Beatrice Offshore Windfarm

Environmental Statement Addendum

Annex 7B Population Model Outputs – Tables

ANNEX 7B: POPULATION MODEL OUTPUTS - TABLES

Table 1: Fulmar Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed										
	0	**100**	**200**	**300**	**400**	**500**	**600**	**700**	**800**	**900**	**1000**
0	0.377	0.380	0.371	0.367	0.377	0.379	0.392	0.386	0.385	0.389	0.381
5	0.206	0.205	0.205	0.204	0.212	0.211	0.217	0.219	0.217	0.215	0.211
10	0.133	0.131	0.130	0.132	0.136	0.135	0.142	0.138	0.142	0.135	0.135
15	0.081	0.084	0.086	0.085	0.089	0.089	0.091	0.092	0.091	0.082	0.087
20	0.050	0.055	0.054	0.054	0.057	0.058	0.060	0.057	0.058	0.051	0.058
25	0.033	0.032	0.031	0.034	0.034	0.034	0.036	0.036	0.034	0.031	0.037
30	0.018	0.019	0.018	0.020	0.019	0.020	0.021	0.021	0.020	0.019	0.021
35	0.010	0.011	0.011	0.011	0.010	0.011	0.011	0.013	0.012	0.010	0.011
40	0.005	0.006	0.005	0.006	0.006	0.007	0.006	0.006	0.005	0.005	0.006
45	0.003	0.003	0.003	0.003	0.003	0.004	0.003	0.003	0.003	0.003	0.003
50	0.001	0.002	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.002	0.002

Table 1a: Fulmar Increase in the Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed										
	0	**100**	**200**	**300**	**400**	**500**	**600**	**700**	**800**	**900**	**1000**
0	0.000	0.003	-0.006	-0.010	0.000	0.002	0.015	0.009	0.008	0.012	0.004
5	0.000	-0.001	-0.001	-0.002	0.006	0.005	0.011	0.013	0.011	0.009	0.005
10	0	-0.002	-0.003	-0.001	0.003	0.002	0.009	0.005	0.009	0.002	0.002
15	0	0.003	0.005	0.004	0.008	0.008	0.01	0.011	0.01	0.001	0.006
20	0	0.005	0.004	0.004	0.007	0.008	0.01	0.007	0.008	0.001	0.008
25	0	-0.001	-0.002	0.001	0.001	0.001	0.003	0.003	0.001	-0.002	0.004
30	0	0.001	0	0.002	0.001	0.002	0.003	0.003	0.002	0.001	0.003
35	0	0.001	0.001	0.001	0	0.001	0.001	0.003	0.002	0	0.001
40	0	0.001	0	0.001	0.001	0.002	0.001	0.001	0	0	0.001
45	0	0	0	0	0	0.001	0	0	0	0	0
50	0	0.001	0	0	0	0.001	0	0	0	0.001	0.001

Table 2: Fulmar Probability of Population Being Smaller than Median after 25 Year Simulation Period in Relation to Displacement. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed										
	0	100	200	300	400	500	600	700	800	900	1000
0	0.500	0.506	0.504	0.512	0.521	0.517	0.525	0.531	0.521	0.520	0.535
5	0.433	0.438	0.435	0.439	0.454	0.450	0.460	0.458	0.457	0.449	0.464
10	0.364	0.370	0.362	0.373	0.387	0.384	0.394	0.393	0.394	0.380	0.398
15	0.298	0.307	0.300	0.307	0.322	0.317	0.330	0.323	0.329	0.318	0.332
20	0.238	0.246	0.245	0.246	0.257	0.253	0.270	0.263	0.266	0.259	0.269
25	0.185	0.194	0.193	0.192	0.200	0.199	0.210	0.209	0.210	0.199	0.211
30	0.140	0.146	0.148	0.148	0.152	0.151	0.158	0.164	0.155	0.151	0.159
35	0.101	0.106	0.106	0.107	0.109	0.113	0.116	0.121	0.113	0.109	0.118
40	0.072	0.072	0.071	0.074	0.075	0.079	0.079	0.088	0.078	0.077	0.079
45	0.046	0.047	0.047	0.051	0.050	0.053	0.051	0.061	0.051	0.050	0.052
50	0.029	0.029	0.030	0.030	0.029	0.032	0.030	0.039	0.033	0.030	0.033

Table 3: Gannet Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed						
	0	**25**	**50**	**75**	**100**	**125**	**150**
0	0.099	0.096	0.103	0.100	0.097	0.097	0.103
5	0.001	0.002	0.001	0.001	0.002	0.001	0.002
10	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0

Table 3a: Gannet Increase in the Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed						
	0	**25**	**50**	**75**	**100**	**125**	**150**
0	0.000	-0.003	0.004	0.002	-0.002	-0.001	0.004
5	0.000	0.001	0.001	0.001	0.001	0.000	0.002
10	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0

Table 4: Gannet Probability of Population Being Smaller than Median after 25 Year Simulation Period in Relation to Displacement. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed						
	0	25	50	75	100	125	150
0	0.500	0.517	0.504	0.513	0.515	0.522	0.521
5	0.306	0.314	0.302	0.311	0.313	0.314	0.319
10	0.142	0.146	0.139	0.147	0.149	0.153	0.151
15	0.049	0.051	0.050	0.052	0.051	0.051	0.055
20	0.010	0.011	0.012	0.013	0.012	0.012	0.013
25	0.002	0.001	0.002	0.002	0.003	0.002	0.002
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 5: Kittiwake Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed								
	0	100	200	300	400	500	600	700	800
0	0.338	0.331	0.339	0.335	0.344	0.350	0.345	0.351	0.353
5	0.085	0.082	0.088	0.088	0.090	0.088	0.093	0.091	0.099
10	0.014	0.016	0.016	0.017	0.016	0.017	0.017	0.019	0.020
15	0.002	0.003	0.002	0.002	0.003	0.003	0.003	0.003	0.003
20	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 5a: Kittiwake Increase in the Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed								
	0	100	200	300	400	500	600	700	800
0	0.000	-0.008	0.001	-0.003	0.006	0.012	0.007	0.013	0.015
5	0.000	-0.003	0.002	0.002	0.005	0.003	0.008	0.006	0.014
10	0.000	0.002	0.001	0.002	0.002	0.003	0.003	0.005	0.006
15	0.000	0.001	0.000	0.000	0.000	0.001	0.000	0.000	0.001
20	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 6: Kittiwake Probability of Population Being Smaller than Median after 25 Year Simulation Period in Relation to Displacement. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed								
	0	100	200	300	400	500	600	700	800
0	0.500	0.512	0.528	0.529	0.528	0.547	0.547	0.557	0.572
5	0.391	0.398	0.413	0.418	0.415	0.434	0.434	0.449	0.462
10	0.280	0.288	0.302	0.308	0.304	0.316	0.323	0.332	0.345
15	0.192	0.194	0.200	0.206	0.208	0.216	0.217	0.233	0.238
20	0.112	0.118	0.119	0.125	0.123	0.135	0.133	0.145	0.146
25	0.062	0.062	0.063	0.067	0.067	0.073	0.075	0.081	0.083
30	0.029	0.029	0.029	0.030	0.030	0.034	0.037	0.039	0.038
35	0.013	0.011	0.012	0.011	0.012	0.013	0.014	0.017	0.017
40	0.003	0.003	0.004	0.004	0.004	0.004	0.005	0.006	0.006
45	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.002
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001

Table 7: Guillemot Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed														
	0	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000
0	0.301	0.304	0.307	0.310	0.313	0.316	0.321	0.320	0.333	0.329	0.337	0.336	0.347	0.350	0.352
5	0.024	0.025	0.027	0.023	0.024	0.025	0.027	0.026	0.027	0.028	0.029	0.028	0.030	0.029	0.029
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 7a: Guillemot Increase in the Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed														
	0	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000
0	0.000	0.003	0.006	0.009	0.012	0.015	0.020	0.019	0.032	0.028	0.036	0.035	0.046	0.049	0.051
5	0.000	0.001	0.003	-0.001	0.000	0.001	0.003	0.002	0.003	0.004	0.005	0.004	0.006	0.005	0.005
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 8: Guillemot Probability of Population Being Smaller than Median after 25 Year Simulation Period in Relation to Displacement. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed														
	0	**500**	**1000**	**1500**	**2000**	**2500**	**3000**	**3500**	**4000**	**4500**	**5000**	**5500**	**6000**	**6500**	**7000**
0	0.500	0.532	0.539	0.559	0.572	0.595	0.614	0.631	0.648	0.665	0.673	0.695	0.722	0.730	0.743
5	0.328	0.351	0.355	0.381	0.390	0.408	0.424	0.451	0.461	0.487	0.491	0.518	0.548	0.549	0.575
10	0.173	0.195	0.196	0.215	0.217	0.234	0.249	0.270	0.282	0.299	0.303	0.331	0.351	0.360	0.381
15	0.073	0.085	0.085	0.095	0.099	0.109	0.118	0.125	0.136	0.145	0.154	0.164	0.177	0.189	0.206
20	0.023	0.030	0.028	0.030	0.036	0.036	0.043	0.041	0.047	0.056	0.060	0.063	0.067	0.075	0.082
25	0.005	0.007	0.007	0.007	0.008	0.008	0.010	0.011	0.011	0.014	0.015	0.018	0.016	0.019	0.022
30	0.001	0.001	0.001	0.002	0.002	0.001	0.001	0.002	0.001	0.002	0.003	0.003	0.003	0.004	0.004
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 9: Razorbill Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed										
	0	**100**	**200**	**300**	**400**	**500**	**600**	**700**	**800**	**900**	**1000**
0	0.087	0.088	0.091	0.097	0.100	0.104	0.108	0.113	0.120	0.125	0.128
5	0.005	0.006	0.006	0.007	0.007	0.008	0.009	0.007	0.011	0.011	0.012
10	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.000	0.001	0.001	0.001
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 9a: Razorbill Increase in the Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed										
	0	**100**	**200**	**300**	**400**	**500**	**600**	**700**	**800**	**900**	**1000**
0	0.000	0.001	0.004	0.010	0.013	0.017	0.021	0.026	0.033	0.038	0.041
5	0.000	0.001	0.001	0.002	0.002	0.003	0.004	0.002	0.006	0.006	0.007
10	0	0	0.001	0	0	0.001	0.001	0	0.001	0.001	0.001
15	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0

Table 10: Razorbill Probability of Population Being Smaller than Median after 25 Year Simulation Period in Relation to Displacement. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed										
	0	100	200	300	400	500	600	700	800	900	1000
0	0.500	0.543	0.598	0.652	0.701	0.757	0.793	0.834	0.869	0.888	0.912
5	0.390	0.427	0.493	0.550	0.596	0.661	0.702	0.749	0.798	0.827	0.856
10	0.283	0.319	0.384	0.432	0.483	0.546	0.585	0.645	0.699	0.739	0.779
15	0.189	0.225	0.277	0.317	0.369	0.419	0.468	0.525	0.582	0.625	0.679
20	0.115	0.133	0.177	0.209	0.255	0.300	0.344	0.393	0.445	0.495	0.545
25	0.062	0.077	0.105	0.128	0.158	0.192	0.226	0.268	0.309	0.361	0.406
30	0.027	0.036	0.054	0.066	0.086	0.110	0.135	0.166	0.190	0.231	0.275
35	0.012	0.016	0.023	0.030	0.041	0.054	0.068	0.086	0.099	0.131	0.155
40	0.004	0.006	0.008	0.010	0.016	0.021	0.029	0.038	0.045	0.057	0.072
45	0.001	0.002	0.002	0.003	0.005	0.007	0.009	0.011	0.018	0.020	0.029
50	0.000	0.000	0.001	0.000	0.001	0.002	0.002	0.003	0.005	0.005	0.008

Table 11: Puffin Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed						
	0	50	100	150	200	250	300
0	0.114	0.121	0.121	0.130	0.137	0.148	0.155
5	0.002	0.003	0.003	0.004	0.005	0.005	0.005
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 11a: Puffin Increase in the Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed						
	0	50	100	150	200	250	300
0	0.000	0.007	0.007	0.016	0.023	0.034	0.041
5	0.000	0.001	0.001	0.002	0.003	0.003	0.003
10	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0

Table 12: Puffin Probability of Population Being Smaller than Median after 25 Year Simulation Period in Relation to Displacement. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed						
	0	50	100	150	200	250	300
0	0.500	0.578	0.645	0.714	0.767	0.823	0.863
5	0.377	0.450	0.518	0.587	0.658	0.719	0.769
10	0.259	0.324	0.383	0.451	0.517	0.594	0.657
15	0.160	0.210	0.261	0.317	0.374	0.445	0.519
20	0.084	0.116	0.158	0.199	0.241	0.299	0.369
25	0.039	0.058	0.079	0.104	0.134	0.172	0.227
30	0.014	0.023	0.031	0.046	0.061	0.083	0.116
35	0.005	0.007	0.011	0.017	0.019	0.031	0.047
40	0.001	0.002	0.002	0.003	0.004	0.009	0.013
45	0.000	0.000	0.000	0.001	0.001	0.001	0.003
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 13: Fulmar Probability of Population Decline during 25 Year Simulation Period in Relation to Collision Mortality during Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of birds in collision						
	0	10	20	30	40	50	60
0	0.365	0.372	0.378	0.377	0.376	0.383	0.386
5	0.199	0.211	0.212	0.210	0.201	0.212	0.210
10	0.127	0.138	0.136	0.134	0.130	0.139	0.135
15	0.080	0.090	0.089	0.083	0.085	0.089	0.085
20	0.050	0.056	0.056	0.053	0.055	0.056	0.054
25	0.029	0.035	0.032	0.034	0.035	0.035	0.033
30	0.017	0.019	0.018	0.019	0.020	0.020	0.019
35	0.009	0.011	0.010	0.011	0.011	0.011	0.009
40	0.005	0.006	0.006	0.006	0.005	0.005	0.006
45	0.002	0.003	0.003	0.003	0.003	0.003	0.003
50	0.001	0.001	0.001	0.001	0.001	0.001	0.001

Table 13a: Fulmar Increase in the Probability of Population Decline during 25 Year Simulation Period in Relation to Collision Mortality during Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of birds in collision						
	0	10	20	30	40	50	60
0	0.000	0.007	0.013	0.012	0.011	0.018	0.021
5	0.000	0.012	0.014	0.012	0.003	0.013	0.011
10	0.000	0.011	0.009	0.007	0.004	0.012	0.008
15	0.000	0.010	0.009	0.004	0.005	0.010	0.005
20	0.000	0.006	0.006	0.003	0.005	0.006	0.004
25	0.000	0.005	0.003	0.005	0.006	0.005	0.004
30	0.000	0.001	0.001	0.002	0.002	0.002	0.001
35	0.000	0.002	0.001	0.002	0.001	0.002	0.000
40	0.000	0.001	0.001	0.001	0.001	0.001	0.001
45	0.000	0.001	0.001	0.001	0.000	0.001	0.001
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 14: Fulmar Probability of Population Being Smaller than Median after 25 Year Simulation Period in Relation to Collision Mortality during Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of birds in collision						
	0	10	20	30	40	50	60
0	0.500	0.508	0.506	0.511	0.510	0.517	0.521
5	0.433	0.439	0.440	0.450	0.443	0.444	0.451
10	0.366	0.371	0.373	0.377	0.375	0.379	0.384
15	0.302	0.306	0.309	0.311	0.308	0.314	0.319
20	0.245	0.246	0.245	0.251	0.250	0.252	0.259
25	0.190	0.193	0.191	0.194	0.195	0.194	0.198
30	0.143	0.143	0.145	0.147	0.146	0.145	0.152
35	0.105	0.102	0.106	0.108	0.105	0.107	0.111
40	0.074	0.069	0.073	0.076	0.073	0.072	0.079
45	0.047	0.047	0.050	0.051	0.048	0.046	0.051
50	0.028	0.030	0.033	0.031	0.028	0.030	0.031

Table 15: Gannet Probability of Population Decline during 25 Year Simulation Period in Relation to Collision Mortality during Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of birds in collision																
	0	25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400
0	0.096	0.094	0.096	0.103	0.101	0.100	0.103	0.098	0.102	0.107	0.101	0.113	0.111	0.109	0.112	0.109	0.109
5	0.002	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.002	0.001	0.002	0.002	0.001	0.002	0.001	0.001	0.002
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 15a: Gannet Increase in the Probability of Population Decline during 25 Year Simulation Period in Relation to Collision Mortality during Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of birds in collision																
	0	25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400
0	0.000	-0.002	-0.001	0.006	0.005	0.003	0.006	0.001	0.005	0.011	0.005	0.016	0.014	0.012	0.016	0.013	0.013
5	0.000	-0.001	-0.001	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	-0.001	0.000	-0.001	-0.001	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 16: Gannet Probability of Population Being Smaller than Median after 25 Year Simulation Period in Relation to Collision Mortality during Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of birds in collision																
	0	**25**	**50**	**75**	**100**	**125**	**150**	**175**	**200**	**225**	**250**	**275**	**300**	**325**	**350**	**375**	**400**
0	0.500	0.502	0.517	0.523	0.530	0.532	0.542	0.550	0.562	0.573	0.562	0.582	0.591	0.600	0.608	0.606	0.612
5	0.296	0.298	0.310	0.320	0.322	0.336	0.333	0.345	0.353	0.363	0.359	0.372	0.384	0.389	0.403	0.399	0.409
10	0.140	0.146	0.152	0.155	0.157	0.167	0.164	0.167	0.176	0.188	0.183	0.190	0.201	0.199	0.211	0.213	0.210
15	0.048	0.051	0.051	0.054	0.055	0.062	0.059	0.060	0.064	0.073	0.071	0.075	0.074	0.076	0.080	0.083	0.083
20	0.012	0.013	0.011	0.012	0.015	0.014	0.015	0.016	0.017	0.020	0.018	0.022	0.019	0.019	0.022	0.023	0.025
25	0.002	0.002	0.002	0.003	0.003	0.003	0.002	0.002	0.003	0.003	0.003	0.005	0.003	0.004	0.004	0.005	0.004
30	0	0	0	0	0	0	0	0.001	0	0	0.001	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0.001	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 17: Kittiwake Probability of Population Decline during 25 Year Simulation Period in Relation to Collision Mortality during Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of birds in collision												
	0	25	50	75	100	125	150	175	200	225	250	275	300
0	0.331	0.339	0.333	0.341	0.347	0.345	0.343	0.349	0.345	0.345	0.353	0.347	0.346
5	0.085	0.086	0.087	0.087	0.091	0.090	0.084	0.095	0.091	0.088	0.095	0.089	0.094
10	0.014	0.015	0.017	0.016	0.016	0.016	0.015	0.018	0.018	0.016	0.017	0.016	0.017
15	0.003	0.003	0.003	0.002	0.003	0.003	0.003	0.003	0.004	0.003	0.003	0.002	0.003
20	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.000	0	0.001
25	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 17a: Kittiwake Increase in the Probability of Population Decline during 25 Year Simulation Period in Relation to Collision Mortality during Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of birds in collision												
	0	25	50	75	100	125	150	175	200	225	250	275	300
0	0.000	0.009	0.002	0.010	0.016	0.014	0.013	0.018	0.014	0.014	0.022	0.016	0.015
5	0.000	0.001	0.002	0.001	0.006	0.005	-0.002	0.010	0.006	0.003	0.010	0.003	0.009
10	0.000	0.002	0.004	0.003	0.003	0.003	0.002	0.005	0.004	0.002	0.003	0.003	0.004
15	0.000	0.000	0.000	-0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000	-0.001	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 18: Kittiwake Probability of Population Being Smaller than Median after 25 Year Simulation Period in Relation to Collision Mortality during Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of birds in collision												
	0	**25**	**50**	**75**	**100**	**125**	**150**	**175**	**200**	**225**	**250**	**275**	**300**
0	0.500	0.498	0.501	0.511	0.514	0.518	0.520	0.526	0.527	0.532	0.539	0.546	0.554
5	0.388	0.390	0.391	0.399	0.399	0.400	0.410	0.418	0.416	0.419	0.426	0.435	0.440
10	0.280	0.283	0.283	0.291	0.291	0.292	0.302	0.308	0.301	0.312	0.314	0.326	0.325
15	0.184	0.190	0.190	0.190	0.193	0.198	0.205	0.207	0.204	0.215	0.210	0.227	0.223
20	0.107	0.109	0.110	0.118	0.115	0.121	0.121	0.125	0.125	0.131	0.127	0.141	0.136
25	0.055	0.061	0.058	0.062	0.065	0.064	0.063	0.072	0.068	0.073	0.072	0.076	0.072
30	0.024	0.028	0.028	0.030	0.029	0.031	0.030	0.031	0.033	0.035	0.035	0.037	0.034
35	0.009	0.010	0.012	0.012	0.011	0.014	0.012	0.011	0.013	0.015	0.013	0.014	0.013
40	0.003	0.003	0.004	0.004	0.003	0.003	0.004	0.003	0.003	0.005	0.005	0.005	0.005
45	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 19: Herring Gull Probability of Population Decline during 25 Year Simulation Period in Relation to Collision Mortality during Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of birds in collision												
	0	50	100	150	200	250	300	350	400	450	500	550	600
0	0.661	0.665	0.671	0.687	0.687	0.695	0.702	0.707	0.710	0.716	0.723	0.738	0.738
5	0.505	0.512	0.513	0.531	0.537	0.542	0.548	0.565	0.565	0.571	0.589	0.598	0.604
10	0.338	0.347	0.345	0.362	0.367	0.376	0.386	0.401	0.405	0.415	0.430	0.438	0.451
15	0.211	0.224	0.220	0.236	0.242	0.246	0.260	0.272	0.272	0.286	0.299	0.302	0.318
20	0.124	0.136	0.135	0.145	0.153	0.156	0.167	0.176	0.177	0.185	0.192	0.202	0.215
25	0.073	0.073	0.080	0.079	0.082	0.093	0.104	0.106	0.107	0.112	0.122	0.128	0.133
30	0.034	0.038	0.041	0.040	0.044	0.047	0.053	0.060	0.059	0.062	0.068	0.073	0.080
35	0.016	0.018	0.018	0.019	0.021	0.024	0.027	0.029	0.030	0.033	0.036	0.036	0.043
40	0.006	0.008	0.007	0.008	0.010	0.011	0.013	0.015	0.012	0.016	0.016	0.017	0.020
45	0.002	0.002	0.003	0.002	0.003	0.004	0.004	0.006	0.006	0.007	0.008	0.008	0.009
50	0.000	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.003	0.003	0.004

(cont.)

Thresholds of population decline (%)	Number of birds in collision											
	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
0	0.736	0.744	0.759	0.766	0.777	0.774	0.784	0.789	0.788	0.800	0.808	0.814
5	0.604	0.617	0.624	0.642	0.648	0.650	0.664	0.671	0.675	0.689	0.702	0.709
10	0.454	0.463	0.469	0.490	0.497	0.500	0.522	0.528	0.535	0.550	0.571	0.575
15	0.322	0.325	0.348	0.357	0.361	0.369	0.392	0.392	0.402	0.418	0.442	0.444
20	0.222	0.228	0.239	0.247	0.251	0.262	0.281	0.288	0.289	0.312	0.331	0.334
25	0.140	0.150	0.153	0.162	0.162	0.174	0.188	0.197	0.199	0.218	0.231	0.236
30	0.081	0.088	0.092	0.095	0.098	0.110	0.115	0.126	0.128	0.137	0.154	0.157
35	0.043	0.049	0.052	0.052	0.055	0.063	0.068	0.073	0.075	0.081	0.094	0.098
40	0.022	0.025	0.024	0.028	0.027	0.033	0.037	0.037	0.044	0.045	0.055	0.054
45	0.010	0.011	0.012	0.014	0.013	0.017	0.018	0.018	0.023	0.023	0.028	0.028
50	0.003	0.004	0.005	0.006	0.006	0.007	0.008	0.009	0.010	0.010	0.011	0.015

Table 19a: Herring Gull Increase in the Probability of Population Decline during 25 Year Simulation Period in Relation to Collision Mortality during Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of birds in collision												
	0	50	100	150	200	250	300	350	400	450	500	550	600
0	0.000	0.004	0.010	0.026	0.026	0.034	0.041	0.047	0.049	0.055	0.062	0.077	0.077
5	0.000	0.007	0.007	0.026	0.032	0.037	0.043	0.059	0.060	0.066	0.084	0.092	0.099
10	0.000	0.009	0.007	0.024	0.029	0.038	0.048	0.063	0.067	0.077	0.092	0.100	0.113
15	0.000	0.013	0.009	0.025	0.031	0.036	0.049	0.062	0.061	0.075	0.088	0.092	0.108
20	0.000	0.012	0.011	0.021	0.029	0.032	0.043	0.052	0.053	0.062	0.068	0.078	0.092
25	0.000	0.000	0.007	0.006	0.009	0.020	0.031	0.033	0.034	0.039	0.049	0.055	0.060
30	0.000	0.004	0.007	0.006	0.009	0.013	0.019	0.025	0.025	0.028	0.034	0.039	0.046
35	0.000	0.002	0.002	0.003	0.005	0.008	0.011	0.013	0.014	0.017	0.020	0.020	0.027
40	0.000	0.001	0.001	0.001	0.004	0.004	0.007	0.008	0.006	0.010	0.010	0.011	0.014
45	0.000	-0.001	0.000	0.000	0.001	0.001	0.002	0.003	0.003	0.005	0.005	0.005	0.007
50	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.002	0.002	0.004

(cont.)

Thresholds of population decline (%)	Number of birds in collision											
	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
0	0.075	0.083	0.098	0.105	0.116	0.113	0.123	0.128	0.127	0.139	0.148	0.153
5	0.099	0.112	0.119	0.136	0.143	0.145	0.159	0.165	0.169	0.184	0.196	0.204
10	0.116	0.125	0.131	0.152	0.159	0.162	0.184	0.190	0.197	0.212	0.233	0.237
15	0.111	0.115	0.137	0.147	0.150	0.158	0.181	0.181	0.192	0.208	0.231	0.234
20	0.098	0.104	0.115	0.123	0.127	0.138	0.158	0.164	0.165	0.189	0.207	0.210
25	0.067	0.077	0.080	0.089	0.089	0.101	0.115	0.124	0.126	0.145	0.158	0.163
30	0.047	0.054	0.058	0.061	0.064	0.076	0.081	0.092	0.094	0.102	0.120	0.123
35	0.027	0.033	0.036	0.036	0.039	0.047	0.052	0.057	0.059	0.065	0.078	0.082
40	0.016	0.019	0.018	0.022	0.020	0.027	0.031	0.031	0.037	0.039	0.049	0.048
45	0.007	0.008	0.010	0.012	0.010	0.015	0.016	0.015	0.021	0.020	0.025	0.026
50	0.003	0.003	0.005	0.005	0.005	0.007	0.007	0.008	0.010	0.010	0.011	0.014

Table 20: Herring Gull Probability of Population Being Smaller than Median after 25 Year Simulation Period in Relation to Collision Mortality during Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of birds in collision												
	0	50	100	150	200	250	300	350	400	450	500	550	600
0	0.500	0.532	0.539	0.545	0.571	0.588	0.594	0.625	0.631	0.656	0.667	0.682	0.694
5	0.454	0.483	0.488	0.494	0.520	0.539	0.545	0.577	0.582	0.610	0.623	0.639	0.647
10	0.402	0.429	0.438	0.441	0.470	0.490	0.495	0.523	0.530	0.557	0.569	0.587	0.596
15	0.346	0.379	0.382	0.391	0.414	0.433	0.444	0.463	0.473	0.500	0.511	0.530	0.542
20	0.294	0.322	0.326	0.335	0.357	0.378	0.389	0.404	0.414	0.442	0.449	0.470	0.486
25	0.240	0.266	0.268	0.282	0.301	0.322	0.329	0.343	0.355	0.379	0.391	0.406	0.425
30	0.190	0.216	0.216	0.228	0.244	0.265	0.272	0.286	0.294	0.316	0.328	0.343	0.361
35	0.146	0.163	0.165	0.177	0.190	0.209	0.216	0.227	0.235	0.253	0.269	0.277	0.291
40	0.104	0.119	0.119	0.128	0.139	0.156	0.164	0.172	0.180	0.194	0.207	0.215	0.228
45	0.069	0.083	0.082	0.088	0.092	0.110	0.116	0.122	0.131	0.140	0.149	0.155	0.166
50	0.043	0.050	0.053	0.056	0.063	0.071	0.077	0.083	0.087	0.095	0.102	0.106	0.115

(cont.)

Thresholds of population decline (%)	Number of birds in collision											
	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
0	0.706	0.723	0.737	0.748	0.769	0.771	0.783	0.794	0.810	0.818	0.835	0.850
5	0.666	0.676	0.694	0.709	0.726	0.734	0.749	0.757	0.776	0.786	0.797	0.818
10	0.615	0.625	0.646	0.658	0.677	0.688	0.704	0.713	0.733	0.745	0.759	0.777
15	0.560	0.572	0.593	0.606	0.622	0.642	0.655	0.668	0.686	0.702	0.718	0.733
20	0.502	0.517	0.539	0.551	0.567	0.589	0.604	0.619	0.633	0.650	0.669	0.684
25	0.440	0.450	0.470	0.485	0.508	0.525	0.542	0.557	0.572	0.590	0.611	0.625
30	0.373	0.378	0.402	0.420	0.439	0.459	0.475	0.483	0.501	0.522	0.547	0.556
35	0.311	0.310	0.329	0.347	0.364	0.393	0.402	0.414	0.430	0.454	0.473	0.485
40	0.245	0.245	0.263	0.276	0.294	0.316	0.332	0.337	0.355	0.375	0.394	0.404
45	0.177	0.182	0.198	0.211	0.224	0.241	0.261	0.261	0.276	0.300	0.315	0.323
50	0.123	0.129	0.136	0.150	0.159	0.173	0.188	0.192	0.206	0.225	0.239	0.241

Table 21: Great Black-Backed Bull Probability of Population Decline during 25 Year Simulation Period in Relation to Collision Mortality during Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of birds in collision												
	0	20	40	60	80	100	120	140	160	180	200	220	240
0	0.195	0.285	0.430	0.735	0.987	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5	0.103	0.169	0.294	0.609	0.972	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10	0.030	0.078	0.175	0.466	0.941	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
15	0.005	0.021	0.078	0.319	0.894	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
20	0.001	0.007	0.036	0.205	0.827	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
25	0.000	0.001	0.014	0.134	0.742	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000
30	0.000	0.000	0.005	0.076	0.638	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000
35	0.000	0.000	0.001	0.039	0.519	0.995	1.000	1.000	1.000	1.000	1.000	1.000	1.000
40	0.000	0.000	0.000	0.018	0.392	0.988	1.000	1.000	1.000	1.000	1.000	1.000	1.000
45	0.000	0.000	0.000	0.009	0.279	0.967	1.000	1.000	1.000	1.000	1.000	1.000	1.000
50	0.000	0.000	0.000	0.003	0.180	0.921	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Table 21a: Great Black-Backed Gull Increase in the Probability of Population Decline during 25 Year Simulation Period in Relation to Collision Mortality during Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of birds in collision												
	0	20	40	60	80	100	120	140	160	180	200	220	240
0	0.00	0.09	0.23	0.54	0.79	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
5	0.00	0.07	0.19	0.51	0.87	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
10	0.00	0.05	0.15	0.44	0.91	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
15	0.00	0.02	0.07	0.31	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
20	0.00	0.01	0.04	0.20	0.83	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
25	0.00	0.00	0.01	0.13	0.74	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
30	0.00	0.00	0.01	0.08	0.64	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
35	0.00	0.00	0.00	0.04	0.52	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
40	0.00	0.00	0.00	0.02	0.39	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
45	0.00	0.00	0.00	0.01	0.28	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00
50	0.00	0.00	0.00	0.00	0.18	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Table 22: Great Black-Backed Gull Probability of Population Being Smaller than Median after 25 Year Simulation Period in Relation to Collision Mortality during Breeding Season.
(Based on all populations listed in Table 7.2 of ES Addendum.)

Thresholds of population decline (%)	Number of birds in collision												
	0	20	40	60	80	100	120	140	160	180	200	220	240
0	0.500	0.995	1.000	1	1	1	1	1	1	1	1	1	1
5	0.429	0.991	1.000	1	1	1	1	1	1	1	1	1	1
10	0.349	0.981	1.000	1	1	1	1	1	1	1	1	1	1
15	0.279	0.965	1.000	1	1	1	1	1	1	1	1	1	1
20	0.213	0.939	1.000	1	1	1	1	1	1	1	1	1	1
25	0.157	0.898	1.000	1	1	1	1	1	1	1	1	1	1
30	0.107	0.844	1.000	1	1	1	1	1	1	1	1	1	1
35	0.068	0.762	1.000	1	1	1	1	1	1	1	1	1	1
40	0.039	0.657	0.999	1	1	1	1	1	1	1	1	1	1
45	0.021	0.527	0.997	1	1	1	1	1	1	1	1	1	1
50	0.010	0.387	0.989	1	1	1	1	1	1	1	1	1	1

Table 23: Herring Gull Probability of Population Decline during 25 Year Simulation Period in Relation to Collision Mortality during Non-Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of birds in collision												
	0	100	200	300	400	500	600	700	800	900	1000	1100	1200
0	0.662	0.670	0.687	0.696	0.713	0.725	0.730	0.762	0.765	0.779	0.787	0.799	0.818
5	0.499	0.513	0.532	0.555	0.567	0.587	0.594	0.627	0.631	0.664	0.667	0.687	0.711
10	0.328	0.347	0.365	0.388	0.400	0.424	0.438	0.473	0.478	0.516	0.528	0.549	0.578
15	0.206	0.224	0.237	0.256	0.272	0.291	0.306	0.334	0.346	0.382	0.396	0.418	0.444
20	0.124	0.134	0.146	0.164	0.176	0.192	0.208	0.230	0.244	0.272	0.287	0.306	0.333
25	0.065	0.074	0.080	0.096	0.103	0.114	0.129	0.151	0.161	0.182	0.196	0.206	0.241
30	0.032	0.038	0.039	0.050	0.056	0.062	0.075	0.089	0.097	0.113	0.125	0.132	0.156
35	0.013	0.018	0.018	0.024	0.026	0.032	0.038	0.048	0.053	0.066	0.072	0.081	0.098
40	0.005	0.007	0.007	0.011	0.012	0.016	0.019	0.023	0.028	0.035	0.040	0.045	0.058
45	0.002	0.003	0.003	0.004	0.005	0.007	0.009	0.011	0.014	0.017	0.020	0.022	0.031
50	0.001	0.001	0.001	0.001	0.002	0.003	0.003	0.004	0.006	0.008	0.009	0.011	0.015

Table 23a: Herring Gull Increase in the Probability of Population Decline during 25 Year Simulation Period in Relation to Collision Mortality during Non-Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of birds in collision												
	0	100	200	300	400	500	600	700	800	900	1000	1100	1200
0	0.000	0.008	0.025	0.034	0.051	0.062	0.068	0.099	0.103	0.117	0.125	0.136	0.156
5	0.000	0.014	0.033	0.056	0.068	0.088	0.095	0.128	0.132	0.165	0.168	0.188	0.212
10	0.000	0.020	0.038	0.061	0.072	0.097	0.111	0.146	0.150	0.188	0.201	0.221	0.251
15	0.000	0.018	0.031	0.050	0.067	0.085	0.100	0.128	0.140	0.176	0.190	0.212	0.238
20	0.000	0.011	0.022	0.040	0.052	0.069	0.085	0.106	0.120	0.149	0.163	0.182	0.209
25	0.000	0.009	0.015	0.031	0.038	0.049	0.065	0.086	0.096	0.117	0.131	0.141	0.177
30	0.000	0.006	0.008	0.019	0.025	0.031	0.043	0.058	0.066	0.081	0.093	0.100	0.125
35	0.000	0.005	0.005	0.011	0.013	0.019	0.025	0.035	0.040	0.053	0.059	0.068	0.085
40	0.000	0.002	0.001	0.006	0.007	0.011	0.014	0.018	0.023	0.030	0.035	0.040	0.052
45	0.000	0.001	0.001	0.003	0.004	0.005	0.007	0.009	0.013	0.015	0.019	0.021	0.029
50	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.004	0.005	0.008	0.009	0.010	0.015

Table 24: Herring Gull Probability of Population Being Smaller than Median after 25 Year Simulation Period in Relation to Collision Mortality during Non-Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of birds in collision												
	0	**100**	**200**	**300**	**400**	**500**	**600**	**700**	**800**	**900**	**1000**	**1100**	**1200**
0	0.500	0.531	0.571	0.595	0.629	0.660	0.696	0.721	0.737	0.771	0.799	0.823	0.841
5	0.446	0.480	0.520	0.545	0.580	0.613	0.654	0.678	0.697	0.732	0.762	0.788	0.808
10	0.397	0.428	0.469	0.495	0.530	0.561	0.606	0.627	0.650	0.688	0.714	0.751	0.770
15	0.342	0.374	0.418	0.438	0.476	0.507	0.552	0.576	0.597	0.639	0.665	0.699	0.726
20	0.286	0.319	0.357	0.377	0.419	0.450	0.492	0.520	0.541	0.582	0.611	0.643	0.674
25	0.237	0.266	0.301	0.319	0.360	0.384	0.431	0.458	0.482	0.522	0.549	0.580	0.616
30	0.188	0.214	0.246	0.259	0.297	0.320	0.364	0.388	0.417	0.458	0.483	0.512	0.550
35	0.141	0.163	0.188	0.202	0.238	0.259	0.297	0.316	0.345	0.386	0.413	0.441	0.481
40	0.100	0.118	0.137	0.155	0.180	0.198	0.229	0.252	0.276	0.313	0.341	0.365	0.404
45	0.068	0.082	0.095	0.109	0.128	0.145	0.170	0.192	0.206	0.243	0.265	0.288	0.319
50	0.041	0.053	0.061	0.070	0.081	0.096	0.118	0.134	0.147	0.174	0.198	0.214	0.241

Table 25: Great Black-Backed Gull Probability of Population Decline during 25 Year Simulation Period in Relation to Collision Mortality during Non-Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of birds in collision								
	0	50	100	150	200	250	300	350	400
0	0.187	0.183	0.188	0.199	0.200	0.197	0.201	0.210	0.204
5	0.099	0.103	0.099	0.114	0.113	0.109	0.110	0.119	0.114
10	0.028	0.029	0.028	0.032	0.034	0.033	0.032	0.040	0.039
15	0.005	0.005	0.004	0.004	0.006	0.007	0.006	0.007	0.007
20	0.001	0.001	0.000	0.001	0.001	0.002	0.001	0.002	0.002
25	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 25a: Great Black-Backed Gull Increase in the Probability of Population Decline during 25 Year Simulation Period in Relation to Collision Mortality during Non-Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of birds in collision								
	0	50	100	150	200	250	300	350	400
0	0.000	-0.003	0.001	0.012	0.014	0.011	0.015	0.024	0.017
5	0.000	0.004	0.000	0.015	0.014	0.010	0.011	0.020	0.016
10	0.000	0.001	0.000	0.004	0.007	0.006	0.005	0.012	0.011
15	0.000	0.000	-0.001	-0.001	0.001	0.002	0.001	0.002	0.002
20	0.000	-0.001	-0.001	0.000	0.000	0.000	0.000	0.001	0.001
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 26: Great Black-Backed Gull Probability of Population Being Smaller than Median after 25 Year Simulation Period in Relation to Collision Mortality during Non-Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of birds in collision								
	0	50	100	150	200	250	300	350	400
0	0.500	0.537	0.573	0.613	0.640	0.684	0.713	0.751	0.772
5	0.428	0.457	0.496	0.535	0.562	0.611	0.638	0.681	0.707
10	0.355	0.387	0.420	0.454	0.480	0.528	0.562	0.598	0.634
15	0.279	0.312	0.344	0.375	0.402	0.445	0.477	0.513	0.547
20	0.212	0.240	0.266	0.296	0.320	0.360	0.389	0.427	0.454
25	0.156	0.176	0.199	0.221	0.249	0.279	0.306	0.340	0.364
30	0.107	0.124	0.141	0.157	0.179	0.207	0.230	0.256	0.275
35	0.070	0.082	0.091	0.107	0.125	0.139	0.161	0.182	0.198
40	0.041	0.050	0.058	0.068	0.078	0.090	0.107	0.124	0.133
45	0.023	0.029	0.032	0.041	0.047	0.051	0.063	0.075	0.078
50	0.012	0.013	0.015	0.023	0.022	0.026	0.032	0.042	0.043

Table 27: Fulmar Probability of Population Decline during 25 Year Simulation Period in Relation to the Combined Effects of Displacement and Collision (at 98% avoidance rate) during the Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed & BOWL CRM of 5										
	0	100	200	300	400	500	600	700	800	900	1000
0	0.371	0.388	0.378	0.379	0.381	0.372	0.374	0.375	0.387	0.390	0.383
5	0.207	0.214	0.209	0.209	0.208	0.204	0.208	0.207	0.217	0.218	0.209
10	0.132	0.136	0.133	0.133	0.135	0.133	0.134	0.132	0.136	0.142	0.134
15	0.084	0.088	0.085	0.086	0.086	0.087	0.087	0.084	0.091	0.089	0.087
20	0.053	0.057	0.056	0.057	0.054	0.055	0.056	0.053	0.057	0.054	0.053
25	0.033	0.033	0.033	0.034	0.035	0.033	0.034	0.032	0.036	0.035	0.031
30	0.020	0.020	0.021	0.019	0.020	0.020	0.020	0.019	0.021	0.022	0.019
35	0.011	0.012	0.011	0.012	0.011	0.011	0.012	0.012	0.012	0.013	0.011
40	0.006	0.006	0.007	0.005	0.005	0.006	0.007	0.006	0.007	0.006	0.006
45	0.004	0.003	0.004	0.002	0.002	0.003	0.004	0.003	0.003	0.002	0.003
50	0.002	0.002	0.002	0.001	0.001	0.002	0.002	0.001	0.002	0.001	0.002

Table 27a: Fulmar Increase in the Probability of Population Decline during 25 Year Simulation Period in Relation to the Combined Effects of Displacement and Collision (at 98% Avoidance Rate) during the Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed & BOWL CRM of 5										
	0	100	200	300	400	500	600	700	800	900	1000
0	0.00	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.02	0.02	0.01
5	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 28: Fulmar Probability of Population Being Smaller than Median after 25 Year Simulation Period in Relation to the Combined Effects of Displacement and Collision (at 98% Avoidance Rate) during the Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed & BOWL CRM of 5										
	0	**100**	**200**	**300**	**400**	**500**	**600**	**700**	**800**	**900**	**1000**
0	0.500	0.505	0.499	0.508	0.507	0.501	0.510	0.512	0.511	0.521	0.516
5	0.428	0.437	0.432	0.441	0.442	0.435	0.444	0.444	0.442	0.453	0.444
10	0.359	0.364	0.367	0.373	0.373	0.367	0.380	0.373	0.374	0.384	0.376
15	0.297	0.301	0.300	0.308	0.307	0.301	0.315	0.306	0.311	0.319	0.313
20	0.235	0.244	0.242	0.249	0.249	0.243	0.253	0.246	0.254	0.258	0.255
25	0.183	0.189	0.188	0.193	0.194	0.188	0.197	0.193	0.201	0.199	0.201
30	0.139	0.140	0.138	0.145	0.148	0.143	0.150	0.148	0.152	0.147	0.151
35	0.103	0.102	0.102	0.103	0.107	0.103	0.109	0.110	0.110	0.106	0.113
40	0.070	0.072	0.069	0.073	0.075	0.070	0.074	0.074	0.075	0.073	0.077
45	0.047	0.047	0.047	0.047	0.050	0.045	0.048	0.049	0.049	0.047	0.052
50	0.032	0.030	0.029	0.029	0.029	0.027	0.031	0.030	0.029	0.030	0.032

Table 29: Fulmar Probability of Population Decline during 25 Year Simulation Period in Relation to the Combined Effects of Displacement and Collision (at 99% Avoidance Rate) during the Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed & BOWL CRM of 3										
	0	100	200	300	400	500	600	700	800	900	1000
0	0.376	0.375	0.381	0.385	0.375	0.375	0.385	0.377	0.377	0.381	0.388
5	0.211	0.208	0.208	0.214	0.201	0.210	0.217	0.206	0.207	0.216	0.215
10	0.136	0.130	0.137	0.138	0.130	0.138	0.138	0.138	0.135	0.137	0.140
15	0.091	0.084	0.088	0.089	0.086	0.089	0.089	0.090	0.089	0.090	0.090
20	0.057	0.055	0.056	0.056	0.054	0.057	0.054	0.057	0.055	0.056	0.052
25	0.035	0.032	0.034	0.035	0.033	0.036	0.032	0.037	0.035	0.033	0.031
30	0.020	0.017	0.019	0.021	0.019	0.020	0.020	0.022	0.022	0.020	0.017
35	0.011	0.011	0.011	0.011	0.011	0.012	0.011	0.013	0.012	0.010	0.009
40	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.006	0.006	0.004
45	0.004	0.003	0.003	0.003	0.002	0.003	0.004	0.003	0.004	0.003	0.003
50	0.002	0.002	0.002	0.002	0.001	0.002	0.002	0.001	0.001	0.001	0.001

Table 29a: Fulmar Increase in Probability of Population Decline during 25 Year Simulation Period in Relation to the Combined Effects of Displacement and Collision (at 99% Avoidance Rate) during the Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed & BOWL CRM of 3										
	0	100	200	300	400	500	600	700	800	900	1000
0	0.000	-0.001	0.005	0.009	-0.002	-0.001	0.008	0.001	0.001	0.004	0.011
5	0.000	-0.003	-0.003	0.003	-0.010	-0.001	0.006	-0.005	-0.004	0.005	0.004
10	0.000	-0.006	0.001	0.002	-0.005	0.002	0.003	0.002	0.000	0.002	0.004
15	0.000	-0.007	-0.003	-0.002	-0.005	-0.002	-0.001	-0.001	-0.002	0.000	-0.001
20	0.000	-0.002	-0.001	-0.001	-0.002	0.000	-0.003	0.001	-0.001	-0.001	-0.005
25	0.000	-0.002	0.000	0.000	-0.002	0.001	-0.003	0.003	0.000	-0.002	-0.004
30	0.000	-0.003	-0.001	0.000	-0.001	0.000	-0.001	0.002	0.002	-0.001	-0.004
35	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.002	0.002	0.000	-0.002
40	0.000	0.000	0.000	0.000	-0.001	0.000	-0.001	0.000	0.000	-0.001	-0.002
45	0.000	0.000	-0.001	0.000	-0.002	-0.001	0.000	-0.001	0.000	-0.001	-0.001
50	0.000	-0.001	0.005	0.009	-0.002	-0.001	0.008	0.001	0.001	0.004	0.011

Table 30: Fulmar Probability of Population Being Smaller than Median after 25 Year Simulation Period in Relation to the Combined Effects of Displacement and Collision (at 99% Avoidance Rate) during the Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed & BOWL CRM of 3										
	0	**100**	**200**	**300**	**400**	**500**	**600**	**700**	**800**	**900**	**1000**
0	0.500	0.499	0.505	0.502	0.500	0.513	0.523	0.516	0.522	0.523	0.531
5	0.436	0.430	0.442	0.435	0.432	0.443	0.454	0.452	0.456	0.452	0.461
10	0.370	0.363	0.373	0.370	0.370	0.377	0.389	0.388	0.388	0.386	0.389
15	0.305	0.302	0.310	0.310	0.306	0.315	0.320	0.318	0.321	0.318	0.326
20	0.242	0.243	0.250	0.251	0.244	0.255	0.260	0.255	0.259	0.260	0.263
25	0.188	0.189	0.194	0.196	0.191	0.202	0.204	0.195	0.200	0.203	0.206
30	0.143	0.140	0.150	0.152	0.144	0.155	0.154	0.147	0.150	0.154	0.157
35	0.106	0.103	0.106	0.112	0.102	0.112	0.111	0.109	0.111	0.115	0.117
40	0.072	0.072	0.072	0.078	0.071	0.079	0.077	0.077	0.075	0.078	0.080
45	0.048	0.046	0.047	0.048	0.045	0.053	0.051	0.051	0.050	0.051	0.051
50	0.030	0.029	0.031	0.029	0.027	0.033	0.032	0.030	0.032	0.032	0.032

Table 31: Gannet Probability of Population Decline during 25 Year Simulation Period in Relation to the Combined Effects of Displacement and Collision (at 98% Avoidance Rate) during the Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed & BOWL CRM of 9						
	0	25	50	75	100	125	150
0	0.098	0.100	0.098	0.098	0.098	0.097	0.097
5	0.001	0.001	0.001	0.001	0.001	0.001	0.001
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 31a: Gannet Increase in the Probability of Population Decline during 25 Year Simulation Period in Relation to the Combined Effects of Displacement and Collision (at 98% Avoidance Rate) during the Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed & BOWL CRM of 9						
	0	25	50	75	100	125	150
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0

Table 32: Gannet Probability of Population Being Smaller than Median after 25 Year Simulation Period in Relation to the Combined Effects of Displacement and Collision (at 98% Avoidance Rate) during the Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed & BOWL CRM of 9						
	0	25	50	75	100	125	150
0	0.500	0.494	0.497	0.503	0.508	0.508	0.505
5	0.298	0.300	0.300	0.303	0.302	0.307	0.308
10	0.142	0.146	0.142	0.139	0.139	0.147	0.143
15	0.050	0.050	0.052	0.048	0.046	0.050	0.053
20	0.012	0.011	0.012	0.012	0.012	0.011	0.012
25	0.002	0.002	0.002	0.002	0.002	0.002	0.002
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0

Table 33: Gannet Probability of Population Decline during 25 Year Simulation Period in Relation to the Combined Effects of Displacement and Collision (at 99% Avoidance Rate) during the Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed & BOWL CRM of 4						
	0	25	50	75	100	125	150
0	0.102	0.100	0.096	0.096	0.105	0.100	0.097
5	0.001	0.002	0.002	0.001	0.001	0.002	0.001
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 33a: Gannet Increase in the Probability of Population Decline during 25 Year Simulation Period in Relation to the Combined Effects of Displacement and Collision (at 99% Avoidance Rate) during the Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed & BOWL CRM of 4						
	0	25	50	75	100	125	150
0	0.000	-0.001	-0.006	-0.006	0.003	-0.002	-0.005
5	0.000	0.000	0.000	0.000	0.000	0.000	-0.001
10	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0

Table 34: Gannet Probability of Population Being Smaller than Median after 25 Year Simulation Period in Relation to the Combined Effects of Displacement and Collision (at 99% Avoidance Rate) during the Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed & BOWL CRM of 4						
	0	25	50	75	100	125	150
0	0.500	0.496	0.495	0.494	0.501	0.508	0.512
5	0.292	0.301	0.293	0.296	0.297	0.301	0.306
10	0.138	0.139	0.134	0.133	0.136	0.138	0.145
15	0.046	0.049	0.048	0.045	0.046	0.045	0.050
20	0.009	0.012	0.011	0.010	0.009	0.011	0.012
25	0.002	0.001	0.002	0.001	0.001	0.002	0.002
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 35: Kittiwake Probability of Population Decline during 25 Year Simulation Period in Relation to the Combined Effects of Displacement and Collision (at 98% Avoidance Rate) during the Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed & BOWL CRM of 21									
	0	50	150	200	250	300	350	400	450	500
0	0.328	0.336	0.333	0.337	0.341	0.344	0.334	0.352	0.342	0.348
5	0.083	0.084	0.085	0.088	0.087	0.087	0.081	0.091	0.089	0.090
10	0.016	0.015	0.015	0.016	0.016	0.016	0.015	0.019	0.017	0.019
15	0.003	0.002	0.002	0.003	0.003	0.003	0.002	0.003	0.002	0.004
20	0.000	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.001
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 35a: Kittiwake Increase in the Probability of Population Decline during 25 Year Simulation Period in Relation to the Combined Effects of Displacement and Collision (at 98% Avoidance Rate) during the Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed & BOWL CRM of 21									
	0	50	150	200	250	300	350	400	450	500
0	0.000	0.008	0.006	0.009	0.013	0.016	0.007	0.024	0.014	0.020
5	0.000	0.001	0.002	0.005	0.004	0.004	-0.002	0.008	0.006	0.007
10	0.000	-0.001	-0.001	0.000	0.000	0.000	-0.001	0.003	0.001	0.003
15	0.000	-0.001	-0.001	0.000	0.000	0.000	-0.001	0.000	-0.001	0.001
20	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.001
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0

Table 36: Kittiwake Probability of Population Being Smaller than Median after 25 Year Simulation Period in Relation to the Combined Effects of Displacement and Collision (at 98% Avoidance Rate) during the Breeding Season. *(Based on all populations listed in Table 7.2 of ES Addendum.)*

Thresholds of population decline (%)	Number of pairs which fail to breed & BOWL CRM of 21									
	0	**50**	**150**	**200**	**250**	**300**	**350**	**400**	**450**	**500**
0	0.500	0.504	0.509	0.514	0.517	0.517	0.519	0.530	0.522	0.537
5	0.391	0.395	0.393	0.396	0.403	0.401	0.409	0.419	0.414	0.425
10	0.283	0.285	0.284	0.288	0.293	0.290	0.302	0.306	0.305	0.313
15	0.191	0.188	0.188	0.195	0.189	0.196	0.203	0.203	0.204	0.212
20	0.115	0.115	0.114	0.117	0.114	0.119	0.123	0.123	0.124	0.128
25	0.062	0.060	0.060	0.062	0.060	0.065	0.067	0.066	0.064	0.067
30	0.030	0.026	0.028	0.028	0.027	0.030	0.029	0.030	0.029	0.032
35	0.012	0.009	0.011	0.011	0.010	0.011	0.010	0.012	0.011	0.012
40	0.004	0.002	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.004
45	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 37: East Caithness Cliffs SPA Fulmar Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement during the Breeding Season.

Thresholds of population decline (%)	Number of pairs which fail to breed													
	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
0	0.381	0.381	0.379	0.382	0.391	0.385	0.393	0.392	0.395	0.396	0.405	0.409	0.411	0.414
5	0.207	0.211	0.208	0.210	0.222	0.218	0.226	0.217	0.217	0.221	0.235	0.230	0.227	0.245
10	0.138	0.134	0.130	0.134	0.142	0.143	0.147	0.143	0.144	0.142	0.156	0.149	0.148	0.161
15	0.089	0.084	0.084	0.088	0.088	0.093	0.095	0.092	0.093	0.092	0.101	0.097	0.098	0.108
20	0.058	0.052	0.053	0.053	0.057	0.058	0.061	0.060	0.058	0.057	0.066	0.059	0.062	0.069
25	0.034	0.034	0.034	0.032	0.036	0.037	0.037	0.038	0.035	0.035	0.041	0.037	0.040	0.043
30	0.021	0.020	0.020	0.018	0.021	0.023	0.022	0.025	0.022	0.022	0.026	0.023	0.024	0.027
35	0.013	0.012	0.011	0.010	0.012	0.013	0.012	0.014	0.012	0.012	0.015	0.013	0.013	0.016
40	0.008	0.006	0.005	0.006	0.006	0.008	0.007	0.009	0.006	0.006	0.008	0.006	0.007	0.008
45	0.004	0.003	0.002	0.003	0.003	0.004	0.004	0.005	0.003	0.003	0.005	0.003	0.003	0.004
50	0.002	0.002	0.001	0.002	0.001	0.002	0.001	0.003	0.002	0.002	0.002	0.001	0.002	0.002

Table 37a: East Caithness Cliffs SPA Fulmar Increase in the Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement during the Breeding Season.

Thresholds of population decline (%)	Number of pairs which fail to breed													
	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
0	0.000	0.000	-0.001	0.001	0.010	0.005	0.013	0.012	0.015	0.015	0.025	0.029	0.030	0.033
5	0.000	0.003	0.001	0.003	0.015	0.010	0.018	0.010	0.010	0.014	0.028	0.023	0.020	0.038
10	0.000	-0.004	-0.008	-0.004	0.004	0.005	0.009	0.005	0.006	0.004	0.018	0.011	0.010	0.023
15	0.000	-0.006	-0.005	-0.002	-0.001	0.003	0.005	0.003	0.003	0.003	0.012	0.007	0.009	0.018
20	0.000	-0.006	-0.005	-0.006	-0.001	0.000	0.003	0.002	0.000	-0.001	0.008	0.001	0.004	0.011
25	0.000	0.000	0.000	-0.002	0.002	0.003	0.003	0.004	0.001	0.001	0.007	0.003	0.006	0.009
30	0.000	-0.001	-0.001	-0.003	0.000	0.002	0.001	0.004	0.001	0.001	0.005	0.002	0.003	0.006
35	0.000	-0.001	-0.002	-0.003	-0.001	0.000	0.000	0.001	-0.001	-0.001	0.003	0.000	0.001	0.003
40	0.000	-0.002	-0.003	-0.003	-0.002	-0.001	-0.001	0.001	-0.002	-0.002	0.000	-0.002	-0.001	0.000
45	0.000	-0.001	-0.002	-0.001	-0.001	0.000	-0.001	0.001	-0.001	-0.001	0.001	-0.001	-0.001	-0.001
50	0.000	0.000	-0.001	-0.001	-0.001	0.000	-0.001	0.001	-0.001	-0.001	0.000	-0.001	-0.001	0.000

Table 38: East Caithness Cliffs SPA Fulmar Probability of Population Being Smaller than Median after 25 Year Simulation Period in Relation to Displacement during the Breeding Season.

Thresholds of population decline (%)	Number of pairs which fail to breed													
	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
0	0.50	0.51	0.51	0.52	0.53	0.54	0.55	0.56	0.56	0.58	0.59	0.60	0.61	0.62
5	0.43	0.44	0.44	0.45	0.46	0.47	0.48	0.49	0.49	0.51	0.53	0.53	0.54	0.55
10	0.36	0.37	0.38	0.39	0.39	0.40	0.41	0.42	0.42	0.43	0.46	0.46	0.47	0.48
15	0.30	0.31	0.31	0.32	0.32	0.34	0.34	0.35	0.35	0.37	0.39	0.39	0.39	0.40
20	0.24	0.25	0.25	0.26	0.26	0.27	0.28	0.28	0.29	0.30	0.32	0.32	0.32	0.33
25	0.19	0.19	0.19	0.20	0.20	0.21	0.22	0.23	0.23	0.24	0.25	0.25	0.25	0.26
30	0.14	0.15	0.14	0.16	0.16	0.16	0.17	0.17	0.17	0.18	0.19	0.19	0.19	0.20
35	0.10	0.10	0.10	0.11	0.11	0.12	0.12	0.13	0.13	0.14	0.15	0.14	0.14	0.15
40	0.07	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.11
45	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.07	0.06	0.07	0.07
50	0.03	0.03	0.03	0.03	0.03	0.04	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.05

Table 39: East Caithness Cliffs SPA Great Black-Backed Gull Probability of Population Decline during 25 Year Simulation Period in Relation to Collisions during the Breeding Season.

Thresholds of population decline (%)	Number of birds in collision												
	0	10	20	30	40	50	60	70	80	90	100	110	120
0	0.189	0.241	0.297	0.386	0.512	0.704	0.892	0.991	1.000	1.000	1.000	1.000	1.000
5	0.105	0.142	0.180	0.253	0.373	0.567	0.812	0.978	1.000	1.000	1.000	1.000	1.000
10	0.029	0.054	0.084	0.139	0.234	0.423	0.708	0.955	1.000	1.000	1.000	1.000	1.000
15	0.004	0.013	0.024	0.054	0.122	0.277	0.585	0.913	0.999	1.000	1.000	1.000	1.000
20	0.001	0.003	0.007	0.022	0.059	0.170	0.463	0.853	0.994	1.000	1.000	1.000	1.000
25	0.000	0.001	0.003	0.009	0.026	0.102	0.349	0.780	0.985	1.000	1.000	1.000	1.000
30	0.000	0.000	0.001	0.003	0.012	0.059	0.249	0.678	0.970	1.000	1.000	1.000	1.000
35	0.000	0.000	0.000	0.001	0.004	0.027	0.163	0.562	0.936	1.000	1.000	1.000	1.000
40	0.000	0.000	0.000	0.000	0.002	0.012	0.099	0.439	0.884	0.998	1.000	1.000	1.000
45	0.000	0.000	0.000	0.000	0.001	0.005	0.053	0.314	0.809	0.993	1.000	1.000	1.000
50	0.000	0.000	0.000	0.000	0.000	0.002	0.024	0.205	0.692	0.979	1.000	1.000	1.000

Table 39a: East Caithness Cliffs SPA Great Black-Backed Gull Increase in the Probability of Population Decline during 25 Year Simulation Period in Relation to Collisions during the Breeding Season.

Thresholds of population decline (%)	Number of birds in collision												
	0	10	20	30	40	50	60	70	80	90	100	110	120
0	0.000	0.052	0.108	0.196	0.323	0.515	0.703	0.802	0.811	0.811	0.811	0.811	0.811
5	0.000	0.037	0.076	0.149	0.268	0.463	0.707	0.873	0.895	0.895	0.895	0.895	0.895
10	0.000	0.025	0.056	0.110	0.206	0.395	0.679	0.926	0.971	0.971	0.971	0.971	0.971
15	0.000	0.009	0.019	0.049	0.118	0.273	0.580	0.909	0.994	0.996	0.996	0.996	0.996
20	0.000	0.003	0.006	0.021	0.058	0.169	0.462	0.852	0.993	0.999	0.999	0.999	0.999
25	0.000	0.000	0.002	0.008	0.026	0.102	0.349	0.779	0.985	1.000	1.000	1.000	1.000
30	0.000	0.000	0.001	0.003	0.011	0.059	0.249	0.678	0.969	1.000	1.000	1.000	1.000
35	0.000	0.000	0.000	0.001	0.004	0.027	0.163	0.562	0.936	1.000	1.000	1.000	1.000
40	0.000	0.000	0.000	0.000	0.002	0.012	0.099	0.439	0.884	0.998	1.000	1.000	1.000
45	0.000	0.000	0.000	0.000	0.001	0.005	0.053	0.314	0.809	0.993	1.000	1.000	1.000
50	0.000	0.000	0.000	0.000	0.000	0.002	0.024	0.205	0.692	0.979	1.000	1.000	1.000

Table 40: East Caithness Cliffs SPA Great Black-Backed Gull Probability of Population Being Smaller than Median after 25 Year Simulation Period in Relation to Collisions During the Breeding Season.

Thresholds of population decline (%)	Number of birds in collision												
	0	**10**	**20**	**30**	**40**	**50**	**60**	**70**	**80**	**90**	**100**	**110**	**120**
0	0.500	0.913	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5	0.429	0.871	0.997	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10	0.351	0.826	0.994	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
15	0.282	0.758	0.988	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
20	0.217	0.683	0.977	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
25	0.157	0.593	0.955	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
30	0.108	0.492	0.919	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
35	0.069	0.385	0.862	0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
40	0.041	0.286	0.778	0.990	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
45	0.023	0.195	0.665	0.973	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
50	0.012	0.118	0.528	0.938	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Table 41: East Caithness Cliffs SPA Guillemot Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement during the Breeding Season.

Thresholds of population decline (%)	Number of pairs which fail to breed												
	0	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000
0	0.290	0.308	0.321	0.335	0.342	0.361	0.373	0.387	0.406	0.432	0.438	0.459	0.475
5	0.026	0.023	0.026	0.030	0.030	0.034	0.035	0.038	0.040	0.043	0.045	0.049	0.054
10	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.001
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 41a: East Caithness Cliffs SPA Guillemot Increase in the Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement during the Breeding Season.

Thresholds of population decline (%)	Number of pairs which fail to breed												
	0	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000
0	0.000	0.018	0.032	0.045	0.052	0.071	0.083	0.097	0.116	0.142	0.148	0.169	0.185
5	0.000	-0.003	0.000	0.004	0.004	0.008	0.009	0.012	0.014	0.017	0.019	0.023	0.028
10	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.001
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 42: East Caithness Cliffs SPA Guillemot Probability of Population Being Smaller than Median after 25 Year Simulation Period in Relation to Displacement during the Breeding Season.

Thresholds of population decline (%)	Number of pairs which fail to breed												
	0	**1000**	**2000**	**3000**	**4000**	**5000**	**6000**	**7000**	**8000**	**9000**	**10000**	**11000**	**12000**
0	0.500	0.553	0.614	0.672	0.721	0.775	0.814	0.856	0.892	0.921	0.940	0.956	0.970
5	0.322	0.370	0.426	0.492	0.538	0.605	0.661	0.723	0.773	0.818	0.851	0.887	0.915
10	0.175	0.209	0.254	0.304	0.350	0.406	0.466	0.532	0.589	0.654	0.698	0.757	0.801
15	0.077	0.095	0.120	0.149	0.179	0.220	0.267	0.321	0.373	0.438	0.493	0.552	0.616
20	0.022	0.032	0.045	0.054	0.066	0.091	0.117	0.147	0.184	0.226	0.272	0.323	0.383
25	0.005	0.007	0.009	0.014	0.019	0.028	0.037	0.049	0.066	0.085	0.107	0.138	0.177
30	0.001	0.001	0.001	0.003	0.004	0.005	0.008	0.010	0.015	0.024	0.027	0.038	0.054
35	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.002	0.004	0.003	0.007	0.009
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 43: East Caithness Cliffs SPA Razorbill Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement during the Breeding Season.

Thresholds of population decline (%)	Number of pairs which fail to breed									
	0	200	400	600	800	1000	1200	1400	1600	1800
0	0.080	0.090	0.107	0.119	0.129	0.152	0.168	0.197	0.223	0.247
5	0.004	0.006	0.008	0.009	0.013	0.014	0.020	0.025	0.031	0.040
10	0.000	0.000	0.001	0.001	0.002	0.001	0.003	0.003	0.004	0.007
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 43a: East Caithness Cliffs SPA Razorbill Increase in the Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement during the Breeding Season.

Thresholds of population decline (%)	Number of pairs which fail to breed									
	0	200	400	600	800	1000	1200	1400	1600	1800
0	0.000	0.010	0.027	0.039	0.049	0.072	0.088	0.118	0.143	0.167
5	0.000	0.002	0.004	0.004	0.009	0.010	0.016	0.021	0.026	0.036
10	0.000	0.000	0.000	0.000	0.002	0.001	0.003	0.003	0.004	0.006
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 44: East Caithness Cliffs SPA Razorbill Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement during the Breeding Season.

Thresholds of population decline (%)	Number of pairs which fail to breed									
	0	**200**	**400**	**600**	**800**	**1000**	**1200**	**1400**	**1600**	**1800**
0	0.500	0.640	0.757	0.860	0.925	0.966	0.988	0.995	0.998	1.000
5	0.399	0.537	0.662	0.784	0.873	0.937	0.970	0.989	0.996	0.999
10	0.294	0.423	0.550	0.684	0.800	0.883	0.941	0.977	0.992	0.996
15	0.196	0.305	0.428	0.573	0.699	0.802	0.896	0.949	0.980	0.992
20	0.125	0.202	0.299	0.440	0.572	0.694	0.817	0.900	0.950	0.979
25	0.065	0.116	0.190	0.304	0.424	0.564	0.705	0.820	0.898	0.953
30	0.030	0.057	0.108	0.189	0.288	0.416	0.559	0.700	0.811	0.895
35	0.012	0.025	0.052	0.101	0.169	0.265	0.400	0.542	0.678	0.795
40	0.005	0.010	0.021	0.044	0.083	0.148	0.238	0.361	0.502	0.652
45	0.001	0.003	0.005	0.014	0.033	0.064	0.119	0.202	0.316	0.460
50	0.000	0.001	0.001	0.004	0.009	0.023	0.045	0.086	0.161	0.251

Table 45: East Caithness Cliffs SPA Puffin Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement during the Breeding Season.

Thresholds of population decline (%)	Number of pairs which fail to breed										
	0	**10**	**20**	**30**	**40**	**50**	**60**	**70**	**80**	**90**	**100**
0	0.117	0.139	0.162	0.189	0.217	0.263	0.302	0.350	0.412	0.493	0.570
5	0.003	0.007	0.008	0.011	0.015	0.025	0.030	0.047	0.073	0.111	0.161
10	0.000	0.000	0.001	0.000	0.001	0.002	0.002	0.005	0.012	0.017	0.036
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.004
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 45a: East Caithness Cliffs SPA Puffin Increase in the Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement during the Breeding Season.

Thresholds of population decline (%)	Number of pairs which fail to breed										
	0	**10**	**20**	**30**	**40**	**50**	**60**	**70**	**80**	**90**	**100**
0	0.000	0.022	0.046	0.072	0.101	0.147	0.186	0.233	0.296	0.377	0.453
5	0.000	0.004	0.005	0.008	0.012	0.022	0.027	0.044	0.070	0.108	0.158
10	0.000	0.000	0.001	0.000	0.001	0.002	0.002	0.005	0.012	0.017	0.036
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.004
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 46: East Caithness Cliffs SPA Puffin Probability of Population Being Smaller than Median after 25 Year Simulation Period in Relation to Displacement during the Breeding Season.

Thresholds of population decline (%)	Number of pairs which fail to breed										
	0	**10**	**20**	**30**	**40**	**50**	**60**	**70**	**80**	**90**	**100**
0	0.499	0.673	0.828	0.935	0.981	0.996	1.000	1.000	1.000	1.000	1.000
5	0.380	0.552	0.734	0.880	0.957	0.990	0.999	1.000	1.000	1.000	1.000
10	0.261	0.422	0.618	0.798	0.911	0.973	0.996	0.999	1.000	1.000	1.000
15	0.163	0.294	0.480	0.679	0.837	0.938	0.986	0.996	1.000	1.000	1.000
20	0.090	0.186	0.326	0.523	0.714	0.866	0.958	0.989	0.999	1.000	1.000
25	0.045	0.098	0.194	0.365	0.555	0.746	0.896	0.967	0.992	0.999	1.000
30	0.019	0.041	0.100	0.215	0.376	0.588	0.776	0.909	0.975	0.996	1.000
35	0.007	0.015	0.043	0.102	0.213	0.384	0.593	0.789	0.920	0.978	0.996
40	0.002	0.004	0.013	0.041	0.090	0.213	0.369	0.589	0.784	0.923	0.980
45	0.000	0.001	0.003	0.011	0.028	0.085	0.175	0.345	0.552	0.778	0.905
50	0.000	0.000	0.001	0.002	0.007	0.023	0.060	0.146	0.298	0.519	0.733

Table 47: North Caithness Cliffs SPA Razorbill Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement during the Breeding Season.

Thresholds of population decline (%)	Number of pairs which fail to breed												
	0	25	50	75	100	125	150	175	200	225	250	275	300
0	0.087	0.087	0.089	0.098	0.101	0.102	0.101	0.109	0.114	0.115	0.125	0.128	0.127
5	0.005	0.006	0.006	0.006	0.006	0.007	0.008	0.008	0.010	0.009	0.010	0.010	0.010
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 47a: North Caithness Cliffs SPA Razorbill Increase in the Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement during the Breeding Season.

Thresholds of population decline (%)	Number of pairs which fail to breed												
	0	25	50	75	100	125	150	175	200	225	250	275	300
0	0.000	0.000	0.002	0.010	0.013	0.015	0.014	0.021	0.027	0.028	0.037	0.041	0.039
5	0.000	0.001	0.001	0.002	0.001	0.002	0.003	0.003	0.005	0.004	0.005	0.005	0.005
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 48: North Caithness Cliffs SPA Razorbill Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement during the Breeding Season.

Thresholds of population decline (%)	Number of pairs which fail to breed												
	0	25	50	75	100	125	150	175	200	225	250	275	300
0	0.500	0.549	0.588	0.621	0.671	0.702	0.749	0.780	0.809	0.842	0.865	0.886	0.912
5	0.394	0.439	0.478	0.519	0.570	0.603	0.651	0.688	0.721	0.762	0.794	0.824	0.854
10	0.289	0.325	0.359	0.401	0.455	0.483	0.535	0.577	0.616	0.659	0.699	0.732	0.776
15	0.196	0.226	0.254	0.287	0.340	0.367	0.407	0.453	0.499	0.544	0.583	0.620	0.669
20	0.119	0.141	0.167	0.188	0.232	0.259	0.291	0.330	0.371	0.419	0.456	0.490	0.536
25	0.065	0.078	0.093	0.111	0.141	0.162	0.184	0.219	0.244	0.285	0.321	0.354	0.399
30	0.031	0.039	0.046	0.056	0.073	0.089	0.100	0.123	0.141	0.172	0.203	0.229	0.264
35	0.012	0.015	0.019	0.025	0.034	0.041	0.049	0.058	0.072	0.084	0.108	0.129	0.150
40	0.004	0.004	0.007	0.011	0.012	0.016	0.018	0.022	0.031	0.037	0.046	0.058	0.073
45	0.001	0.001	0.001	0.003	0.004	0.006	0.005	0.008	0.009	0.010	0.014	0.021	0.029
50	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.002	0.003	0.002	0.004	0.004	0.007

Table 49: North Caithness Cliffs SPA Puffin Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement during the Breeding Season.

Thresholds of population decline (%)	Number of pairs which fail to breed						
	0	50	100	150	200	250	300
0	0.110	0.113	0.127	0.129	0.132	0.150	0.156
5	0.002	0.002	0.002	0.004	0.003	0.005	0.005
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 49a: North Caithness Cliffs SPA Puffin Probability of Population Decline during 25 Year Simulation Period in Relation to Displacement during the Breeding Season.

Thresholds of population decline (%)	Number of pairs which fail to breed						
	0	50	100	150	200	250	300
0	0.00	0.00	0.02	0.02	0.02	0.04	0.05
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0

Table 50: North Caithness Cliffs SPA Puffin Probability of Population Being Smaller than Median after 25 Year Simulation Period in Relation to Displacement during the Breeding Season.

Thresholds of population decline (%)	Number of pairs which fail to breed						
	0	50	100	150	200	250	300
0	0.500	0.580	0.650	0.727	0.782	0.838	0.887
5	0.381	0.448	0.521	0.610	0.676	0.739	0.811
10	0.261	0.322	0.391	0.464	0.544	0.614	0.698
15	0.159	0.209	0.261	0.322	0.402	0.473	0.557
20	0.085	0.118	0.153	0.197	0.262	0.324	0.401
25	0.037	0.058	0.078	0.102	0.144	0.194	0.249
30	0.014	0.022	0.031	0.044	0.066	0.094	0.130
35	0.004	0.007	0.009	0.014	0.022	0.037	0.052
40	0.001	0.002	0.002	0.003	0.007	0.011	0.015
45	0.000	0.001	0.000	0.001	0.001	0.002	0.003
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000