

Appendix B: Tables 1 and 2. NEFSC spring and autumn bottom trawl survey stratified mean number per tow at age for Gulf of Maine cod, (strata 01260-01300, 01360-01400), 1963-2008 .

[a] Indices from 1970-2001 have been recalculated and may differ slightly from those reported previously (Mayo et al. 2002) due to slight modifications to the age-length keys and a better accounting of vessel effects in 1979 and 1987.

[b] Spring catch per tow at age indices for 1968-1969 were obtained by applying combined 1970-1981 age-length keys to stratified mean catch per tow at length distributions from each survey. Calculations were carried out only to age 10+.

[c] Autumn catch per tow at age indices for 1963-1969 were obtained by applying combined 1970-1981 age-length keys to stratified mean catch per tow at length distributions from each survey. Calculations were carried out only to age 10+.

[d] Spring surveys during 1973-1981 were accomplished with a '41 Yankee' trawl; in all other years, spring surveys were accomplished with a '36 Yankee' trawl. No adjustments have been made to the catch per tow data for these differences.

[e] During 1963-1984, BMV oval doors were used in the spring and autumn surveys; since 1985, Portuguese polyvalent doors have been used in both surveys. Adjustments have been made to the 1963-1984 catch per tow data to standardize these data to polyvalent door equivalents. Conversion coefficients of 1.56 (numbers) and 1.62 (weight) were used in this standardization (NEFSC 1991).

[f] In the Gulf of Maine, spring surveys during 1980-1982, 1989-1991, 1994 and 2003, were conducted aboard R/V DELAWARE II; in all other years, the surveys were conducted aboard R/V ALBATROSS IV except in 1979 and 1987 when both vessels were deployed on portions of the survey. Adjustments have been made to the R/V DELAWARE II catch per tow data to standardize these to R/V ALBATROSS IV equivalents. Conversion coefficients of 0.79 (numbers) and 0.67 (weight) were used in this standardization (NEFSC 1991).

[g] In the Gulf of Maine, autumn surveys during 1977-1978, 1980, 1989-1991 and 1993 were conducted aboard R/V DELAWARE II; in all other years, the surveys were conducted aboard R/V ALBATROSS IV except in 1979 when both vessels were deployed on portions of the survey. Adjustments have been made to the R/V DELAWARE II catch per tow data to standardize these to R/V ALBATROSS IV equivalents. Conversion coefficients of 0.79 (numbers) and 0.67 (weight) were used in this standardization (NEFSC 1991).

Appendix B: Tables 3 and 4. Massachusetts DMF spring and autumn bottom trawl survey stratified mean number per tow at age for Gulf of Maine cod, regions 4 and 5 (strata 28-36), 1978-2007.

Appendix B: Table 1. Stratified mean number per tow at age and aggregate mean weight (kg) per tow for Gulf of Maine cod<sup>1</sup> based on NEFSC spring bottom trawl surveys, 1968-2008

NEFSC Spring survey stratified mean number per tow																Mean wgt/tow (kg)				
Year	Age Group														Totals					
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14+	0+	4+	5+	6+	
1968	0.128	0.613	1.234	1.407	0.846	0.538	0.207	0.129	0.111	0.059	0.165	-	-	-	-	5.438	2.056	1.211	0.673	18.200
1969	0	0	0.036	0.307	0.88	0.807	0.633	0.256	0.144	0.089	0.101	-	-	-	-	3.253	2.909	2.03	1.223	13.190
1970	0	0.159	0.124	0.053	0.091	0.271	0.465	0.611	0.094	0.059	0.098	0.1	0.042	0.012	0.012	2.191	1.855	1.764	1.494	11.080
1971	0	0.026	0.151	0.105	0.286	0.048	0.084	0.3	0.206	0.154	0.058	0.013	0	0	0	1.429	1.148	0.862	0.814	7.000
1972	0	0.371	0.135	0.521	0.195	0.181	0.044	0.124	0.093	0.229	0.056	0.056	0.034	0	0.017	2.057	1.03	0.835	0.653	8.030
1973	0	0.035	4.25	0.89	0.632	0.348	0.194	0.096	0.221	0.261	0.198	0.075	0.106	0.132	0.088	7.525	2.35	1.718	1.37	18.810
1974	0	0.475	0.103	1.503	0.172	0.235	0.075	0.028	0.057	0.033	0.045	0.043	0.081	0	0.051	2.902	0.82	0.648	0.413	7.420
1975	0.006	0.096	0.686	0.131	1.105	0.269	0.079	0	0.006	0.018	0.028	0.026	0.062	0	0	2.512	1.593	0.488	0.219	6.040
1976	0	0.051	0.265	1.104	0.137	0.902	0.09	0.095	0.027	0	0.011	0	0.074	0.027	0	2.782	1.362	1.225	0.323	7.560
1977	0	0.025	0.297	0.553	1.925	0.111	0.831	0.011	0.083	0	0	0	0	0	0.038	3.872	2.998	1.073	0.962	8.540
1978	0	0.048	0.11	0.308	0.351	0.744	0.095	0.252	0.013	0.107	0	0.022	0	0	0	2.05	1.584	1.233	0.488	7.700
1979	0.044	0.484	1.63	0.219	0.449	0.299	0.587	0.102	0.112	0.013	0.031	0	0	0	0.025	3.993	1.617	1.168	0.869	8.360
1980	0.07	0.037	0.423	0.492	0.138	0.238	0.304	0.317	0	0.122	0.014	0	0	0	0	2.155	1.133	0.994	0.756	6.230
1981	0	1.075	0.644	0.841	1.342	0.331	0.264	0.116	0.121	0.1	0	0	0	0	0	4.832	2.272	0.93	0.6	10.650
1982	0.014	0.359	1.007	0.476	0.655	0.988	0.087	0.112	0	0.026	0.039	0	0	0	0	3.763	1.907	1.251	0.264	8.620
1983	0.013	0.632	0.949	0.997	0.465	0.404	0.212	0.068	0.016	0.071	0.018	0.008	0.03	0	0.03	3.912	1.322	0.857	0.453	10.960
1984	0	0.151	1.312	1.023	0.823	0.212	0.047	0.1	0	0	0	0	0	0	0	3.667	1.182	0.359	0.147	6.140
1985	0	0.029	0.231	0.662	0.663	0.662	0.103	0.091	0.052	0	0.026	0	0	0	0	2.517	1.596	0.933	0.272	7.650
1986	0	0.537	0.248	0.754	0.237	0.091	0.035	0.038	0	0	0	0	0.018	0	0	1.957	0.419	0.182	0.090	3.480
1987	0	0.03	0.46	0.199	0.231	0.074	0	0.066	0.008	0	0	0	0	0	0.015	1.083	0.394	0.163	0.088	1.980
1988	0.029	0.717	0.923	0.823	0.218	0.254	0.092	0.065	0	0.007	0	0	0	0	0	3.127	0.635	0.417	0.163	3.600
1989	0	0.017	0.605	0.723	0.6	0.091	0.063	0.014	0	0	0	0	0	0	0	2.112	0.768	0.168	0.077	2.420
1990	0	0	0.208	1.365	0.637	0.102	0.032	0.018	0	0	0	0	0	0	0	2.362	0.789	0.152	0.050	3.080
1991	0	0.038	0.068	0.234	1.717	0.299	0.02	0.018	0	0	0	0	0	0	0	2.393	2.054	0.337	0.038	2.890
1992	0	0.05	0.226	0.242	0.282	1.328	0.226	0.069	0	0.012	0	0	0	0	0	2.435	1.917	1.635	0.307	8.630
1993	0	0.201	0.497	0.799	0.334	0.091	0.484	0.055	0.023	0	0	0.023	0	0	0	2.507	1.010	0.676	0.585	5.880
1994	0	0.015	0.316	0.388	0.215	0.094	0.049	0.127	0.027	0.022	0.018	0	0	0	0	1.271	0.553	0.338	0.244	2.430
1995	0	0.05	0.179	1.116	0.372	0.145	0.028	0	0.011	0	0	0	0	0.028	0	1.930	0.585	0.213	0.068	2.430
1996	0	0.057	0.022	0.593	1.331	0.403	0.059	0	0	0	0	0	0	0	0	2.465	1.793	0.463	0.059	5.430
1997	0	0.159	0.132	0.399	0.264	0.876	0.242	0.12	0	0	0	0	0	0	0	2.192	1.502	1.238	0.362	5.620
1998	0	0.018	0.224	0.33	0.517	0.142	0.421	0.023	0.037	0	0	0	0	0	0	1.710	1.139	0.622	0.481	4.180
1999	0	0.166	0.344	0.713	0.345	0.315	0.134	0.273	0	0	0	0	0	0.011	0	2.301	1.078	0.733	0.418	5.090
2000	0.026	1.184	0.725	0.439	0.457	0.107	0.101	0.024	0.022	0	0	0	0	0	0	3.083	0.710	0.253	0.146	3.210
2001	0	0.029	0.323	0.716	0.497	0.354	0.064	0.098	0.055	0	0.011	0	0	0	0	2.146	1.078	0.581	0.227	6.220
2002	0	0.34	0.045	0.524	1.601	0.614	0.362	0.164	0.057	0.016	0	0	0	0	0	3.724	2.814	1.213	0.598	10.930
2003	0	0.069	0.831	0.063	0.708	1.089	0.395	0.321	0.103	0.073	0.027	0	0	0	0	3.677	2.715	2.007	0.918	9.500
2004	0	0.136	0.045	0.221	0.118	0.191	0.232	0.014	0.014	0.01	0	0	0	0	0	0.981	0.579	0.461	0.270	2.410
2005	0	0.02	0.7265	0.1014	0.6076	0.0154	0.1498	0.1297	0.0142	0	0	0	0	0	0	1.765	0.917	0.309	0.294	2.700
2006	0.0284	0.1858	0.2272	0.4344	0.0595	0.1892	0.021	0.1314	0.0729	0	0.013	0	0	0	0	1.363	0.487	0.428	0.238	2.702
2007	0	0.092	3.4799	2.89	4.3461	0.5376	0.9437	0.0652	0.0384	0	0	0	0	0	0	12.393	5.931	1.585	1.047	15.811
2008	0	0.0661	1.0986	3.2112	1.3566	0.9393	0.0584	0.0806	0	0	0	0	0	0	0	6.811	2.435	1.078	0.139	9.386

1. Strata 01260-01300 and 01360-01400.

Appendix B: Table 2. Stratified mean number per tow at age and aggregate mean weight (kg) per tow for Gulf of Maine cod<sup>1</sup> based on NEFSC autumn bottom trawl surveys, 1963-2007.

Year	Age Group														Totals				Mean wgt/tow (kg)	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14+	0+	3+	4+		5+
1963	0.05	0.649	1.349	1.253	0.849	0.579	0.537	0.3	0.183	0.095	0.075	-	-	-	-	5.917	3.869	2.616	1.767	17.950
1964	0	0.092	0.122	0.417	0.856	0.853	0.783	0.373	0.237	0.114	0.101	-	-	-	-	4.003	3.789	3.318	2.462	22.800
1965	0.002	0.85	0.88	0.824	0.75	0.496	0.374	0.17	0.08	0.044	0.025	-	-	-	-	4.494	2.763	1.939	1.189	12.010
1966	0.17	0.204	0.64	0.697	0.718	0.558	0.441	0.192	0.078	0.048	0.036	-	-	-	-	3.783	2.769	2.072	1.354	12.920
1967	0.012	0.129	0.215	0.574	0.671	0.384	0.268	0.162	0.07	0.041	0.034	-	-	-	-	2.562	2.204	1.630	0.959	9.230
1968	0.012	0.036	0.179	0.719	1.256	0.973	0.627	0.261	0.156	0.072	0.095	-	-	-	-	4.387	4.159	3.440	2.184	19.440
1969	0.016	0.059	0.123	0.354	0.63	0.552	0.466	0.22	0.145	0.129	0.062	-	-	-	-	2.758	2.560	2.206	1.576	15.370
1970	0.802	0.883	0.26	0.538	0.329	0.486	0.425	0.811	0.132	0.094	0.036	0.037	0.073	0	0	4.905	2.960	2.422	2.093	16.440
1971	1.319	0.179	0.276	0.219	0.578	0.478	0.455	0.236	0.298	0.163	0.066	0.034	0.061	0	0	4.361	2.588	2.368	1.790	16.530
1972	0.031	5.578	1.215	1.528	0.233	0.09	0.14	0.07	0.138	0.262	0	0	0	0	0.016	9.301	2.477	0.949	0.716	12.990
1973	0.638	0.329	2.17	1.139	0.507	0.213	0.077	0.027	0.051	0.183	0.102	0	0	0.016	0	4.452	1.315	1.176	0.669	8.760
1974	0.283	1.134	0.266	1.876	0.167	0.274	0.051	0.046	0.036	0.033	0.033	0.098	0	0	0.033	4.328	2.646	0.770	0.603	8.960
1975	0.047	0.177	3.045	0.138	2.333	0.259	0.109	0.017	0.006	0	0	0.006	0.006	0	0	6.143	2.874	2.736	0.403	8.620
1976	0	0.23	0.221	0.633	0.077	0.773	0.052	0.132	0	0	0.031	0	0	0	0	2.148	1.697	1.064	0.988	6.740
1977	0	0.042	0.416	0.465	1.157	0.114	0.629	0.044	0.09	0.022	0.032	0	0.044	0.019	0	3.073	2.615	2.150	0.994	10.200
1978	0.248	1.373	0.378	1.135	0.658	1.426	0.109	0.31	0.005	0.083	0.007	0.013	0	0.028	0	5.773	3.773	2.638	1.980	12.900
1979	0.002	0.381	0.588	0.145	0.708	0.337	0.688	0.044	0.181	0	0.053	0	0	0	0.018	3.142	2.172	2.027	1.319	13.930
1980	0.027	1.321	2.52	1.78	0.492	0.194	0.36	0.207	0.036	0.025	0	0.036	0	0.014	0.022	7.034	3.165	1.385	0.894	14.200
1981	0.01	0.618	0.419	0.539	0.405	0.121	0.076	0.029	0.09	0	0.043	0	0	0	0	2.349	1.302	0.763	0.358	7.530
1982	0	0.843	3.353	2.275	1.089	0.209	0	0	0	0	0	0	0	0	0	7.769	3.573	1.298	0.209	15.920
1983	0	0.317	0.916	0.828	0.197	0.227	0.21	0	0	0	0.027	0.028	0.037	0	0	2.786	1.553	0.726	0.529	8.420
1984	0.022	0.432	0.426	0.631	0.387	0.214	0.163	0.079	0	0.03	0	0	0.03	0.035	0	2.449	1.569	0.938	0.551	8.740
1985	0.121	0.526	0.957	0.609	0.248	0.182	0.075	0	0.034	0.021	0.01	0	0.01	0	0.029	2.821	1.218	0.609	0.361	8.260
1986	0	0.392	0.401	0.657	0.342	0.073	0.041	0	0.011	0.034	0	0	0	0	0	1.950	1.157	0.501	0.159	4.720
1987	0.128	0.578	1.38	0.592	0.243	0.075	0	0	0	0	0	0	0	0	0	2.996	0.910	0.318	0.075	3.390
1988	0	1.938	2.313	0.99	0.443	0.099	0.065	0.033	0.011	0.011	0	0	0	0	0	5.903	1.652	0.662	0.219	6.620
1989	0	0.15	2.407	1.502	0.293	0.161	0.033	0	0	0	0.009	0	0	0	0	4.553	1.997	0.495	0.202	4.540
1990	0.006	0.045	0.187	1.829	0.598	0.259	0.052	0.01	0	0	0	0	0	0	0	2.986	2.748	0.919	0.321	4.910
1991	0.009	0.144	0.139	0.223	0.633	0.081	0	0.023	0	0	0	0	0	0	0	1.252	0.960	0.737	0.104	2.780
1992	0.059	0.291	0.446	0.14	0.036	0.35	0.104	0.008	0	0	0	0	0	0	0	1.433	0.638	0.498	0.462	2.450
1993	0.043	0.198	0.568	0.36	0.034	0	0.03	0	0	0	0	0	0	0	0	1.232	0.424	0.064	0.030	1.000
1994	0.032	0.207	0.883	0.826	0.085	0.051	0	0.045	0	0	0	0	0	0	0	2.130	1.008	0.182	0.096	2.740
1995	0.008	0.068	0.285	1.228	0.325	0.082	0.011	0	0	0	0	0	0	0	0	2.008	1.647	0.419	0.093	3.670
1996	0.029	0.124	0.383	0.188	0.542	0.062	0	0	0	0	0	0	0	0	0	1.327	0.792	0.604	0.062	2.350
1997	0	0.297	0.086	0.177	0.173	0.14	0	0	0	0	0	0	0	0	0	0.872	0.490	0.313	0.140	1.870
1998	0.05	0.097	0.32	0.115	0.192	0.039	0.031	0	0	0	0	0	0	0	0	0.843	0.376	0.262	0.069	1.500
1999	0.025	0.431	0.367	0.586	0.243	0.132	0.016	0.006	0	0	0	0	0	0	0	1.807	0.984	0.398	0.155	3.510
2000	0.008	0.533	0.984	0.394	0.507	0.134	0.01	0	0.011	0.023	0	0	0	0	0	2.604	1.079	0.686	0.178	4.650
2001	0.018	0.034	0.141	0.752	0.469	0.337	0.122	0.084	0	0.023	0	0	0	0	0	1.980	1.788	1.035	0.566	7.330
2002	0	0.269	0.081	0.364	2.797	1.096	0.627	0.051	0.043	0	0	0	0	0	0	5.328	4.979	4.615	1.818	24.660
2003	0.542	0.455	0.198	0.185	0.529	0.45	0.073	0.077	0	0.011	0	0.011	0	0	0	2.529	1.335	1.150	0.622	5.990
2004	1.38	0.651	0.168	0.581	0.231	0.253	0.168	0.068	0.011	0.01	0.011	0	0	0	0	3.533	1.334	0.753	0.522	4.900
2005	0.034	0.1533	0.3806	0.0796	0.4495	0.0221	0.0923	0.0824	0.0227	0.0214	0	0	0	0	0	1.338	0.690	0.241	0.219	2.897
2006	0.0638	1.2514	0.5802	1.0331	0.2475	0.2857	0.0339	0.0496	0.0296	0	0.0057	0.0137	0	0	0	3.594	0.666	0.418	0.133	4.229
2007	0.0113	0.1456	0.831	0.384	0.5283	0.0226	0.069	0	0	0	0	0	0	0	0	1.992	0.620	0.092	0.069	2.714

1. Strata 01260-01300 and 01360-01400.

Appendix B: Table 3. Stratified mean number per tow at age and aggregate mean weight (kg) per tow for Gulf of Maine cod<sup>1</sup> based on Massachusetts DMF spring inshore bottom trawl surveys, 1978-2007.

MADMF Spring stratified mean number per tow																Totals				Stratified Mean Wgt/tow(kg)	
Year	Age Group															Total	0+	1+	2+		3+
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
1978	31.43	6.33	2.59	3.61	2.00	1.76	0.07	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47.89	47.87	16.44	10.11	7.52	11.05
1979	69.49	19.62	2.07	0.56	2.41	1.02	1.27	0.02	0.11	0.00	0.00	0.00	0.00	0.00	0.00	96.56	96.57	27.08	7.46	5.39	14.28
1980	9.03	42.81	10.45	1.80	0.22	0.89	0.40	0.35	0.00	0.04	0.00	0.00	0.00	0.00	0.00	65.98	65.99	56.96	14.15	3.70	14.51
1981	26.48	23.01	12.52	6.15	0.96	0.15	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	69.41	69.41	42.93	19.92	7.40	18.69
1982	1.71	13.29	7.17	2.41	0.87	0.22	0.08	0.04	0.05	0.00	0.00	0.00	0.00	0.00	0.00	25.84	25.84	24.13	10.84	3.67	12.16
1983	0.77	34.75	14.61	2.86	1.50	0.25	0.03	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	54.85	54.84	54.07	19.32	4.71	18.75
1984	0.26	1.96	5.15	2.07	0.70	0.05	0.05	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.33	10.32	10.06	8.10	2.95	7.24
1985	1.09	1.79	2.77	2.27	0.45	0.05	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.46	8.45	7.36	5.57	2.80	4.77
1986	1.14	9.26	11.68	1.23	0.68	0.07	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.09	24.09	22.95	13.69	2.01	7.84
1987	0.78	8.29	4.71	2.96	0.22	0.09	0.06	0.03	0.00	0.07	0.00	0.00	0.00	0.00	0.00	17.21	17.21	16.43	8.14	3.43	7.87
1988	1.88	10.05	6.35	2.45	1.45	0.01	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.24	22.25	20.37	10.32	3.97	7.70
1989	0.18	21.59	20.51	8.76	1.06	0.10	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52.24	52.24	52.06	30.47	9.96	16.82
1990	4.92	4.63	5.45	14.75	2.31	0.31	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.41	32.41	27.49	22.86	17.41	15.88
1991	0.35	5.01	2.69	1.57	3.66	0.40	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.70	13.69	13.34	8.33	5.64	8.73
1992	1.51	4.50	5.13	3.67	0.75	1.26	0.09	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.92	16.93	15.42	10.92	5.79	8.77
1993	79.84	2.99	6.11	2.55	0.90	0.09	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	92.66	92.65	12.81	9.82	3.71	5.86
1994	4.63	4.79	4.07	1.75	0.49	0.16	0.01	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.00	15.96	15.94	11.31	6.52	2.45	3.89
1995	12.03	5.83	1.92	2.76	0.78	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.36	23.37	11.34	5.51	3.59	3.99
1996	8.94	0.64	0.52	1.08	1.49	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.96	12.97	4.03	3.39	2.87	3.15
1997	12.47	2.88	0.98	0.93	0.17	0.42	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.89	17.90	5.43	2.55	1.57	2.50
1998	23.48	1.49	0.83	0.70	0.75	0.06	0.24	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.57	27.56	4.08	2.59	1.76	3.25
1999	143.00	11.68	2.39	2.31	0.78	0.64	0.07	0.18	0.01	0.00	0.00	0.00	0.00	0.00	0.00	161.06	161.06	18.06	6.38	3.99	9.00
2000	2.15	35.14	7.02	2.89	2.20	0.71	0.49	0.09	0.08	0.00	0.00	0.00	0.00	0.00	0.00	50.77	50.77	48.62	13.48	6.46	20.60
2001	25.99	0.08	4.50	4.97	3.52	2.07	0.42	0.26	0.03	0.00	0.00	0.00	0.00	0.00	0.00	41.84	41.84	15.85	15.77	11.27	26.45
2002	0.92	19.29	0.26	1.23	1.41	0.56	0.30	0.16	0.13	0.03	0.03	0.00	0.01	0.00	0.00	24.34	24.33	23.41	4.12	3.86	11.16
2003	1097.97	6.20	12.70	0.28	1.43	1.33	0.29	0.13	0.04	0.00	0.00	0.00	0.00	0.00	0.00	1120.37	1120.37	22.40	16.20	3.50	10.98
2004	116.15	9.21	1.56	2.58	0.46	0.90	0.64	0.04	0.04	0.01	0.00	0.00	0.00	0.00	0.00	131.59	131.59	15.44	6.23	4.67	8.15
2005	180.85	1.06	7.15	0.57	2.07	0.18	0.95	0.35	0.08	0.00	0.00	0.00	0.00	0.00	0.00	193.26	193.26	12.41	11.35	4.20	10.40
2006	1053.70	14.89	3.67	3.38	0.54	0.69	0.01	0.06	0.07	0.00	0.00	0.00	0.00	0.00	0.00	1077.03	1077.01	23.31	8.42	4.75	9.18
2007	49.35	4.37	3.36	1.84	1.75	0.32	0.54	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	61.58	61.58	12.23	7.86	4.50	8.43

1. Mass. Regions 4 and 5 (strata 25-36)

Appendix B: Table 4. Stratified mean number per tow at age and aggregate mean weight (kg) per tow for Gulf of Maine cod<sup>1</sup> based on Massachusetts DMF autumn inshore bottom trawl surveys, 1978-2007.

Year	MADMF Autumn stratified mean number per tow															Totals				Stratified Mean Wgt/tow(kg)	
	Age Group															0+	1+	2+	3+		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Total					
1978	151.81	3.95	0.02	0.07	0.01	0.09	0.02	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	156.06	156.06	4.25	0.30	0.28	1.51
1979	5.72	2.93	0.20	0.00	0.04	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.92	8.92	3.20	0.27	0.07	1.05
1980	6.00	5.46	1.06	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.53	12.54	6.54	1.08	0.02	1.28
1981	1.45	6.20	1.25	0.36	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.29	9.28	7.83	1.63	0.38	3.64
1982	4.59	1.14	0.31	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.12	6.12	1.53	0.39	0.08	0.66
1983	1.27	0.28	0.10	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.68	1.68	0.41	0.13	0.03	0.09
1984	10.30	0.16	0.07	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.55	10.54	0.24	0.08	0.01	0.13
1985	2.65	0.19	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.87	2.87	0.22	0.03	0.01	0.07
1986	1.80	0.55	0.37	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.75	2.75	0.95	0.40	0.03	0.25
1987	311.72	1.40	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	313.15	313.14	1.42	0.02	0.00	0.35
1988	5.53	3.10	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.87	8.87	3.34	0.24	0.00	0.37
1989	3.94	0.02	0.10	0.07	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.15	4.15	0.21	0.19	0.09	0.22
1990	7.81	4.22	0.31	0.32	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.71	12.71	4.90	0.68	0.37	0.76
1991	5.04	2.00	0.36	0.02	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.48	7.49	2.45	0.45	0.09	0.48
1992	26.42	0.99	0.04	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.50	27.49	1.07	0.08	0.04	0.27
1993	49.43	1.53	0.36	0.17	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	51.50	51.51	2.08	0.55	0.19	1.35
1994	40.01	5.36	3.45	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.00	49.01	9.00	3.64	0.19	2.00
1995	2.93	0.80	0.41	0.49	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.66	4.65	1.72	0.92	0.51	0.81
1996	6.90	0.08	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.01	7.01	0.11	0.03	0.02	0.08
1997	1.43	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.46	1.46	0.03	0.00	0.00	0.01
1998	3.27	0.64	0.32	0.04	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.33	4.32	1.05	0.41	0.09	0.36
1999	7.33	0.59	0.07	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.01	8.00	0.67	0.08	0.01	0.31
2000	0.05	0.40	0.17	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	0.68	0.63	0.23	0.06	0.27
2001	49.19	0.01	0.13	0.13	0.04	0.05	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	49.55	49.56	0.37	0.36	0.23	0.76
2002	0.96	1.09	0.13	0.25	0.36	0.44	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.30	3.29	2.33	1.24	1.11	3.99
2003	120.17	1.60	0.14	0.05	0.20	0.11	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	122.28	122.28	2.11	0.51	0.37	1.85
2004	44.67	9.94	0.92	1.19	0.19	0.45	0.25	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	57.62	57.62	12.95	3.01	2.09	5.58
2005	39.47	0.61	0.24	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.35	40.35	0.88	0.27	0.03	0.21
2006	2.08	4.35	0.42	0.48	0.06	0.08	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.50	7.50	5.42	1.07	0.65	1.94
2007	7.61	0.16	0.13	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.92	7.91	0.30	0.14	0.01	2.94

<sup>1</sup> Mass. Regions 4 and 5 (strata 25-36)