

**Table 36. Northeast Fisheries Science Center (NEFSC) research trawl survey indices of abundance for summer flounder. Indices are stratified mean numbers (n) and weight (kg) per tow. Spring indices are for offshore strata 1-12 61-76; fall indices are for offshore strata 1-2, 5-6, 9-10, 61, 65, 69, and 73. Winter indices (1992-2007) are for NEFSC offshore strata 1-3, 5-7, 9-11, 13-14, 16-17, 61-63, 65-67, 69-71, and 73-75. n/a = not available due to incomplete coverage (spring) or end of survey (winter). Note that door and vessel conversion factors for 1967-2008 are not significant; 1967-2008 gear conversion factors have not been included due to limited sample size and extreme violation of underlying assumptions in experimental work.**

Year	Spring (n)	Spring (kg)	Fall (n)	Fall (kg)
1967	n/a	n/a	1.35	1.25
1968	0.15	0.16	1.10	1.00
1969	0.19	0.16	0.59	0.61
1970	0.09	0.09	0.15	0.13
1971	0.22	0.28	0.42	0.27
1972	0.47	0.21	0.39	0.27
1973	0.76	0.54	0.87	0.63
1974	1.37	1.26	1.70	1.86
1975	1.97	1.61	3.00	2.48
1976	2.83	2.00	1.14	0.85
1977	2.84	1.74	2.17	1.75
1978	2.55	1.40	0.32	0.40
1979	0.40	0.35	1.17	0.94
1980	1.30	0.78	0.94	0.57
1981	1.50	0.80	0.91	0.72
1982	2.27	1.11	1.57	0.90
1983	0.95	0.53	0.90	0.47
1984	0.66	0.38	0.99	0.65
1985	2.38	1.20	1.24	0.87
1986	2.14	0.82	0.68	0.45
1987	0.93	0.38	0.26	0.28
1988	1.50	0.68	0.11	0.11
1989	0.32	0.24	0.20	0.08
1990	0.72	0.27	0.27	0.19
1991	1.08	0.35	0.51	0.17

**Table 36, continued. Northeast Fisheries Science Center (NEFSC) research trawl survey indices of abundance for summer flounder. Indices are stratified mean numbers (n) and weight (kg) per tow. Spring indices are for offshore strata 1-12 61-76; fall indices are for offshore strata 1-2, 5-6, 9-10, 61, 65, 69, and 73. Winter indices (1992-2007) are for NEFSC offshore strata 1-3, 5-7, 9-11, 13-14, 16-17, 61-63, 65-67, 69-71, and 73-75. n/a = not available due to incomplete coverage (spring) or end of survey (winter). Note that door and vessel conversion factors for 1967-2008 are not significant; 1967-2008 gear conversion factors have not been included due to limited sample size and extreme violation of underlying assumptions in experimental work.**

Year	Winter (n)	Winter (kg)	Spring (n)	Spring (kg)	Fall (n)	Fall (kg)
1992	12.30	4.90	1.20	0.46	0.85	0.49
1993	13.60	5.50	1.27	0.48	0.11	0.04
1994	12.05	6.03	0.93	0.46	0.60	0.35
1995	10.93	4.81	1.09	0.46	1.13	0.83
1996	31.25	12.35	1.76	0.67	0.71	0.45
1997	10.28	5.54	1.06	0.61	1.32	0.92
1998	7.76	5.13	1.19	0.76	2.32	1.58
1999	11.06	7.99	1.60	1.01	2.42	1.66
2000	15.76	12.59	2.14	1.70	1.90	1.82
2001	18.59	15.68	2.69	2.16	1.56	1.55
2002	22.68	18.43	2.47	2.29	1.32	1.40
2003	35.62	27.48	2.91	2.42	2.00	1.93
2004	17.77	15.25	3.03	2.43	3.00	3.06
2005	12.89	10.32	1.81	1.59	1.57	1.83
2006	21.04	15.93	1.77	1.34	2.10	1.79
2007	16.83	12.89	3.25	3.17	2.21	2.45
2008	n/a	n/a	1.40	1.38	1.38	1.62

**Table 37. Northeast Fisheries Science Center (NEFSC) research trawl spring and fall survey indices from the FSV *Henry B. Bigelow* (HBB) and calibrated, equivalent indices for the FSV *Albatross IV* (ALB) time series. Indices are stratified mean numbers (n) and weight (kg) per tow. Spring indices are for offshore strata 1-12, 61-76; fall indices are for offshore strata 1-2, 5-6, 9-10, 61, 65, 69, and 73. The aggregate spring catch number calibration factor is 3.2255; the spring catch weight factor is 3.0657; the fall catch number factor is 2.4054; the fall catch weight factor is 2.1409.**

Year	Spring (n) HBB	Spring (kg) HBB	Spring (n) ALB	Spring (kg) ALB
2009	5.672	3.598	1.758	1.174
2010	7.131	4.808	2.211	1.568
2011	8.174	4.929	2.534	1.608
2012	6.612	5.007	1.062	1.633

  

Year	Fall (n) HBB	Fall (kg) HBB	Fall (n) ALB	Fall (kg) ALB
2009	7.062	5.622	2.936	2.626
2010	3.466	2.941	1.441	1.374
2011	5.663	5.751	2.354	2.686

**Table 38. Northeast Fisheries Science Center (NEFSC) trawl survey spring and fall survey indices from the FSV Henry B. Bigelow (HBB) and length calibrated, equivalent indices for the FSV Albatross IV (ALB) time series. Indices are the sum of the stratified mean numbers (n) at length. Spring strata set includes offshore strata 1-12, 61-76. Fall strata set (aged set) includes offshore strata 1, 5, 9, 61, 65, 69, 73, and inshore strata 1-61. The HBB does not sample the shallowest inshore strata (0-18 m, 0-60 ft, 0-10 fathoms). The length calibration factors are for the lengths observed in the 2008 calibration experiment and include a constant swept area factor of 0.579. The effective total catch number calibration factors (HBB/ALB ratios) vary by year and season, depending on the characteristics of the HBB length frequency distributions.**

Year	Spring (n) HBB	HBB CV	Spring (n) ALB	Effective Factor
2009	5.672	12.1	2.845	1.994
2010	7.131	10.9	3.772	1.891
2011	8.174	15.9	4.448	1.838
2012	6.612	13.9	3.623	1.825

  

Year	Fall (n) HBB	HBB CV	Fall (n) ALB	Effective Factor
2009	9.509	19.4	5.128	1.854
2010	4.876	16.9	2.688	1.814
2011	7.385	22.1	3.945	1.872

**Table 39. NEFSC trawl survey spring and fall survey indices at age from the FSV Henry B. Bigelow (HBB) and equivalent indices at age for the FSV Albatross IV (ALB) time series. The spring strata set includes offshore strata 1-12, 61-76. The fall strata set (aged set) includes offshore strata 1, 5, 9, 61, 65, 69, 73, and inshore strata 1-61. Indices at age are compiled after the application of length calibration factors including a constant swept area factor of 0.579. The effective catch number at age calibration factors (HBB/ALB ratios) vary by year and season, depending on the characteristics of the HBB length frequency distributions.**

<b>Spring</b>									
<b>2009</b>	0	1	2	3	4	5	6	7+	Total
HBB	0.00	1.76	1.54	1.15	0.61	0.41	0.11	0.11	5.67
ALB	0.00	0.72	0.89	0.63	0.32	0.20	0.05	0.04	2.85
HBB/ALB	0.00	2.44	1.73	1.83	1.91	2.05	2.20	2.75	1.99
<b>2010</b>	0	1	2	3	4	5	6	7+	Total
HBB	0.00	1.95	1.87	1.51	0.93	0.47	0.19	0.22	7.13
ALB	0.00	0.95	1.09	0.83	0.49	0.24	0.09	0.08	3.77
HBB/ALB	0.00	2.05	1.72	1.82	1.90	1.96	2.11	2.75	1.89
<b>2011</b>	0	1	2	3	4	5	6	7+	Total
HBB	0.00	1.48	2.44	2.18	1.06	0.63	0.16	0.22	8.17
ALB	0.00	0.72	1.43	1.25	0.56	0.32	0.08	0.09	4.45
HBB/ALB	0.00	2.06	1.71	1.74	1.89	1.97	2.00	2.44	1.84
<b>Fall</b>									
<b>2009</b>	0	1	2	3	4	5	6	7+	Total
HBB	0.64	3.41	2.27	1.52	0.94	0.42	0.13	0.18	9.51
ALB	0.27	1.97	1.27	0.81	0.48	0.21	0.05	0.06	5.13
HBB/ALB	2.37	1.73	1.79	1.88	1.96	2.00	2.60	3.00	1.85
<b>2010</b>	0	1	2	3	4	5	6	7+	Total
HBB	0.23	1.66	1.28	0.78	0.46	0.27	0.11	0.09	4.88
ALB	0.10	0.96	0.74	0.43	0.24	0.13	0.05	0.04	2.69
HBB/ALB	2.30	1.73	1.73	1.81	1.92	2.08	2.20	2.25	1.81
<b>2011</b>	0	1	2	3	4	5	6	7+	Total
HBB	0.33	1.74	1.99	1.30	0.65	0.48	0.31	0.59	7.39
ALB	0.15	1.01	1.14	0.71	0.33	0.23	0.15	0.23	3.95
HBB/ALB	2.20	1.72	1.75	1.83	1.97	2.09	2.07	2.57	1.87