

Commercial fishing patterns influence odontocete whale-longline interactions in the Southern Ocean

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Table S2

AIC selection for the GLMs fitted to the annual proportions of fishing days with whale depredation interactions

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Table S2.1. AIC selection table for GLMs fitted to *Pr(days)* of sperm whales at the vessel level. Models are ordered by increasing AIC values and coefficient estimates are provided for the intercept and for continuous covariates when included in models. (*) indicates an interaction term between two variables, (+) indicates a categorical variable included in the model and blanks indicate that the variable was not included in the model. A correlation coefficient (pseudo r^2) is also provided.

Intercept	Depth	Proportion effort cachalotera	Proportion effort winter	Total area size	Density of vessels	Fishery	Mobility of vessels	Fishery* mobility	df	logLik	AIC	Δ AIC	pseudo r^2	weight
0.37	-0.04	0.11	-0.14	-0.43	-0.07	+	0.48	+	19	-2900.23	5838.46	0.00	0.55	1.00
0.02	-0.06	0.12	-0.14	-0.45	-0.06	+	0.13		13	-2927.87	5881.75	43.29	0.55	0.00
0.05	-0.06	0.12	-0.13	-0.44		+	0.14		12	-2929.85	5883.69	45.24	0.55	0.00
-0.09		0.12	-0.14	-0.46	-0.05	+	0.12		12	-2933.31	5890.62	52.16	0.54	0.00
-0.06		0.12	-0.13	-0.46		+	0.13		11	-2934.64	5891.28	52.83	0.54	0.00
0.18	-0.05	0.10		-0.45		+	0.15		11	-2943.43	5908.86	70.40	0.54	0.00
0.08		0.10		-0.46		+	0.14		10	-2947.99	5915.99	77.53	0.54	0.00
0.07		0.10		-0.47	-0.03	+	0.14		11	-2947.50	5916.99	78.54	0.54	0.00
0.23			-0.11	-0.47		+	0.15		10	-2953.60	5927.20	88.74	0.54	0.00
0.42	-0.05			-0.45		+	0.17		10	-2958.89	5937.79	99.33	0.54	0.00
0.32				-0.47		+	0.16		9	-2963.15	5944.29	105.83	0.54	0.00
0.31				-0.47	-0.03	+	0.16		10	-2962.56	5945.12	106.67	0.54	0.00
-0.10		0.12		-0.41		+			9	-2971.78	5961.56	123.11	0.54	0.00
0.07			-0.12	-0.41		+			9	-2982.44	5982.88	144.43	0.53	0.00
0.13				-0.42	-0.08	+			9	-2990.92	5999.85	161.39	0.53	0.00
0.23	-0.04			-0.40		+			9	-2992.48	6002.95	164.49	0.53	0.00
0.16				-0.41		+			8	-2994.50	6005.00	166.54	0.53	0.00
-0.02		0.12				+			8	-3043.08	6102.16	263.70	0.52	0.00
0.36						+	0.10		8	-3052.21	6120.43	281.97	0.52	0.00
0.15			-0.12			+			8	-3053.54	6123.09	284.63	0.52	0.00
0.37	-0.07					+			8	-3056.70	6129.40	290.95	0.52	0.00
0.25						+			7	-3065.38	6144.77	306.31	0.52	0.00
0.23					-0.03	+			8	-3064.70	6145.40	306.94	0.52	0.00
-0.16			-0.52						2	-4530.49	9064.99	3226.53	0.20	0.00
-0.11							0.35		2	-5025.35	10054.70	4216.24	0.09	0.00
-0.20					-0.23				2	-5272.90	10549.79	4711.34	0.04	0.00
-0.17		0.14							2	-5362.38	10728.76	4890.30	0.02	0.00
-0.14	-0.09								2	-5435.47	10874.94	5036.49	0.01	0.00
-0.17				0.05					2	-5455.40	10914.80	5076.34	0.00	0.00
-0.15									1	-5466.33	10934.66	5096.20	0.00	0.00

Table S2.2. AIC selection table for GLMs fitted to $Pr(days)$ of sperm whales at the fleet level. Models are ordered by increasing AIC values and coefficient estimates are provided for the intercept and for continuous covariates when included in models. (*) indicates an interaction term between two variables, (+) indicates a categorical variable included in the model and blanks indicate that the variable was not included in the model. A correlation coefficient (pseudo r^2) is also provided.

Intercept	Depth	Proportion effort cachalotera	Proportion effort winter	Total area size	Density of vessels	Fishery	Mobility of vessels	Fishery* mobility	df	logLik	AIC	ΔAIC	pseudo r^2	weight
4.56	-0.25	0.09	-0.18	-0.27	0.32	+	3.65	+	19	-370.59	779.19	0.00	0.90	1.00
1.91	-0.47	0.19	-0.19	-0.20	0.12	+	0.54		13	-443.69	913.38	134.20	0.87	0.00
1.95	-0.49	0.19	-0.19	-0.29		+	0.60		12	-445.72	915.43	136.24	0.86	0.00
1.76	-0.46	0.21	-0.20		0.18	+	0.41		12	-446.06	916.12	136.93	0.86	0.00
1.73	-0.49	0.24	-0.21			+	0.41		11	-452.22	926.45	147.26	0.86	0.00
2.16	-0.49	0.17		-0.32		+	0.60		11	-453.23	928.47	149.28	0.86	0.00
1.96	-0.45	0.19			0.19	+	0.39		11	-454.76	931.53	152.34	0.86	0.00
1.94	-0.48	0.22				+	0.39		10	-461.20	942.40	163.21	0.86	0.00
2.48	-0.48			-0.43		+	0.69		10	-461.99	943.98	164.79	0.86	0.00
2.27	-0.43				0.24	+	0.40		10	-467.38	954.76	175.57	0.85	0.00
2.16	-0.47		-0.16			+	0.42		10	-472.62	965.25	186.06	0.85	0.00
2.29	-0.46					+	0.41		9	-478.25	974.49	195.30	0.85	0.00
1.41	-0.40	0.24				+			9	-498.04	1014.09	234.90	0.84	0.00
1.75	-0.34				0.25	+			9	-505.25	1028.50	249.31	0.83	0.00
1.65	-0.38		-0.12			+			9	-514.95	1047.89	268.70	0.83	0.00
1.82	-0.39			0.13		+			9	-515.33	1048.66	269.47	0.83	0.00
1.77	-0.38					+			8	-518.17	1052.35	273.16	0.83	0.00
1.14					0.33	+			8	-540.19	1096.38	317.19	0.82	0.00
1.31						+	0.28		8	-542.23	1100.46	321.27	0.81	0.00
0.73		0.20				+			8	-548.70	1113.40	334.21	0.81	0.00
0.95			-0.13			+			8	-559.95	1135.90	356.71	0.81	0.00
1.07						+			7	-563.39	1140.78	361.59	0.80	0.00
1.07				0.05		+			8	-562.92	1141.84	362.65	0.80	0.00
0.79					0.40				2	-1967.33	3938.66	3159.47	0.08	0.00
0.63			-0.33						2	-1991.62	3987.24	3208.05	0.07	0.00
0.70	-0.25								2	-2010.38	4024.75	3245.56	0.06	0.00
0.66							0.25		2	-2023.78	4051.55	3272.36	0.05	0.00
0.62				0.19					2	-2063.61	4131.21	3352.03	0.03	0.00
0.67									1	-2122.42	4246.85	3467.66	0.00	0.00
0.67		-0.01							2	-2122.35	4248.70	3469.51	0.00	0.00

Table S2.3. AIC selection table for GLMs fitted to *Pr(days)* of killer whales at the vessel level. Models are ordered by increasing AIC values and coefficient estimates are provided for the intercept and for continuous covariates when included in models. (*) indicates an interaction term between two variables, (+) indicates a categorical variable included in the model and blanks indicate that the variable was not included in the model. A correlation coefficient (pseudo r^2) is also provided.

Intercept	Depth	Proportion effort cachalotera	Proportion effort winter	Total area size	Density of vessels	Fishery	Mobility of vessels	Fishery* Mobility	df	logLik	AIC	Δ AIC	pseudo r^2	weight
-0.78	-0.25			-0.82	-0.29	+	-0.16	+	17	-1294.13	2622.27	0.00	0.85	0.33
-0.70	-0.24			-0.80	-0.32	+	-0.06		11	-1300.83	2623.65	1.39	0.85	0.17
-0.75	-0.24	0.02		-0.81	-0.32	+	-0.07		12	-1300.60	2625.21	2.94	0.85	0.08
-0.69	-0.24		0.02	-0.81	-0.32	+	-0.06		12	-1300.67	2625.34	3.08	0.85	0.07
-0.63	-0.24			-0.80	-0.31	+			10	-1302.80	2625.60	3.33	0.85	0.06
-0.61	-0.24		0.03	-0.80	-0.31	+			11	-1302.55	2627.11	4.84	0.85	0.03
-0.66	-0.24	0.02		-0.80	-0.31	+			11	-1302.67	2627.35	5.08	0.85	0.03
-0.50	-0.21		0.07	-0.70		+			10	-1331.72	2683.44	61.17	0.84	0.00
-0.60	-0.20			-0.69		+	-0.05		10	-1332.29	2684.57	62.31	0.84	0.00
-0.55	-0.21			-0.69		+			9	-1333.36	2684.72	62.45	0.84	0.00
-0.64	-0.21	0.04		-0.70		+			10	-1332.52	2685.05	62.78	0.84	0.00
-1.02				-0.81	-0.26	+			9	-1339.89	2697.78	75.51	0.84	0.00
-0.97				-0.72		+	-0.06		9	-1359.10	2736.19	113.93	0.83	0.00
-0.85			0.07	-0.73		+			9	-1359.33	2736.66	114.39	0.83	0.00
-0.90				-0.72		+			8	-1361.05	2738.11	115.84	0.83	0.00
-0.98		0.04		-0.73		+			9	-1360.40	2738.80	116.53	0.83	0.00
-0.37	-0.22					+			8	-1383.94	2783.88	161.61	0.83	0.00
-0.81					-0.17	+			8	-1406.69	2829.39	207.12	0.82	0.00
-0.80						+	-0.05		8	-1414.87	2845.73	223.46	0.82	0.00
-0.74						+			7	-1416.25	2846.49	224.23	0.82	0.00
-0.72			0.03			+			8	-1415.88	2847.76	225.50	0.82	0.00
-0.71		-0.01				+			8	-1416.16	2848.32	226.06	0.82	0.00
-2.18				-1.53					2	-3534.58	7073.16	4450.89	0.40	0.00
-2.01		0.32							2	-5251.14	10506.28	7884.01	0.07	0.00
-1.96			-0.38						2	-5385.85	10775.71	8153.44	0.04	0.00
-1.89					0.22				2	-5493.02	10990.04	8367.77	0.02	0.00
-1.95	0.16								2	-5540.86	11085.72	8463.45	0.01	0.00
-1.94							-0.14		2	-5554.72	11113.44	8491.18	0.01	0.00
-1.91									1	-5587.30	11176.61	8554.34	0.00	0.00

Table S2.4. AIC selection table for GLMs fitted to *Pr(days)* of killer whales at the fleet level. Models are ordered by increasing AIC values and coefficient estimates are provided for the intercept and for continuous covariates when included in models. (*) indicates an interaction term between two variables, (+) indicates a categorical variable included in the model and blanks indicate that the variable was not included in the model. A correlation coefficient (pseudo r^2) is also provided.

Intercept	Depth	Proportion effort cachalotera	Proportion effort winter	Total area size	Density of vessels	Fishery	Mobility of vessels	df	logLik	AIC	Δ AIC	pseudo r^2	weight
0.74	-0.30				0.09	+	0.12	10	-293.67	607.33	0.00	0.95	0.15
0.64	-0.30				0.13	+		9	-294.67	607.34	0.01	0.95	0.15
0.80	-0.32					+	0.18	9	-294.78	607.57	0.23	0.95	0.14
0.60	-0.30		-0.05		0.13	+		10	-294.26	608.53	1.20	0.95	0.08
0.64	-0.30			-0.03	0.12	+		10	-294.62	609.23	1.90	0.95	0.06
0.67	-0.30	-0.02			0.13	+		10	-294.65	609.29	1.96	0.95	0.06
0.67	-0.33					+		8	-297.82	611.64	4.31	0.95	0.02
0.67	-0.33			-0.08		+		9	-297.37	612.74	5.41	0.95	0.01
0.63	-0.33		-0.04			+		9	-297.54	613.08	5.74	0.95	0.01
0.68	-0.33	-0.01				+		9	-297.82	613.64	6.30	0.95	0.01
0.11					0.19	+		8	-311.59	639.19	31.86	0.95	0.00
0.26						+	0.23	8	-314.07	644.14	36.81	0.95	0.00
0.07						+		7	-319.11	652.22	44.89	0.94	0.00
0.18		-0.06				+		8	-318.85	653.70	46.37	0.94	0.00
0.04			-0.03			+		8	-318.88	653.76	46.43	0.94	0.00
0.07				-0.01		+		8	-319.11	654.21	46.88	0.94	0.00
-1.14				-1.12				2	-2237.04	4478.08	3870.75	0.33	0.00
-0.99					0.80			2	-2577.60	5159.21	4551.87	0.22	0.00
-1.21							-0.76	2	-2638.61	5281.22	4673.88	0.20	0.00
-1.14		0.30						2	-3112.46	6228.93	5621.60	0.04	0.00
-1.15			-0.23					2	-3195.55	6395.10	5787.77	0.02	0.00
-1.12	0.15							2	-3214.44	6432.88	5825.55	0.01	0.00
-1.11								1	-3245.90	6493.79	5886.46	0.00	0.00