



Spiorad na Mara Offshore Wind Farm

Offshore Project

Environmental Impact Assessment Report

Annex 14.1.4.B: MRSea Apportioned and Corrected Abundance and Density Estimates, Volume 2c

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1 ANNEX 14.1.4.B: MRSEA APPORTIONED AND CORRECTED ABUNDANCE AND DENSITY ESTIMATES

1.1 INTRODUCTION

1.1.1 This document is an appendix to the **Annex 14.1.4 MRSea Modelling Report, Volume 2c** of the **Appendix 14.1: Ornithology Baseline Report, Volume 2c**. The tables in this appendix set out the MRSea apportioned and corrected abundance and density estimates for the following species:

- Kittiwake;
- Gannet;
- Guillemot;
- Razorbill;
- Puffin.

1.1.2 For each species listed above, this appendix sets out the MRSea apportioned and corrected abundance and density estimates for the following areas:

- Turbine Area;
- Turbine Area plus 2 km buffer;
- Turbine Area plus 4 km buffer.

1.2 KITTIWAKE

1.2.1 TURBINE AREA

Table 1-1 Table 11 Kittiwake MRSea apportioned and corrected abundance estimates (Turbine Area)

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	7	3	26	6.1	0	0	1	0.3	7	3	24	5.8
S02 – April 2022	14	5	63	15.4	10	3	44	10.7	4	1	19	4.7
S03 – May 2022	33	23	53	7.8	6	4	10	1.4	27	19	44	6.4
S04 – June 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S05 – July 2022	1	0	22	6.6	1	0	14	4.3	0	0	8	2.3
S06 – August 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S07 – September 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S08 – October 2022	234	169	349	45.8	56	41	84	11.0	177	128	265	34.8
S09 – November 2022	103	75	148	19.5	3	2	4	0.5	95	67	138	17.9
S10 – December 2022	32	21	56	9.3	0	0	0	0.0	32	21	56	9.3
S11 – January 2023	561	451	710	66.3	66	53	84	7.8	495	398	626	58.5
S12 – February 2023	138	95	197	26.2	44	31	63	8.4	93	65	133	17.7
S13 – March 2023	117	60	264	51.4	61	32	139	27.1	55	28	125	24.3
S14 – April 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S15 – May 2023	2	1	12	3.6	0	0	0	0.0	2	1	12	3.6
S16 – June 2023	0	0	0	0.0	0	0	0	0.0	0	0	0	0.0
S17 – July 2023	3	1	14	4.3	1	0	3	1.0	2	1	11	3.3
S18 – August 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S19 – September 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S20 – October 2023	13	5	44	16.8	4	1	13	4.8	9	3	31	12.0
S21 – November 2023	28	18	55	10.7	2	1	3	0.7	26	17	52	10.0
S22 – December 2023	35	21	68	13.3	0	0	0	0.0	35	22	69	13.5
S23 – January 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
S24 – February 2024	134	92	202	28.7	36	25	54	7.7	98	68	148	21.0

Table 1-2 Kittiwake MRSea apportioned and corrected density estimates (Turbine Area)

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	0.049	0.019	0.183	0.0438	0.002	0.001	0.009	0.0022	0.046	0.018	0.174	0.0416
S02 – April 2022	0.098	0.032	0.448	0.1098	0.068	0.023	0.311	0.0763	0.030	0.010	0.137	0.0336
S03 – May 2022	0.236	0.165	0.380	0.0553	0.042	0.030	0.068	0.0099	0.193	0.135	0.311	0.0454
S04 – June 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S05 – July 2022	0.006	0.000	0.155	0.0470	0.004	0.000	0.101	0.0307	0.002	0.000	0.054	0.0164
S06 – August 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S07 – September 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S08 – October 2022	1.666	1.202	2.490	0.3269	0.401	0.290	0.600	0.0788	1.265	0.913	1.890	0.2481
S09 – November 2022	0.737	0.533	1.053	0.1394	0.020	0.014	0.029	0.0038	0.676	0.477	0.982	0.1277
S10 – December 2022	0.230	0.151	0.397	0.0665	0.000	0.000	0.000	0.0000	0.230	0.151	0.397	0.0665
S11 – January 2023	4.002	3.218	5.062	0.4725	0.471	0.379	0.596	0.0556	3.532	2.840	4.467	0.4170
S12 – February 2023	0.981	0.681	1.402	0.1867	0.316	0.220	0.452	0.0602	0.665	0.461	0.950	0.1265
S13 – March 2023	0.831	0.429	1.884	0.3664	0.438	0.226	0.993	0.1933	0.393	0.203	0.890	0.1732

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S14 – April 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S15 – May 2023	0.015	0.004	0.088	0.0257	0.000	0.000	0.000	0.0000	0.015	0.004	0.088	0.0257
S16 – June 2023	0.000	0.000	0.000	0.0000	0.000	0.000	0.000	0.0000	0.000	0.000	0.000	0.0000
S17 – July 2023	0.020	0.005	0.099	0.0308	0.005	0.001	0.024	0.0073	0.016	0.004	0.076	0.0235
S18 – August 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S19 – September 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S20 – October 2023	0.092	0.033	0.313	0.1195	0.026	0.009	0.089	0.0341	0.065	0.023	0.223	0.0853
S21 – November 2023	0.197	0.128	0.395	0.0762	0.012	0.008	0.025	0.0048	0.185	0.120	0.371	0.0714
S22 – December 2023	0.247	0.151	0.485	0.0949	0.000	0.000	0.000	0.0000	0.251	0.155	0.489	0.0964
S23 – January 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S24 – February 2024	0.954	0.659	1.442	0.2046	0.255	0.176	0.386	0.0548	0.698	0.483	1.056	0.1499

1.2.2 TURBINE AREA PLUS 2 KM BUFFER

Table 1-3 Kittiwake MRSea apportioned and corrected abundance estimates (Turbine Area plus 2 km buffer)

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	19	9	54	11.9	1	0	3	0.6	18	9	51	11.3
S02 – April 2022	30	12	133	35.6	21	8	93	24.7	9	4	41	10.9
S03 – May 2022	43	32	65	8.7	8	6	12	1.6	35	26	54	7.1
S04 – June 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S05 – July 2022	29	26	71	147.3	19	17	46	96.3	10	9	24	51.0

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S06 – August 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S07 – September 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S08 – October 2022	367	279	536	64.1	88	67	129	15.4	279	212	407	48.6
S09 – November 2022	187	137	267	33.2	7	6	10	1.3	175	127	253	31.2
S10 – December 2022	43	30	72	11.0	0	0	0	0.0	43	30	72	11.0
S11 – January 2023	996	819	1,235	105.9	117	96	145	12.5	879	722	1,090	93.5
S12 – February 2023	409	305	537	58.2	132	98	173	18.8	277	206	364	39.5
S13 – March 2023	319	198	585	100.1	168	104	308	52.8	151	93	276	47.3
S14 – April 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S15 – May 2023	7	2	32	8.2	0	0	0	0.0	7	2	32	8.2
S16 – June 2023	0	0	0	0.0	0	0	0	0.0	0	0	0	0.0
S17 – July 2023	23	6	96	33.7	5	1	23	8.0	17	5	73	25.6
S18 – August 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S19 – September 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S20 – October 2023	32	15	84	26.8	9	4	24	7.7	23	11	60	19.2
S21 – November 2023	45	30	90	20.0	3	2	6	1.3	42	28	84	18.8
S22 – December 2023	66	45	118	23.8	9	9	9	8.6	57	36	110	20.7
S23 – January 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S24 – February 2024	325	248	465	56.5	87	66	124	15.1	238	182	340	41.4

Table 1-4 Kittiwake MRSea apportioned and corrected density estimates (Turbine Area plus 2 km buffer)

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	0.072	0.036	0.206	0.0453	0.004	0.002	0.010	0.0023	0.069	0.034	0.195	0.0431
S02 – April 2022	0.116	0.046	0.509	0.1356	0.080	0.032	0.353	0.0942	0.035	0.014	0.155	0.0414
S03 – May 2022	0.164	0.122	0.249	0.0330	0.029	0.022	0.045	0.0059	0.134	0.100	0.205	0.0271
S04 – June 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S05 – July 2022	0.109	0.100	0.269	0.5614	0.071	0.066	0.175	0.3670	0.038	0.035	0.093	0.1944
S06 – August 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S07 – September 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S08 – October 2022	1.400	1.063	2.042	0.2441	0.337	0.256	0.492	0.0588	1.062	0.807	1.550	0.1853
S09 – November 2022	0.712	0.521	1.018	0.1266	0.029	0.023	0.037	0.0051	0.668	0.482	0.966	0.1188
S10 – December 2022	0.164	0.114	0.274	0.0417	0.000	0.000	0.000	0.0000	0.164	0.114	0.274	0.0417
S11 – January 2023	3.795	3.120	4.708	0.4037	0.446	0.367	0.554	0.0475	3.349	2.753	4.154	0.3562
S12 – February 2023	1.558	1.161	2.046	0.2219	0.503	0.375	0.660	0.0716	1.056	0.787	1.386	0.1504
S13 – March 2023	1.217	0.753	2.228	0.3814	0.642	0.397	1.175	0.2012	0.575	0.356	1.053	0.1803
S14 – April 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S15 – May 2023	0.027	0.009	0.121	0.0314	0.000	0.000	0.000	0.0000	0.027	0.009	0.121	0.0314
S16 – June 2023	0.000	0.000	0.000	0.0000	0.000	0.000	0.000	0.0000	0.000	0.000	0.000	0.0000
S17 – July 2023	0.087	0.023	0.367	0.1282	0.021	0.005	0.087	0.0305	0.066	0.017	0.280	0.0977
S18 – August 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S19 – September 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S20 – October 2023	0.121	0.057	0.322	0.1022	0.035	0.016	0.092	0.0292	0.086	0.041	0.230	0.0730
S21 – November 2023	0.171	0.113	0.343	0.0763	0.011	0.007	0.021	0.0048	0.160	0.106	0.322	0.0715
S22 – December 2023	0.251	0.170	0.450	0.0907	0.034	0.034	0.034	0.0327	0.219	0.138	0.417	0.0789

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S23 – January 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S24 – February 2024	1.240	0.944	1.770	0.2152	0.332	0.253	0.474	0.0576	0.908	0.692	1.297	0.1576

1.2.3 TURBINE AREA PLUS 4 KM BUFFER

Table 1-5 Kittiwake MRSea apportioned and corrected abundance estimates (Turbine Area plus 4 km buffer)

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	41	24	93	18.8	2	1	5	0.9	39	23	88	17.9
S02 – April 2022	51	21	233	77.8	35	15	162	54.1	16	6	71	23.8
S03 – May 2022	67	52	96	10.6	12	9	17	1.9	55	43	79	8.7
S04 – June 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S05 – July 2022	33	27	110	91.3	22	18	73	61.4	11	9	38	29.8
S06 – August 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S07 – September 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S08 – October 2022	478	380	684	76.1	115	92	165	18.3	363	288	519	57.8
S09 – November 2022	285	214	399	46.9	10	8	13	1.6	271	202	381	44.6
S10 – December 2022	52	37	84	12.0	0	0	0	0.0	52	37	84	12.0
S11 – January 2023	1,399	1,176	1,701	135.7	165	138	200	16.0	1,234	1,038	1,501	119.7
S12 – February 2023	921	743	1,146	101.7	297	240	369	32.8	624	504	776	68.9
S13 – March 2023	631	418	1,096	165.0	333	220	578	87.0	298	197	518	78.0

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S14 – April 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S15 – May 2023	22	10	74	17.2	0	0	0	0.0	22	10	74	17.2
S16 – June 2023	2	1	10	2.6	1	0	4	1.1	1	0	6	1.5
S17 – July 2023	40	19	143	44.8	13	8	37	14.1	29	13	108	33.0
S18 – August 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S19 – September 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S20 – October 2023	61	35	140	36.1	17	10	40	10.3	43	25	100	25.8
S21 – November 2023	65	45	133	40.0	5	4	10	3.3	58	39	121	35.5
S22 – December 2023	84	58	154	27.9	9	9	9	8.6	76	49	145	25.0
S23 – January 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S24 – February 2024	665	541	878	94.2	175	142	233	24.9	489	398	645	69.3

Table 1-6 Kittiwake MRSea apportioned and corrected density estimates (Turbine Area plus 4 km buffer)

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	0.10	0.06	0.23	0.05	0.01	0.00	0.01	0.00	0.10	0.06	0.22	0.04
S02 – April 2022	0.12	0.05	0.57	0.19	0.09	0.04	0.40	0.13	0.04	0.02	0.17	0.06
S03 – May 2022	0.16	0.13	0.23	0.03	0.03	0.02	0.04	0.00	0.13	0.10	0.19	0.02
S04 – June 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S05 – July 2022	0.08	0.07	0.27	0.22	0.05	0.04	0.18	0.15	0.03	0.02	0.09	0.07
S06 – August 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S07 – September 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S08 – October 2022	1.17	0.93	1.67	0.19	0.28	0.22	0.40	0.04	0.89	0.70	1.27	0.14
S09 – November 2022	0.70	0.52	0.97	0.11	0.02	0.02	0.03	0.00	0.66	0.49	0.93	0.11
S10 – December 2022	0.13	0.09	0.20	0.03	0.00	0.00	0.00	0.00	0.13	0.09	0.20	0.03
S11 – January 2023	3.42	2.87	4.16	0.33	0.40	0.34	0.49	0.04	3.02	2.54	3.67	0.29
S12 – February 2023	2.25	1.82	2.80	0.25	0.73	0.59	0.90	0.08	1.52	1.23	1.90	0.17
S13 – March 2023	1.54	1.02	2.68	0.40	0.81	0.54	1.41	0.21	0.73	0.48	1.27	0.19
S14 – April 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S15 – May 2023	0.05	0.02	0.18	0.04	0.00	0.00	0.00	0.00	0.05	0.02	0.18	0.04
S16 – June 2023	0.00	0.00	0.02	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00
S17 – July 2023	0.10	0.05	0.35	0.11	0.03	0.02	0.09	0.03	0.07	0.03	0.26	0.08
S18 – August 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S19 – September 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S20 – October 2023	0.15	0.09	0.34	0.09	0.04	0.02	0.10	0.03	0.11	0.06	0.25	0.06
S21 – November 2023	0.16	0.11	0.32	0.10	0.01	0.01	0.02	0.01	0.14	0.09	0.30	0.09
S22 – December 2023	0.21	0.14	0.38	0.07	0.02	0.02	0.02	0.02	0.18	0.12	0.35	0.06
S23 – January 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S24 – February 2024	1.62	1.32	2.15	0.23	0.43	0.35	0.57	0.06	1.19	0.97	1.58	0.17

1.3 GANNET

1.3.1 TURBINE AREA

Table 1-7 Gannet MRSea apportioned and corrected abundance estimates (Turbine Area)

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	5	2	31	11.2	1	1	8	3	4	2	23	8.3
S02 – April 2022	122	86	174	22.6	70	49	100	13.0	52	36	74	9.7
S03 – May 2022	20	6	114	28.2	3	1	19	4.7	16	5	95	23.5
S04 – June 2022	56	36	92	14.4	11	7	17	2.7	46	29	75	11.7
S05 – July 2022	132	90	212	30.8	44	30	70	10.2	88	60	142	20.6
S06 – August 2022	409	206	1,150	264.8	5	3	14	3.3	404	203	1,136	261.5
S07 – September 2022	52	25	110	22.3	10	5	22	4.5	41	20	88	17.8
S08 – October 2022	229	155	382	55.3	61	41	101	14.7	168	114	280	40.6
S09 – November 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S10 – December 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S11 – January 2023	23	15	40	6.9	0	0	0	0.0	23	15	40	6.9
S12 – February 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S13 – March 2023	5	1	26	8.0	2	1	12	3.6	3	1	14	4.4
S14 – April 2023	35	25	56	7.7	9	6	15	2.0	26	18	41	5.7
S15 – May 2023	39	24	66	11.4	11	7	18	3.2	28	18	48	8.3
S16 – June 2023	101	67	157	23.1	14	9	21	3.1	87	58	136	20.0
S17 – July 2023	97	67	153	23.8	19	13	29	4.5	79	54	123	19.2

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S18 – August 2023	20	7	72	18.8	6	2	22	5.7	14	5	50	13.0
S19 – September 2023	51	31	125	25.7	6	4	15	3.2	45	27	109	22.5
S20 – October 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S21 – November 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S22 – December 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S23 – January 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S24 – February 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 1-8 Gannet MRSea apportioned and corrected density estimates (Turbine Area)

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	0.04	0.02	0.22	0.08	0.01	0.00	0.06	0.02	0.03	0.01	0.16	0.06
S02 – April 2022	0.87	0.61	1.24	0.16	0.50	0.35	0.71	0.09	0.37	0.26	0.53	0.07
S03 – May 2022	0.14	0.04	0.81	0.20	0.02	0.01	0.13	0.03	0.12	0.03	0.67	0.17
S04 – June 2022	0.40	0.26	0.66	0.10	0.08	0.05	0.12	0.02	0.32	0.21	0.53	0.08
S05 – July 2022	0.94	0.64	1.51	0.22	0.31	0.21	0.50	0.07	0.63	0.43	1.01	0.15
S06 – August 2022	2.92	1.47	8.20	1.89	0.04	0.02	0.10	0.02	2.88	1.45	8.10	1.86
S07 – September 2022	0.37	0.18	0.79	0.16	0.07	0.04	0.16	0.03	0.30	0.14	0.63	0.13
S08 – October 2022	1.63	1.11	2.72	0.39	0.43	0.29	0.72	0.10	1.20	0.81	2.00	0.29
S09 – November 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S10 – December 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S11 – January 2023	0.16	0.11	0.29	0.05	0.00	0.00	0.00	0.00	0.16	0.11	0.29	0.05
S12 – February 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S13 – March 2023	0.03	0.01	0.19	0.06	0.01	0.00	0.08	0.03	0.02	0.01	0.10	0.03
S14 – April 2023	0.25	0.18	0.40	0.05	0.07	0.05	0.11	0.01	0.19	0.13	0.30	0.04
S15 – May 2023	0.28	0.17	0.47	0.08	0.08	0.05	0.13	0.02	0.20	0.13	0.34	0.06
S16 – June 2023	0.72	0.48	1.12	0.16	0.10	0.06	0.15	0.02	0.62	0.41	0.97	0.14
S17 – July 2023	0.69	0.48	1.09	0.17	0.13	0.09	0.21	0.03	0.56	0.39	0.88	0.14
S18 – August 2023	0.14	0.05	0.51	0.13	0.04	0.01	0.16	0.04	0.10	0.03	0.36	0.09
S19 – September 2023	0.37	0.22	0.89	0.18	0.05	0.03	0.11	0.02	0.32	0.19	0.78	0.16
S20 – October 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S21 – November 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S22 – December 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S23 – January 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S24 – February 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

1.3.2 TURBINE AREA PLUS 2 KM BUFFER

Table 1-9 Gannet MRSea apportioned and corrected abundance estimates (Turbine Area plus 2 km buffer)

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	17	9	68	40.1	5	2	18	11	13	7	50	29.6
S02 – April 2022	285	213	386	43.8	164	122	221	25.1	122	91	165	18.7
S03 – May 2022	32	13	159	39.9	5	2	26	6.7	27	10	132	33.3
S04 – June 2022	116	80	190	27.2	22	15	36	5.1	94	65	154	22.1
S05 – July 2022	261	183	398	55.8	86	61	132	18.5	174	123	266	37.3
S06 – August 2022	682	390	1,915	394.3	9	5	24	5.0	674	385	1,891	389.4
S07 – September 2022	116	67	214	39.0	23	13	43	7.8	93	53	171	31.2
S08 – October 2022	316	220	522	72.2	84	58	138	19.1	232	162	383	53.0
S09 – November 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S10 – December 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S11 – January 2023	49	33	87	14.4	0	0	0	0.0	49	33	87	14.4
S12 – February 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S13 – March 2023	20	8	73	18.9	9	4	33	8.5	11	4	40	10.4
S14 – April 2023	67	47	104	14.0	18	12	27	3.7	49	35	76	10.3
S15 – May 2023	76	49	124	20.8	21	14	34	5.7	55	36	90	15.1
S16 – June 2023	180	124	278	39.2	24	17	38	5.3	156	107	241	33.9
S17 – July 2023	180	128	284	41.2	34	24	54	7.9	146	103	229	33.3
S18 – August 2023	60	26	170	40.8	18	8	52	12.4	42	18	119	28.4
S19 – September 2023	155	102	321	57.9	19	13	40	7.2	135	90	281	50.7
S20 – October 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S21 – November 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S22 – December 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S23 – January 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S24 – February 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 1-10 Gannet MRSea apportioned and corrected density estimates (Turbine Area plus 2 km buffer)

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	0.07	0.03	0.26	0.15	0.02	0.01	0.07	0.04	0.05	0.03	0.19	0.11
S02 – April 2022	1.09	0.81	1.47	0.17	0.62	0.47	0.84	0.10	0.46	0.35	0.63	0.07
S03 – May 2022	0.12	0.05	0.60	0.15	0.02	0.01	0.10	0.03	0.10	0.04	0.50	0.13
S04 – June 2022	0.44	0.30	0.72	0.10	0.08	0.06	0.14	0.02	0.36	0.25	0.59	0.08
S05 – July 2022	0.99	0.70	1.52	0.21	0.33	0.23	0.50	0.07	0.66	0.47	1.02	0.14
S06 – August 2022	2.60	1.49	7.30	1.50	0.03	0.02	0.09	0.02	2.57	1.47	7.21	1.48
S07 – September 2022	0.44	0.25	0.82	0.15	0.09	0.05	0.16	0.03	0.36	0.20	0.65	0.12
S08 – October 2022	1.20	0.84	1.99	0.27	0.32	0.22	0.53	0.07	0.88	0.62	1.46	0.20
S09 – November 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S10 – December 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S11 – January 2023	0.19	0.12	0.33	0.05	0.00	0.00	0.00	0.00	0.19	0.12	0.33	0.05
S12 – February 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S13 – March 2023	0.07	0.03	0.28	0.07	0.03	0.01	0.13	0.03	0.04	0.02	0.15	0.04

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S14 – April 2023	0.25	0.18	0.39	0.05	0.07	0.05	0.10	0.01	0.19	0.13	0.29	0.04
S15 – May 2023	0.29	0.19	0.47	0.08	0.08	0.05	0.13	0.02	0.21	0.14	0.34	0.06
S16 – June 2023	0.69	0.47	1.06	0.15	0.09	0.06	0.14	0.02	0.59	0.41	0.92	0.13
S17 – July 2023	0.69	0.49	1.08	0.16	0.13	0.09	0.21	0.03	0.56	0.39	0.87	0.13
S18 – August 2023	0.23	0.10	0.65	0.16	0.07	0.03	0.20	0.05	0.16	0.07	0.45	0.11
S19 – September 2023	0.59	0.39	1.22	0.22	0.07	0.05	0.15	0.03	0.52	0.34	1.07	0.19
S20 – October 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S21 – November 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S22 – December 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S23 – January 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S24 – February 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

1.3.3 TURBINE AREA PLUS 4 KM BUFFER

Table 1-11 Gannet MRSea apportioned and corrected abundance estimates (Turbine Area plus 4 km buffer)

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	32	19	109	60.7	8	5	29	16	23	14	80	44.7
S02 – April 2022	513	404	666	66.5	294	232	382	38.2	219	172	284	28.4
S03 – May 2022	45	21	194	48.8	8	3	32	8.1	38	17	162	40.7
S04 – June 2022	198	146	316	43.0	37	28	60	8.1	160	118	256	34.9

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S05 – July 2022	426	314	628	82.1	141	104	208	27.2	285	210	420	54.9
S06 – August 2022	872	542	2,225	492.5	11	7	28	6.2	861	536	2,197	486.3
S07 – September 2022	222	143	362	56.6	44	29	72	11.3	177	115	290	45.3
S08 – October 2022	360	262	588	81.3	95	70	156	21.6	264	193	432	59.7
S09 – November 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S10 – December 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S11 – January 2023	82	55	147	24.7	0	0	0	0.0	82	55	147	24.7
S12 – February 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S13 – March 2023	56	29	145	31.2	25	13	65	14.0	31	16	80	17.2
S14 – April 2023	107	77	162	21.8	28	20	43	5.7	79	57	119	16.1
S15 – May 2023	117	80	188	29.2	32	22	52	8.0	85	58	136	21.1
S16 – June 2023	275	196	420	57.3	37	26	57	7.7	238	169	364	49.5
S17 – July 2023	273	198	424	57.6	52	38	81	11.0	221	160	343	46.6
S18 – August 2023	137	75	334	68.2	42	23	102	20.8	95	52	233	47.5
S19 – September 2023	355	256	674	101.9	44	32	84	12.6	311	224	590	89.2
S20 – October 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S21 – November 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S22 – December 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S23 – January 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S24 – February 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 1-12 Gannet MRSea apportioned and corrected density estimates (Turbine Area plus 4 km buffer)

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	0.08	0.05	0.27	0.15	0.02	0.01	0.07	0.04	0.06	0.03	0.20	0.11
S02 – April 2022	1.25	0.99	1.63	0.16	0.72	0.57	0.93	0.09	0.53	0.42	0.69	0.07
S03 – May 2022	0.11	0.05	0.47	0.12	0.02	0.01	0.08	0.02	0.09	0.04	0.39	0.10
S04 – June 2022	0.48	0.36	0.77	0.11	0.09	0.07	0.15	0.02	0.39	0.29	0.63	0.09
S05 – July 2022	1.04	0.77	1.53	0.20	0.34	0.25	0.51	0.07	0.70	0.51	1.03	0.13
S06 – August 2022	2.13	1.33	5.44	1.20	0.03	0.02	0.07	0.02	2.10	1.31	5.37	1.19
S07 – September 2022	0.54	0.35	0.89	0.14	0.11	0.07	0.18	0.03	0.43	0.28	0.71	0.11
S08 – October 2022	0.88	0.64	1.44	0.20	0.23	0.17	0.38	0.05	0.65	0.47	1.05	0.15
S09 – November 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S10 – December 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S11 – January 2023	0.20	0.13	0.36	0.06	0.00	0.00	0.00	0.00	0.20	0.13	0.36	0.06
S12 – February 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S13 – March 2023	0.14	0.07	0.35	0.08	0.06	0.03	0.16	0.03	0.08	0.04	0.19	0.04
S14 – April 2023	0.26	0.19	0.40	0.05	0.07	0.05	0.10	0.01	0.19	0.14	0.29	0.04
S15 – May 2023	0.29	0.20	0.46	0.07	0.08	0.05	0.13	0.02	0.21	0.14	0.33	0.05
S16 – June 2023	0.67	0.48	1.03	0.14	0.09	0.06	0.14	0.02	0.58	0.41	0.89	0.12
S17 – July 2023	0.67	0.48	1.04	0.14	0.13	0.09	0.20	0.03	0.54	0.39	0.84	0.11
S18 – August 2023	0.33	0.18	0.82	0.17	0.10	0.06	0.25	0.05	0.23	0.13	0.57	0.12
S19 – September 2023	0.87	0.62	1.65	0.25	0.11	0.08	0.20	0.03	0.76	0.55	1.44	0.22
S20 – October 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S21 – November 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S22 – December 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S23 – January 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S24 – February 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

1.4 GUILLEMOT

1.4.1 TURBINE AREA

Table 1-13 Guillemot MRSea apportioned and corrected abundance estimates (Turbine Area)

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	677	444	1,336	100.8	619	405	1,214	92.2	44	22	40	6.5
S02 – April 2022	201	76	341	74.2	188	72	329	69.2	11	4	26	4.2
S03 – May 2022	156	115	230	29.1	152	112	224	28.4	4	3	6	0.7
S04 – June 2022	9	2	164	7,865.6	8	2	144	6,912.1	1	0	20	953.5
S05 – July 2022	223	111	270	44.7	157	92	213	31.5	66	18	70	13.2
S06 – August 2022	47	231	181	27.3	45	230	176	26.5	1	1	4	0.9
S07 – September 2022	2,519	1,840	4,665	336.8	2,507	1,831	4,650	335.3	12	9	16	1.6
S08 – October 2022	189	118	221	31.4	166	100	190	27.5	23	17	33	3.9
S09 – November 2022	27	16	56	11.2	21	12	42	8.5	7	4	13	2.7
S10 – December 2022	32	11	62	20.7	31	10	61	20.4	0	0	1	0.3

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S11 – January 2023	118	81	185	27.8	113	78	179	26.8	4	3	6	1.0
S12 – February 2023	101	59	129	20.5	100	59	127	20.3	1	1	1	0.2
S13 – March 2023	249	176	329	43.6	248	175	327	43.3	1	1	2	0.2
S14 – April 2023	191	105	253	39.8	164	92	227	34.1	28	13	34	5.9
S15 – May 2023	92	33	129	29.8	69	23	82	22.3	23	9	53	7.5
S16 – June 2023	61	19	207	50.3	53	17	182	43.7	4	1	13	3.1
S17 – July 2023	86	39	133	28.8	54	22	75	18.1	32	17	59	10.5
S18 – August 2023	302	224	392	47.9	302	224	392	47.9	0	0	0	0.0
S19 – September 2023	638	455	714	75.8	637	454	713	75.6	1	1	2	0.2
S20 – October 2023	77	22	148	24.3	76	21	146	23.9	1	1	2	0.4
S21 – November 2023	9	4	25	5.9	8	3	22	5.2	1	0	3	0.7
S22 – December 2023	42	13	71	19.8	31	11	57	14.5	11	2	14	5.3
S23 – January 2024	158	83	185	32.0	157	83	184	31.8	1	1	1	0.2
S24 – February 2024	150	89	207	36.2	149	88	205	36.0	1	1	1	0.2

Table 1-14 Guillemot MRSea apportioned and corrected density estimates (Turbine Area)

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	4.827	3.169	9.530	0.7190	4.414	2.889	8.658	0.6575	0.311	0.158	0.287	0.0464
S02 – April 2022	1.436	0.545	2.431	0.5289	1.340	0.517	2.347	0.4937	0.081	0.030	0.185	0.0297
S03 – May 2022	1.114	0.822	1.643	0.2075	1.085	0.801	1.601	0.2022	0.028	0.021	0.042	0.0053

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S04 – June 2022	0.064	0.014	1.171	56.0932	0.056	0.013	1.029	49.2933	0.008	0.002	0.142	6.8000
S05 – July 2022	1.587	0.790	1.927	0.3188	1.119	0.654	1.517	0.2248	0.470	0.126	0.501	0.0943
S06 – August 2022	0.334	1.644	1.288	0.1948	0.323	1.639	1.258	0.1887	0.011	0.005	0.030	0.0062
S07 – September 2022	17.962	13.123	33.271	2.4020	17.878	13.056	33.160	2.3908	0.084	0.067	0.112	0.0112
S08 – October 2022	1.350	0.839	1.577	0.2241	1.183	0.715	1.354	0.1963	0.167	0.124	0.232	0.0278
S09 – November 2022	0.193	0.116	0.399	0.0800	0.146	0.088	0.303	0.0607	0.047	0.028	0.096	0.0193
S10 – December 2022	0.226	0.076	0.439	0.1477	0.223	0.074	0.432	0.1458	0.003	0.001	0.008	0.0020
S11 – January 2023	0.838	0.575	1.322	0.1980	0.809	0.555	1.276	0.1912	0.029	0.020	0.046	0.0069
S12 – February 2023	0.717	0.422	0.919	0.1463	0.710	0.417	0.909	0.1449	0.007	0.005	0.010	0.0014
S13 – March 2023	1.776	1.253	2.343	0.3108	1.766	1.246	2.330	0.3091	0.009	0.007	0.013	0.0017
S14 – April 2023	1.360	0.750	1.804	0.2838	1.167	0.656	1.621	0.2435	0.200	0.096	0.243	0.0418
S15 – May 2023	0.653	0.233	0.923	0.2122	0.489	0.167	0.588	0.1587	0.165	0.066	0.378	0.0535
S16 – June 2023	0.434	0.132	1.477	0.3585	0.378	0.120	1.297	0.3120	0.027	0.009	0.093	0.0225
S17 – July 2023	0.615	0.280	0.950	0.2057	0.386	0.156	0.535	0.1292	0.225	0.123	0.420	0.0751
S18 – August 2023	2.155	1.599	2.794	0.3414	2.155	1.599	2.794	0.3414	0.000	0.000	0.000	0.0000
S19 – September 2023	4.552	3.242	5.095	0.5406	4.543	3.234	5.083	0.5395	0.010	0.008	0.012	0.0011
S20 – October 2023	0.549	0.154	1.058	0.1734	0.539	0.149	1.042	0.1705	0.009	0.005	0.017	0.0029
S21 – November 2023	0.063	0.026	0.178	0.0422	0.055	0.023	0.157	0.0373	0.007	0.003	0.021	0.0049
S22 – December 2023	0.298	0.092	0.507	0.1411	0.218	0.077	0.405	0.1033	0.080	0.015	0.102	0.0378
S23 – January 2024	1.124	0.595	1.318	0.2280	1.118	0.591	1.309	0.2268	0.006	0.004	0.008	0.0012
S24 – February 2024	1.069	0.633	1.474	0.2585	1.063	0.629	1.464	0.2569	0.006	0.004	0.010	0.0015

1.4.2 TURBINE AREA PLUS 2 KM BUFFER

Table 1-15 Guillemot MRSea apportioned and corrected abundance estimates (Turbine Area plus 2 km buffer)

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	1,448	1,044	3,073	189.2	1,331	950	2,793	173.9	104	51	98	13.6
S02 – April 2022	334	144	514	110.8	291	133	484	96.5	34	9	77	11.4
S03 – May 2022	318	248	457	54.4	310	242	445	53.1	8	6	12	1.4
S04 – June 2022	14	4	321	16,192.0	13	3	282	14,229.1	2	0	39	1,962.9
S05 – July 2022	357	209	445	69.0	275	181	381	53.2	86	29	80	16.6
S06 – August 2022	121	49	213	50.4	118	47	205	48.9	4	2	8	1.5
S07 – September 2022	3,901	3,024	6,075	433.2	3,874	2,990	5,965	430.2	20	16	25	2.2
S08 – October 2022	333	231	404	49.9	289	198	351	43.4	44	33	59	6.5
S09 – November 2022	72	41	125	33.6	56	31	95	25.9	15	10	29	6.8
S10 – December 2022	61	28	117	29.2	60	28	114	28.7	1	1	2	0.5
S11 – January 2023	248	185	370	48.5	239	179	358	46.8	9	6	13	1.7
S12 – February 2023	229	151	278	38.4	226	149	275	37.9	2	2	3	0.4
S13 – March 2023	545	415	716	80.8	542	412	712	80.4	3	2	4	0.4
S14 – April 2023	396	236	513	72.2	337	199	432	61.5	58	29	70	10.6
S15 – May 2023	137	63	208	42.9	102	45	138	31.9	35	18	73	11.0
S16 – June 2023	129	47	355	87.9	118	44	319	80.0	8	3	23	5.3
S17 – July 2023	171	88	269	50.5	104	49	155	30.8	67	40	118	19.8
S18 – August 2023	611	461	773	90.6	611	461	773	90.6	0	0	0	0.0
S19 – September 2023	1,421	1,083	1,572	140.2	1,418	1,081	1,569	139.9	3	2	4	0.3
S20 – October 2023	80	32	139	26.2	78	31	135	25.5	2	1	4	0.7

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S21 – November 2023	24	12	59	12.4	21	11	52	11.0	3	1	7	1.5
S22 – December 2023	100	42	231	34.7	85	33	151	29.6	15	4	20	5.1
S23 – January 2024	368	222	420	60.3	367	221	418	60.0	2	1	3	0.3
S24 – February 2024	313	198	410	63.8	313	197	410	63.7	2	1	2	0.3

Table 1-16 Guillemot MRSea apportioned and corrected density estimates (Turbine Area plus 2 km buffer)

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	5.52	3.98	11.71	0.721	5.07	3.62	10.64	0.663	0.40	0.19	0.37	0.052
S02 – April 2022	1.27	0.55	1.96	0.422	1.11	0.51	1.84	0.368	0.13	0.04	0.29	0.043
S03 – May 2022	1.21	0.95	1.74	0.207	1.18	0.92	1.70	0.202	0.03	0.02	0.04	0.005
S04 – June 2022	0.06	0.01	1.22	61.703	0.05	0.01	1.07	54.223	0.01	0.00	0.15	7.480
S05 – July 2022	1.36	0.80	1.70	0.263	1.05	0.69	1.45	0.203	0.33	0.11	0.30	0.063
S06 – August 2022	0.46	0.19	0.81	0.192	0.45	0.18	0.78	0.186	0.01	0.01	0.03	0.006
S07 – September 2022	14.87	11.52	23.15	1.651	14.76	11.39	22.73	1.639	0.08	0.06	0.09	0.008
S08 – October 2022	1.27	0.88	1.54	0.190	1.10	0.75	1.34	0.165	0.17	0.13	0.22	0.025
S09 – November 2022	0.28	0.16	0.48	0.128	0.21	0.12	0.36	0.099	0.06	0.04	0.11	0.026
S10 – December 2022	0.23	0.11	0.44	0.111	0.23	0.11	0.43	0.109	0.00	0.00	0.01	0.002
S11 – January 2023	0.94	0.71	1.41	0.185	0.91	0.68	1.36	0.179	0.03	0.02	0.05	0.006
S12 – February 2023	0.87	0.57	1.06	0.146	0.86	0.57	1.05	0.144	0.01	0.01	0.01	0.001

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S13 – March 2023	2.08	1.58	2.73	0.308	2.06	1.57	2.71	0.306	0.01	0.01	0.02	0.002
S14 – April 2023	1.51	0.90	1.95	0.275	1.29	0.76	1.65	0.234	0.22	0.11	0.27	0.040
S15 – May 2023	0.52	0.24	0.79	0.164	0.39	0.17	0.53	0.122	0.13	0.07	0.28	0.042
S16 – June 2023	0.49	0.18	1.35	0.335	0.45	0.17	1.22	0.305	0.03	0.01	0.09	0.020
S17 – July 2023	0.65	0.34	1.03	0.192	0.40	0.19	0.59	0.117	0.26	0.15	0.45	0.076
S18 – August 2023	2.33	1.76	2.95	0.345	2.33	1.76	2.95	0.345	0.00	0.00	0.00	0.000
S19 – September 2023	5.41	4.13	5.99	0.534	5.40	4.12	5.98	0.533	0.01	0.01	0.01	0.001
S20 – October 2023	0.31	0.12	0.53	0.100	0.30	0.12	0.51	0.097	0.01	0.01	0.02	0.003
S21 – November 2023	0.09	0.05	0.22	0.047	0.08	0.04	0.20	0.042	0.01	0.01	0.03	0.006
S22 – December 2023	0.38	0.16	0.88	0.132	0.32	0.13	0.57	0.113	0.06	0.02	0.08	0.019
S23 – January 2024	1.40	0.85	1.60	0.230	1.40	0.84	1.59	0.229	0.01	0.01	0.01	0.001
S24 – February 2024	1.19	0.75	1.56	0.243	1.19	0.75	1.56	0.243	0.01	0.00	0.01	0.001

1.4.3 TURBINE AREA PLUS 4 KM BUFFER

Table 1-17 Guillemot MRSea apportioned and corrected abundance estimates (Turbine Area plus 4 km buffer)

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	2,181	1,598	4,002	253.6	2,033	1,468	3,658	236.3	137	80	139	15.9
S02 – April 2022	543	278	875	153.5	466	248	795	131.7	54	17	85	15.3

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S03 – May 2022	552	442	822	1,665.2	538	431	801	1,622.8	14	11	21	42.4
S04 – June 2022	33	9	590	28,615.1	30	8	522	26,260.2	3	1	67	2,354.9
S05 – July 2022	535	354	717	100.4	438	299	600	82.2	101	45	103	19.0
S06 – August 2022	327	175	1,271	109.7	320	170	1,259	107.5	6	4	12	2.2
S07 – September 2022	5,552	4,510	8,306	531.1	5,515	4,478	8,224	527.6	34	24	38	3.2
S08 – October 2022	501	362	612	70.8	435	310	537	61.5	66	52	88	9.3
S09 – November 2022	132	73	200	104.1	106	56	155	83.6	25	17	46	19.5
S10 – December 2022	123	66	192	43.9	121	65	188	43.2	2	1	4	0.8
S11 – January 2023	475	345	621	78.0	451	333	597	74.1	23	13	23	3.7
S12 – February 2023	426	311	514	58.7	423	308	510	58.2	4	3	6	0.6
S13 – March 2023	1,021	797	1,255	124.4	1,015	792	1,248	123.7	6	4	7	0.7
S14 – April 2023	640	425	800	98.7	549	365	688	84.6	87	51	106	13.4
S15 – May 2023	215	118	335	62.6	158	85	238	46.0	57	33	109	16.5
S16 – June 2023	252	107	562	136.2	235	100	521	127.3	14	7	35	7.8
S17 – July 2023	323	176	477	83.9	199	98	279	51.8	124	77	211	32.2
S18 – August 2023	1,058	819	1,307	142.5	1,058	819	1,307	142.5	0	0	0	0.0
S19 – September 2023	2,590	2,066	2,824	221.1	2,584	2,061	2,817	220.7	5	5	6	0.5
S20 – October 2023	112	51	206	37.0	104	47	197	34.2	12	3	41	4.1
S21 – November 2023	59	37	123	21.3	52	33	108	18.8	7	4	14	2.5
S22 – December 2023	172	86	272	47.4	153	78	252	42.1	20	9	29	5.6
S23 – January 2024	687	466	909	93.8	683	463	905	93.3	3	3	4	0.5
S24 – February 2024	528	361	725	89.2	527	360	725	89.1	3	2	4	0.5

Table 1-18 Guillemot MRSea apportioned and corrected density estimates (Turbine Area plus 4 km buffer)

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	5.33	3.91	9.78	0.620	4.97	3.59	8.94	0.578	0.33	0.20	0.34	0.039
S02 – April 2022	1.33	0.68	2.14	0.375	1.14	0.61	1.94	0.322	0.13	0.04	0.21	0.037
S03 – May 2022	1.35	1.08	2.01	4.069	1.31	1.05	1.96	3.966	0.03	0.03	0.05	0.104
S04 – June 2022	0.08	0.02	1.44	69.929	0.07	0.02	1.28	64.174	0.01	0.00	0.16	5.755
S05 – July 2022	1.31	0.87	1.75	0.245	1.07	0.73	1.47	0.201	0.25	0.11	0.25	0.046
S06 – August 2022	0.80	0.43	3.11	0.268	0.78	0.42	3.08	0.263	0.02	0.01	0.03	0.005
S07 – September 2022	13.57	11.02	20.30	1.298	13.48	10.94	20.10	1.289	0.08	0.06	0.09	0.008
S08 – October 2022	1.22	0.88	1.50	0.173	1.06	0.76	1.31	0.150	0.16	0.13	0.21	0.023
S09 – November 2022	0.32	0.18	0.49	0.254	0.26	0.14	0.38	0.204	0.06	0.04	0.11	0.048
S10 – December 2022	0.30	0.16	0.47	0.107	0.30	0.16	0.46	0.106	0.01	0.00	0.01	0.002
S11 – January 2023	1.16	0.84	1.52	0.191	1.10	0.81	1.46	0.181	0.06	0.03	0.06	0.009
S12 – February 2023	1.04	0.76	1.26	0.143	1.03	0.75	1.25	0.142	0.01	0.01	0.01	0.001
S13 – March 2023	2.49	1.95	3.07	0.304	2.48	1.94	3.05	0.302	0.01	0.01	0.02	0.002
S14 – April 2023	1.57	1.04	1.96	0.241	1.34	0.89	1.68	0.207	0.21	0.12	0.26	0.033
S15 – May 2023	0.53	0.29	0.82	0.153	0.39	0.21	0.58	0.112	0.14	0.08	0.27	0.040
S16 – June 2023	0.62	0.26	1.37	0.333	0.58	0.24	1.27	0.311	0.04	0.02	0.08	0.019
S17 – July 2023	0.79	0.43	1.17	0.205	0.49	0.24	0.68	0.127	0.30	0.19	0.52	0.079
S18 – August 2023	2.59	2.00	3.19	0.348	2.59	2.00	3.19	0.348	0.00	0.00	0.00	0.000
S19 – September 2023	6.33	5.05	6.90	0.540	6.32	5.04	6.89	0.539	0.01	0.01	0.02	0.001
S20 – October 2023	0.27	0.12	0.50	0.090	0.25	0.12	0.48	0.084	0.03	0.01	0.10	0.010
S21 – November 2023	0.15	0.09	0.30	0.052	0.13	0.08	0.26	0.046	0.02	0.01	0.04	0.006
S22 – December 2023	0.42	0.21	0.67	0.116	0.37	0.19	0.61	0.103	0.05	0.02	0.07	0.014

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S23 – January 2024	1.68	1.14	2.22	0.229	1.67	1.13	2.21	0.228	0.01	0.01	0.01	0.001
S24 – February 2024	1.29	0.88	1.77	0.218	1.29	0.88	1.77	0.218	0.01	0.01	0.01	0.001

1.5 RAZORBILL

1.5.1 TURBINE AREA

Table 1-19 Razorbill MRSea apportioned and corrected abundance estimates (Turbine Area)

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	744	430	1,679	223.8	749	425	1,710	243.8	9	6	17	2.9
S02 – April 2022	16	6	67	63.7	16	6	66	68.1	0	0	1	0.8
S03 – May 2022	20	8	53	12.2	20	8	53	13.3	0	0	0	0.0
S04 – June 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S05 – July 2022	34	20	62	11.3	34	20	62	12.1	0	0	1	0.1
S06 – August 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S07 – September 2022	366	251	709	70.5	362	248	704	75.5	4	3	5	0.7
S08 – October 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S09 – November 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S10 – December 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S11 – January 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S12 – February 2023	61	31	113	23.2	56	28	103	23.2	5	3	10	1.8
S13 – March 2023	16	8	38	7.9	16	8	38	8.6	0	0	0	0.0
S14 – April 2023	14	8	25	4.4	11	7	22	3.8	3	1	3	0.8
S15 – May 2023	2	1	5	1.2	2	1	5	1.3	0	0	0	0.0
S16 – June 2023	15	8	32	6.1	13	7	27	5.7	3	1	8	1.2
S17 – July 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S18 – August 2023	362	219	579	98.1	362	219	579	106.2	0	0	0	0.0
S19 – September 2023	145	100	187	23.6	143	99	185	25.4	1	1	2	0.2
S20 – October 2023	4	1	16	5.2	4	1	16	5.6	0	0	0	0.0
S21 – November 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S22 – December 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S23 – January 2024	57	33	80	13.4	56	32	79	14.3	1	1	1	0.2
S24 – February 2024	198	93	299	64.6	193	91	290	68.3	5	2	8	1.5

Table 1-20 Razorbill MRSea unapportioned and uncorrected density estimates (Turbine Area)

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	5.305	3.064	11.971	1.5957	5.339	3.028	12.194	1.7386	0.068	0.044	0.123	0.0203
S02 – April 2022	0.114	0.042	0.476	0.4543	0.113	0.042	0.469	0.4856	0.001	0.001	0.006	0.0058
S03 – May 2022	0.139	0.058	0.378	0.0873	0.139	0.058	0.378	0.0945	0.000	0.000	0.000	0.0000
S04 – June 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S05 – July 2022	0.241	0.143	0.445	0.0803	0.239	0.141	0.442	0.0862	0.002	0.001	0.004	0.0007
S06 – August 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S07 – September 2022	2.608	1.790	5.057	0.5025	2.582	1.771	5.019	0.5386	0.026	0.019	0.038	0.0050
S08 – October 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S09 – November 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S10 – December 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S11 – January 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S12 – February 2023	0.436	0.218	0.804	0.1657	0.402	0.199	0.736	0.1655	0.034	0.018	0.069	0.0128
S13 – March 2023	0.117	0.056	0.273	0.0564	0.117	0.056	0.273	0.0611	0.000	0.000	0.000	0.0000
S14 – April 2023	0.103	0.056	0.177	0.0316	0.081	0.051	0.157	0.0270	0.018	0.005	0.019	0.0056
S15 – May 2023	0.013	0.006	0.039	0.0085	0.013	0.006	0.039	0.0092	0.000	0.000	0.000	0.0000
S16 – June 2023	0.106	0.056	0.227	0.0434	0.091	0.051	0.192	0.0406	0.021	0.006	0.056	0.0087
S17 – July 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S18 – August 2023	2.585	1.559	4.130	0.6995	2.585	1.559	4.130	0.7572	0.000	0.000	0.000	0.0000
S19 – September 2023	1.031	0.711	1.334	0.1686	1.023	0.705	1.323	0.1810	0.009	0.006	0.012	0.0014
S20 – October 2023	0.030	0.010	0.116	0.0369	0.030	0.010	0.116	0.0399	0.000	0.000	0.000	0.0000
S21 – November 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S22 – December 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S23 – January 2024	0.405	0.234	0.570	0.0957	0.399	0.230	0.560	0.1020	0.006	0.004	0.010	0.0015
S24 – February 2024	1.411	0.664	2.131	0.4606	1.378	0.646	2.072	0.4870	0.033	0.018	0.060	0.0107

1.5.2 TURBINE AREA PLUS 2 KM BUFFER

Table 1-21 Razorbill MRSea apportioned and corrected abundance estimates (Turbine Area plus 2 km buffer)

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	908	590	2,112	258.9	909	582	2,127	280.5	12	8	22	3.5
S02 – April 2022	94	35	234	1,757.0	100	37	251	2,024.5	1	0	2	14.5
S03 – May 2022	36	16	98	21.4	36	16	98	23.1	0	0	0	0.0
S04 – June 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S05 – July 2022	95	49	143	29.7	90	50	144	30.5	1	0	1	0.2
S06 – August 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S07 – September 2022	613	440	1,036	106.8	596	426	993	112.4	24	7	27	4.1
S08 – October 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S09 – November 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S10 – December 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S11 – January 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S12 – February 2023	112	59	203	123.8	105	55	186	125.2	8	5	17	9.3
S13 – March 2023	35	19	78	14.9	35	19	78	16.2	0	0	0	0.0
S14 – April 2023	21	11	32	5.5	17	10	27	4.9	3	1	4	0.9
S15 – May 2023	6	3	16	4.5	6	3	16	4.9	0	0	0	0.0
S16 – June 2023	34	19	66	12.6	30	17	57	11.9	12	3	32	4.3
S17 – July 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S18 – August 2023	725	481	1,064	161.9	725	481	1,064	175.3	0	0	0	0.0
S19 – September 2023	321	234	401	46.0	319	232	397	49.4	3	2	3	0.4
S20 – October 2023	44	16	86	23.7	44	16	86	25.6	0	0	0	0.0

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S21 – November 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S22 – December 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S23 – January 2024	123	69	164	28.5	122	68	161	30.4	2	1	3	0.4
S24 – February 2024	389	212	581	108.6	379	207	566	114.5	9	5	15	2.5

Table 1-22 Razorbill MRSea apportioned and corrected density estimates (Turbine Area plus 2 km buffer)

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	3.46	2.25	8.05	0.986	3.47	2.22	8.11	1.069	0.05	0.03	0.08	0.013
S02 – April 2022	0.36	0.13	0.89	6.695	0.38	0.14	0.96	7.715	0.00	0.00	0.01	0.055
S03 – May 2022	0.14	0.06	0.37	0.081	0.14	0.06	0.37	0.088	0.00	0.00	0.00	0.000
S04 – June 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S05 – July 2022	0.36	0.19	0.55	0.113	0.34	0.19	0.55	0.116	0.00	0.00	0.00	0.001
S06 – August 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S07 – September 2022	2.33	1.68	3.95	0.407	2.27	1.63	3.78	0.428	0.09	0.03	0.10	0.016
S08 – October 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S09 – November 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S10 – December 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S11 – January 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S12 – February 2023	0.43	0.23	0.77	0.472	0.40	0.21	0.71	0.477	0.03	0.02	0.07	0.035
S13 – March 2023	0.13	0.07	0.30	0.057	0.13	0.07	0.30	0.062	0.00	0.00	0.00	0.000

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S14 – April 2023	0.08	0.04	0.12	0.021	0.06	0.04	0.10	0.019	0.01	0.00	0.01	0.004
S15 – May 2023	0.02	0.01	0.06	0.017	0.02	0.01	0.06	0.019	0.00	0.00	0.00	0.000
S16 – June 2023	0.13	0.07	0.25	0.048	0.11	0.07	0.22	0.045	0.04	0.01	0.12	0.016
S17 – July 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S18 – August 2023	2.76	1.83	4.05	0.617	2.76	1.83	4.05	0.668	0.00	0.00	0.00	0.000
S19 – September 2023	1.22	0.89	1.53	0.175	1.22	0.88	1.51	0.188	0.01	0.01	0.01	0.001
S20 – October 2023	0.17	0.06	0.33	0.090	0.17	0.06	0.33	0.098	0.00	0.00	0.00	0.000
S21 – November 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S22 – December 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S23 – January 2024	0.47	0.26	0.62	0.109	0.46	0.26	0.61	0.116	0.01	0.00	0.01	0.002
S24 – February 2024	1.48	0.81	2.21	0.414	1.45	0.79	2.16	0.436	0.03	0.02	0.06	0.009

1.5.3 TURBINE AREA PLUS 4 KM BUFFER

Table 1-23 Razorbill MRSea apportioned and corrected abundance estimates (Turbine Area plus 4 km buffer)

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	1,065	688	2,288	291.8	1,059	669	2,246	314.1	17	10	26	4.7
S02 – April 2022	323	153	653	43,882.0	337	159	711	49,540.2	7	2	12	897.7
S03 – May 2022	54	28	136	28.7	54	28	136	31.1	0	0	0	0.0
S04 – June 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S05 – July 2022	192	105	282	56.1	185	100	271	58.8	1	1	2	0.3
S06 – August 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S07 – September 2022	899	686	1,443	141.2	880	671	1,406	149.6	22	9	22	3.4
S08 – October 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S09 – November 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S10 – December 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S11 – January 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S12 – February 2023	170	105	294	15,632.6	156	96	269	15,516.4	13	9	25	1,215.2
S13 – March 2023	64	38	136	44.7	64	38	136	48.4	0	0	0	0.0
S14 – April 2023	49	38	61	6.3	44	35	56	6.1	5	2	5	0.6
S15 – May 2023	22	10	45	17.1	23	10	45	19.5	0	0	0	0.0
S16 – June 2023	66	36	125	24.2	60	33	112	23.7	7	3	15	2.4
S17 – July 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S18 – August 2023	1,221	888	1,638	214.0	1,221	888	1,638	231.6	0	0	0	0.0
S19 – September 2023	613	466	730	78.0	609	462	724	83.8	5	4	6	0.6
S20 – October 2023	80	37	155	29.5	83	37	165	33.0	0	0	0	0.0

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S21 – November 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S22 – December 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S23 – January 2024	211	132	315	46.0	208	130	310	49.1	3	2	4	0.6
S24 – February 2024	599	368	925	145.8	585	359	904	153.9	13	9	21	3.2

Table 1-24 Razorbill MRSea apportioned and corrected density estimates (Turbine Area plus 4 km buffer)

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	2.60	1.68	5.59	0.7132	2.59	1.63	5.49	0.768	0.04	0.02	0.06	0.011
S02 – April 2022	0.79	0.37	1.59	107.237	0.82	0.39	1.74	121.065	0.02	0.00	0.03	2.194
S03 – May 2022	0.13	0.07	0.33	0.070	0.13	0.07	0.33	0.076	0.00	0.00	0.00	0.000
S04 – June 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S05 – July 2022	0.47	0.26	0.69	0.137	0.45	0.24	0.66	0.144	0.00	0.00	0.00	0.001
S06 – August 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S07 – September 2022	2.20	1.68	3.53	0.345	2.15	1.64	3.43	0.366	0.05	0.02	0.05	0.008
S08 – October 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S09 – November 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S10 – December 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S11 – January 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S12 – February 2023	0.42	0.26	0.72	38.202	0.38	0.23	0.66	37.918	0.03	0.02	0.06	2.970

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S13 – March 2023	0.16	0.09	0.33	0.109	0.16	0.09	0.33	0.118	0.00	0.00	0.00	0.000
S14 – April 2023	0.12	0.09	0.15	0.015	0.11	0.09	0.14	0.015	0.01	0.01	0.01	0.002
S15 – May 2023	0.05	0.02	0.11	0.042	0.06	0.02	0.11	0.048	0.00	0.00	0.00	0.000
S16 – June 2023	0.16	0.09	0.30	0.059	0.15	0.08	0.27	0.058	0.02	0.01	0.04	0.006
S17 – July 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S18 – August 2023	2.98	2.17	4.00	0.523	2.98	2.17	4.00	0.566	0.00	0.00	0.00	0.000
S19 – September 2023	1.50	1.14	1.78	0.1901	1.49	1.13	1.77	0.205	0.01	0.01	0.02	0.001
S20 – October 2023	0.20	0.09	0.38	0.072	0.20	0.09	0.40	0.081	0.00	0.00	0.00	0.000
S21 – November 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S22 – December 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S23 – January 2024	0.52	0.32	0.77	0.112	0.51	0.32	0.76	0.120	0.01	0.00	0.01	0.002
S24 – February 2024	1.46	0.90	2.26	0.356	1.43	0.88	2.21	0.376	0.03	0.02	0.05	0.008

1.6 PUFFIN

1.6.1 TURBINE AREA

Table 1-25 Puffin MRSea apportioned and corrected abundance estimates (Turbine Area)

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S02 – April 2022	32	13	81	18.1	25	10	70	14	6	3	13	3.3
S03 – May 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S04 – June 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S05 – July 2022	4,151	3,028	5,679	600.0	3,540	2,595	4,852	512	611	402	915	88.3
S06 – August 2022	11	6	27	5.8	11	6	27	6	0	0	0	0.0
S07 – September 2022	225	156	315	43.3	225	156	315	43	0	0	0	0.0
S08 – October 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S09 – November 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S10 – December 2022	0	0	0	0.1	0	0	0	0	0	0	0	0.0
S11 – January 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S12 – February 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S13 – March 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S14 – April 2023	175	97	319	62.7	61	34	112	22	113	63	208	40.4
S15 – May 2023	16	9	30	5.9	11	6	21	4	5	3	9	1.8
S16 – June 2023	57	28	140	33.5	50	25	120	29	10	2	29	6.1
S17 – July 2023	138	91	213	30.0	61	40	94	13	77	51	119	16.8

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S18 – August 2023	210	152	303	39.9	210	152	303	40	0	0	0	0.0
S19 – September 2023	161	117	227	28.9	161	117	227	29	0	0	0	0.0
S20 – October 2023	114	72	176	22.5	114	72	176	22	0	0	0	0.0
S21 – November 2023	13	7	31	6.2	13	7	31	6	0	0	0	0.0
S22 – December 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S23 – January 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S24 – February 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 1-26 Puffin MRSea apportioned and corrected density estimates (Turbine Area)

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S02 – April 2022	0.23	0.09	0.58	0.129	0.18	0.07	0.50	0.100	0.04	0.02	0.10	0.024
S03 – May 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S04 – June 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S05 – July 2022	29.60	21.59	40.50	4.279	25.24	18.51	34.60	3.649	4.35	2.86	6.53	0.629
S06 – August 2022	0.08	0.04	0.19	0.041	0.08	0.04	0.19	0.041	0.00	0.00	0.00	0.000
S07 – September 2022	1.60	1.11	2.25	0.309	1.60	1.11	2.25	0.309	0.00	0.00	0.00	0.000
S08 – October 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S09 – November 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S10 – December 2022	0.00	0.00	0.00	0.001	0.00	0.00	0.00	0.001	0.00	0.00	0.00	0.000

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S11 – January 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S12 – February 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S13 – March 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S14 – April 2023	1.25	0.69	2.27	0.447	0.43	0.24	0.80	0.155	0.80	0.45	1.49	0.288
S15 – May 2023	0.11	0.06	0.22	0.042	0.08	0.04	0.15	0.030	0.03	0.02	0.06	0.013
S16 – June 2023	0.40	0.20	1.00	0.239	0.35	0.18	0.86	0.209	0.07	0.02	0.21	0.043
S17 – July 2023	0.99	0.65	1.52	0.214	0.43	0.29	0.67	0.094	0.55	0.36	0.85	0.120
S18 – August 2023	1.49	1.09	2.16	0.285	1.49	1.09	2.16	0.285	0.00	0.00	0.00	0.000
S19 – September 2023	1.15	0.84	1.62	0.206	1.15	0.84	1.62	0.206	0.00	0.00	0.00	0.000
S20 – October 2023	0.81	0.51	1.26	0.160	0.81	0.51	1.26	0.160	0.00	0.00	0.00	0.000
S21 – November 2023	0.09	0.05	0.22	0.044	0.09	0.05	0.22	0.044	0.00	0.00	0.00	0.000
S22 – December 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S23 – January 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S24 – February 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

1.6.2 TURBINE AREA PLUS 2 KM BUFFER

Table 1-27 Puffin MRSea apportioned and corrected abundance estimates (Turbine Area plus 2 km buffer)

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S02 – April 2022	73	31	139	32.4	55	23	107	25	17	9	35	7.3
S03 – May 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S04 – June 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S05 – July 2022	7,369	5,677	9,781	935.9	6,325	4,889	8,438	803	1,023	748	1,431	129.9
S06 – August 2022	33	17	65	13.0	33	17	65	13	0	0	0	0.0
S07 – September 2022	428	307	562	72.4	428	307	563	72	0	0	0	0.0
S08 – October 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S09 – November 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S10 – December 2022	1	0	2	0.4	1	0	2	0	0	0	0	0.0
S11 – January 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S12 – February 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S13 – March 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S14 – April 2023	283	168	491	90.0	95	58	165	30	188	108	341	59.8
S15 – May 2023	34	20	63	10.4	23	14	40	7	12	6	24	3.6
S16 – June 2023	119	68	265	56.8	109	63	240	52	7	4	15	3.2
S17 – July 2023	280	192	425	55.4	126	85	195	25	153	107	228	30.3
S18 – August 2023	464	356	630	73.8	464	356	630	74	0	0	0	0.0
S19 – September 2023	320	241	444	51.8	320	241	444	52	0	0	0	0.0
S20 – October 2023	201	131	270	37.9	201	131	270	38	0	0	0	0.0

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S21 – November 2023	24	14	54	10.3	24	14	54	10	0	0	0	0.0
S22 – December 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S23 – January 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S24 – February 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 1-28 Puffin MRSea apportioned and corrected density estimates (Turbine Area plus 2 km buffer)

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S02 – April 2022	0.28	0.12	0.53	0.123	0.21	0.09	0.41	0.093	0.06	0.03	0.13	0.028
S03 – May 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S04 – June 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S05 – July 2022	28.08	21.63	37.27	3.567	24.10	18.63	32.16	3.061	3.90	2.85	5.45	0.495
S06 – August 2022	0.12	0.07	0.25	0.050	0.12	0.07	0.25	0.050	0.00	0.00	0.00	0.000
S07 – September 2022	1.63	1.17	2.14	0.276	1.63	1.17	2.15	0.276	0.00	0.00	0.00	0.000
S08 – October 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S09 – November 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S10 – December 2022	0.00	0.00	0.01	0.002	0.00	0.00	0.01	0.002	0.00	0.00	0.00	0.000
S11 – January 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S12 – February 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S13 – March 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S14 – April 2023	1.08	0.64	1.87	0.343	0.36	0.22	0.63	0.115	0.72	0.41	1.30	0.228
S15 – May 2023	0.13	0.08	0.24	0.040	0.09	0.05	0.15	0.026	0.05	0.02	0.09	0.014
S16 – June 2023	0.45	0.26	1.01	0.217	0.41	0.24	0.91	0.198	0.03	0.01	0.06	0.012
S17 – July 2023	1.07	0.73	1.62	0.211	0.48	0.32	0.74	0.095	0.58	0.41	0.87	0.115
S18 – August 2023	1.77	1.36	2.40	0.281	1.77	1.36	2.40	0.281	0.00	0.00	0.00	0.000
S19 – September 2023	1.22	0.92	1.69	0.197	1.22	0.92	1.69	0.197	0.00	0.00	0.00	0.000
S20 – October 2023	0.77	0.50	1.03	0.144	0.77	0.50	1.03	0.144	0.00	0.00	0.00	0.000
S21 – November 2023	0.09	0.05	0.21	0.039	0.09	0.05	0.21	0.039	0.00	0.00	0.00	0.000
S22 – December 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S23 – January 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S24 – February 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

1.6.3 TURBINE AREA PLUS 4 KM BUFFER

Table 1-29 Puffin MRSea apportioned and corrected abundance estimates (Turbine Area plus 4 km buffer)

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S02 – April 2022	152	82	267	47.4	112	57	196	35	41	25	78	12.8
S03 – May 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S04 – June 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S05 – July 2022	10,308	8,209	13,212	1,173.4	8,896	7,091	11,431	1,013	1,388	1,079	1,845	158.0
S06 – August 2022	67	41	118	20.0	67	41	118	20	0	0	0	0.0
S07 – September 2022	683	524	887	100.2	683	525	888	100	0	0	0	0.0
S08 – October 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S09 – November 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S10 – December 2022	10	7	18	2.9	10	7	18	3	0	0	0	0.0
S11 – January 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S12 – February 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S13 – March 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S14 – April 2023	354	231	599	101.4	121	80	206	35	238	150	417	68.4
S15 – May 2023	59	39	94	14.6	41	27	61	10	18	12	31	4.5
S16 – June 2023	225	135	435	86.6	208	127	402	80	19	9	45	7.4
S17 – July 2023	488	347	719	87.0	221	154	331	39	265	190	396	47.4
S18 – August 2023	870	694	1,140	112.4	870	694	1,140	112	0	0	0	0.0
S19 – September 2023	501	385	674	72.5	501	385	674	73	0	0	0	0.0
S20 – October 2023	305	203	434	54.5	299	202	406	53	0	0	0	0.0

Survey	Abundances											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S21 – November 2023	39	25	78	13.7	39	25	78	14	0	0	0	0.0
S22 – December 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S23 – January 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S24 – February 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 1-30 Puffin MRSea apportioned and corrected density estimates (Turbine Area plus 4 km buffer)

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S01 – March 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S02 – April 2022	0.37	0.20	0.65	0.116	0.27	0.14	0.48	0.086	0.10	0.06	0.19	0.031
S03 – May 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S04 – June 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S05 – July 2022	25.19	20.06	32.29	2.868	21.74	17.33	27.94	2.475	3.39	2.64	4.51	0.386
S06 – August 2022	0.16	0.10	0.29	0.049	0.16	0.10	0.29	0.049	0.00	0.00	0.00	0.000
S07 – September 2022	1.67	1.28	2.17	0.245	1.67	1.28	2.17	0.245	0.00	0.00	0.00	0.000
S08 – October 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S09 – November 2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S10 – December 2022	0.03	0.02	0.04	0.007	0.03	0.02	0.04	0.007	0.00	0.00	0.00	0.000
S11 – January 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S12 – February 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S13 – March 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Survey	Density											
	All behaviours				Sitting				Flying			
	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD	Prediction	LCL	UCL	SD
S14 – April 2023	0.86	0.57	1.46	0.248	0.30	0.20	0.50	0.085	0.58	0.37	1.02	0.167
S15 – May 2023	0.15	0.09	0.23	0.036	0.10	0.07	0.15	0.024	0.04	0.03	0.08	0.011
S16 – June 2023	0.55	0.33	1.06	0.212	0.51	0.31	0.98	0.196	0.05	0.02	0.11	0.018
S17 – July 2023	1.19	0.85	1.76	0.213	0.54	0.38	0.81	0.096	0.65	0.46	0.97	0.116
S18 – August 2023	2.13	1.70	2.79	0.275	2.13	1.70	2.79	0.275	0.00	0.00	0.00	0.000
S19 – September 2023	1.22	0.94	1.65	0.177	1.22	0.94	1.65	0.177	0.00	0.00	0.00	0.000
S20 – October 2023	0.75	0.50	1.06	0.133	0.73	0.49	0.99	0.130	0.00	0.00	0.00	0.000
S21 – November 2023	0.10	0.06	0.19	0.034	0.10	0.06	0.19	0.034	0.00	0.00	0.00	0.000
S22 – December 2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S23 – January 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S24 – February 2024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

1.7 GLOSSARY OF TERMS AND ABBREVIATIONS

A list of key terms and acronyms used in this Appendix are provided in **Table 1-31** and **Table 1-32**.

Table 1-31 Acronyms and abbreviations

Term	Definition
LCL	Lower confidence limit
SD	Standard Deviation
UCL	Upper confidence limit

Table 1-32 Glossary

Term	Meaning
Lower confidence limit	Represents the lower bound of a confidence interval
Standard Deviation	A statistic measuring the dispersion of a dataset relative to its mean. It is calculated as the square root of the variance
Upper confidence limit	Represents the upper bound of a confidence interval