

Table: Southern New England – Mid-Atlantic Winter Flounder commercial landings from 1964 to 2016

year	Kg	MT	lbs
1964	6,614,744	6,615	14,583,013
1965	7,735,842	7,736	17,054,611
1966	9,734,664	9,735	21,461,261
1967	7,095,090	7,095	15,641,995
1968	5,133,247	5,133	11,316,871
1969	6,668,606	6,669	14,701,759
1970	7,001,144	7,001	15,434,880
1971	6,105,013	6,105	13,459,251
1972	4,445,799	4,446	9,801,308
1973	4,578,919	4,579	10,094,787
1974	3,834,161	3,834	8,452,878
1975	3,668,565	3,669	8,087,801
1976	2,876,360	2,876	6,341,287
1977	3,892,736	3,893	8,582,014
1978	5,746,555	5,747	12,668,986
1979	5,848,582	5,849	12,893,916
1980	9,871,991	9,872	21,764,014
1981	10,267,182	10,267	22,635,262
1982	8,420,174	8,420	18,563,306
1983	7,963,654	7,964	17,556,852
1984	7,635,154	7,635	16,832,634
1985	6,005,368	6,005	13,239,571
1986	4,639,424	4,639	10,228,178
1987	4,482,744	4,483	9,882,759
1988	3,932,070	3,932	8,668,730
1989	3,846,934	3,847	8,481,037
1990	3,963,522	3,964	8,738,070
1991	4,782,778	4,783	10,544,219
1992	3,815,484	3,815	8,411,703
1993	3,010,421	3,010	6,636,841
1994	2,128,170	2,128	4,691,812
1995	2,592,852	2,593	5,716,260
1996	2,783,615	2,784	6,136,821
1997	3,550,322	3,550	7,827,121
1998	3,137,744	3,138	6,917,542
1999	3,348,628	3,349	7,382,461
2000	3,703,923	3,704	8,165,753
2001	4,557,040	4,557	10,046,554
2002	3,085,135	3,085	6,801,559
2003	2,307,742	2,308	5,087,700
2004	1,641,514	1,642	3,618,919
2005	1,322,143	1,322	2,914,827
2006	1,720,608	1,721	3,793,290
2007	1,626,428	1,626	3,585,660
2008	1,112,929	1,113	2,453,588
2009	270,826	271	597,070
2010	173,709	174	382,962
2011	149,669	150	329,963
2012	134,386	134	296,270
2013	857,029	857	1,889,426
2014	658,436	658	1,451,603
2015	653,780	654	1,441,338
2016	519,268	519	1,144,790

Table: Southern New England – Mid-Atlantic Winter Flounder commercial landings by State from 1964 to 2016

YEAR	ME	NH	MA	RI	CT	NY	NJ	DE	MD	VA	NC	Total
1964	0.000	0.000	4767.066	1847.473	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6614.539
1965	0.020	0.000	6067.228	1656.151	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7723.400
1966	0.000	0.000	7815.683	1918.982	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9734.664
1967	0.000	0.000	5354.712	1740.378	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7095.090
1968	0.227	0.000	3632.556	1500.464	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5133.247
1969	0.000	0.000	4735.498	1933.108	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6668.606
1970	0.000	0.000	4742.534	2258.610	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7001.144
1971	0.000	0.000	4005.174	2099.840	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6105.013
1972	0.000	0.000	2667.922	1777.876	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4445.799
1973	0.000	0.000	2728.583	1850.336	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4578.919
1974	0.000	0.000	2625.214	1208.947	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3834.161
1975	0.000	0.000	2731.034	937.531	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3668.565
1976	0.000	0.000	2078.216	798.144	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2876.360
1977	0.397	0.000	2498.026	1394.313	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3892.736
1978	0.000	0.000	3532.541	2121.234	0.000	0.000	92.780	0.000	0.000	0.000	0.000	5746.555
1979	3.629	0.000	3388.394	2361.724	0.000	0.000	94.836	0.000	0.000	0.000	0.000	5848.582
1980	0.020	0.000	6235.532	3569.518	0.000	0.000	66.920	0.000	0.000	0.000	0.000	9871.991
1981	4.850	0.000	6316.261	3710.764	0.000	0.000	235.307	0.000	0.000	0.000	0.000	10267.182
1982	0.005	0.000	4875.364	3422.720	0.000	0.000	118.798	0.000	0.078	3.210	0.000	8420.174
1983	7.153	0.000	4814.347	2990.087	0.000	0.000	141.607	0.000	0.053	10.407	0.000	7963.654
1984	3.735	0.000	4375.784	3160.101	0.000	0.000	86.819	0.000	0.472	8.243	0.000	7635.154
1985	0.000	0.000	2959.369	2816.740	0.000	0.000	214.306	0.000	0.921	14.032	0.000	6005.368
1986	0.519	0.000	2187.736	1854.097	0.000	406.857	168.104	0.000	0.030	22.081	0.000	4639.424
1987	1.748	0.000	2159.920	1659.229	0.000	556.460	103.234	0.000	0.000	2.152	0.000	4482.744
1988	0.355	0.000	2001.693	1108.751	0.000	697.721	114.305	0.000	0.101	9.144	0.000	3932.070
1989	0.012	0.000	1929.334	1255.952	0.000	496.734	157.319	0.000	1.212	6.369	0.000	3846.934
1990	2.548	0.000	2393.937	1228.156	0.000	232.434	101.576	0.000	0.196	4.676	0.000	3963.522
1991	0.141	0.000	3062.000	1138.630	0.000	461.635	115.047	0.000	0.168	5.157	0.000	4782.778
1992	1.233	0.000	2089.512	957.753	0.000	632.635	128.627	0.000	0.700	5.024	0.000	3815.484
1993	0.132	0.000	1761.439	618.754	0.000	503.428	113.161	0.000	0.793	12.714	0.000	3010.421
1994	0.122	0.000	1188.202	468.278	0.000	324.752	142.957	0.000	1.606	2.254	0.000	2128.170
1995	0.046	0.187	1470.574	456.606	164.221	235.457	261.393	0.000	2.246	2.122	0.000	2592.852
1996	0.007	0.012	1814.556	504.617	163.938	231.889	66.517	0.000	1.740	0.340	0.000	2783.615
1997	0.189	0.037	2472.409	561.682	193.741	258.413	63.155	0.000	0.206	0.466	0.024	3550.322
1998	0.082	0.000	1981.444	543.235	200.635	347.764	61.829	0.001	2.030	0.565	0.159	3137.744
1999	0.188	0.002	2096.571	519.132	165.736	323.864	241.463	0.000	1.322	0.351	0.000	3348.628
2000	5.696	0.000	2019.012	780.546	186.119	458.272	252.274	0.000	1.699	0.306	0.000	3703.923
2001	0.553	0.218	2979.556	630.632	170.392	511.254	261.203	0.000	3.035	0.197	0.000	4557.040
2002	17.950	0.069	2016.499	537.742	115.936	283.657	112.782	0.000	0.400	0.101	0.000	3085.135
2003	4.598	0.000	1378.282	415.541	98.862	202.668	207.658	0.001	0.133	0.000	0.000	2307.742
2004	3.366	0.003	922.396	307.636	90.647	149.776	167.063	0.000	0.489	0.139	0.000	1641.514
2005	1.929	0.000	786.219	281.635	53.041	69.336	122.687	0.000	7.260	0.038	0.000	1322.143
2006	21.226	0.474	736.325	535.974	54.716	158.750	184.912	0.000	28.231	0.000	0.000	1720.608
2007	33.840	0.002	686.632	503.793	14.318	186.526	194.276	0.001	5.055	1.985	0.000	1626.428
2008	20.319	0.006	586.491	272.312	45.370	74.544	107.415	0.000	6.460	0.014	0.000	1112.929
2009	0.000	0.001	110.409	80.475	12.278	40.002	24.208	0.000	3.454	0.000	0.000	270.826
2010	0.000	0.000	146.077	14.558	5.991	4.573	2.509	0.000	0.000	0.000	0.001	173.709
2011	0.002	0.001	81.838	14.482	4.642	3.103	3.166	0.000	42.094	0.341	0.000	149.669
2012	0.002	0.000	98.030	10.753	19.334	5.284	0.850	0.076	0.000	0.057	0.000	134.386
2013	5.514	0.000	531.898	183.404	50.235	57.855	22.474	0.000	0.153	5.500	0.000	857.033
2014	0.527	0.000	402.176	206.303	16.138	26.361	6.902	0.029	0.000	0.000	0.000	658.436
2015	0.000	0.000	393.931	166.624	19.285	62.276	1.926	0.000	0.828	0.286	8.625	653.781
2016	0.000	0.000	277.042	142.906	38.488	57.537	1.541	0.000	0.000	0.000	1.756	519.270

Table: Southern New England – Mid-Atlantic Winter Flounder commercial discards 1981-1993 calculated using mesh selection methodology. Assumes 50% discard mortality.

Year	Metric tons	Numbers 000s
1981	1,343	5,123
1982	1,149	4,271
1983	1,311	5,251
1984	986	3,936
1985	1,534	4,531
1986	1,273	4,902
1987	950	3,545
1988	904	3,729
1989	1,404	5,761
1990	673	2,567
1991	784	2,700
1992	511	1,812
1993	457	1,580

Table: Southern New England – Mid-Atlantic Winter Flounder commercial discards 1994-2016 calculated using SBRM. Assumes 50% discard mortality.

Year	Fishery	Live (MT)	Dead (MT)
1994	Trawl	650	325
	Scallop	32	16
1995	Trawl	261	131
	Scallop	57	29
1996	Trawl	138	59
	Scallop	212	106
1997	Trawl	105	53
	Scallop	449	225
1998	Trawl	230	115
	Scallop	116	58
1999	Trawl	38	19
	Scallop	86	43
2000	Trawl	137	59
	Scallop	159	80
2001	Trawl	39	20
	Scallop	17	9
2002	Trawl	108	54
	Scallop	78	39
2003	Trawl	69	35
	Scallop	201	101
2004	Trawl	137	69
	Scallop	31	16
2005	Trawl	127	64
	Scallop	83	42
2006	Trawl	199	100
	Scallop	103	52
2007	Trawl	151	76
	Scallop	77	39
2008	Trawl	113	57
	Scallop	104	52
2009	Trawl	270	135
	Scallop	60	30
2010	Trawl	193	97
	Scallop	112	56
2011	Trawl	510	255
	Scallop	86	43
2012	Trawl	805	403
	Scallop	137	69
2013	Trawl	256	128
	Scallop	156	78
2014	Trawl	66	33
	Scallop	61	31
2015	Trawl	76	38
	Scallop	88	44
2016	Trawl	149	75

Table: Southern New England – Mid-Atlantic Winter Flounder recreational landings (A+B1) and discards (B2) from 1981-2016 from MRIP. Assumes 15% discard mortality.

Year	A+B1	B2	15%B2
1981	8253	3007	451
1982	8216	2163	324
1983	8295	2699	405
1984	12441	4968	745
1985	13086	4785	718
1986	7001	2337	351
1987	6857	2342	351
1988	7354	2811	422
1989	3799	2297	345
1990	2487	1359	204
1991	2808	1539	231
1992	809	550	83
1993	1879	1305	155
1994	1203	864	80
1995	1348	792	119
1996	1607	1049	157
1997	1220	701	105
1998	584	425	64
1999	658	412	62
2000	1401	727	109
2001	892	528	79
2002	408	299	45
2003	572	189	28
2004	344	98	15
2005	215	269	40
2006	273	318	48
2007	215	74	11
2008	76	42	6
2009	113	140	21
2010	56	95	14
2011	113	127	19
2012	53	44	7
2013	10	36	6
2014	38	22	3
2015	10	15	2
2016	33	14	2

Table: Southern New England – Mid-Atlantic Winter Flounder mean weight at age.

Year	Age1	Age2	Age3	Age4	Age5	Age6	Age7
1981	0.129	0.274	0.477	0.798	1.063	1.242	1.196
1982	0.092	0.263	0.440	0.697	1.052	1.257	1.840
1983	0.197	0.237	0.354	0.517	0.768	1.047	1.552
1984	0.148	0.261	0.370	0.546	0.695	0.915	1.284
1985	0.111	0.282	0.364	0.482	0.522	0.467	0.613
1986	0.129	0.292	0.398	0.480	0.685	0.879	0.961
1987	0.046	0.287	0.384	0.551	0.475	0.564	0.853
1988	0.039	0.279	0.351	0.508	0.634	0.517	0.827
1989	0.118	0.258	0.378	0.508	0.660	0.716	1.073
1990	0.082	0.295	0.394	0.525	0.672	0.808	0.990
1991	0.093	0.317	0.420	0.534	0.603	0.823	1.168
1992	0.079	0.287	0.427	0.599	0.802	0.945	1.395
1993	0.169	0.334	0.460	0.592	0.689	0.878	1.167
1994	0.311	0.430	0.473	0.564	0.750	0.985	1.281
1995	0.267	0.420	0.470	0.559	0.789	1.089	1.741
1996	0.136	0.380	0.464	0.607	0.824	0.851	1.085
1997	0.245	0.443	0.515	0.644	0.771	0.957	1.477
1998	0.196	0.362	0.465	0.568	0.665	1.090	1.116
1999	0.136	0.359	0.439	0.524	0.684	0.903	1.147
2000	0.106	0.407	0.492	0.622	0.729	0.975	1.079
2001	0.089	0.436	0.519	0.640	0.783	1.051	1.234
2002	0.135	0.372	0.499	0.617	0.747	0.927	1.143
2003	0.167	0.426	0.517	0.672	0.854	1.000	1.135
2004	0.094	0.384	0.549	0.619	0.786	0.945	1.251
2005	0.129	0.342	0.488	0.675	0.834	1.013	1.318
2006	0.118	0.379	0.468	0.652	0.872	1.065	1.289
2007	0.065	0.388	0.472	0.631	0.856	1.107	1.641
2008	0.110	0.355	0.479	0.598	0.755	0.937	1.275
2009	0.126	0.326	0.434	0.594	0.757	1.006	0.941
2010	0.127	0.329	0.505	0.615	0.766	0.899	1.075
2011	0.099	0.306	0.456	0.604	0.781	1.033	1.259
2012	0.093	0.312	0.496	0.650	0.801	0.942	1.211
2013	0.119	0.379	0.537	0.691	0.846	0.949	1.184
2014	0.119	0.420	0.556	0.706	0.792	0.879	1.038
2015	0.131	0.430	0.644	0.787	0.939	0.973	1.060
2016	0.115	0.377	0.471	0.759	0.881	0.882	1.067

Table: Southern New England – Mid-Atlantic Winter Flounder SSB weight at age.

Year	Age1	Age2	Age3	Age4	Age5	Age6	Age7
1981	0.102	0.234	0.420	0.728	1.005	1.179	1.196
1982	0.067	0.207	0.376	0.614	0.959	1.189	1.840
1983	0.179	0.173	0.321	0.490	0.744	1.049	1.552
1984	0.119	0.238	0.319	0.473	0.630	0.863	1.284
1985	0.080	0.228	0.326	0.441	0.530	0.533	0.613
1986	0.099	0.212	0.355	0.438	0.609	0.739	0.961
1987	0.025	0.220	0.351	0.494	0.477	0.602	0.853
1988	0.021	0.153	0.328	0.463	0.605	0.503	0.827
1989	0.087	0.137	0.342	0.449	0.605	0.688	1.073
1990	0.052	0.217	0.342	0.471	0.612	0.755	0.990
1991	0.064	0.202	0.373	0.483	0.576	0.769	1.168
1992	0.049	0.197	0.387	0.532	0.700	0.814	1.395
1993	0.124	0.207	0.393	0.531	0.658	0.852	1.167
1994	0.281	0.315	0.421	0.527	0.693	0.874	1.281
1995	0.237	0.380	0.456	0.529	0.706	0.962	1.741
1996	0.092	0.338	0.449	0.557	0.724	0.830	1.085
1997	0.215	0.299	0.465	0.577	0.712	0.910	1.477
1998	0.160	0.318	0.458	0.550	0.658	0.971	1.116
1999	0.094	0.293	0.412	0.504	0.643	0.815	1.147
2000	0.066	0.283	0.443	0.554	0.653	0.866	1.079
2001	0.055	0.272	0.479	0.586	0.725	0.930	1.234
2002	0.092	0.231	0.477	0.582	0.710	0.876	1.143
2003	0.127	0.290	0.463	0.609	0.766	0.907	1.135
2004	0.061	0.291	0.505	0.583	0.746	0.914	1.251
2005	0.090	0.222	0.451	0.630	0.755	0.931	1.318
2006	0.079	0.265	0.422	0.592	0.801	0.982	1.289
2007	0.037	0.261	0.439	0.571	0.782	1.022	1.641
2008	0.077	0.202	0.447	0.553	0.711	0.909	1.275
2009	0.092	0.227	0.406	0.553	0.700	0.914	0.941
2010	0.093	0.239	0.436	0.548	0.704	0.849	1.075
2011	0.068	0.228	0.409	0.569	0.721	0.935	1.259
2012	0.058	0.213	0.422	0.578	0.729	0.885	1.211
2013	0.078	0.237	0.448	0.619	0.775	0.897	1.184
2014	0.078	0.276	0.489	0.644	0.757	0.868	1.038
2015	0.092	0.280	0.559	0.701	0.854	0.909	1.060
2016	0.074	0.265	0.457	0.719	0.849	0.901	1.067

Table: Southern New England – Mid-Atlantic Winter Flounder Jan-1 weight at age.

Year	Age1	Age2	Age3	Age4	Age5	Age6	Age7
1981	0.09	0.216	0.395	0.695	0.978	1.149	1.196
1982	0.057	0.184	0.347	0.577	0.916	1.156	1.84
1983	0.171	0.148	0.305	0.477	0.732	1.05	1.552
1984	0.107	0.227	0.296	0.44	0.599	0.838	1.284
1985	0.068	0.204	0.308	0.422	0.534	0.57	0.613
1986	0.087	0.18	0.335	0.418	0.575	0.677	0.961
1987	0.019	0.192	0.335	0.468	0.478	0.622	0.853
1988	0.015	0.113	0.317	0.442	0.591	0.496	0.827
1989	0.075	0.1	0.325	0.422	0.579	0.674	1.073
1990	0.042	0.187	0.319	0.446	0.584	0.73	0.99
1991	0.053	0.161	0.352	0.459	0.563	0.744	1.168
1992	0.038	0.163	0.368	0.502	0.654	0.755	1.395
1993	0.106	0.162	0.363	0.503	0.642	0.839	1.167
1994	0.268	0.27	0.398	0.509	0.666	0.824	1.281
1995	0.224	0.361	0.45	0.514	0.667	0.904	1.741
1996	0.075	0.319	0.442	0.534	0.679	0.819	1.085
1997	0.202	0.246	0.442	0.547	0.684	0.888	1.477
1998	0.145	0.298	0.454	0.541	0.654	0.917	1.116
1999	0.079	0.265	0.399	0.494	0.623	0.775	1.147
2000	0.052	0.235	0.42	0.523	0.618	0.817	1.079
2001	0.044	0.215	0.46	0.561	0.698	0.875	1.234
2002	0.076	0.182	0.466	0.566	0.691	0.852	1.143
2003	0.11	0.24	0.439	0.579	0.726	0.864	1.135
2004	0.049	0.253	0.484	0.566	0.727	0.898	1.251
2005	0.075	0.179	0.433	0.609	0.719	0.892	1.318
2006	0.065	0.221	0.4	0.564	0.767	0.942	1.289
2007	0.028	0.214	0.423	0.543	0.747	0.983	1.641
2008	0.064	0.152	0.431	0.531	0.69	0.896	1.275
2009	0.078	0.189	0.393	0.533	0.673	0.872	0.941
2010	0.079	0.204	0.406	0.517	0.675	0.825	1.075
2011	0.0558	0.1971	0.3873	0.5523	0.693	0.8895	1.259
2012	0.0461	0.1757	0.3896	0.5444	0.6956	0.8577	1.211
2013	0.0633	0.1877	0.4093	0.5854	0.7416	0.8719	1.184
2014	0.0633	0.2236	0.459	0.6157	0.7398	0.8623	1.038
2015	0.077	0.226	0.520	0.662	0.814	0.878	1.06
2016	0.059	0.222	0.450	0.699	0.833	0.910	1.067

Table: Southern New England – Mid-Atlantic Winter Flounder mean numbers per tow NEFSC Spring bottom trawl survey.

				Age							
	1	2	3	4	5	6	7	Total	CV	Lower	Upper
1981	0.740	4.277	3.891	0.452	0.098	0.007	0.016	9.482	0.198	6.668	12.678
1982	1.111	2.605	1.150	0.348	0.117	0.044	0.032	5.412	0.208	3.517	7.307
1983	0.400	0.840	1.801	0.871	0.584	0.319	0.126	4.940	0.203	3.380	6.598
1984	0.171	1.518	1.458	0.525	0.254	0.147	0.103	4.173	0.117	3.441	4.996
1985	0.424	1.280	2.074	0.480	0.231	0.193	0.148	4.830	0.197	3.339	6.430
1986	0.074	0.382	1.187	0.287	0.144	0.047	0.026	2.151	0.229	1.318	2.905
1987	0.176	0.534	0.624	0.230	0.032	0.015	0.040	1.654	0.218	1.083	2.271
1988	0.068	0.451	0.963	0.349	0.139	0.043	0.021	2.050	0.192	1.400	2.722
1989	0.095	0.759	0.872	0.269	0.107	0.002	0.009	2.136	0.341	1.123	3.407
1990	0.197	0.501	1.062	0.284	0.071	0.031	0.000	2.190	0.360	1.113	3.717
1991	0.106	0.528	1.200	0.410	0.053	0.013	0.029	2.339	0.134	1.830	2.871
1992	0.166	0.270	0.653	0.349	0.051	0.010	0.000	1.523	0.265	0.920	2.230
1993	0.143	0.379	0.225	0.117	0.045	0.005	0.011	0.947	0.203	0.640	1.281
1994	0.202	0.793	0.460	0.101	0.018	0.018	0.014	1.609	0.270	0.936	2.359
1995	0.170	0.839	0.853	0.205	0.035	0.003	0.006	2.111	0.240	1.317	2.966
1996	0.077	0.496	0.769	0.173	0.074	0.015	0.000	1.603	0.141	1.232	1.947
1997	0.122	0.436	0.672	0.184	0.067	0.008	0.000	1.508	0.203	1.009	2.037
1998	0.298	1.263	0.601	0.361	0.110	0.010	0.000	2.644	0.220	1.710	3.671
1999	0.451	1.970	1.351	0.369	0.092	0.039	0.020	4.292	0.171	3.059	5.566
2000	0.297	0.787	1.172	0.724	0.236	0.087	0.022	3.326	0.288	1.892	5.011
2001	0.200	0.309	0.523	0.450	0.182	0.023	0.004	1.690	0.137	1.320	2.093
2002	0.047	0.612	0.510	0.283	0.213	0.100	0.041	1.805	0.190	1.301	2.414
2003	0.117	0.086	0.331	0.099	0.057	0.040	0.016	0.746	0.119	0.604	0.891
2004	0.309	0.182	0.176	0.312	0.120	0.034	0.047	1.180	0.283	0.680	1.761
2005	0.093	0.525	0.108	0.196	0.058	0.029	0.012	1.019	0.289	0.568	1.525
2006	0.330	0.727	0.602	0.151	0.080	0.027	0.000	1.917	0.194	1.326	2.503
2007	0.056	0.173	0.336	0.212	0.049	0.016	0.029	0.871	0.192	0.594	1.143
2008	0.182	0.552	0.365	0.179	0.040	0.014	0.001	1.333	0.211	0.901	1.825
2009	0.070	0.252	0.337	0.182	0.201	0.059	0.014	1.129	0.242	0.695	1.595
2010	0.236	0.265	0.341	0.153	0.076	0.025	0.004	1.166	0.162	0.864	1.484
2011	0.062	0.117	0.294	0.139	0.058	0.034	0.011	0.716	0.175	0.514	0.930
2012	0.064	0.260	0.455	0.241	0.138	0.072	0.034	1.263	0.255	0.801	1.839
2013	0.025	0.138	0.120	0.118	0.057	0.029	0.027	0.514	0.255	0.310	0.741
2014	0.184	0.099	0.156	0.094	0.074	0.047	0.032	0.687	0.192	0.488	0.909
2015	0.135	0.109	0.078	0.043	0.032	0.017	0.039	0.456	0.187	0.327	0.611
2016	0.396	0.950	0.443	0.057	0.085	0.037	0.064	2.034	0.250	1.244	2.962

Table: Southern New England – Mid-Atlantic Winter Flounder mean numbers per tow NEFSC Fall bottom trawl survey.

	Age									
	2	3	4	5	6	7+	Total	CV	Lower	Upper
1981	1.236	5.470	2.880	0.570	0.006	0.013	10.176	0.2937	5.0728	15.0024
1982	2.225	5.874	2.459	0.398	0.053	0.048	11.057	0.1981	7.4076	14.5075
1983	0.865	2.291	1.203	0.489	0.062	0.049	4.959	0.181	3.574	6.457
1984	1.795	4.465	2.380	0.645	0.382	0.364	10.031	0.350	5.060	16.365
1985	0.178	0.978	1.248	0.312	0.002	0.030	2.748	0.207	1.893	3.742
1986	0.132	1.065	0.948	0.311	0.057	0.024	2.537	0.192	1.772	3.409
1987	0.249	1.001	0.297	0.039	0.012	0.000	1.597	0.217	1.038	2.196
1988	0.043	0.762	0.391	0.129	0.040	0.000	1.365	0.261	0.828	2.035
1989	0.044	0.332	0.528	0.223	0.034	0.012	1.172	0.170	0.843	1.489
1990	0.319	0.831	0.381	0.061	0.022	0.000	1.613	0.373	0.708	2.747
1991	0.095	1.077	0.913	0.167	0.014	0.001	2.267	0.271	1.298	3.290
1992	0.045	1.149	0.831	0.109	0.015	0.000	2.149	0.214	1.411	2.937
1993	0.194	1.872	0.969	0.254	0.025	0.006	3.320	0.317	1.522	5.107
1994	0.383	0.522	0.348	0.066	0.000	0.003	1.321	0.266	0.756	1.930
1995	0.501	2.542	1.236	0.375	0.063	0.046	4.763	0.230	3.051	6.613
1996	0.399	0.866	0.735	0.115	0.005	0.014	2.133	0.194	1.512	2.856
1997	0.623	1.488	0.941	0.364	0.072	0.002	3.489	0.375	1.364	5.765
1998	1.519	3.954	2.871	0.703	0.080	0.000	9.127	0.305	5.062	14.047
1999	1.446	3.139	2.190	0.463	0.050	0.007	7.295	0.123	5.749	8.727
2000	0.427	1.086	1.795	0.583	0.214	0.032	4.136	0.155	3.100	5.226
2001	0.986	2.244	2.460	0.646	0.169	0.022	6.527	0.229	4.187	9.305
2002	0.516	1.245	1.017	0.350	0.215	0.046	3.387	0.258	2.047	4.897
2003	0.397	4.982	2.819	1.366	0.619	0.236	10.420	0.167	7.625	13.318
2004	0.480	1.086	1.285	0.499	0.130	0.048	3.527	0.217	2.205	4.773
2005	2.212	0.755	0.354	0.350	0.074	0.068	3.812	0.257	2.350	5.534
2006	0.828	2.090	0.942	0.265	0.155	0.099	4.379	0.268	2.660	6.586
2007	0.455	1.586	0.906	0.225	0.071	0.021	3.264	0.276	1.887	4.840
2008	0.675	1.997	1.220	0.193	0.023	0.036	4.144	0.276	2.449	6.262
2009	0.495	0.803	0.846	0.744	0.336	0.095	3.319	0.392	1.521	5.722
2010	0.536	0.914	0.259	0.173	0.099	0.026	2.007	0.254	1.227	2.975
2011	0.477	1.234	0.744	0.254	0.218	0.057	2.984	0.281	1.734	4.470
2012	0.259	0.361	0.350	0.257	0.122	0.178	1.527	0.232	0.985	2.183
2013	0.927	2.242	1.905	0.746	0.187	0.102	6.109	0.472	2.056	11.322
2014	0.042	0.176	0.206	0.170	0.060	0.059	0.713	0.315	0.387	1.154
2015	0.403	0.146	0.127	0.046	0.027	0.022	0.772	0.215	0.502	1.034
2016	0.021	0.614	0.250	0.094	0.014	0.037	1.029	0.353	0.621	2.458

Table: Southern New England – Mid-Atlantic Winter Flounder mean numbers per tow NEFSC Winter bottom trawl survey.

	Age				
	1	2	3	4	5
1981	0	0	0	0	0
1982	0	0	0	0	0
1983	0	0	0	0	0
1984	0	0	0	0	0
1985	0	0	0	0	0
1986	0	0	0	0	0
1987	0	0	0	0	0
1988	0	0	0	0	0
1989	0	0	0	0	0
1990	0	0	0	0	0
1991	0	0	0	0	0
1992	0.73	0.86	1.09	0.73	0.24
1993	0.56	1.16	0.54	0.18	0.12
1994	0.36	1.16	1.76	0.25	0.28
1995	0.04	0.75	1.26	0.17	0
1996	1.01	0.87	1.55	0.32	0.02
1997	0.43	1.49	1.32	0.54	0.13
1998	0.42	3.52	1.95	0.96	0.32
1999	0.84	5.94	2.23	0.96	0.2
2000	0.23	2.82	2.12	0.24	0.16
2001	1.04	0.55	0.7	0.54	0.22
2002	0.08	1.34	0.74	0.15	0.21
2003	0.09	0.57	1.04	0.25	0.22
2004	2.17	1.02	0.43	0.36	0.22
2005	0.39	2.56	0.36	0.43	0.27
2006	0	2.4	1.73	0.51	0.27
2007	0.02	0.56	1.03	1.03	0.13

Table: Southern New England – Mid-Atlantic Winter Flounder mean numbers per tow MADMF Spring bottom trawl survey.

Year	1	2	3	4	5	6	7	Total
1981	8.65	9.07	13.66	9.72	3.81	1.20	1.69	47.80
1982	3.06	11.88	12.72	8.80	2.66	1.07	1.26	41.45
1983	1.71	15.32	17.85	14.11	4.14	2.34	2.66	58.13
1984	1.28	9.59	11.82	10.18	3.35	1.22	0.59	38.03
1985	3.13	9.98	16.48	6.35	2.48	0.75	0.33	39.50
1986	3.27	7.07	19.36	5.69	0.83	0.13	0.43	36.78
1987	9.44	7.74	12.35	6.59	2.21	0.22	0.61	39.16
1988	3.61	7.02	14.66	2.45	0.35	0.07	0.21	28.37
1989	2.26	6.08	12.30	4.68	1.01	0.29	0.78	27.40
1990	4.43	11.73	8.03	2.99	0.40	0.02	0.12	27.72
1991	1.65	2.88	4.90	1.18	0.24	0.13	0.04	11.02
1992	8.06	7.40	6.73	4.21	1.67	0.60	0.29	28.96
1993	16.03	18.75	12.02	2.76	0.65	0.14	0.06	50.41
1994	12.15	17.35	14.96	4.72	0.62	0.59	0.44	50.83
1995	14.31	11.14	8.10	1.93	0.61	0.80	0.48	37.37
1996	4.98	10.12	7.72	2.86	2.00	1.46	1.78	30.92
1997	10.43	9.30	10.27	4.26	1.32	1.00	1.93	38.51
1998	8.62	13.09	7.21	3.51	1.47	1.22	0.75	35.87
1999	9.66	8.00	5.81	1.89	0.21	0.25	0.17	25.99
2000	6.41	7.78	6.68	1.74	1.09	0.46	0.47	24.63
2001	5.47	4.73	2.39	2.02	0.66	0.20	0.33	15.80
2002	0.94	3.00	1.55	0.82	0.29	0.08	0.01	6.69
2003	4.12	3.78	6.15	2.25	1.14	0.24	0.04	17.72
2004	3.46	3.15	1.97	1.67	0.56	0.21	0.12	11.14
2005	14.05	8.42	2.68	1.07	0.59	0.11	0.08	27.00
2006	3.19	9.61	2.98	1.12	0.32	0.20	0.20	17.62
2007	3.69	5.59	5.32	1.63	0.35	0.09	0.02	16.69
2008	3.15	5.14	1.73	0.42	0.13	0.02	0.06	10.65
2009	2.60	6.03	4.09	1.06	0.68	0.06	0.04	14.56
2010	14.20	6.94	5.57	1.74	0.93	0.40	0.07	29.85
2011	1.47	3.02	2.69	0.83	0.43	0.21	0.05	8.70
2012	2.52	3.45	3.15	0.89	0.46	0.24	0.15	10.85
2013	0.65	2.43	1.92	1.05	0.22	0.23	0.12	6.62
2014	2.43	2.23	1.39	0.55	0.27	0.15	0.19	7.20
2015	2.43	3.18	2.27	1.02	0.10	0.10	0.10	9.19
2016	6.99	4.48	2.55	0.77	0.19	0.05	0.11	15.14

Table: Southern New England – Mid-Atlantic Winter Flounder mean numbers per tow RIDFW Spring bottom trawl survey.

				Age				
	1	2	3	4	5	6	7+	Total
1981	45.67	27.88	12.86	1.27	0.23	0.05	0.02	87.98
1982	13.42	9.74	5.02	2.31	0.33	0.11	0.02	30.95
1983	29.49	9.79	10.98	6.00	2.13	0.56	0.00	58.95
1984	6.67	16.79	13.94	2.96	0.83	0.35	0.10	41.64
1985	6.01	15.69	10.35	2.24	0.60	0.08	0.01	34.98
1986	11.94	15.63	9.59	2.63	1.14	0.09	0.00	41.02
1987	15.30	24.59	13.14	2.66	0.41	0.08	0.04	56.22
1988	8.93	12.37	9.53	2.92	0.68	0.01	0.00	34.44
1989	4.79	8.20	4.95	2.33	0.51	0.07	0.03	20.88
1990	6.46	6.36	4.88	2.16	0.48	0.04	0.06	20.44
1991	11.21	14.36	12.00	2.78	0.41	0.10	0.11	40.97
1992	1.30	0.95	1.17	0.75	0.20	0.04	0.00	4.41
1993	2.32	0.35	0.17	0.06	0.02	0.00	0.00	2.92
1994	2.84	4.56	1.97	0.63	0.19	0.04	0.03	10.26
1995	9.36	11.36	9.87	1.47	0.13	0.00	0.00	32.19
1996	3.11	8.36	7.47	1.56	0.15	0.03	0.00	20.68
1997	4.90	8.77	6.86	1.48	0.26	0.00	0.00	22.27
1998	2.11	9.47	5.90	1.60	0.13	0.01	0.00	19.22
1999	1.71	6.52	4.26	0.82	0.09	0.06	0.00	13.46
2000	2.88	4.98	5.51	2.19	0.66	0.10	0.00	16.32
2001	2.46	3.47	3.67	2.23	0.63	0.02	0.01	12.49
2002	1.60	4.76	3.21	1.24	0.54	0.15	0.06	11.56
2003	1.72	0.86	1.76	0.50	0.30	0.28	0.14	5.56
2004	5.47	3.97	1.03	0.44	0.12	0.09	0.04	11.16
2005	8.86	2.41	1.73	1.38	0.79	0.43	0.14	15.74
2006	2.07	4.72	5.24	2.24	0.74	0.30	0.05	15.36
2007	1.19	1.12	2.03	1.62	0.86	0.43	0.08	7.33
2008	3.29	1.00	1.00	1.12	0.67	0.22	0.06	7.36
2009	0.37	1.17	0.80	0.70	0.47	0.12	0.04	3.67
2010	3.24	2.68	3.13	1.24	1.06	0.18	0.03	11.56
2011	1.46	1.66	2.58	1.13	0.45	0.21	0.04	7.53
2012	2.90	2.03	4.47	2.22	1.37	0.49	0.39	13.87
2013	0.56	0.57	0.97	0.96	0.38	0.16	0.06	3.66
2014	0.83	0.33	0.88	0.65	0.51	0.32	0.20	3.72
2015	1.34	0.49	0.33	0.24	0.14	0.10	0.15	2.79
2016	2.33	2.33	1.42	0.16	0.17	0.09	0.19	6.70

Table: Southern New England – Mid-Atlantic Winter Flounder mean numbers per tow CTDEP Spring bottom trawl survey.

Year	Total	Age 1	Age 2	Age 3	Age 4	Age 5	Age 6	Age 7+
1981	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0
1984	111.96	8.21	44.01	31.83	20.96	4.23	1.23	1.49
1985	83.57	4.11	28.46	32.88	14.17	2.33	0.82	0.8
1986	63.65	6.69	26	15.53	12.26	2.05	0.5	0.62
1987	79.93	7.32	44.69	14.56	5.05	6.55	1.28	0.48
1988	137.59	14.49	71.87	39.1	8.59	1.83	1.46	0.25
1989	148.19	13.56	78.43	41.23	10.85	2.84	0.98	0.3
1990	223.09	11.31	131.52	64.97	8.97	4.09	1.96	0.27
1991	150.21	8.52	66.99	60.39	9.31	4.05	0.8	0.15
1992	61.38	6.8	31.32	12.78	8.97	1.1	0.36	0.05
1993	63.59	19.11	19.87	15.46	4.81	3.24	0.8	0.3
1994	84.45	9.57	64.14	5.86	3.01	1.14	0.49	0.24
1995	50.12	14.35	23.69	9.77	1.36	0.63	0.2	0.12
1996	110.61	11.46	59.07	24.17	14.41	0.97	0.28	0.25
1997	71.31	12.53	25.53	19.41	9.45	3.76	0.51	0.12
1998	72.9	11.22	32.4	12.23	12.67	3.15	0.99	0.24
1999	41.35	6.56	12.42	11.27	6.09	3.2	1.14	0.67
2000	45.42	7.11	16.66	8.4	7.7	3.42	1.53	0.6
2001	54.51	8.45	19.6	10.85	8.06	5.46	1.28	0.81
2002	43.72	6.27	19.9	9.56	4.43	1.95	1.02	0.59
2003	27.84	2.47	7.83	8.71	4.79	1.95	0.77	1.32
2004	20.46	6.34	3.84	3.49	3.88	1.91	0.64	0.36
2005	16.1	7.06	6.18	0.84	0.81	0.67	0.21	0.33
2006	5.58	1.14	2.6	1.1	0.19	0.14	0.17	0.24
2007	28.66	2.98	10.83	10.7	3.1	0.61	0.15	0.29
2008	24.12	11.48	3.48	4.19	4.12	0.65	0.12	0.08
2009	22.59	7.56	11.21	1.02	1.31	1.21	0.22	0.11
2010	20.88	6.64	8.45	3.94	0.71	0.57	0.44	0.13
2011	27.95	6.54	9.34	6.53	3.66	1.15	0.30	0.43
2012	15.80	4.84	5.61	2.51	1.97	0.62	0.09	0.14
2013	10.08	0.61	3.50	1.94	1.96	1.33	0.48	0.26
2014	5.92	0.85	0.64	2.08	1.36	0.62	0.26	0.13
2015	3.94	0.89	0.84	0.29	0.64	0.65	0.22	0.41
2016	3.98	0.93	0.73	1.00	0.79	0.40	0.08	0.05

Table: Southern New England – Mid-Atlantic Winter Flounder mean numbers per tow NJDFW Ocean bottom trawl survey.

				age				
Year	1	2	3	4	5	6	7+	Total
1993	5.10	6.50	2.50	2.40	1.70	0.40	0.57	19.17
1994	3.70	4.20	3.90	1.40	0.40	0.30	0.16	14.06
1995	8.00	10.10	8.60	2.40	0.90	0.30	0.11	30.41
1996	0.60	2.90	2.60	1.90	0.90	0.30	0.20	9.40
1997	16.60	5.40	6.10	6.00	1.50	0.30	0.12	36.02
1998	4.50	3.90	4.80	3.30	1.20	0.40	0.10	18.20
1999	2.40	2.20	5.90	3.10	2.90	0.70	0.59	17.79
2000	0.70	0.30	2.10	3.30	2.00	0.90	0.80	10.10
2001	3.90	0.60	1.30	2.70	3.80	0.70	0.83	13.83
2002	5.81	3.21	4.55	2.22	2.80	2.16	1.83	22.58
2003	2.08	1.10	4.79	1.24	1.09	0.87	1.35	12.52
2004	6.48	0.72	1.42	2.08	0.56	1.38	1.57	14.21
2005	4.97	10.04	2.55	2.76	2.61	1.32	1.42	25.67
2006	0.64	2.49	9.43	3.23	0.62	0.75	0.97	18.13
2007	3.80	0.67	4.33	6.09	1.51	0.62	1.56	18.58
2008	5.57	1.59	0.83	1.75	1.69	0.21	0.37	12.01
2009	2.84	4.35	3.54	1.34	1.48	0.33	0.10	13.98
2010	0.75	1.59	2.63	1.50	0.94	0.37	0.21	7.99
2011	0.54	1.04	3.68	2.03	0.58	0.45	0.35	8.67
2012	0.15	3.30	3.00	2.34	1.38	0.11	0.72	11.00
2013	0.11	1.28	1.66	1.73	1.24	0.37	0.51	6.90
2014	2.00	0.37	0.58	0.43	0.52	0.17	0.20	4.27
2015	6.13	1.05	0.16	0.64	0.39	0.60	0.76	9.75
2016	5.00	0.86	0.13	0.52	0.32	0.49	0.62	7.95

Table: Southern New England – Mid-Atlantic Winter Flounder mean numbers per tow NJDFW River bottom trawl survey.

Year	Total	Age 1	Age 2	Age 3	Age 4	Age 5	Age 6	Age 7
1981	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0	0
1995	2.82	0.6	0.3	1.4	0.4	0.1	0.01	0.01
1996	3.05	0.3	0.9	0.7	0.7	0.2	0.1	0.15
1997	3.35	1.1	0.4	0.9	0.4	0.4	0.1	0.05
1998	4.25	1.9	0.9	0.4	0.7	0.2	0.1	0.05
1999	3.23	0.2	0.5	1.4	0.5	0.4	0.1	0.13
2000	2.11	0.4	0.2	0.4	0.8	0.2	0.1	0.01
2001	2.84	1.4	0.3	0.2	0.4	0.4	0.1	0.04
2002	2.8	1.21	0.48	0.49	0.18	0.27	0.13	0.04
2003	1.57	0.05	0.22	0.9	0.18	0.03	0.1	0.09
2004	1.27	0.67	0.02	0.1	0.29	0.05	0	0.14
2005	1.17	0.42	0.24	0.17	0.2	0.09	0.02	0.03
2006	0	0	0	0	0	0	0	0
2007	0	0	0	0	0	0	0	0
2008	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0
2010	0	0	0	0	0	0	0	0
2011	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0
2013	0	0	0	0	0	0	0	0
2014	0	0	0	0	0	0	0	0

Table: Southern New England – Mid-Atlantic Winter Flounder mean numbers per tow URIGSO bottom trawl survey.

				Age				
	1	2	3	4	5	6	7+	Total
1985	2.09	18.31	12.15	1.94	0.56	0.00	0.00	35.05
1986	6.87	13.85	4.23	0.83	0.08	0.02	0.00	25.88
1987	16.69	35.86	10.75	1.54	0.20	0.02	0.00	65.06
1988	22.35	24.00	7.82	0.95	0.04	0.00	0.06	55.22
1989	19.74	24.18	2.40	0.93	0.12	0.03	0.01	47.41
1990	6.22	10.33	2.18	0.75	0.10	0.00	0.04	19.62
1991	7.81	5.84	2.55	0.47	0.07	0.05	0.00	16.79
1992	5.81	4.17	1.35	0.47	0.08	0.01	0.00	11.89
1993	9.03	8.76	0.90	0.30	0.06	0.02	0.00	19.07
1994	4.52	6.22	1.50	0.17	0.02	0.01	0.00	12.44
1995	34.71	13.64	7.26	1.38	0.21	0.26	0.17	57.63
1996	14.22	19.68	5.41	1.11	0.43	0.25	0.11	41.21
1997	18.06	15.55	6.97	1.56	0.41	0.24	0.36	43.15
1998	7.50	13.73	3.90	1.25	0.31	0.21	0.07	26.97
1999	7.08	3.07	2.07	0.72	0.09	0.15	0.06	13.24
2000	7.47	3.77	2.28	0.82	0.11	0.14	0.05	14.64
2001	4.10	0.90	0.27	0.11	0.02	0.03	0.01	5.44
2002	5.39	3.18	0.99	0.34	0.06	0.01	0.00	9.97
2003	14.16	4.30	0.82	0.26	0.12	0.03	0.01	19.70
2004	18.36	6.47	0.50	0.32	0.09	0.04	0.02	25.80
2005	23.59	6.31	0.66	0.16	0.03	0.00	0.00	30.75
2006	5.20	4.04	1.22	0.34	0.03	0.01	0.00	10.84
2007	4.41	2.88	0.95	0.24	0.06	0.00	0.00	8.54
2008	18.74	7.41	0.72	0.15	0.01	0.00	0.00	27.03
2009	3.65	5.92	1.65	0.21	0.11	0.01	0.00	11.55
2010	7.73	3.16	1.10	0.25	0.05	0.02	0.00	12.31
2011	2.10	1.42	1.16	0.26	0.08	0.03	0.01	5.05
2012	3.09	0.68	0.24	0.12	0.01	0.00	0.01	4.15
2013	1.06	0.41	0.20	0.14	0.05	0.02	0.01	1.87
2014	0.92	0.16	0.12	0.05	0.03	0.02	0.00	1.29
2015	1.03	0.32	0.12	0.04	0.01	0.01	0.03	1.56
2016	2.91	0.95	0.21	0.01	0.01	0.01	0.01	4.10

Table: Southern New England – Mid-Atlantic Winter Flounder mean numbers per tow for recruitment (Age 0) indices

Year	MADMF	CTDEP
1981	0.43	0.00
1982	0.34	0.00
1983	0.37	0.00
1984	0.23	0.00
1985	0.32	0.00
1986	0.34	0.00
1987	0.33	0.00
1988	0.27	0.00
1989	0.18	15.46
1990	0.42	1.90
1991	0.33	2.85
1992	0.27	5.23
1993	0.29	11.90
1994	0.07	5.61
1995	0.15	14.23
1996	0.15	10.10
1997	0.22	19.22
1998	0.39	7.47
1999	0.17	9.24
2000	0.20	8.70
2001	0.35	4.33
2002	0.21	1.34
2003	0.10	3.06
2004	0.20	8.07
2005	0.10	10.96
2006	0.08	5.63
2007	0.16	0.93
2008	0.17	4.73
2009	0.09	1.97
2010	0.08	0.78
2011	0.09	0.96
2012	0.25	1.12
2013	0.14	0.29
2014	0.25	0.27
2015	0.19	0.47
2016	0.13	0.64

Table: Spawning stock biomass, fishing mortality and recruitment time-series from the 2015 Southern New England – Mid-Atlantic winter flounder operational ASAP assessment.

Year	SSB (MT)	F	Recruits (000s)
1981	21020	0.65	68685
1982	22154	0.54	60952
1983	19713	0.64	63254
1984	17162	0.77	42165
1985	12155	1.02	36738
1986	9765	0.8	42796
1987	7963	0.95	35216
1988	6551	1.08	34456
1989	5724	0.98	34108
1990	5751	0.82	20372
1991	6055	0.96	15478
1992	5308	0.82	17281
1993	4252	0.88	25443
1994	4359	0.53	18911
1995	6318	0.47	25525
1996	7082	0.46	20751
1997	8355	0.47	29271
1998	8645	0.4	22820
1999	9190	0.4	15964
2000	10011	0.48	13262
2001	9374	0.6	15640
2002	7188	0.54	7646
2003	6628	0.48	7562
2004	5919	0.41	15520
2005	5386	0.34	13393
2006	5844	0.39	7393
2007	6710	0.36	6157
2008	5801	0.28	9140
2009	5178	0.12	7075
2010	5878	0.07	6532
2011	6932	0.1	4873
2012	6964	0.12	4464
2013	6763	0.21	2390
2014	5661	0.19	4102
2015	5090	0.2	5742
2016	4360	0.21	7549

Table: Abundance at age (000s) from the 2017 Southern New England – Mid-Atlantic winter flounder operational ASAP assessment.

Year	Age							Total
	1	2	3	4	5	6	7+	
1981	68,685	54,196	38,313	13,961	3,705	797	553	180,209
1982	60,952	50,565	34,147	17,119	5,453	1,447	544	170,227
1983	63,254	44,916	32,663	16,492	7,379	2,350	883	167,937
1984	42,165	46,574	28,401	14,759	6,533	2,923	1,324	142,679
1985	36,738	31,004	28,453	11,525	5,103	2,259	1,528	116,609
1986	42,796	26,951	17,831	9,562	3,139	1,390	1,083	102,750
1987	35,216	31,460	16,345	7,073	3,212	1,054	862	95,222
1988	34,456	25,849	18,364	5,754	2,043	928	578	87,972
1989	34,108	25,259	14,595	5,826	1,457	517	402	82,164
1990	20,372	25,027	14,610	4,993	1,623	406	268	67,299
1991	15,478	14,972	15,077	5,675	1,633	531	229	53,596
1992	17,281	11,359	8,706	5,245	1,615	465	227	44,899
1993	25,443	12,700	6,845	3,384	1,717	529	236	50,855
1994	18,911	18,690	7,556	2,558	1,054	535	249	49,553
1995	25,525	13,850	12,096	3,621	1,062	469	410	57,032
1996	20,751	18,720	9,112	6,112	1,614	503	492	57,303
1997	29,271	15,221	12,342	4,635	2,748	770	563	65,549
1998	22,820	21,467	10,015	6,237	2,066	1,300	741	64,645
1999	15,964	16,763	14,392	5,377	3,012	1,049	1,175	57,733
2000	13,262	11,726	11,228	7,704	2,587	1,525	1,312	49,345
2001	15,640	9,726	7,708	5,656	3,419	1,220	1,585	44,954
2002	7,646	11,438	6,190	3,500	2,186	1,427	1,490	33,878
2003	7,562	5,600	7,408	2,973	1,457	975	1,591	27,565
2004	15,520	5,545	3,681	3,731	1,319	687	1,476	31,960
2005	13,393	11,400	3,712	1,967	1,791	667	1,306	34,235
2006	7,393	9,852	7,769	2,101	1,019	968	1,230	30,331
2007	6,157	5,432	6,622	4,206	1,026	523	1,313	25,279
2008	9,140	4,528	3,690	3,711	2,151	548	1,146	24,914
2009	7,075	6,733	3,137	2,203	2,064	1,238	1,095	23,545
2010	6,532	5,229	4,848	2,120	1,445	1,373	1,615	23,162
2011	4,873	4,832	3,807	3,396	1,458	1,002	2,128	21,497
2012	4,464	3,603	3,495	2,611	2,271	987	2,208	19,638
2013	2,390	3,299	2,591	2,353	1,704	1,504	2,229	16,070
2014	4,102	1,763	2,317	1,618	1,389	1,033	2,465	14,686
2015	5,742	3,026	1,245	1,474	978	860	2,356	15,682
2016	7,549	4,235	2,132	784	880	599	2,159	18,338