black_rockfish_sensitivity_table

Contents

Table 1: One of the black rockfish sensitivity tables.

	Base case	Index removal						Length comp removal						Age comp removal					
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Total likelihood	1618	1628	1502	1629	1629	1633	1546	1593	1532	1482	1486	1571	1618	1576	1599	1110	1165	1581	638
Survey likelihood components																			
Onboard	-9	3	-10	-9	-9	-9	-6	-9	-9	-9	-9	-9	-11	-9	-9	-9	-9	-9	-9
Tag	66	66	3232	66	66	66	3143	66	67	66	64	66	44	66	66	65	66	66	65
MRFSS	-11	-11	-7	3	-11	-11	-5	-11	-11	-11	-10	-11	-10	-11	-11	-11	-11	-11	-11
ORBS	-11	-11	-12	-11	-8	-11	-5	-11	-11	-11	-11	-11	-13	-11	-11	-11	-11	-11	-11
CommLog	-15	-15	-15	-15	-15	15	-4	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15
Length likelihood components																			
Trawl	24	24	26	25	25	25	27	32	24	25	23	25	32	24	24	24	25	24	25
Live	79	79	82	79	79	79	82	79	5954	78	85	79	8282	79	79	75	86	76	68
Dead	118	118	125	118	118	118	124	118	117	249	117	118	1033	118	118	114	117	118	114
RecO	94	94	94	95	95	95	94	94	94	98	5580	94	1301	94	94	89	92	94	85
RecS	46	46	47	46	46	46	47	46	46	46	46	964	774	46	46	47	47	46	47
Age likeklihood components																			
Trawl	42	42	40	42	42	42	40	42	41	42	39	41	37	43	42	44	39	43	32
Live	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	20	19	19	23
Dead	485	489	459	485	485	486	460	486	479	479	459	484	452	490	489	528	455	488	698
RecO	427	425	414	427	427	426	414	427	431	427	415	428	432	425	425	420	550	427	729
Small	37	37	38	37	37	37	37	37	35	37	39	37	36	37	37	35	38	39	62
MnWt likelihood components																			
Trawl	72	73	73	73	73	73	73	72	73	73	72	72	72	73	73	72	73	73	72
Dead	152	152	128	152	152	152	129	152	152	137	152	154	115	152	152	151	153	152	152
Parameters																			
NatM_p_1_Fem_GP_1	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
NatM_p_2_Fem_GP_1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
L_at_Amin_Fem_GP_1	20.32	19.92	19.7	20.34	20.33	20.23	19.69	20.3	19.64	20.01	18.28	20.63	18.56	19.99	19.91	20.37	21.93	19.8	27.84
L_at_Amax_Fem_GP_1	49.66	48.99	49.14	49.64	49.64	49.43	49.25	49.62	50.62	49.65	49.59	50.02	54.55	49.02	48.92	47.21	55.25	48.69	44.84
VonBert_K_Fem_GP_1	0.21	0.23	0.22	0.21	0.22	0.22	0.22	0.22	0.21	0.22	0.24	0.21	0.18	0.23	0.23	0.25	0.14	0.24	0.28
CV_young_Fem_GP_1	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.14	0.12	0.15	0.12	0.13	0.12	0.12	0.14	0.1	0.11	0.09
CV_old_Fem_GP_1	0.07	0.07	0.08	0.07	0.07	0.07	0.08	0.07	0.06	0.07	0.06	0.07	0.08	0.07	0.07	0.06	0.08	0.07	0.08
NatM_p_1_Mal_GP_1	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
NatM_p_2_Mal_GP_1	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
L_at_Amin_Mal_GP_1	17.47	17.32	16.72	17.49	17.48	17.43	16.72	17.43	18.8	16.57	15.84	17.5	18.92	17.35	17.3	17.09	18.2	15.86	21.18
L_at_Amax_Mal_GP_1	43.27	43.24	43.45	43.27	43.27	43.27	43.46	43.22	43.11	43.31	44.75	43.28	47.23	43.27	43.23	42.99	43.54	43.09	41.72
VonBert_K_Mal_GP_1	0.34	0.35	0.33	0.34	0.34	0.34	0.33	0.34	0.33	0.35	0.32	0.34	0.24	0.34	0.35	0.35	0.33	0.37	0.54
CV_young_Mal_GP_1	0.14	0.14	0.17	0.14	0.14	0.14	0.17	0.14	0.12	0.17	0.18	0.14	0.12	0.14	0.14	0.18	0.1	0.15	0.13
CV_old_Mal_GP_1	0.07	0.06	0.06	0.07	0.07	0.07	0.06	0.07	0.07	0.06	0.06	0.07	0.08	0.06	0.06	0.06	0.07	0.07	0.07
Wtlen_2_Fem	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88
Mat50\%_Fem	43.69	43.69	43.69	43.69	43.69	43.69	43.69	43.69	43.69	43.69	43.69	43.69	43.69	43.69	43.69	43.69	43.69	43.69	43.69
Eggs/kg_inter_Fem	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
Eggs/kg_slope_wt_Fem	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Wtlen_2_Mal	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89
SR_LN(R0)	8.21	8.21	7.73	8.21	8.21	8.21	7.74	8.21	8.21	8.21	8.17	8.2	8.3	8.21	8.21	8.22	8.2	8.21	8.03
SR_BH_steep	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
SR_sigmaR	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Q_extraSD_6_Onboard	0.24	0.08	0.23	0.24	0.24	0.24	0.5	0.24	0.24	0.24	0.24	0.24	0.21	0.24	0.24	0.24	0.24	0.24	0.24
Q_extraSD_8_MRFSS	0.2	0.2	0.27	0.04	0.2	0.2	0.5	0.2	0.2	0.2	0.21	0.2	0.21	0.2	0.2	0.2	0.2	0.2	0.2
Q_extraSD_9_ORBS	0.16	0.16	0.14	0.16	0.33	0.16	0.5	0.16	0.16	0.16	0.16	0.16	0.13	0.16	0.16	0.16	0.16	0.16	0.16
Q_extraSD_10_CommLog	0	0	0	0	0	4.36	0.5	0	0	0	0	0	0	0	0	0	0	0	0
LnQ_base_7_Tag	-1.39	-1.39	-1.39	-1.39	-1.39	-1.39	-1.39	-1.39	-1.39	-1.39	-1.39	-1.39	-1.39	-1.39	-1.39	-1.39	-1.39	-1.39	-1.39
SizeSel_1P_1_Trawl	49.21	59.84	48.4	48.25	48.25	48.42	48.35	47.84	48.98	48.88	49.91	48.25	59.95	54.16	59.86	59.97	48.42	59.89	59.98
SizeSel_1P_3_Trawl	5.06	5.71	4.99	5.07	5.07	5.19	5.01	4.68	4.79	5.28	5.62	5.05	6.37	5.32	5.71	5.55	5.28	5.71	5.43
SizeSel_1P_4_Trawl	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
SizeSel_1P_6_Trawl	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
SzSel_1Fem_Peak_Trawl	-2.53	14.77	-2.09	-3.1	-3.1	-2.34	-2.12	-1.33	-4.16	-3.02	-4	-3.24	-11.18	14.98	14.72	9.7	-3.18	14.49	2.78
SzSel_1Fem_Ascend_Trawl	-0.64	0.92	-0.6	-0.81	-0.81	-0.69	-0.61	-0.43	-0.85	-0.81	-1	-0.84	-1.5	1.16	0.91	0.59	-0.83	0.89	0.09
SzSel_1Fem_Descend_Trawl	-6.85	0	-2.35	1.86	1.87	-2.18	-14.61	-4.21	-8.07	-1.67	-0.82	1.73	-7.38	0	0	0	-1.7	0	0
SzSel_1Fem_Final_Trawl	-5.08	0	-11.72	-10	-9.98	-10.85	-12.02	-12.39	-5.71	-10.96	-9.96	-10.31	-12.41	0.02	0	0	-13.48	0	-0.01
SizeSel_2P_1_Live	38.15	38.01	40.42	38.15	38.15	38.11	40.38	38.13	39.68	37.77	37.68	38.24	16.89	38.04	37.99	37.74	38.95	37.8	37.51
SizeSel_2P_2_Live	-2.47	-2.51	-2.43	-2.48	-2.48	-2.49	-2.45	-2.43	-5.98	-2.48	-3.83	-2.43	-1.38	-2.51	-2.51	-2.41	-2.61	-2.43	-0.45
SizeSel_2P_3_Live	3.38	3.36	3.75	3.38	3.38	3.38	3.75	3.38	-2.89	3.3	3.29	3.4	-3.9	3.36	3.36	3.31	3.5	3.32	3.38

SizeSel_2P_4_Live	3.6	3.65	3.3	3.61	3.61	3.63	3.31	3.59	-1.55	3.78	3.77	3.57	0.25	3.65	3.66	3.7	3.4	3.71	0.91
SizeSel_2P_6_Live	-3.25	-2.82	-2.34	-3.27	-3.26	-3.15	-2.42	-3.21	-4.98	-4.03	-2.59	-3.49	-4.99	-2.83	-2.79	-1.17	-4.98	-2.87	0.58
SizeSel_3P_1_Dead	41.09	40.96	41.55	41.08	41.08	41.03	41.53	41.13	42.03	47.34	39.43	41.15	50	40.95	40.94	40.71	41.97	40.78	40.21
SizeSel_3P_2_Dead	-3.72	-4.33	-2.42	-3.7	-3.71	-3.83	-2.48	-3.7	-4.02	-8.69	-9.73	-3.46	1.65	-4.29	-4.34	-9.31	-3.44	-3.97	-0.7
SizeSel_3P_3_Dead	3.89	3.87	3.85	3.88	3.88	3.88	3.85	3.89	4.01	5.37	3.52	3.89	6.41	3.86	3.87	3.82	3.97	3.87	3.98
SizeSel_3P_4_Dead	0.13	0.53	5.85	0.13	0.14	0.27	5.85	0.01	-1.44	1.38	1.95	-0.18	2.02	0.49	0.53	-1.96	-1.96	0.49	1.32
SizeSel_3P_6_Dead	0.26	0.33	3.53	0.26	0.26	0.27	3.56	0.34	0.32	-4.07	-0.93	0.29	3.93	0.35	0.34	0.81	-0.36	0.42	-3.19
SzSel_3Fem_Peak_Dead	-2.12	-2.09	-1.44	-2.1	-2.1	-2.08	-1.46	-2.16	-2.96	-3.92	-1.05	-2.09	-0.83	-2.05	-2.09	-1.93	-2.56	-1.98	-0.95
SzSel_3Fem_Ascend_Dead	-0.35	-0.34	-0.18	-0.35	-0.35	-0.34	-0.19	-0.36	-0.46	-0.51	-0.11	-0.35	3.02	-0.33	-0.34	-0.31	-0.43	-0.34	-0.25
SzSel_3Fem_Descend_Dead	3.44	3.16	-2.74	3.44	3.43	3.33	-2.71	3.56	4.96	0.76	1.92	3.68	0.25	3.19	3.16	5.41	5.35	3.21	-5.95
SzSel_3Fem_Final_Dead	-12.32	-13.04	-14.95	-12.52	-12.52	-12.79	-14.95	-12.65	-10.86	-10.98	-9.51	-12.65	4.83	-13.19	-13.12	-1.85	-11.02	-13.51	3.44
SizeSel_4P_1_RecO	38.39	38.28	39.9	38.4	38.39	38.36	39.89	38.4	38.67	38.02	40.27	38.47	35	38.32	38.27	38.27	39.7	38.13	37.77
SizeSel_4P_2_RecO	-4.24	-4.23	-3.83	-4.24	-4.24	-4.23	-3.84	-4.24	-4.23	-4.28	-1.66	-4.25	-1.02	-4.26	-4.23	-4.5	-4.09	-4.17	-4.12
SizeSel_4P_3_RecO	3.79	3.79	3.94	3.79	3.79	3.79	3.94	3.8	3.83	3.74	-1.8	3.8	-0.73	3.79	3.79	3.8	3.93	3.77	3.87
SizeSel_5P_1_RecS	29.45	29.41	29.8	29.45	29.45	29.44	29.79	29.44	29.4	29.47	29.24	39.65	15.01	29.42	29.4	29.46	29.34	29.32	28.65
SizeSel_5P_2_RecS	-8.77	-8.76	-8.61	-8.77	-8.77	-8.76	-8.62	-8.77	-8.84	-8.74	-8.86	-5.82	-4.38	-8.75	-8.75	-8.61	-8.94	-8.71	-8.88
SizeSel_5P_3_RecS	4.14	4.13	4.19	4.14	4.14	4.14	4.19	4.14	4.12	4.14	4.08	-2.8	9.03	4.13	4.13	4.15	4.14	4.12	4.11
SizeSel_5P_4_RecS	3.53	3.51	3.39	3.53	3.53	3.52	3.4	3.53	3.59	3.5	3.65	-1.46	-1.31	3.51	3.51	3.39	3.87	3.49	3.25
SizeSel_5P_6_RecS	-1.83	-1.84	-1.42	-1.83	-1.83	-1.83	-1.44	-1.83	-1.82	-1.89	-2.18	-4.98	-5	-1.83	-1.84	-1.77	-1.95	-1.87	-1.83
AgeSel_4Fem_Peak_RecO	-3.89	-3.87	-1.34	-3.88	-3.89	-3.88	-1.65	-3.89	-3.85	-3.79	0.48	-3.88	5.48	-3.85	-3.86	-3.37	-2.54	-3.87	9.64
AgeSel_4Fem_Descend_RecO	3.26	3.34	3.44	3.27	3.27	3.29	3.45	3.27	3.1	3.27	3.22	3.24	1.27	3.33	3.35	3.53	-8.92	3.38	-1.8
AgeSel_4Fem_Final_RecO	-9.33	-9.27	-12.75	-9.3	-9.3	-9.28	-12.8	-9.33	-9.43	-9.18	-12.34	-9.36	-11.85	-9.33	-9.25	-9.53	-8.82	-9.12	-11.53
Derived quantitites																			
SB_0	1385	1319	802	1382	1382	1361	813	1381	1492	1396	1420	1404	2290	1316	1310	1061	2053	1299	800
SB_{2015}	836	795	198	834	834	821	206	833	920	842	851	853	1249	792	790	622	1341	782	441
$SB_{2015}SB_0$	60\%	60\%	25\%	60\%	60\%	60\%	25\%	60\%	62\%	60\%	60\%	61\%	55\%	60\%	60\%	59\%	65\%	60\%	55\%
Yield at $SPR_{50%}$	518	517	309	517	517	517	311	517	531	519	523	519	424	516	517	504	562	517	476

tab:blck_sens

"Scorpionfish don't recruit well in cold water regime (which we've been in)"

"dsfa"

"dffsdfs"