WHAM output tables

Table 1. Parameter estimates, standard errors, and confidence intervals. Rounded to 3 decimal places.

	Estimate	Std. Error	95% CI lower	95% CI upper
Index 1 fully selected q	0.000	0.000	0.000	0.000
Index 2 fully selected q	0.021	0.001	0.019	0.024
Block 1: a_{50}	2.232	0.103	2.037	2.440
Block 1: 1/slope (increasing)	0.357	0.026	0.309	0.412
Block 2: a_{50}	2.321	0.215	1.923	2.763
Block 2: 1/slope (increasing)	0.661	0.090	0.504	0.861
Block 3: Selectivity for age 1	0.226	0.026	0.179	0.281
Block 3: Selectivity for age 2	0.220	0.026	0.173	0.274
Block 3: Selectivity for age 3	0.655	0.069	0.510	0.775
Block 3: Selectivity for age 4	1.000	—	—	—
Block 3: Selectivity for age 5	1.000	—	—	—
Block 3: Selectivity for age 6	1.000	—	—	—
Block 3: Selectivity for age 7	1.000	—	—	—
Block 3: Selectivity for age 8+	1.000	—	—	—
Block 4: a_{50}	1.050	0.111	0.851	1.288
Block 4: 1/slope (increasing)	0.052	0.117	0.001	2.813
Fleet 1 age comp, logistic-normal: σ	39.021	3.174	33.270	45.765
Fleet 1 age comp, logistic-normal: ρ	0.717	0.050	0.609	0.805
Fleet 2 age comp, logistic-normal: σ	48.386	4.386	40.510	57.794
Fleet 2 age comp, logistic-normal: ρ	0.832	0.033	0.758	0.887
Index 1 age comp, logistic-normal: σ	53.542	4.670	45.128	63.524
Index 1 age comp, logistic-normal: ρ	0.805	0.037	0.723	0.867

Table 1. Parameter estimates, standard errors, and confidence intervals. Rounded to 3 decimal places. *(continued)*

	Estimate	Std. Error	95% CI lower	95% CI upper
Index 2 age comp, logistic-normal: σ	60.916	5.181	51.563	71.966
Index 2 age comp, logistic-normal: ρ	0.786	0.039	0.700	0.852

Table 2. Abundance at age (1000s).

	1	2	3	4	5	6	7	8+
1989	15901	19025	3922	1698	233	401	10	99
1990	26074	9736	8743	1164	429	56	96	26
1991	25421	16124	4539	2625	301	107	14	30
1992	25332	15417	7122	1238	599	66	23	10
1993	16544	15657	7126	2090	312	146	16	8
1994	16013	10015	6837	1890	462	66	31	5
1995	46117	9904	4766	2178	521	123	17	9
1996	23299	28306	4689	1531	600	138	32	7
1997	14074	13966	11554	1055	280	105	24	7
1998	7621	8806	7196	4470	363	93	35	10
1999	20001	4930	4957	3246	1882	150	39	18
2000	48273	12996	2850	2383	1471	842	67	25
2001	23168	30558	6984	1201	910	548	311	34
2002	26895	14463	15828	2762	422	309	185	116
2003	16042	17005	7828	6836	1081	161	117	114
2004	13194	10113	8999	3197	2511	386	57	82
2005	9377	8511	5703	4119	1363	1053	161	58
2006	13888	6065	4899	2747	1860	606	466	97
2007	16449	9048	3587	2495	1328	888	288	268
2008	17736	10638	5262	1780	1163	609	406	254
2009	14021	11326	5932	2402	748	478	249	270
2010	14771	8933	6332	2748	1022	311	198	214
2011	7652	9257	4701	2590	1004	362	109	145
2012	31069	4980	5430	2346	1224	468	169	118
2013	8079	19257	2523	2058	780	393	149	91
2014	8845	5115	10312	1052	777	287	144	88
2015	11599	5745	3016	5254	507	369	136	110
2016	22982	7601	3510	1657	2773	265	193	128
2017	19729	14919	4506	1819	813	1341	128	154
2018	8545	12603	8382	2101	782	342	561	118
2019	24490	5533	7444	4333	1025	375	163	324

Table 2. Abundance at age (1000s). *(continued)*

	1	2	3	4	5	6	7	8+
2020	22768	15864	3233	3726	2043	476	174	226
2021	25431	14582	8858	1469	1563	840	195	163

Table 3. Total fishing mortality at age.

	1	2	3	4	5	6	7	8+
1989	0.091	0.378	0.814	0.976	1.016	1.025	1.027	1.027
1990	0.081	0.363	0.803	0.953	0.987	0.995	0.996	0.997
1991	0.100	0.417	0.899	1.078	1.122	1.132	1.134	1.135
1992	0.081	0.372	0.826	0.978	1.012	1.020	1.021	1.022
1993	0.102	0.429	0.927	1.110	1.155	1.165	1.167	1.167
1994	0.080	0.343	0.744	0.889	0.924	0.932	0.934	0.934
1995	0.088	0.348	0.735	0.889	0.928	0.937	0.939	0.940
1996	0.112	0.496	1.092	1.297	1.345	1.356	1.358	1.359
1997	0.069	0.263	0.550	0.668	0.699	0.706	0.708	0.708
1998	0.036	0.175	0.396	0.465	0.480	0.483	0.484	0.484
1999	0.031	0.148	0.332	0.392	0.405	0.408	0.408	0.408
2000	0.057	0.221	0.464	0.563	0.588	0.594	0.596	0.596
2001	0.071	0.258	0.527	0.647	0.680	0.687	0.689	0.689
2002	0.058	0.214	0.440	0.538	0.565	0.571	0.572	0.573
2003	0.061	0.236	0.495	0.601	0.629	0.635	0.637	0.637
2004	0.038	0.173	0.382	0.453	0.469	0.473	0.474	0.474
2005	0.036	0.152	0.331	0.395	0.411	0.414	0.415	0.415
2006	0.029	0.125	0.275	0.327	0.339	0.342	0.343	0.343
2007	0.036	0.142	0.301	0.363	0.379	0.383	0.384	0.384
2008	0.048	0.184	0.384	0.467	0.489	0.494	0.495	0.495
2009	0.051	0.182	0.370	0.454	0.478	0.483	0.484	0.484
2010	0.067	0.242	0.494	0.607	0.637	0.644	0.646	0.646
2011	0.030	0.133	0.295	0.350	0.363	0.365	0.366	0.366
2012	0.078	0.280	0.570	0.701	0.737	0.745	0.747	0.747
2013	0.057	0.225	0.475	0.574	0.599	0.605	0.607	0.607

Table 3. Total fishing mortality at age. *(continued)*

	1	2	3	4	5	6	7	8+
2014	0.032	0.128	0.274	0.330	0.344	0.347	0.348	0.348
2015	0.023	0.093	0.199	0.239	0.249	0.251	0.252	0.252
2016	0.032	0.123	0.257	0.312	0.327	0.330	0.331	0.331
2017	0.048	0.177	0.363	0.444	0.466	0.471	0.472	0.473
2018	0.035	0.126	0.260	0.318	0.334	0.337	0.338	0.338
2019	0.034	0.137	0.292	0.352	0.367	0.371	0.372	0.372
2020	0.046	0.183	0.389	0.469	0.489	0.494	0.495	0.495
2021	0.086	0.323	0.671	0.818	0.857	0.866	0.868	0.868