

Table A2-2. Northern cod abundance-at-age estimates (millions) from the M-shift formulation of NCAM.

Year	Age 2	Age 3	Age 4	Age 5	Age 6	Age 7	Age 8	Age 9	Age 10	Age 11	Age 12	Age 13	Age 14
1983	2,144.4	1,088.0	676.0	474.7	139.7	90.0	95.8	55.1	25.0	5.5	1.8	0.7	0.6
1984	1,530.0	1,394.9	741.8	447.4	275.1	77.8	46.1	51.7	27.6	13.1	3.0	1.1	0.4
1985	755.7	1,006.5	957.2	510.9	279.2	159.1	37.7	21.6	23.1	13.0	6.2	1.5	0.5
1986	663.8	484.2	693.6	667.4	317.2	159.9	72.1	17.5	10.0	10.6	5.9	2.8	0.7
1987	1,000.2	451.7	357.8	518.5	447.6	187.3	82.7	36.9	9.0	4.8	5.4	2.9	1.5
1988	1,355.3	613.8	295.2	240.3	312.3	209.1	72.4	34.2	14.3	3.5	2.0	2.1	1.2
1989	1,498.1	958.1	454.4	217.8	166.1	179.8	103.6	35.4	16.8	7.5	1.9	1.1	1.1
1990	884.0	1,106.3	734.7	341.5	153.0	101.9	93.8	53.7	18.6	8.6	4.0	1.0	0.6
1991	737.3	552.7	734.1	495.9	219.3	88.4	48.8	38.4	21.8	7.8	3.7	1.6	0.4
1992	358.0	407.6	289.5	394.3	194.5	56.9	10.9	3.9	3.0	1.8	0.6	0.3	0.1
1993	110.9	125.4	124.0	71.3	43.6	13.3	1.6	0.5	0.2	0.2	0.1	0.0	0.0
1994	67.2	45.6	38.1	29.9	5.8	2.2	0.4	0.1	0.0	0.0	0.0	0.0	0.0
1995	35.2	19.0	8.1	7.8	2.6	0.5	0.2	0.1	0.0	0.0	0.0	0.0	0.0
1996	53.3	22.5	13.2	6.0	5.6	1.9	0.4	0.1	0.1	0.0	0.0	0.0	0.0
1997	57.4	29.4	12.6	8.9	3.9	3.8	1.2	0.2	0.1	0.0	0.0	0.0	0.0
1998	59.7	30.3	15.4	7.2	5.7	2.6	2.5	0.8	0.1	0.1	0.0	0.0	0.0
1999	89.0	33.9	17.8	9.0	4.0	3.6	1.7	1.7	0.5	0.1	0.0	0.0	0.0
2000	115.3	58.0	22.9	11.5	4.8	2.1	1.9	1.0	1.1	0.4	0.1	0.0	0.0
2001	136.9	61.3	29.2	11.0	4.3	1.8	0.9	1.2	0.6	0.7	0.2	0.0	0.0
2002	132.6	59.2	24.5	9.5	3.1	1.3	0.7	0.5	0.7	0.4	0.4	0.1	0.0
2003	101.2	49.0	18.6	7.3	3.3	1.2	0.5	0.3	0.2	0.4	0.2	0.2	0.1
2004	107.0	43.8	18.4	6.5	2.5	1.5	0.7	0.3	0.2	0.1	0.2	0.1	0.1
2005	60.0	79.5	33.3	13.4	4.4	1.6	0.9	0.5	0.2	0.1	0.1	0.2	0.1
2006	79.7	46.8	65.3	27.2	10.0	3.0	1.1	0.6	0.3	0.2	0.1	0.1	0.1
2007	111.7	61.2	37.5	52.1	20.2	6.2	1.6	0.6	0.4	0.2	0.1	0.1	0.1
2008	124.7	80.4	45.4	26.6	32.9	11.8	3.0	0.9	0.4	0.2	0.1	0.1	0.0
2009	145.3	83.4	55.0	28.6	14.8	17.7	6.5	1.7	0.5	0.2	0.1	0.1	0.0
2010	156.3	90.1	52.3	30.9	15.2	8.1	9.5	3.3	0.9	0.3	0.1	0.1	0.0
2011	176.9	82.1	47.8	22.4	12.7	8.3	4.5	5.2	1.8	0.5	0.1	0.1	0.0
2012	120.9	121.8	59.0	32.9	14.8	8.9	5.7	3.0	3.4	1.2	0.3	0.1	0.0
2013	210.9	89.3	96.8	47.5	26.3	11.9	6.8	4.3	2.3	2.6	0.9	0.3	0.1
2014	349.6	163.6	73.1	80.6	39.2	21.3	9.0	5.0	3.1	1.7	1.9	0.7	0.2
2015	325.7	262.5	128.5	58.1	62.8	29.3	13.8	5.5	3.1	1.9	1.0	1.2	0.4