

Table 32. Gulf of Maine Atlantic cod fishing mortality-at-age from 1982 to 2018 as estimated from the M-ramp model.

Model	Year	Age1	Age2	Age3	Age4	Age5	Age6	Age7	Age8	Age9 ⁺	F _{full}
M-ramp	1982	0.032	0.224	0.576	0.685	0.698	0.700	0.700	0.700	0.700	0.700
M-ramp	1983	0.039	0.274	0.703	0.836	0.853	0.855	0.855	0.855	0.855	0.855
M-ramp	1984	0.035	0.244	0.626	0.744	0.759	0.760	0.760	0.761	0.761	0.761
M-ramp	1985	0.046	0.319	0.819	0.974	0.993	0.995	0.995	0.995	0.995	0.995
M-ramp	1986	0.039	0.275	0.705	0.838	0.854	0.856	0.856	0.856	0.856	0.856
M-ramp	1987	0.040	0.278	0.714	0.850	0.866	0.868	0.868	0.868	0.868	0.868
M-ramp	1988	0.030	0.210	0.539	0.641	0.653	0.655	0.655	0.655	0.655	0.655
M-ramp	1989	0.010	0.068	0.339	0.771	0.940	0.970	0.974	0.975	0.975	0.975
M-ramp	1990	0.013	0.084	0.417	0.948	1.156	1.192	1.198	1.198	1.199	1.198
M-ramp	1991	0.012	0.083	0.412	0.937	1.142	1.178	1.183	1.184	1.184	1.184
M-ramp	1992	0.013	0.090	0.446	1.013	1.234	1.273	1.279	1.280	1.280	1.280
M-ramp	1993	0.016	0.108	0.538	1.222	1.488	1.536	1.543	1.544	1.544	1.544
M-ramp	1994	0.014	0.093	0.464	1.055	1.285	1.326	1.332	1.333	1.333	1.333
M-ramp	1995	0.010	0.064	0.319	0.726	0.884	0.912	0.916	0.917	0.917	0.917
M-ramp	1996	0.009	0.057	0.284	0.646	0.787	0.812	0.816	0.816	0.816	0.816
M-ramp	1997	0.007	0.047	0.234	0.531	0.647	0.668	0.671	0.671	0.671	0.671
M-ramp	1998	0.006	0.039	0.195	0.443	0.540	0.557	0.559	0.560	0.560	0.560
M-ramp	1999	0.004	0.026	0.131	0.297	0.361	0.373	0.375	0.375	0.375	0.375
M-ramp	2000	0.005	0.031	0.154	0.351	0.427	0.441	0.443	0.443	0.443	0.443
M-ramp	2001	0.005	0.032	0.160	0.364	0.443	0.457	0.459	0.459	0.460	0.459
M-ramp	2002	0.004	0.025	0.126	0.287	0.350	0.361	0.362	0.363	0.363	0.363
M-ramp	2003	0.004	0.027	0.137	0.311	0.379	0.391	0.392	0.393	0.393	0.393
M-ramp	2004	0.005	0.033	0.164	0.372	0.453	0.468	0.470	0.470	0.470	0.470
M-ramp	2005	0.006	0.033	0.156	0.420	0.591	0.635	0.644	0.645	0.645	0.645
M-ramp	2006	0.004	0.022	0.105	0.284	0.399	0.429	0.435	0.435	0.436	0.435
M-ramp	2007	0.004	0.025	0.116	0.314	0.442	0.475	0.481	0.482	0.482	0.482
M-ramp	2008	0.006	0.034	0.160	0.433	0.610	0.656	0.664	0.665	0.666	0.665
M-ramp	2009	0.007	0.039	0.186	0.502	0.706	0.759	0.769	0.770	0.771	0.770
M-ramp	2010	0.008	0.045	0.214	0.578	0.813	0.874	0.885	0.887	0.887	0.887
M-ramp	2011	0.012	0.067	0.315	0.852	1.199	1.288	1.305	1.308	1.308	1.308
M-ramp	2012	0.013	0.076	0.357	0.965	1.359	1.460	1.478	1.482	1.482	1.482
M-ramp	2013	0.017	0.095	0.448	1.211	1.704	1.831	1.855	1.859	1.859	1.859
M-ramp	2014	0.015	0.086	0.402	1.087	1.530	1.644	1.665	1.669	1.669	1.669
M-ramp	2015	0.002	0.014	0.065	0.176	0.247	0.266	0.269	0.270	0.270	0.270
M-ramp	2016	0.003	0.019	0.090	0.244	0.343	0.369	0.373	0.374	0.374	0.374
M-ramp	2017	0.003	0.019	0.091	0.247	0.347	0.373	0.378	0.379	0.379	0.379
M-ramp	2018	0.002	0.010	0.048	0.129	0.182	0.195	0.198	0.198	0.198	0.198