Table 1: Time-series of population estimates from the base-case model.

Year	Total biomass (mt)	Spawning biomass (mt)	Depletion	Age-0 recruits	Total catch (mt)	Relative exploitation rate	SPR
1892	123686	66128	0.00	9339	0	0.00	1.00
1893	123686	66041	0.00	9279	0	0.00	1.00
1894	123686	65950	0.00	9193	0	0.00	1.00
1895	123687	65841	0.00	9130	0	0.00	1.00
1896	123687	65262	0.00	9109	0	0.00	1.00
1897	123687	64378	0.00	9215	0	0.00	1.00
1898	123687	62072	0.00	9423	0	0.00	1.00
1899	123687	60916	0.00	9929	0	0.00	1.00
1900	123687	60315	0.00	10708	0	0.00	1.00
1901	123687	59504	0.00	11554	0	0.00	1.00
1902	123687	58639	0.00	12371	0	0.00	1.00
1903	123687	58052	0.00	13617	0	0.00	1.00
1904	123687	57411	0.00	15069	0	0.00	1.00
1905	123687	56308	0.00	14230	0	0.00	1.00
1906	123687	55691	0.00	11925	0	0.00	1.00
1907	123687	54777	0.00	9988	0	0.00	1.00
1908	123687	54363	0.00	8721	0	0.00	1.00
1909	123687	53448	0.00	7689	0	0.00	1.00
1910	123687	52974	0.00	6725	0	0.00	1.00
1911	123687	52940	0.00	6411	0	0.00	1.00
1912	123687	53368	0.00	7917	0	0.00	1.00
1913	123687	53212	0.00	12969	0	0.00	1.00
1914	123687	52417	0.00	10720	0	0.00	1.00
1915	123687	50961	0.00	6890	0	0.00	1.00
1916	123683	48630	0.00	5870	0	0.00	1.00
1917	123681	46010	0.00	5162	0	0.00	1.00
1918	123679	42622	0.00	3956	0	0.00	1.00
1919	123682	32825	0.00	3303	0	0.00	1.00
1920	123683	25585	0.00	3653	0	0.00	1.00
1921	123683	21380	0.00	5644	0	0.00	1.00
1922	123683	21168	0.00	10235	0	0.00	1.00
1923	123682	20464	0.00	4799	0	0.00	1.00
1924	123681	19831	0.00	2544	0	0.00	1.00
1925	123680	19133	0.00	1940	0	0.00	1.00
1926	123678	18047	0.00	2437	0	0.00	1.00
1927	123678	17330	0.00	3035	0	0.00	1.00
1928	123678	17365	0.00	2521	0	0.00	1.00
1929	123638	17273	0.00	3195	2	0.00	1.00
1930	123637	17439	0.00	3491	2	0.00	1.00
1931	123636	16885	0.00	4103	2	0.00	1.00

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Year	Total biomass (mt)	Spawning biomass (mt)	Depletion	Age-0 recruits	Total catch (mt)	Relative exploitation rate	SPR
1932	123648	16410	0.00	3294	2	0.00	1.00
1933	123419	15722	0.00	6858	12	0.00	1.00
1934	123336	15126	0.00	2675	15	0.00	1.00
1935	123530	14808	0.00	3007	7	0.00	1.00
1936	123473	14251	0.00	4367	9	0.00	1.00
1937	123354	13693	0.00	4686	14	0.00	1.00
1938	122830	13224	0.99	1873	37	0.00	0.99
1939	122140	12792	0.98	3220	67	0.00	0.99
1940	122005	12525	0.98	3696	73	0.00	0.98
1941	121733	12088	0.98	4468	85	0.00	0.98
1942	120878	11604	0.98	3815	123	0.00	0.97
1943	104097	11340	0.98	4336	979	0.01	0.82
1944	94916	10898	0.97	997	1551	0.01	0.73
1945	67128	10429	0.96	1788	4134	0.04	0.48
1946	85770	10105	0.92	4383	2132	0.02	0.65
1947	99265	9902	0.91	3031	1179	0.01	0.77
1948	92655	9812	0.90	1454	1582	0.01	0.71
1949	90399	9762	0.88	1513	1714	0.02	0.69
1950	97068	9754	0.87	2609	1267	0.01	0.75
1951	94004	9678	0.86	6731	1443	0.01	0.73
1952	80504	9675	0.85	7296	2398	0.02	0.60
1953	89354	9913	0.84	3248	1703	0.02	0.68
1954	78940	10092	0.83	2076	2467	0.02	0.59
1955	86788	10334	0.81	837	1841	0.02	0.66
1956	71658	10631	0.81	3027	3087	0.03	0.52
1957	76462	11018	0.79	2079	2610	0.03	0.56
1958	83855	11547	0.79	1285	2018	0.02	0.63
1959	97060	12146	0.79	1184	1187	0.01	0.75
1960	83516	12648	0.79	10654	2084	0.02	0.63
1961	73301	12994	0.79	2373	2951	0.03	0.54
1962	64570	13132	0.78	3035	3842	0.04	0.46
1963	53866	13211	0.76	3048	5221	0.05	0.36
1964	49813	13347	0.72	3299	5657	0.06	0.33
1965	40847	13684	0.68	3611	7210	0.08	0.25
1966	18483	14133	0.63	3972	19195	0.23	0.07
1967	18438	14644	0.49	4078	14711	0.23	0.07
1968	21721	15081	0.38	4166	9239	0.18	0.10
1969	60208	15448	0.32	4240	1769	0.04	0.42
1970	50341	66128	0.31	9339	2416	0.06	0.33
1971	55385	66041	0.30	9279	2011	0.05	0.37

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Year	Total biomass (mt)	Spawning biomass (mt)	Depletion	Age-0 recruits	Total catch (mt)	Relative exploitation rate	SPR
1972	55051	65950	0.29	9193	1990	0.05	0.37
1973	43762	65841	0.28	9130	2793	0.07	0.27
1974	46533	65262	0.27	9109	2402	0.07	0.30
1975	65826	64378	0.26	9215	1247	0.04	0.47
1976	58186	62072	0.26	9423	1581	0.05	0.40
1977	75581	60916	0.26	9929	906	0.03	0.56
1978	52715	60315	0.26	10708	1883	0.06	0.35
1979	62021	59504	0.25	11554	1363	0.04	0.43
1980	56230	58639	0.24	12371	1590	0.05	0.38
1981	57288	58052	0.23	13617	1474	0.05	0.39
1982	63975	57411	0.22	15069	1148	0.04	0.45
1983	50032	56308	0.22	14230	1727	0.06	0.33
1984	48259	55691	0.21	11925	1742	0.06	0.31
1985	49300	54777	0.20	9988	1608	0.06	0.32
1986	49661	54363	0.20	8721	1536	0.06	0.32
1987	54837	53448	0.19	7689	1270	0.05	0.37
1988	47209	52974	0.19	6725	1605	0.06	0.30
1989	44502	52940	0.18	6411	1711	0.07	0.28
1990	52947	53368	0.17	7917	1256	0.05	0.35
1991	44836	53212	0.17	12969	1615	0.07	0.28
1992	42655	52417	0.16	10720	1683	0.08	0.26
1993	45846	50961	0.16	6890	1449	0.07	0.29
1994	49772	48630	0.15	5870	1235	0.06	0.33
1995	52587	46010	0.15	5162	1110	0.05	0.35
1996	55340	42622	0.15	3956	1011	0.05	0.37
1997	61400	32825	0.15	3303	836	0.04	0.43
1998	60577	25585	0.14	3653	858	0.04	0.42
1999	68701	21380	0.14	5644	661	0.03	0.49
2000	103031	21168	0.14	10235	171	0.01	0.81
2001	90570	20464	0.15	4799	317	0.02	0.69
2002	103064	19831	0.15	2544	178	0.01	0.81
2003	105315	19133	0.15	1940	158	0.01	0.83
2004	106674	18047	0.16	2437	148	0.01	0.84
2005	114601	17330	0.16	3035	77	0.00	0.92
2006	114018	17365	0.17	2521	86	0.00	0.91
2007	107724	17273	0.18	3195	158	0.01	0.85
2008	109480	17439	0.19	3491	144	0.01	0.87
2009	104702	16885	0.19	4103	207	0.01	0.82
2010	109247	16410	0.20	3294	153	0.01	0.87
2011	114575	15722	0.20	6858	93	0.00	0.92

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Year	Total biomass (mt)	Spawning biomass (mt)	Depletion	Age-0 recruits	Total catch (mt)	Relative exploitation rate	SPR
2012	114878	15126	0.20	2675	90	0.00	0.92
2013	115184	14808	0.20	3007	88	0.00	0.92
2014	116957	14251	0.21	4367	70	0.00	0.94
2015	115075	13693	0.22	4686	93	0.00	0.92
2016	115712	13224	0.22	1873	89	0.00	0.93
2017	123687	12792	0.23	3220			

tab:Timeseries_mod1