1505
20	869	0	0	0	0	0	0	0	0	0	0	132	0	0	0	0	0	0	0	0	0	37	0	184	494	1716
21	883	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	3	0	38	268	1198
22	1034	0	1	0	0	0	0	0	0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	5	559	1645
23	465	0	0	0	0	0	0	0	0	0	0	68	0	0	0	0	0	0	0	0	0	7	0	2	342	884
24	299	0	0	0	0	0	0	0	0	0	0	90	0	0	0	0	0	0	0	0	0	10	0	16	253	668
25	8425	0	0	0	0	0	0	0	0	0	0	50	0	0	15	0	0	0	0	0	0	299	0	4	476	9269
26	5906	0	0	0	0	0	0	0	0	0	0	120	0	0	0	0	0	0	0	0	0	21	0	12	460	6519
27	194	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	272	6	0	178	652
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
29	42	0	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	1	0	0	0	17	0	87	1803	1969
30	583	0	0	0	0	0	0	0	0	0	0	48	0	0	0	0	0	14	0	0	0	37	0	39	4135	4856
31	14415	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	15	0	3	7489	21934
32	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	73	2	38	242	406

NMFS-NEFSC WINTER BOTTOM TRAWL SURVEY
 DELAWARE II FEB 04 - MAR 01, 2003
 CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

	SPINY DOGFISH	WINTER SKATE	LITTLE SKATE	ATLANTIC HERRING	SILVER HAKE	ATLANTIC COD	HADDOCK	POLLOCK	WHITE HAKE	RED HAKE	AMERICAN PLAICE	SUMMER FLDR	YELLOWTAIL FLDR	WINTER FLDR	WITCH FLDR	WINDOWPANE FLDF	ATLANTIC MACKERE	BUTTERFISH	ACADIAN REDFISH	LONGHORN SCULPI	OCEAN POUT	GOOSEFISH	AMERICAN LOBSTEI	LONGFIN SQUID	TOTAL* OTHER	TOTAL ALL
33	4	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	5	0	0	930	952
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	103	0	9	1005	1117
35	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	59	0	33	95	193
36	45	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	12	0	30	17208	17309
37	5850	0	1	0	0	0	0	0	0	0	0	197	0	0	0	0	0	7	0	0	0	0	0	8	692	6755
38	7442	0	0	0	0	0	0	0	0	0	0	77	0	0	0	0	0	0	0	0	0	15	0	54	773	8361
39	57	19	16	0	0	0	0	0	0	0	0	6	0	0	0	10	0	0	0	0	0	6	0	0	393	507
40	31	55	16	0	0	0	0	0	0	0	0	18	0	0	0	5	0	0	0	0	0	0	0	0	210	335
41	16	0	9	0	0	0	0	0	0	0	0	127	0	0	0	1	0	0	0	0	0	0	0	5	90	248
42	11	0	32	0	0	0	0	0	0	0	0	86	0	0	0	0	0	0	0	0	0	14	0	3	220	366
43	52	4	20	0	0	0	0	0	0	0	0	34	0	0	0	7	0	0	0	0	0	0	0	1	328	446
44	64	33	3	0	0	0	0	0	0	0	0	27	0	0	0	12	0	0	0	0	0	0	0	0	114	253
45	4790	0	91	0	0	0	0	0	0	0	0	218	0	0	0	10	0	0	0	0	0	7	0	1	373	5490
46	4181	0	99	0	0	0	0	0	0	0	0	203	0	0	0	0	0	0	0	0	0	0	0	4	319	4806
47	734	11	223	0	0	0	0	0	0	0	0	120	0	0	0	13	0	0	0	0	0	0	0	2	111	1214
48	375	0	84	0	0	0	0	0	0	0	0	5	0	0	0	23	0	1	0	0	0	0	0	0	16	504
49	59	36	53	0	0	0	0	0	0	0	0	1	0	0	0	15	0	0	0	0	0	0	0	0	7	171
50	1159	0	86	0	2	0	0	0	0	0	0	447	0	0	2	0	1	35	0	0	0	14	0	12	108	1866
51	22	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	9	0	0	0	0	0	67	33	136
52	394	0	14	0	5	0	0	0	0	0	0	76	0	0	1	0	0	16	0	0	0	12	0	21	138	677
53	0	0	59	1	4	0	0	0	0	0	0	40	0	0	6	0	9	9	0	0	0	4	0	271	564	967
54	0	0	21	0	0	0	0	0	0	1	0	28	0	0	3	0	3	0	0	0	0	9	0	91	200	356
55	1457	0	0	0	4	0	0	0	0	4	0	6	0	0	18	0	0	1	0	0	0	279	0	39	96	1904
56	16	0	16	0	0	0	0	0	0	0	0	88	0	0	1	0	49	3	0	0	0	30	0	30	201	434
57	102	0	35	0	1	0	0	0	0	0	0	127	0	0	2	0	2	2	0	0	0	23	0	3	553	850
58	0	10	52	4	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	1	32	110
59	0	28	172	1	0	0	0	0	0	0	0	0	0	1	0	14	0	0	0	0	0	0	0	0	6	222
60	7	12	242	11	0	0	0	0	0	0	0	0	0	0	0	32	0	0	0	0	0	0	0	0	5	309
61	4	37	472	0	0	0	0	0	0	0	0	2	0	0	0	13	0	0	0	0	0	0	0	0	19	547
62	10	15	473	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	1	506
63	727	0	317	26	0	0	0	0	0	0	0	27	0	0	0	0	37	3	0	0	0	16	0	6	196	1355
64	1543	1	200	0	1	0	0	0	0	0	0	73	0	0	1	0	28	0	0	0	2	0	0	13	71	1933
65	166	3	51	2	0	0	0	0	0	0	0	15	0	0	0	4	84	0	0	0	3	0	0	0	2	330

NMFS-NEFSC WINTER BOTTOM TRAWL SURVEY
 DELAWARE II FEB 04 - MAR 01, 2003
 CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

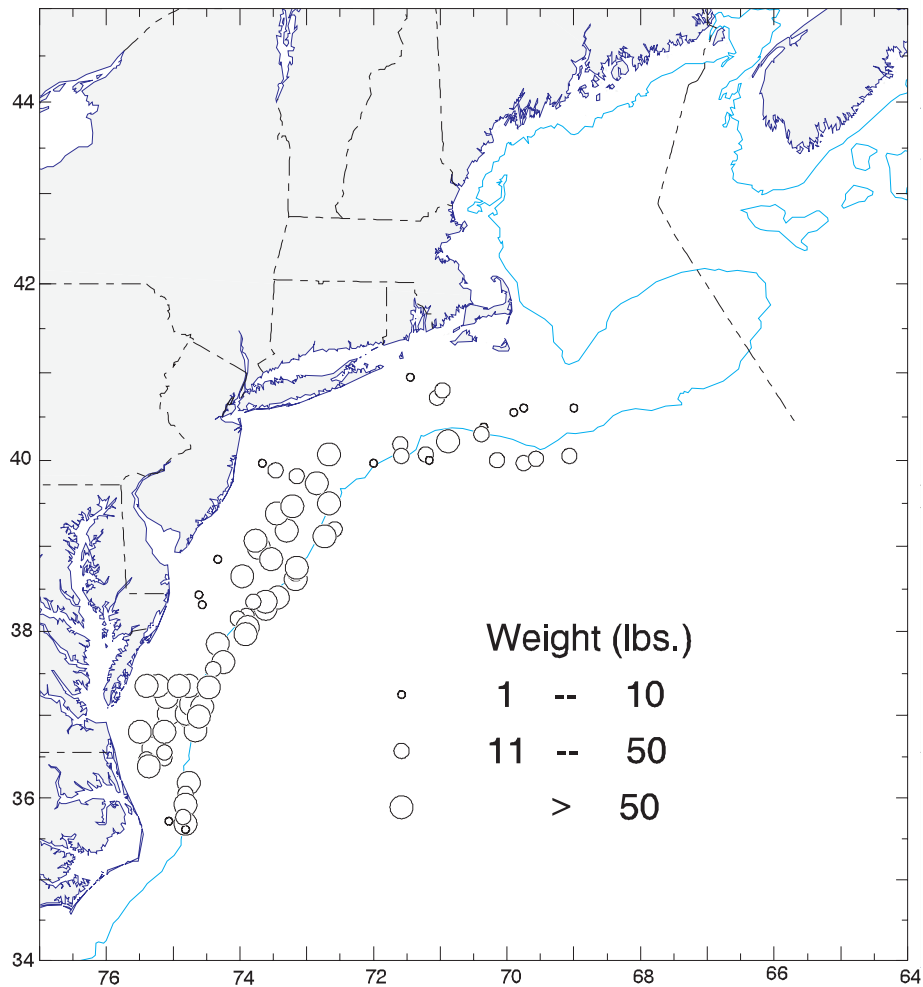
	SPINY DOGFISH	WINTER SKATE	LITTLE SKATE	ATLANTIC HERRING	SILVER HAKE	ATLANTIC COD	HADDOCK	POLLOCK	WHITE HAKE	RED HAKE	AMERICAN PLAICE	SUMMER FLDR	YELLOWTAIL FLDR	WINTER FLDR	WITCH FLDR	WINDOWPANE FLDR	ATLANTIC MACKEREL	BUTTERFISH	ACADIAN REDFISH	LONGHORN SCULPI	OCEAN POUT	GOOSEFISH	AMERICAN LOBSTEI	LONGFIN SQUID	TOTAL* OTHER	TOTAL ALL	
66	254	0	126	6	0	0	0	0	0	0	0	13	0	0	0	13	69	0	0	0	11	0	0	0	0	4	496
67	2120	0	96	0	0	0	0	0	0	0	0	42	0	0	0	0	3	28	0	0	1	0	0	2	34	2326	
68	401	2	146	15	0	0	0	0	0	0	0	0	0	0	0	1	132	0	0	0	0	1	0	0	85	783	
69	252	0	291	121	0	0	0	0	0	0	0	1	1	0	0	0	5	0	0	0	0	0	0	0	0	7	678
70	1147	38	613	444	2	0	0	0	0	1	0	8	0	0	1	0	2475	0	0	0	0	0	66	0	57	4852	
71	36	1	122	0	0	0	0	0	0	0	0	1	7	2	0	2	0	0	0	0	0	0	0	0	0	3	174
72	41	10	43	7	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	9	24	0	0	1	141	
73	3	0	120	7	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	83	0	0	0	1	216	
74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	54	406	22	0	0	0	0	0	0	0	0	9	1	0	2	0	0	0	2	63	0	2	0	2	563	
76	119	2	243	0	0	0	0	0	0	0	0	6	0	0	5	0	10	0	0	0	19	7	0	1	38	450	
77	0	0	2	0	0	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	14	0	30	15	86	
78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
79	0	0	0	0	6	0	0	0	3	0	0	0	0	0	1	0	0	0	0	0	0	123	1	7	33	174	
80	0	0	0	0	0	0	0	0	0	0	0	32	0	0	2	0	0	3	0	0	0	49	0	43	43	172	
81	1	0	38	4	2	0	0	0	7	3	0	175	0	0	0	0	5	0	0	0	0	12	0	1	43	291	
82	16	0	21	0	11	0	0	0	0	2	0	80	0	0	1	0	2	1	0	0	0	3	0	1	57	195	
83	24	0	15	0	7	0	0	0	0	1	0	371	0	0	1	0	6	7	0	0	0	20	0	6	67	525	
84	12	0	0	0	3	0	0	0	0	0	0	37	0	0	1	0	0	5	0	0	0	38	0	66	24	186	
85	7	0	0	0	30	0	0	0	5	3	0	0	0	0	10	0	0	0	0	0	0	198	7	0	46	306	
86	99	0	0	136	12	0	0	0	0	0	0	157	0	0	1	0	1	8	0	0	0	182	1	2	59	658	
87	0	0	0	1	1	0	0	0	0	0	0	16	0	0	0	1	0	0	0	0	0	36	3	0	60	118	
88	18	90	206	0	5	0	0	0	0	0	0	92	35	1	4	48	0	0	0	12	159	6	0	0	32	708	
89	10	98	360	37	3	0	0	0	0	0	0	43	11	0	0	37	0	0	0	32	73	10	0	0	10	724	
90	0	18	23	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	44
91	0	129	118	0	1	0	0	0	0	0	0	0	0	0	0	3	0	0	0	4	0	17	0	0	20	292	
92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
93	4	144	39	29	0	0	0	0	0	0	0	3	0	0	2	8	0	0	0	1	0	1	1	0	8	240	
94	14	620	1	110	17	2	0	0	0	0	0	8	1	0	1	7	16	0	0	0	0	54	0	0	36	887	
95	37	0	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	16	9	88	69	223	
96	10	0	0	0	7	0	0	0	0	0	0	302	0	0	0	0	1	81	0	0	0	66	0	89	1181	1737	
97	22	11	5	3	16	0	0	0	0	3	0	694	0	0	2	0	9	16	0	0	0	13	0	43	259	1096	
98	15	0	0	1	23	0	0	0	1	3	0	12	0	0	26	0	0	58	0	0	0	16	1	5	42	203	

NMFS-NEFSC WINTER BOTTOM TRAWL SURVEY
 DELAWARE II FEB 04 - MAR 01, 2003
 CATCH WEIGHTS (POUNDS) OF IMPORTANT SPECIES BY HAUL

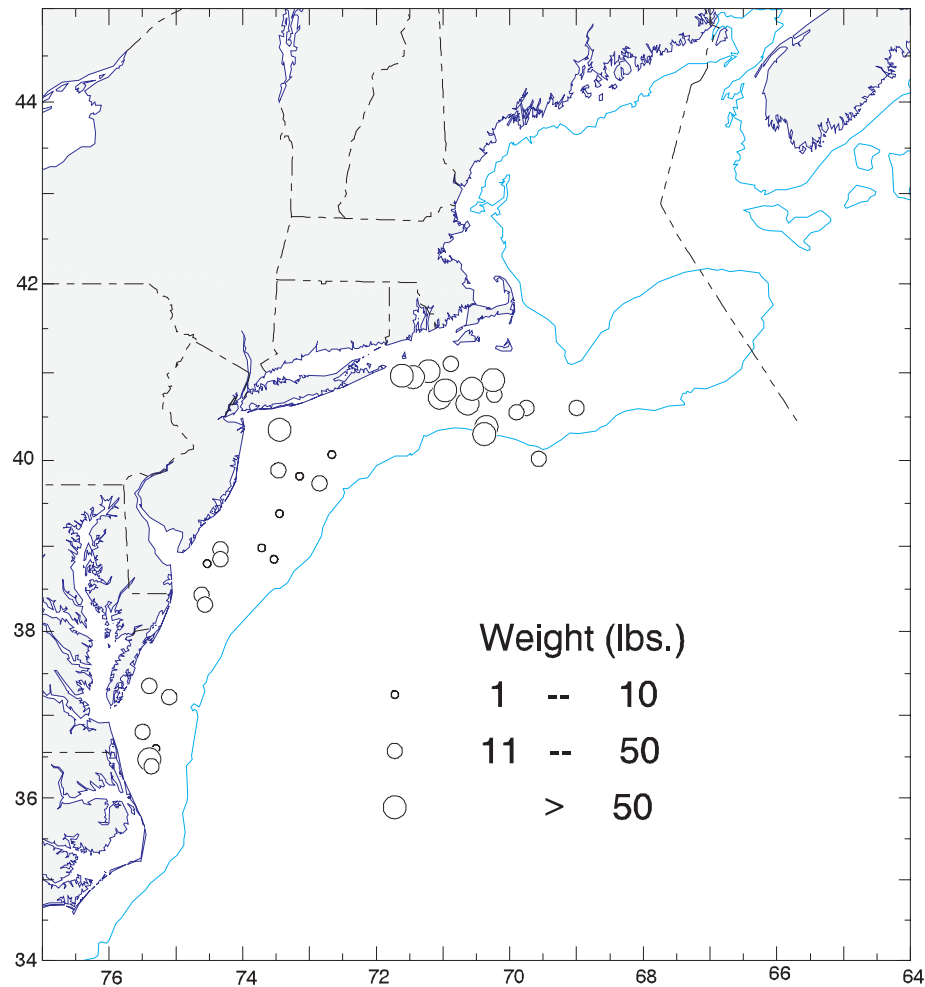
	SPINY DOGFISH	WINTER SKATE	LITTLE SKATE	ATLANTIC HERRING	SILVER HAKE	ATLANTIC COD	HADDOCK	POLLOCK	WHITE HAKE	RED HAKE	AMERICAN PLAICE	SUMMER FLDR	YELLOWTAIL FLDR	WINTER FLDR	WITCH FLDR	WINDOWPANE FLDF	ATLANTIC MACKERE	BUTTERFISH	ACADIAN REDFISH	LONGHORN SCULPI	OCEAN POUT	GOOSEFISH	AMERICAN LOBSTEI	LONGFIN SQUID	TOTAL* OTHER	TOTAL ALL	
99	6	50	91	0	0	12	11	0	0	0	0	0	5	7	0	23	0	0	0	5	0	3	0	0	0	82	295
100	3	33	153	0	0	0	0	0	0	0	0	0	1	1	0	4	0	0	0	25	0	0	0	0	0	27	247
101	9	39	223	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	12	0	0	0	0	0	0	286
102	0	20	81	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5	0	0	0	0	0	11	118
103	0	261	5	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	74	344
104	0	56	772	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	9	0	1	0	0	0	3	843
105	0	168	401	2	2	17	0	0	0	0	0	0	19	2	0	14	0	0	0	10	182	4	0	0	0	3	824
106	0	166	222	0	1	10	0	0	0	0	0	17	42	13	0	13	0	0	0	19	191	22	0	0	0	5	721
107	0	122	124	0	0	7	0	0	0	0	0	2	33	36	0	10	0	0	0	43	998	9	0	0	0	7	1391
TOTAL	86862	2396	8354	990	183	48	16	0	21	32	0	5798	167	72	225	371	2949	329	0	180	1794	3149	71	2441	47130	163578	

* "Total other" in southern areas are comprised primarily of rays, large sharks, smooth dogfish and spotted hake.

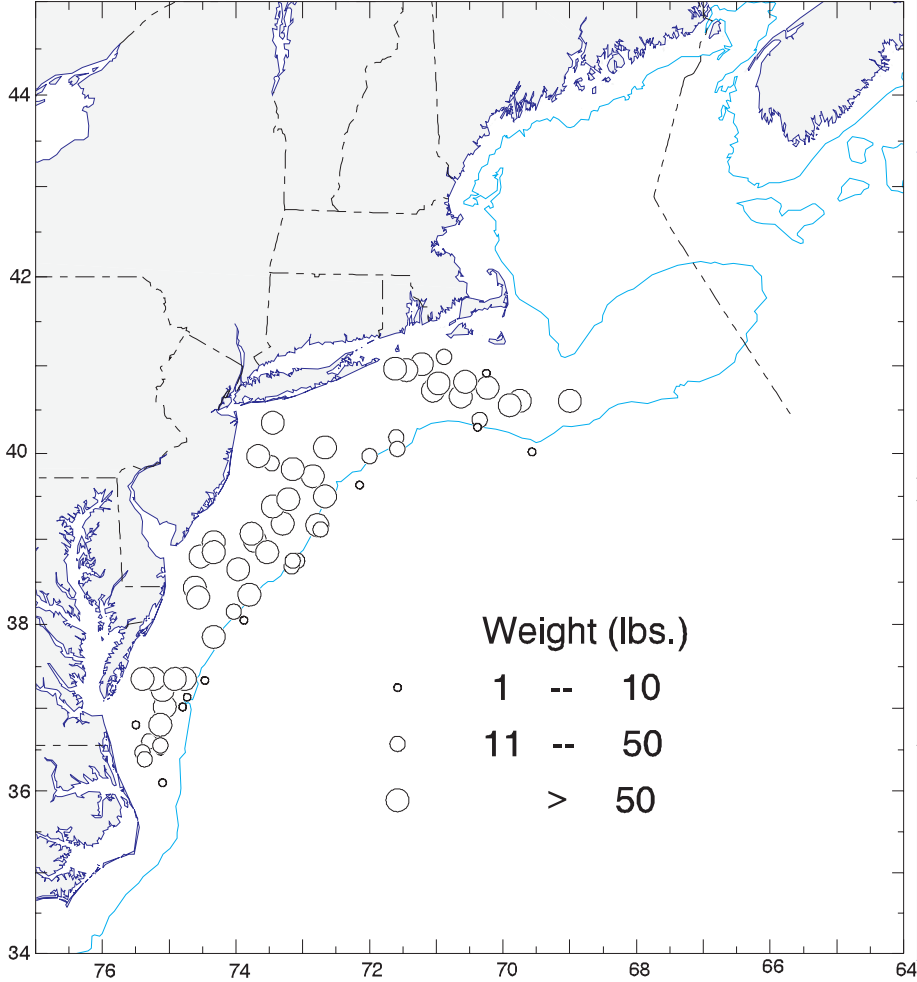
SPINY DOGFISH
NEFSC Bottom Trawl Survey
FEB. 04 - MAR. 01, 2003



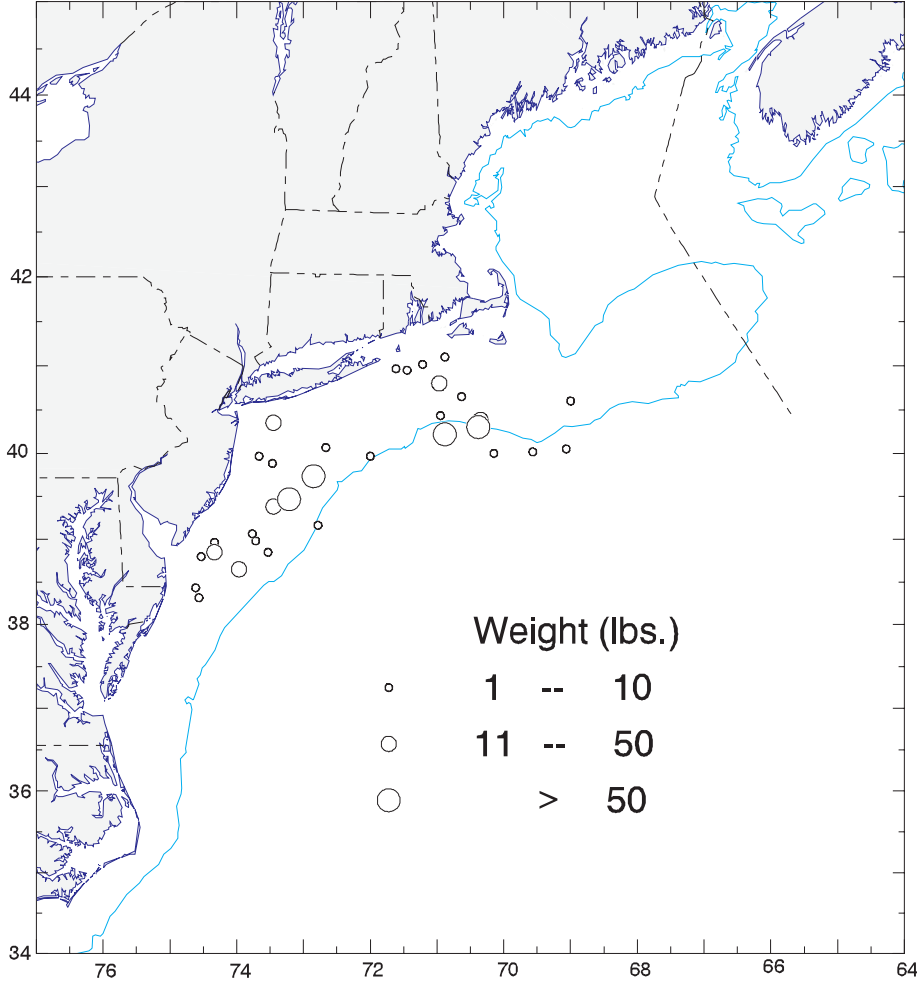
WINTER SKATE
NEFSC Bottom Trawl Survey
FEB. 04 - MAR. 01, 2003



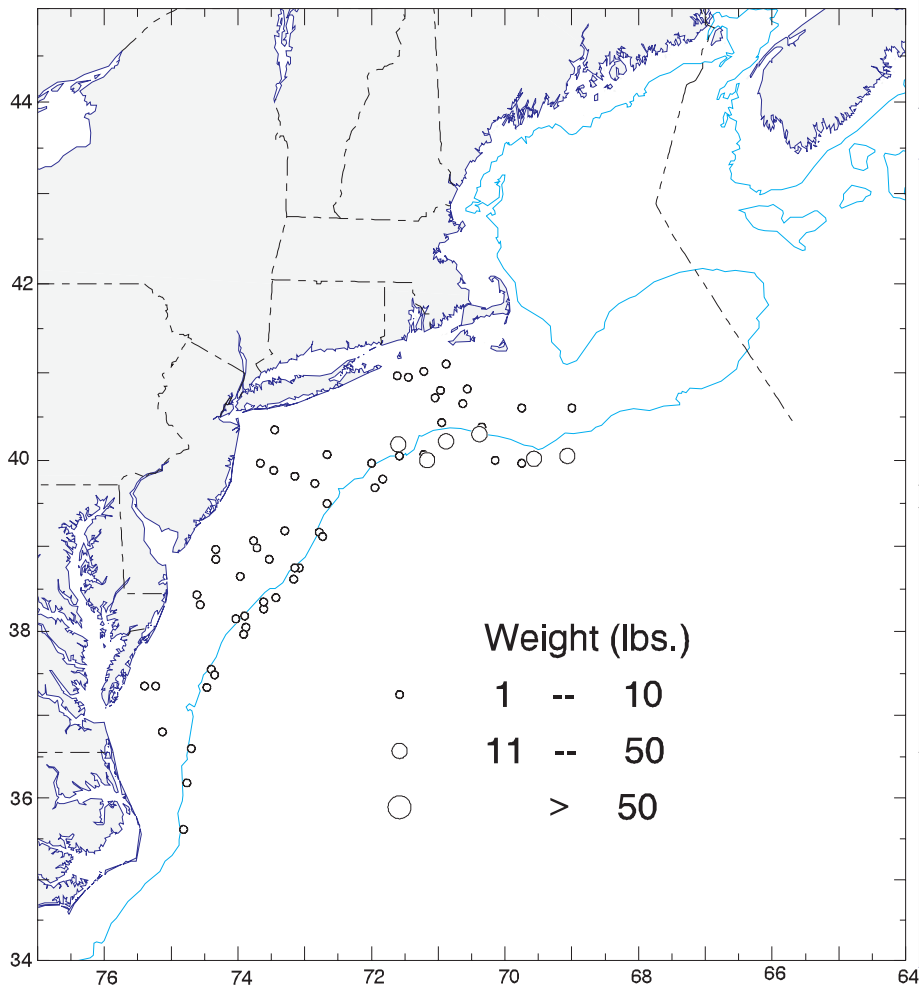
LITTLE SKATE
NEFSC Bottom Trawl Survey
FEB. 04 - MAR. 01, 2003



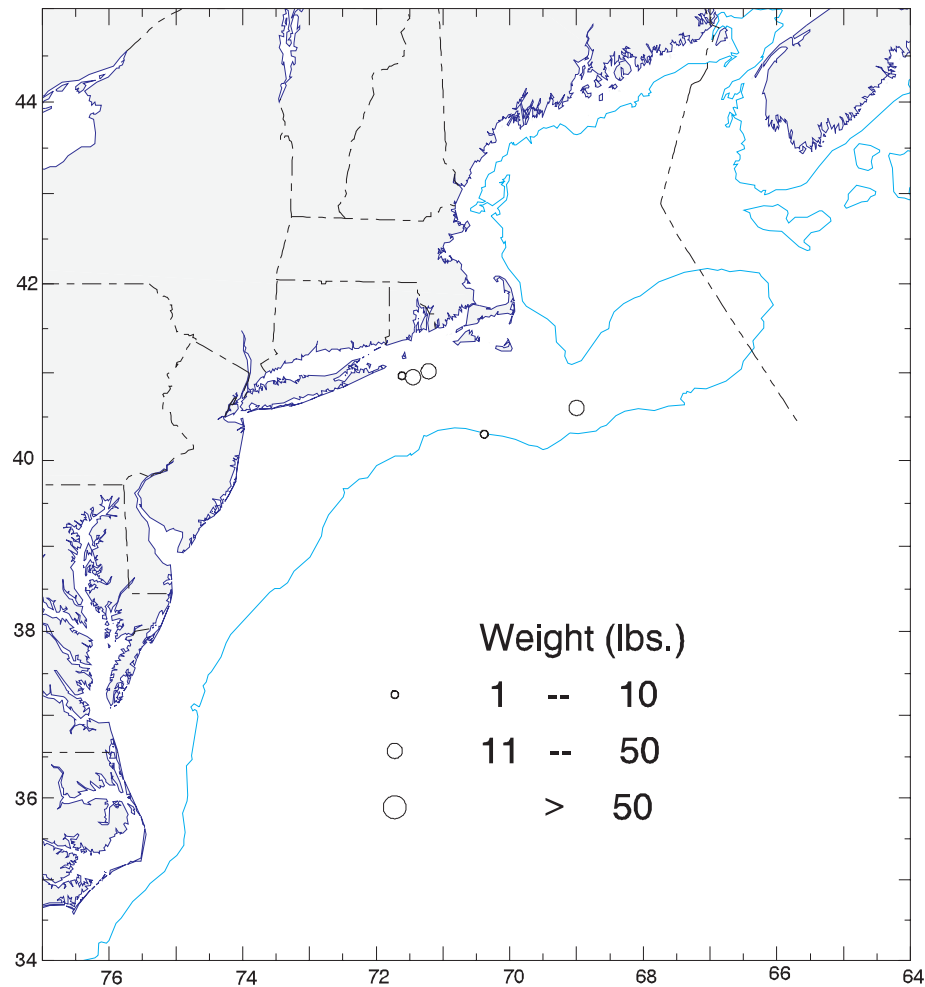
ATLANTIC HERRING
NEFSC Bottom Trawl Survey
FEB. 04 - MAR. 01, 2003



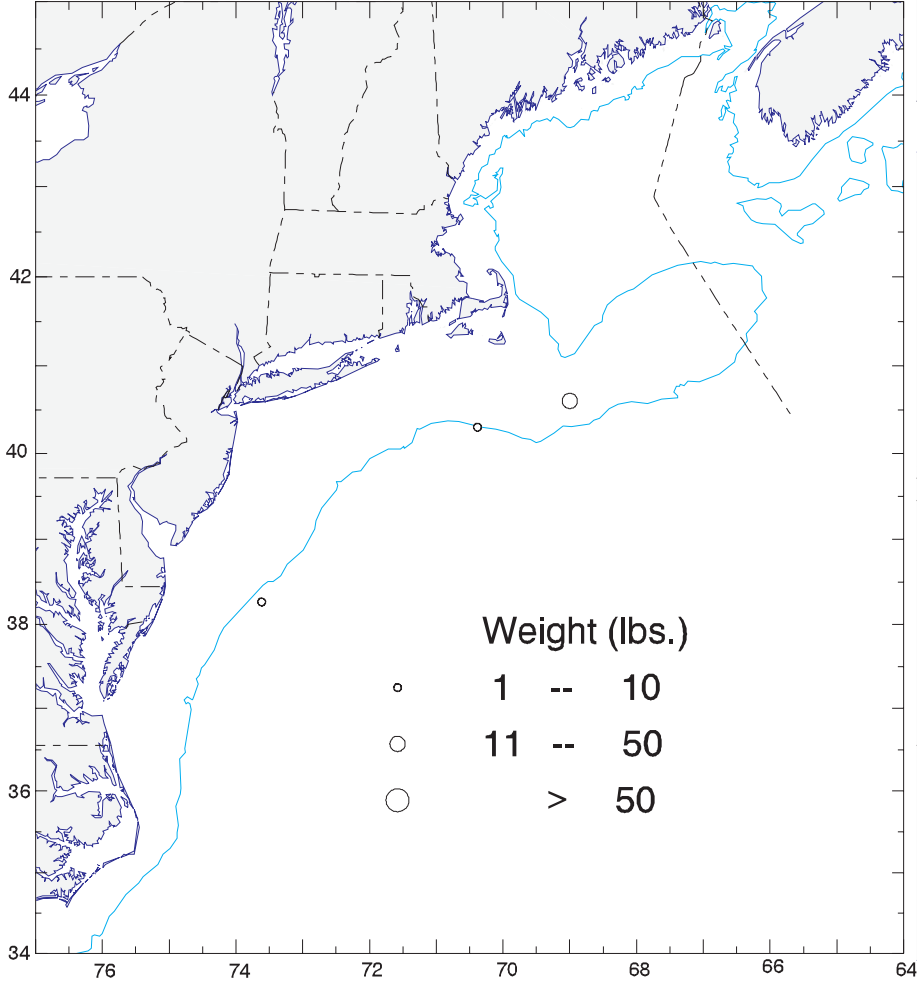
SILVER HAKE
NEFSC Bottom Trawl Survey
FEB. 04 - MAR. 01, 2003



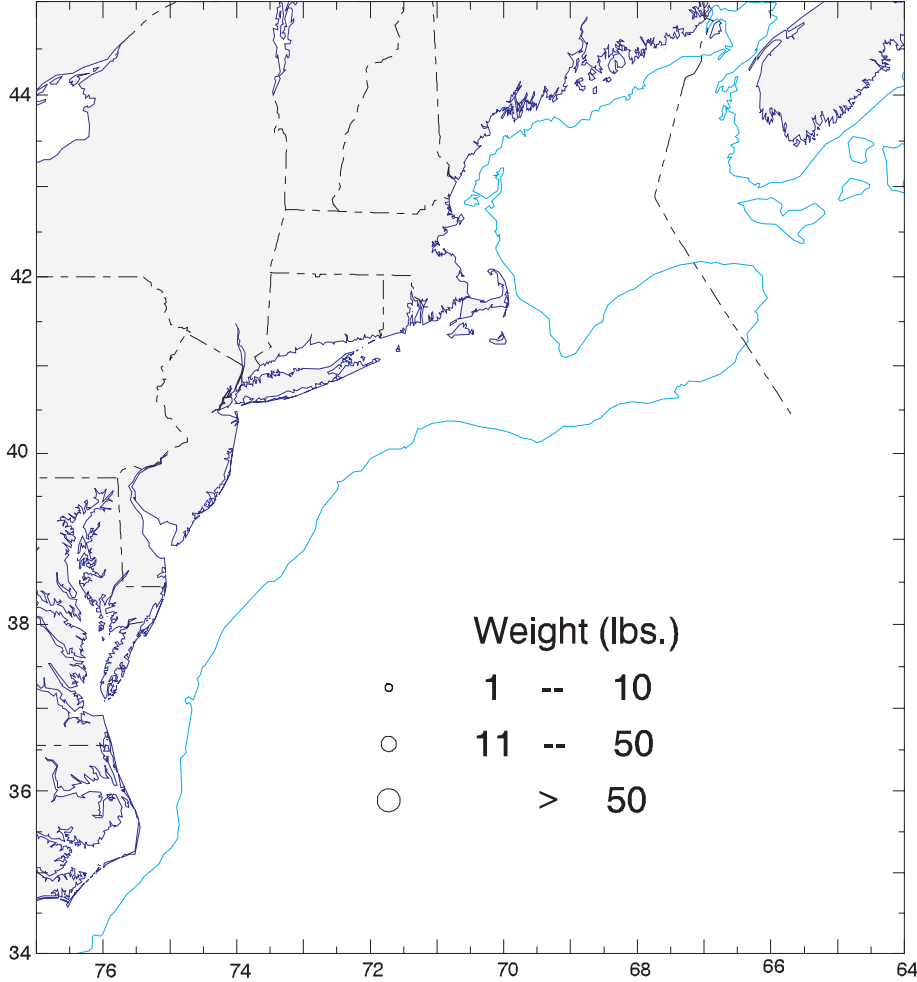
ATLANTIC COD
NEFSC Bottom Trawl Survey
FEB. 04 - MAR. 01, 2003



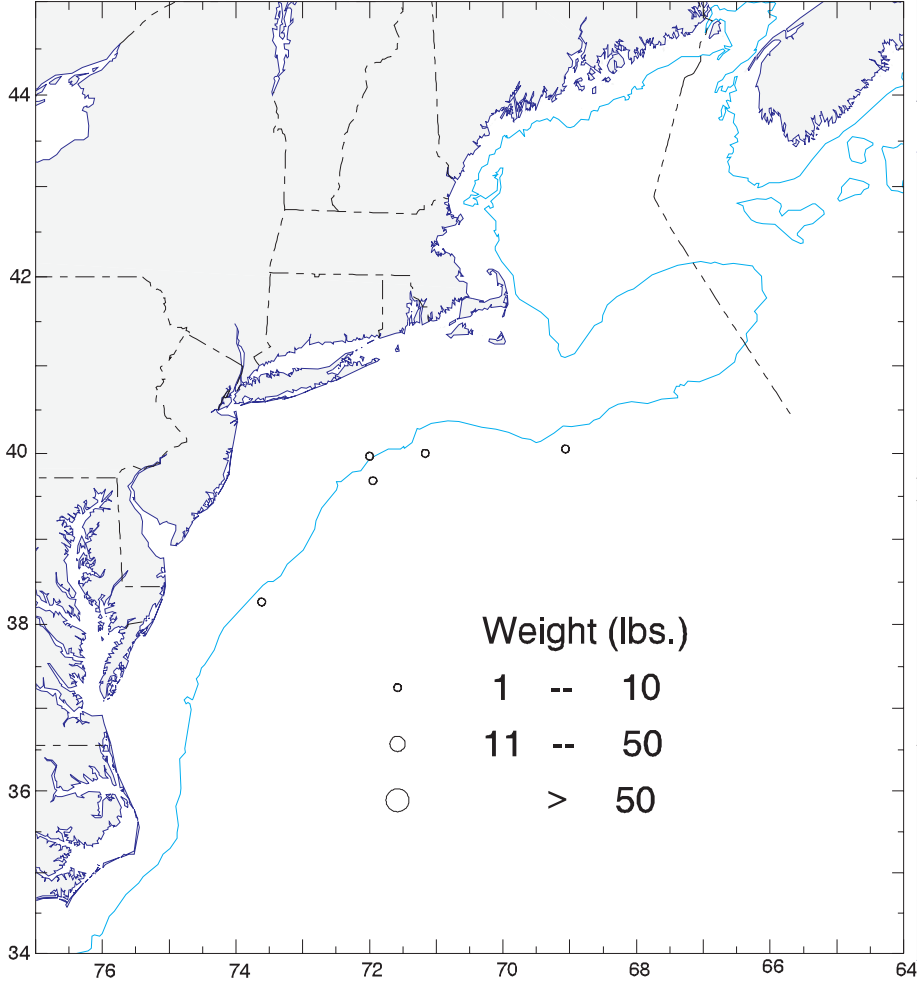
HADDOCK
NEFSC Bottom Trawl Survey
FEB. 04 - MAR. 01, 2003



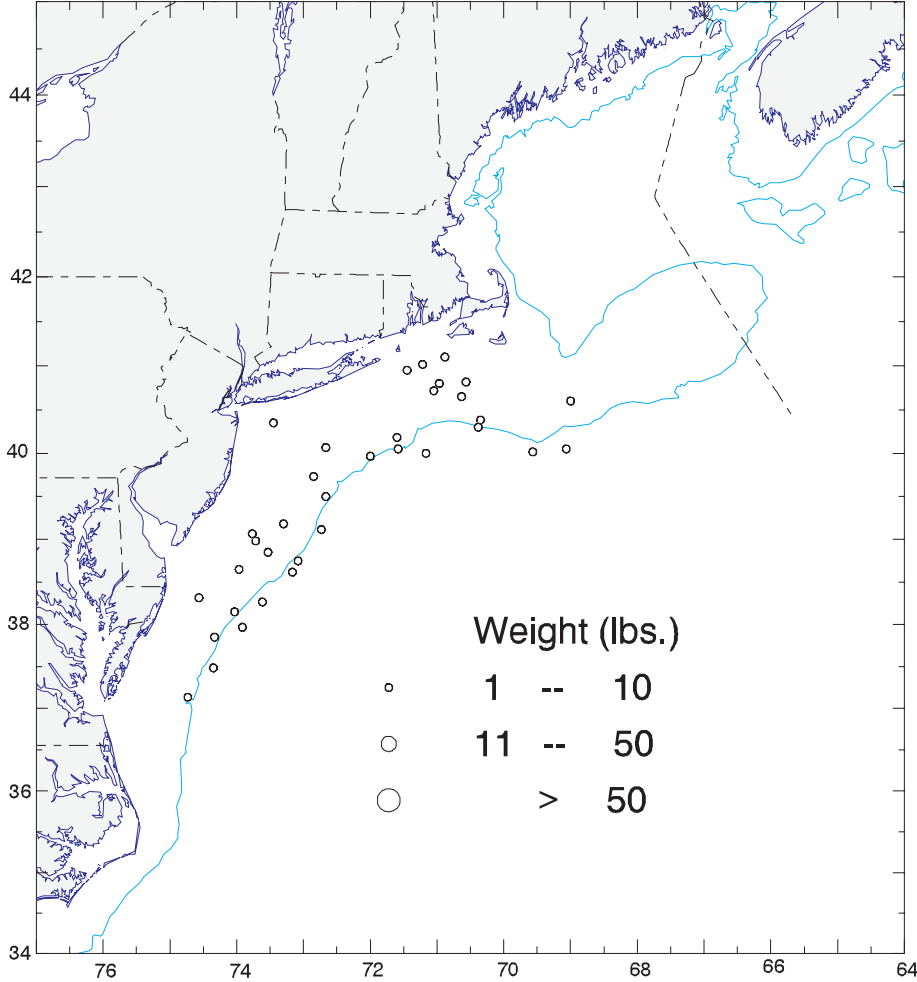
POLLOCK
NEFSC Bottom Trawl Survey
FEB. 04 - MAR. 01, 2003



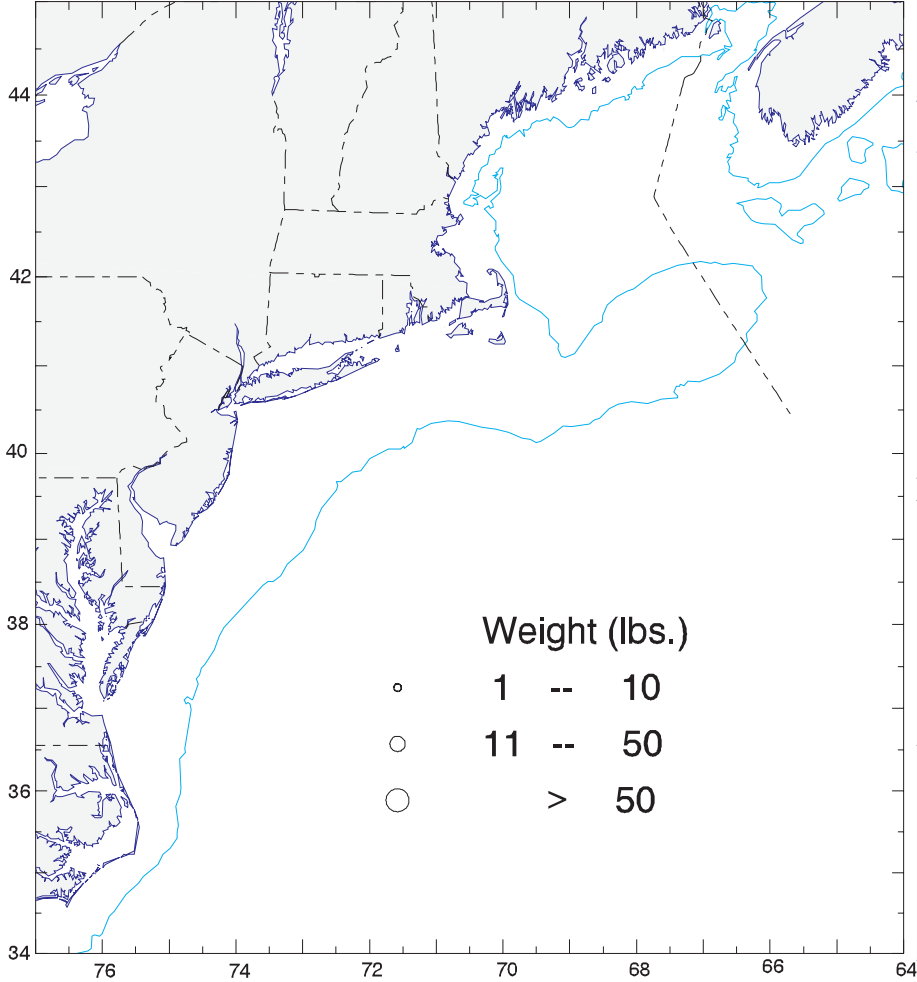
WHITE HAKE
NEFSC Bottom Trawl Survey
FEB. 04 - MAR. 01, 2003



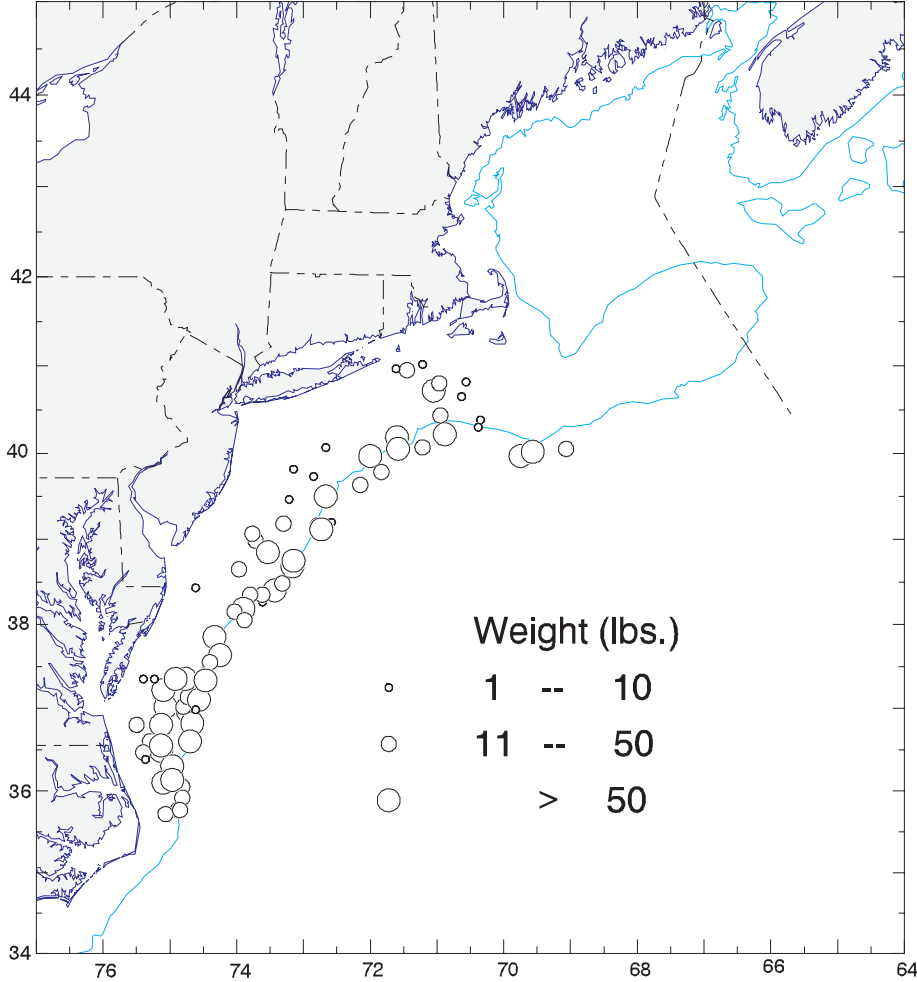
RED HAKE
NEFSC Bottom Trawl Survey
FEB. 04 - MAR. 01, 2003



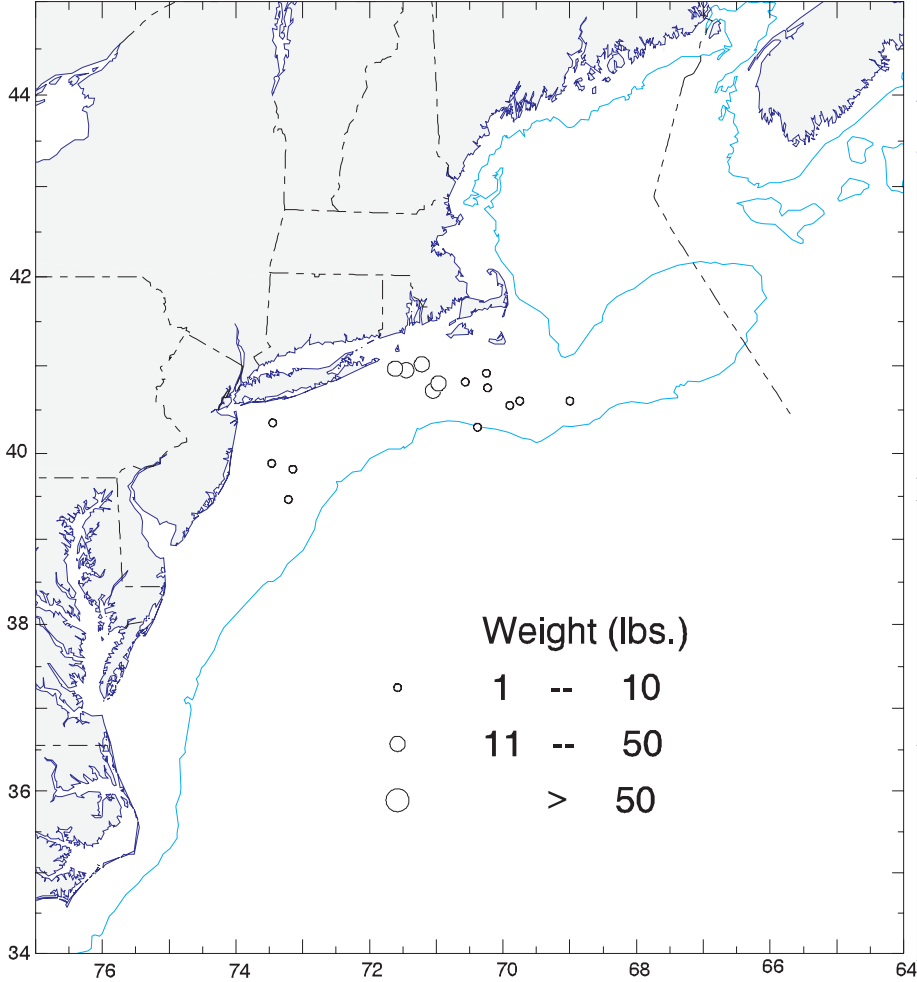
AMERICAN PLAICE
NEFSC Bottom Trawl Survey
FEB. 04 - MAR. 01, 2003



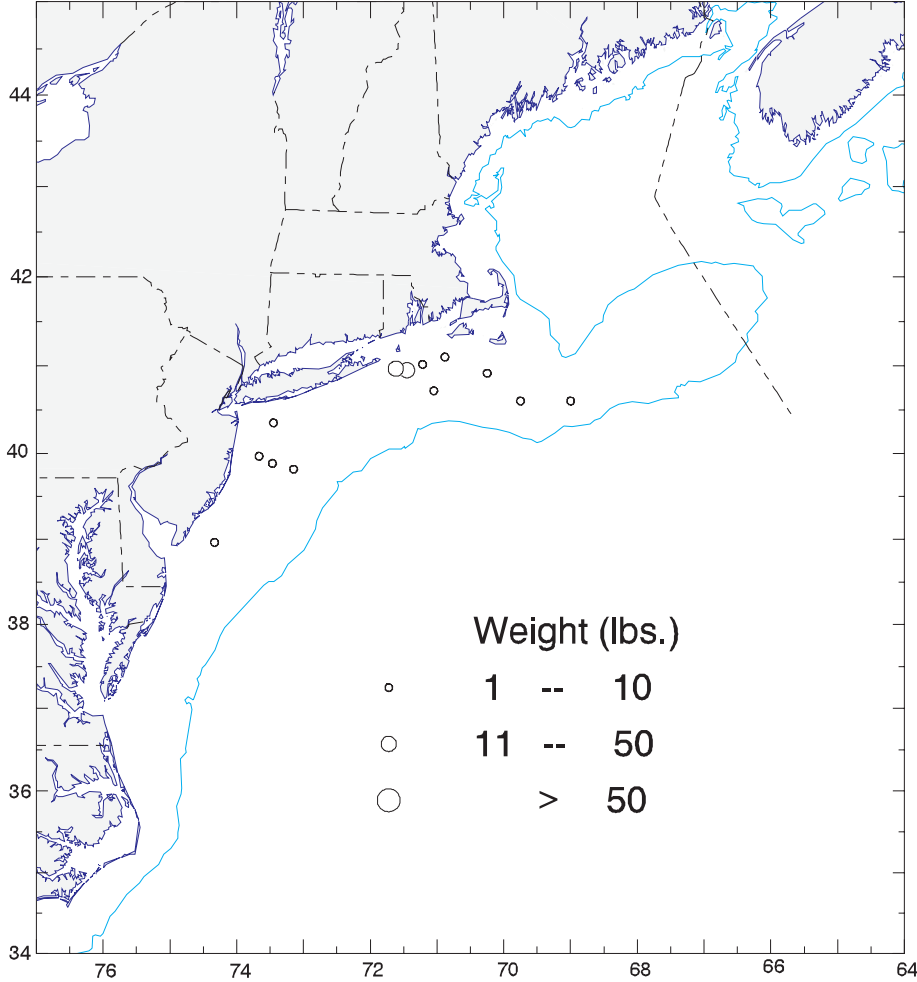
SUMMER FLOUNDER
NEFSC Bottom Trawl Survey
FEB. 04 - MAR. 01, 2003



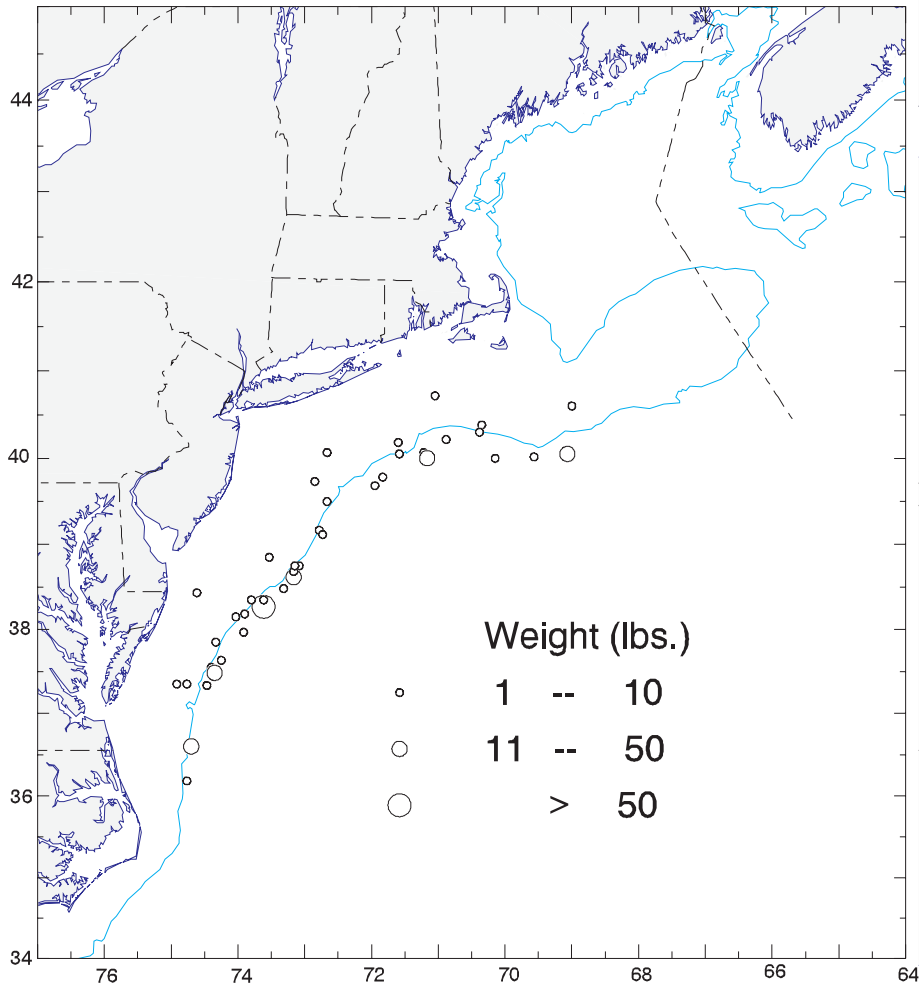
YELLOWTAIL FLOUNDER
NEFSC Bottom Trawl Survey
FEB. 04 - MAR. 01, 2003



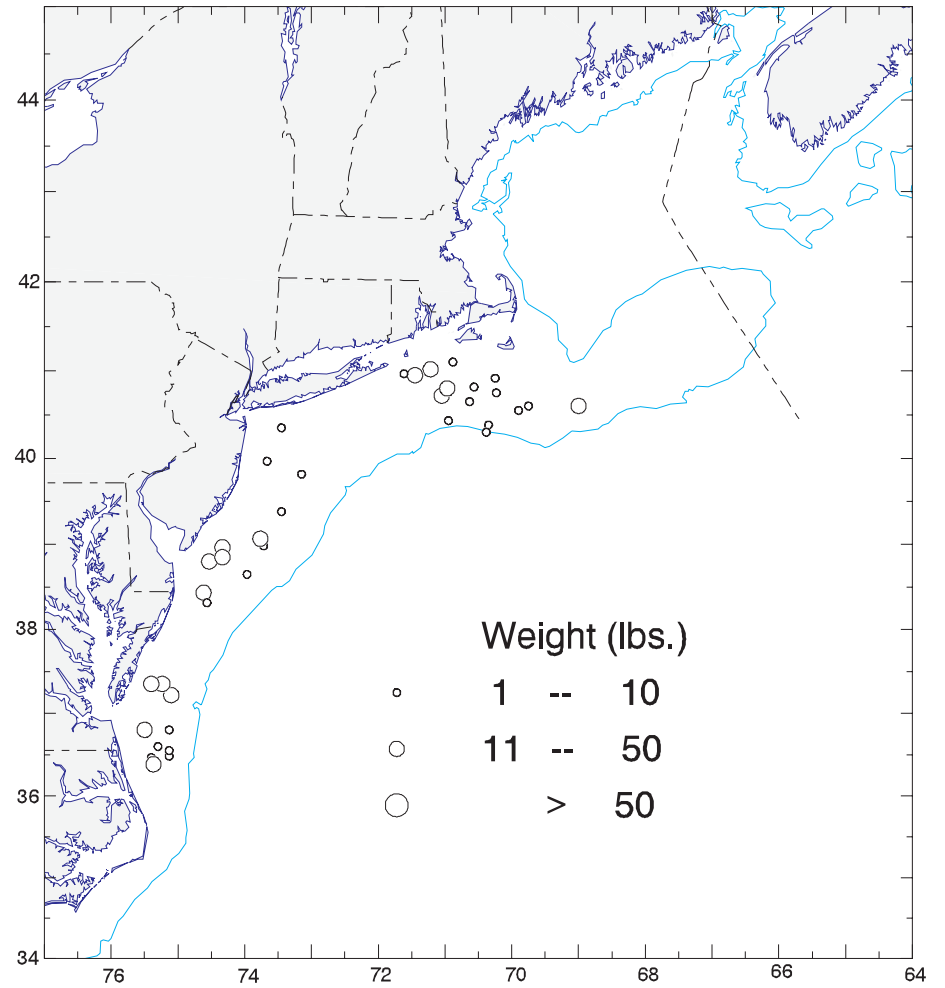
WINTER FLOUNDER
NEFSC Bottom Trawl Survey
FEB. 04 - MAR. 01, 2003



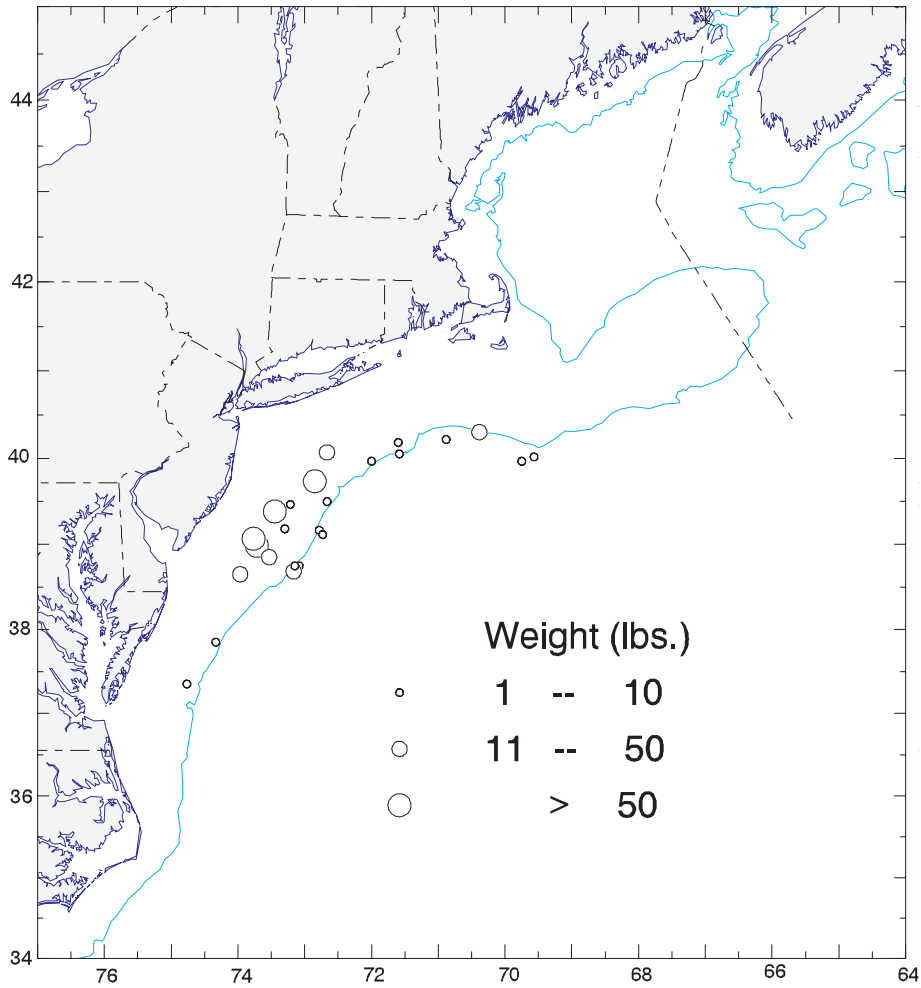
WITCH FLOUNDER
NEFSC Bottom Trawl Survey
FEB. 04 - MAR. 01, 2003



WINDOWPANE FLOUNDER
NEFSC Bottom Trawl Survey
FEB. 04 - MAR. 01, 2003



ATLANTIC MACKEREL
NEFSC Bottom Trawl Survey
FEB. 04 - MAR. 01, 2003



BUTTERFISH
NEFSC Bottom Trawl Survey
FEB. 04 - MAR. 01, 2003

