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Appendix 11.1, Annex D: Offshore Ornithology Apportioned Design-Based Abundance Estimates

Array EIA Report

2024

Revision	Comments	Author	Checker	Approver
FINAL	Final	RPS/NIRAS	RPS	RPS

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1. APPORTIONED DESIGN-BASED ABUNDANCE ESTIMATES

1. This annex provides survey results for all species recorded in the site-specific Digital Aerial Survey (DAS). All abundance estimates are inclusive of apportionment of unidentified birds. Populations estimates for “All Behaviours” throughout the tables of this annex are inclusive of correction for availability bias (where applicable) as used for impact assessment, though estimates for “Flying Only” and “Sitting Only” are not corrected. Data are presented for “Sitting” birds, “Flying” birds and “All Behaviours”, though it should be noted that “All Behaviours” in some cases includes a small number of birds classified as other behaviours (e.g. diving or taking off) and therefore is not always the sum of “Flying” and “Sitting”. Deceased birds are not included in these data. Further details on the surveys flown and analysis undertaken (including correction factors for availability bias) are presented in volume 3, appendix 11.1, section 3.2 and HiDef (2023).

KITTIWAKE

Table 1.1: Kittiwake Design-based Abundance Estimates for Array Only

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	133	77	195	31	22.66	33	3	62	16	47.11	101	49	150	27	26.28
April 2021	384	67	919	227	59.07	90	19	189	45	49.47	290	20	760	214	73.80
May 2021	2,474	1,723	3,462	439	17.75	1,674	1,165	2,404	317	18.93	836	519	1,152	162	19.32
June 2021	716	449	1,059	159	22.18	365	133	681	147	40.32	360	220	499	72	19.89
July 2021	21	0	50	14	68.68	10	0	30	10	99.48	10	0	30	10	98.87
August 2021	30	0	76	21	67.42	-	-	-	-	-	31	0	78	22	69.74
September 2021	59	10	129	32	54.07	11	0	31	10	93.12	49	0	129	32	64.69
October 2021	61	20	108	24	38.32	10	0	30	10	99.54	51	10	97	23	44.31
November 2021	61	29	100	20	31.79	10	0	30	10	97.52	50	20	87	19	36.53
December 2021	161	80	244	42	25.64	20	0	50	14	66.24	142	70	221	38	26.78
January 2022	71	10	147	34	48.09	10	0	30	10	99.68	61	10	119	28	46.39
February 2022	103	40	180	37	35.67	50	11	100	23	46.02	49	10	89	20	40.28
March 2022	210	129	298	44	20.80	61	19	114	26	42.02	151	80	227	38	24.89
April 2022	21	0	50	14	67.54	-	-	-	-	-	20	0	50	14	67.52
May 2022	224	137	315	46	20.60	-	-	-	-	-	219	140	312	47	21.22
June 2022	190	95	308	56	29.29	71	0	177	49	68.10	121	70	169	25	20.52
July 2022	1,268	840	1,784	234	18.42	900	495	1,399	229	25.35	356	169	594	112	31.31
August 2022	114	0	319	97	84.86	113	0	328	95	84.60		-	-	-	-
September 2022	11	0	39	11	99.91	-	-	-	-	-	10	0	30	10	103.64
October 2022	41	10	89	22	52.92	-	-	-	-	-	41	10	89	22	53.70
November 2022	623	208	1,202	255	40.96	268	10	679	175	65.26	355	147	686	141	39.63
December 2022	11	0	30	10	90.38	-	-	-	-	-	11	0	30	10	92.81
January 2023	31	0	60	15	49.00	11	0	30	10	93.96	20	0	49	13	62.64
February 2023	163	90	247	39	23.71	21	0	50	14	65.13	140	80	210	34	23.98

Table 1.2: Kittiwake Design-based Abundance Estimates for Array Plus 2 km Buffer

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	187	125	259	36	18.86	47	17	84	17	36.14	141	80	208	31	22.04
April 2021	480	139	1,031	233	48.43	144	30	291	68	46.82	343	70	871	229	66.55
May 2021	3,239	2,360	4,376	509	15.71	2,197	1,547	3,071	389	17.70	1,050	709	1,444	183	17.39
June 2021	1,322	887	1,786	232	17.55	726	358	1,201	211	29.80	593	415	775	92	15.51
July 2021	30	0	68	17	55.90	11	0	30	10	96.95	21	0	51	15	68.92
August 2021	30	0	79	22	71.02	-	-	-	-	-	31	0	79	22	70.13
September 2021	60	10	136	33	54.22	11	0	31	10	93.85	51	0	130	33	65.00
October 2021	80	30	127	25	30.49	21	0	50	14	68.06	61	20	106	23	37.78
November 2021	129	59	228	45	34.68	10	0	30	10	102.73	119	49	217	44	37.03
December 2021	175	79	266	47	26.73	22	0	51	14	63.79	155	79	240	42	26.94
January 2022	70	10	141	35	49.90	10	0	30	10	96.59	62	10	119	28	45.45
February 2022	102	40	181	38	36.85	50	11	99	24	47.27	51	10	89	20	39.01
March 2022	291	210	380	45	15.31	81	29	149	32	38.40	211	137	300	43	20.43
April 2022	40	10	79	18	45.35	11	0	30	10	96.62	30	0	68	16	52.78
May 2022	338	235	453	57	16.88	22	0	60	20	94.69	321	222	424	54	16.85
June 2022	311	156	486	88	28.07	130	0	297	76	58.14	183	99	296	50	27.40
July 2022	2,094	1,353	2,929	411	19.60	1,570	866	2,390	372	23.70	531	300	814	132	24.73
August 2022	201	29	456	114	56.79	183	20	442	111	60.68	11	0	30	10	89.89
September 2022	11	0	30	10	95.37	-	-	-	-	-	10	0	30	10	97.02
October 2022	62	10	125	29	45.80	-	-	-	-	-	60	10	119	28	45.66
November 2022	1,181	357	2,344	525	44.40	438	39	1,042	277	63.15	711	258	1,386	297	41.73
December 2022	41	10	79	18	43.62	10	0	30	10	99.73	30	0	60	16	53.35
January 2023	41	10	79	19	44.95	10	0	30	10	96.82	30	0	61	16	53.21
February 2023	189	107	279	46	24.44	20	0	50	14	66.65	175	98	269	44	24.76

Table 1.3: Kittiwake Design-based Abundance Estimates for Array Plus 4 km Buffer (Array Offshore Ornithology Study Area)

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	1,042	180	2,779	802	76.96	651	25	1,816	612	93.94	429	136	986	256	59.68
April 2021	543	198	1,057	234	43.03	180	50	328	71	39.12	368	97	851	218	59.02
May 2021	4,284	3,301	5,410	536	12.51	2,627	1,957	3,420	378	14.38	1,634	1,141	2,193	274	16.77
June 2021	1,545	1,118	1,986	220	14.20	831	466	1,271	210	25.16	714	508	925	104	14.46
July 2021	40	0	89	24	58.93	20	0	50	14	66.04	21	0	50	14	66.02
August 2021	61	10	117	28	45.29	21	0	60	19	91.31	40	0	89	23	56.51
September 2021	60	10	126	32	52.83	11	0	31	10	96.52	50	0	125	32	64.07
October 2021	100	49	156	28	27.98	30	0	68	16	53.56	70	29	118	25	35.16
November 2021	172	89	294	55	31.90	11	0	30	11	97.41	158	70	281	54	34.04
December 2021	212	130	307	45	20.82	31	0	61	16	51.68	184	109	278	42	22.82
January 2022	81	20	163	35	43.40	20	0	50	13	63.74	59	10	114	27	45.95
February 2022	193	79	340	69	35.57	111	39	225	48	42.53	79	29	138	29	36.17
March 2022	329	241	418	45	13.63	89	30	152	32	35.29	241	157	332	46	18.77
April 2022	49	20	89	20	39.43	11	0	30	11	95.08	40	10	79	19	46.47
May 2022	439	296	591	75	16.97	50	0	117	30	60.99	391	275	512	63	15.89
June 2022	412	239	614	96	23.22	140	10	302	76	54.12	270	156	399	62	22.64
July 2022	3,245	1,950	4,857	722	22.25	2,369	1,200	3,752	645	27.22	817	486	1,181	179	21.90
August 2022	249	69	495	114	45.61	239	50	488	117	48.94	20	0	50	14	69.09
September 2022	21	0	60	20	94.26	-	-	-	-	-	21	0	60	19	92.07
October 2022	71	10	146	35	49.04	-	-	-	-	-	70	10	139	33	47.30
November 2022	1,633	522	3,021	675	41.31	644	88	1,461	350	54.28	972	392	1,788	362	37.26
December 2022	61	20	100	22	34.71	11	0	30	10	93.07	49	10	90	20	40.52
January 2023	40	10	78	18	45.44	11	0	30	10	93.50	31	0	69	17	54.67
February 2023	232	128	350	55	23.35	20	0	49	13	64.36	211	118	312	50	23.31

Table 1.4: Kittiwake Design-based Abundance Estimates for Array Plus 8 km Buffer

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	1,783	390	4,083	987	55.35	1,087	75	2,735	701	64.48	673	269	1,350	280	41.53
April 2021	1,227	495	2,168	450	36.70	746	207	1,583	362	48.47	487	169	1,015	226	46.42
May 2021	6,868	5,503	8,302	720	10.48	3,685	2,834	4,724	480	13.02	3,148	2,378	3,983	414	13.14
June 2021	2,361	1,789	2,964	307	12.97	1,303	858	1,838	255	19.55	1,064	811	1,325	130	12.20
July 2021	109	50	177	33	30.09	50	10	97	22	43.30	61	20	119	27	43.78
August 2021	130	50	219	44	33.43	41	0	97	24	58.15	90	20	175	40	44.12
September 2021	70	20	146	35	48.86	20	0	50	14	67.70	50	0	119	32	63.22
October 2021	151	90	218	33	21.31	31	0	68	17	53.35	121	68	184	31	25.69
November 2021	219	128	339	54	24.65	40	10	80	20	48.19	178	90	288	53	29.77
December 2021	243	141	359	55	22.54	30	0	61	16	52.35	215	119	334	57	26.10
January 2022	117	49	205	42	35.86	31	0	60	16	52.24	90	30	166	36	39.48
February 2022	272	128	453	85	31.33	141	59	246	49	34.56	134	59	222	42	31.35
March 2022	498	375	629	66	13.22	139	69	218	39	27.84	359	249	481	60	16.71
April 2022	81	30	139	28	34.35	31	0	69	17	53.49	51	10	90	21	40.41
May 2022	799	580	1,050	120	14.99	60	10	129	31	52.19	741	555	960	104	13.94
June 2022	921	535	1,497	257	27.90	525	177	1,078	236	44.93	398	262	538	73	18.28
July 2022	5,382	3,410	7,667	1,140	21.17	4,068	2,324	6,049	953	23.42	1,332	882	1,806	236	17.69
August 2022	4,246	788	9,022	2,058	48.47	4,070	833	8,177	1,950	47.90	194	30	467	111	57.09
September 2022	31	0	79	22	70.19	-	-	-	-	-	30	0	80	22	74.13
October 2022	167	69	279	55	32.81	-	-	-	-	-	169	70	286	56	33.12
November 2022	2,440	1,069	4,154	780	31.94	804	197	1,666	375	46.63	1,546	823	2,435	415	26.80
December 2022	91	40	151	30	32.42	31	0	81	23	73.40	61	20	110	23	36.77
January 2023	41	10	80	19	45.23	11	0	30	11	97.49	31	0	61	17	53.47
February 2023	365	250	483	60	16.26	61	20	109	22	36.05	302	192	416	57	18.70

GANNET

Table 1.5: Gannet Design-based Abundance Estimates for Array Only

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	21	0	49	13	64.26	-	-	-	-	-	21	0	50	14	65.22
April 2021	289	80	550	123	42.58	59	0	128	34	57.53	226	70	454	98	43.25
May 2021	730	482	1,016	136	18.59	453	252	677	112	24.63	285	187	390	53	18.59
June 2021	408	234	607	99	24.07	203	97	349	66	32.41	215	118	328	54	24.98
July 2021	1,825	1,332	2,363	263	14.37	954	679	1,281	152	15.92	853	487	1,253	198	23.17
August 2021	100	40	176	34	33.81	31	0	60	16	50.71	71	28	128	27	37.57
September 2021	327	171	513	90	27.26	102	40	167	33	31.60	233	90	405	82	35.03
October 2021	449	286	620	88	19.38	198	108	301	51	25.61	247	139	367	58	23.43
November 2021	20	0	50	14	65.31	-	-	-	-	-	20	0	50	14	68.83
December 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2022	11	0	30	10	92.58	10	0	30	10	96.62	-	-	-	-	-
March 2022	61	20	109	24	39.51	31	0	61	17	53.11	30	0	67	16	52.10
April 2022	143	50	250	50	34.85	92	20	187	43	46.41	51	10	97	22	42.09
May 2022	557	342	845	134	23.89	130	30	262	60	45.85	428	248	610	93	21.58
June 2022	241	148	342	50	20.54	101	48	168	33	32.68	139	77	210	35	24.65
July 2022	241	133	364	58	23.93	152	66	277	56	36.43	89	38	157	32	36.00
August 2022	366	230	526	77	20.89	244	133	371	61	24.77	112	40	199	41	36.09
September 2022	51	10	99	25	48.44	21	0	50	14	66.63	30	10	67	17	54.87
October 2022	110	40	201	42	38.07	21	0	50	14	67.90	92	30	168	36	38.52
November 2022	21	0	50	15	69.19	10	0	30	10	99.52	11	0	31	10	94.45
December 2022	11	0	30	10	95.31	-	-	-	-	-	11	0	38	10	98.52
January 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2023	10	0	30	10	97.83	-	-	-	-	-	10	0	30	10	94.82

Table 1.6: Gannet Design-based Abundance Estimates for Array Plus 2 km Buffer

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	31	0	67	16	52.65	10	0	30	10	97.63	20	0	49	14	67.53
April 2021	319	105	579	123	38.61	80	0	171	44	55.19	248	69	476	104	41.81
May 2021	1,006	685	1,393	178	17.71	508	292	730	112	21.90	502	346	672	84	16.57
June 2021	586	387	838	117	19.87	286	157	439	72	25.14	291	166	437	71	24.37
July 2021	2,267	1,694	2,872	299	13.16	1,205	881	1,583	176	14.58	1,073	666	1,497	220	20.42
August 2021	211	99	360	66	30.97	91	30	161	35	38.57	120	49	198	39	32.18
September 2021	453	256	671	112	24.56	142	60	234	44	30.74	308	159	500	87	28.19
October 2021	682	487	900	106	15.46	306	169	473	78	25.37	369	219	525	76	20.37
November 2021	21	0	50	15	69.60	-	-	-	-	-	21	0	50	14	66.77
December 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2022	30	0	60	16	51.65	20	0	50	14	66.22	10	0	30	10	98.18
March 2022	91	40	147	29	31.62	50	10	90	20	39.74	41	10	79	17	41.09
April 2022	192	78	338	69	36.06	112	20	228	55	49.07	81	30	129	29	35.41
May 2022	774	513	1,106	152	19.56	170	59	337	73	42.72	594	392	818	108	18.07
June 2022	419	288	533	69	16.27	141	69	217	37	26.13	282	177	410	60	21.08
July 2022	284	174	411	62	21.62	171	79	288	58	33.54	111	48	184	36	32.20
August 2022	395	259	543	74	18.76	278	166	426	68	24.19	112	49	196	39	34.38
September 2022	89	30	151	32	35.16	31	0	68	17	53.15	60	20	105	22	35.54
October 2022	152	69	248	46	29.90	21	0	50	14	66.46	130	60	217	40	30.61
November 2022	62	10	121	29	46.68	41	10	87	21	49.99	21	0	51	15	70.28
December 2022	30	0	68	17	53.50	10	0	30	10	97.41	21	0	50	14	63.59
January 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2023	10	0	30	10	99.66	-	-	-	-	-	10	0	30	10	98.21

Table 1.7: Gannet Design-based Abundance Estimates for Array Plus 4 km Buffer (Array Offshore Ornithology Study Area)

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	51	20	90	20	39.24	10	0	30	10	97.86	40	10	79	18	44.55
April 2021	378	149	648	134	35.36	92	10	193	46	49.44	278	117	495	102	36.70
May 2021	1,409	1,036	1,900	223	15.80	638	398	922	135	21.15	780	484	1,199	188	24.06
June 2021	752	498	1,010	133	17.68	400	238	576	87	21.71	350	220	504	77	21.94
July 2021	2,872	2,269	3,543	330	11.49	1,455	1,113	1,838	191	13.13	1,416	964	1,937	243	17.16
August 2021	277	139	438	77	27.62	118	49	202	40	34.11	161	97	239	39	23.84
September 2021	592	369	878	130	21.85	180	89	296	54	30.12	412	234	623	103	24.90
October 2021	928	676	1,206	134	14.42	470	267	694	110	23.27	458	303	629	85	18.56
November 2021	20	0	49	14	68.81	-	-	-	-	-	20	0	49	14	65.58
December 2021	10	0	30	10	100.36	-	-	-	-	-	11	0	31	11	92.89
January 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2022	41	10	77	17	41.90	21	0	50	14	64.15	21	0	49	13	63.73
March 2022	141	69	217	38	26.42	59	10	115	25	42.48	79	30	136	27	33.83
April 2022	259	129	408	73	28.17	157	60	285	58	36.44	101	40	165	32	31.78
May 2022	994	725	1,311	155	15.5	209	100	373	69	32.62	779	544	1,027	124	15.85
June 2022	504	348	668	82	16.25	190	118	275	41	21.2	311	201	429	61	19.47
July 2022	350	227	492	67	18.91	189	98	301	54	28.58	157	87	244	42	26.67
August 2022	501	365	659	80	15.79	326	205	467	68	20.6	161	97	239	39	23.84
September 2022	111	49	188	36	32.05	50	10	106	25	48.47	60	20	106	23	36.8
October 2022	200	105	307	53	26.52	31	0	69	17	53.94	171	88	275	47	27.50
November 2022	81	30	140	29	35.84	51	10	98	21	41.17	31	0	68	17	54.74
December 2022	41	10	80	19	45.93	11	0	30	10	96.52	30	0	61	16	53.44
January 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2023	11	0	30	10	95.18	-	-	-	-	-	11	0	30	10	98.1

Table 1.8: Gannet Design-based Abundance Estimates for Array Plus 8 km Buffer

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	253	100	466	94	37.14	60	0	169	51	84.96	187	80	324	64	33.91
April 2021	596	288	977	175	29.31	113	20	226	53	47.07	483	236	755	134	27.66
May 2021	2,113	1,603	2,700	278	13.12	1,028	694	1,397	180	17.43	1,068	680	1,527	223	20.84
June 2021	986	697	1,304	157	15.88	502	309	715	106	21.02	478	310	653	86	17.97
July 2021	4,178	3,345	4,964	407	9.72	2,127	1,643	2,653	256	12.01	1,995	1,409	2,600	295	14.76
August 2021	767	361	1,279	237	30.78	352	156	604	118	33.51	405	214	638	109	26.9
September 2021	908	593	1,247	171	18.8	299	166	460	77	25.78	589	371	853	126	21.29
October 2021	1,577	1,250	1,932	182	11.51	862	614	1,155	138	15.94	709	526	917	101	14.25
November 2021	81	30	141	30	36.95	21	0	50	15	69.02	61	20	109	23	37.18
December 2021	21	0	51	14	68.40	-	-	-	-	-	20	0	51	15	71.90
January 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2022	71	30	119	24	34.04	30	0	69	17	55.97	40	10	80	19	46.52
March 2022	418	127	927	242	57.82	275	30	730	205	74.62	132	69	205	35	26.33
April 2022	429	279	595	83	19.14	273	137	429	76	27.85	158	89	239	39	24.34
May 2022	1,703	1,291	2,123	218	12.76	478	266	724	119	24.77	1,220	972	1,501	140	11.44
June 2022	743	556	945	103	13.79	289	179	401	58	19.95	451	310	593	74	16.22
July 2022	489	327	650	86	17.42	289	165	413	67	22.87	201	99	325	57	27.96
August 2022	708	499	935	113	15.93	451	289	640	92	20.28	249	147	371	61	24.35
September 2022	150	78	228	40	26.32	62	10	119	27	42.71	92	49	146	25	27.43
October 2022	331	206	475	68	20.58	72	30	119	24	32.8	259	145	389	63	24.06
November 2022	222	110	361	64	28.46	81	30	139	29	35.99	141	60	235	45	31.86
December 2022	61	20	118	27	43.17	20	0	50	14	68.49	41	0	91	25	60.21
January 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2023	10	0	31	10	98.86	-	-	-	-	-	11	0	30	10	95.76

Table 1.9: Fulmar Design-based Abundance Estimates for Array Only

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	19	0	45	12	65.81	-	-	-	-	-	-	-	-	-	-
April 2021	191	110	274	42	22.03	132	77	196	31	23.49	60	20	111	25	41.10
May 2021	290	170	427	65	22.24	170	87	261	46	26.76	122	49	220	44	36.02
June 2021	408	234	607	99	24.07	804	348	1,540	334	41.52	230	139	325	47	20.06
July 2021	342	247	456	53	15.44	192	105	296	51	26.53	151	90	213	30	19.98
August 2021	340	169	595	112	32.87	268	135	463	84	31.31	70	20	130	28	40.19
September 2021	472	216	788	153	32.39	361	160	648	129	35.68	100	40	163	32	32.05
October 2021	88	29	170	38	42.41	70	0	146	37	51.59	21	0	50	14	67.4
November 2021	398	269	532	69	17.34	181	88	283	50	27.25	220	118	329	52	23.61
December 2021	367	240	504	68	18.31	92	31	171	35	37.94	274	178	378	52	18.73
January 2022	140	60	232	44	30.82	71	20	130	29	40.56	70	29	119	24	33.82
February 2022	211	110	318	53	24.87	141	67	229	44	30.66	70	30	120	25	34.74
March 2022	81	10	158	37	45.86	72	10	159	39	53.62	10	0	30	10	96.06
April 2022	150	59	264	53	34.83	112	30	222	52	46.07	40	0	90	24	58.94
May 2022	61	20	100	21	33.65	10	0	30	10	93.67	50	19	97	21	40.09
June 2022	675	497	875	99	14.56	427	250	640	95	22.15	250	149	360	55	21.76
July 2022	2,515	306	6,047	1,550	61.62	2342	135	5,827	1,560	66.6	189	107	276	44	22.84
August 2022	121	59	188	34	28.27	62	19	113	26	42.03	60	20	109	23	37.89
September 2022	296	181	443	67	22.61	251	149	370	56	22.09	42	0	89	22	52.38
October 2022	30	0	91	30	99.07	32	0	90	29	92.08	-	-	-	-	-
November 2022	200	98	312	56	28.11	117	29	245	58	49.45	78	30	137	28	34.75
December 2022	730	546	924	95	13.01	71	10	150	36	50.2	660	508	810	77	11.58
January 2023	279	186	370	50	17.59	50	10	99	22	42.98	232	146	319	48	20.35
February 2023	152	81	239	41	26.86	91	40	150	30	32.26	61	20	100	21	33.45

Table 1.10: Fulmar Design-based Abundance Estimates for Array Plus 2 km Buffer

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	18	0	44	12	65.42	19	0	44	12	64.71	-	-	-	-	-
April 2021	275	177	376	54	19.55	212	127	312	49	22.94	61	20	110	25	40.93
May 2021	496	255	844	153	30.75	314	133	588	123	39.14	187	97	297	51	27.3
June 2021	1,314	832	2,057	329	25.04	1,019	573	1,748	329	32.27	278	177	390	55	19.46
July 2021	481	354	620	71	14.66	270	166	386	56	20.75	212	150	278	33	15.41
August 2021	446	247	698	121	27.01	446	247	698	121	27.01	129	49	229	47	35.92
September 2021	616	328	970	173	28.01	463	220	776	144	31.00	160	79	240	43	26.35
October 2021	122	49	200	41	33.22	91	20	171	39	41.88	31	0	68	16	51.37
November 2021	509	357	673	81	15.85	231	120	346	57	24.53	278	180	388	54	19.11
December 2021	492	329	685	91	18.47	114	50	202	40	34.67	379	241	522	71	18.65
January 2022	182	95	297	51	28.03	71	20	128	29	39.96	113	59	176	32	27.65
February 2022	249	149	358	55	21.89	166	80	256	46	27.2	81	38	136	27	32.43
March 2022	90	20	175	41	44.82	80	10	161	39	47.79	11	0	30	10	92.82
April 2022	210	89	361	68	32.44	168	59	303	62	37.05	41	0	98	24	58.98
May 2022	80	30	137	27	33.65	11	0	30	10	90.21	348	227	474	63	18.09
June 2022	954	718	1,211	129	13.47	598	402	820	110	18.25	348	227	474	63	18.09
July 2022	3,197	506	6,973	1,742	54.49	2,836	258	6,849	1,708	60.21	262	157	377	59	22.23
August 2022	169	98	236	39	22.69	101	40	164	31	30.35	71	30	111	22	30.57
September 2022	402	267	543	70	17.25	331	224	445	57	17.13	70	20	123	26	37.28
October 2022	87	0	237	64	72.95	93	0	257	69	73.89	-	-	-	-	-
November 2022	361	140	683	137	37.84	209	49	412	95	45.38	131	39	257	56	42.63
December 2022	883	701	1,062	97	10.96	111	40	200	43	38.12	769	610	943	85	11.04
January 2023	367	267	471	54	14.60	61	20	106	22	35.25	311	218	409	49	15.68
February 2023	181	89	289	53	28.97	90	39	156	31	34.63	90	30	167	36	39.34

Table 1.11: Fulmar Design-based Abundance Estimates for Array Plus 4 km Buffer (Array Offshore Ornithology Study Area)

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	29	0	60	16	53.24	18	0	43	12	67.21	10	0	30	10	92.03
April 2021	347	219	490	69	19.69	281	169	404	59	20.83	71	20	120	25	35.02
May 2021	767	361	1,379	276	35.91	503	207	1,056	224	44.48	252	138	414	74	29.06
June 2021	1,546	1,045	2,340	346	22.33	1,241	735	2,041	359	28.91	331	237	435	51	15.13
July 2021	662	503	866	94	14.06	408	269	549	69	16.92	260	176	345	43	16.24
August 2021	673	429	968	143	21.18	447	271	658	103	22.87	227	128	354	61	26.68
September 2021	1,096	473	1,983	394	35.96	910	299	1,776	402	44.19	208	120	304	47	22.35
October 2021	129	59	209	40	30.55	99	30	179	37	37.32	30	0	60	16	52.66
November 2021	0.52	630	474	789	82.00	307	196	426	59	19.00	318	208	431	56	17.45
December 2021	638	467	837	97	15.18	180	80	290	55	30.36	457	319	610	76	16.42
January 2022	203	99	313	53	25.94	81	20	144	32	39.09	119	59	185	34	28.15
February 2022	356	238	502	66	18.52	251	154	374	56	22.05	109	49	175	31	28.44
March 2022	109	40	189	39	35.76	83	10	176	43	51.09	31	0	68	17	52.57
April 2022	358	170	609	112	31.23	273	108	497	102	37.39	92	39	157	31	33.96
May 2022	100	49	158	28	27.76	10	0	30	10	98.47	89	40	139	27	29.35
June 2022	1,162	912	1,425	133	11.44	707	499	955	116	16.37	456	332	579	64	13.85
July 2022	3,721	919	7,587	1775	47.7	3,342	615	7,156	1743	52.15	401	248	578	86	21.39
August 2022	189	118	259	37	19.33	119	59	186	33	27.54	70	30	116	22	31.08
September 2022	500	350	667	85	16.91	389	272	514	64	16.35	100	40	158	31	30.69
October 2022	91	0	238	67	73.54	95	0	235	63	66.41	171	88	275	47	27.5
November 2022	442	156	883	191	43.15	264	59	554	124	46.82	155	39	334	78	50.43
December 2022	1,198	999	1,420	111	9.20	163	70	264	49	29.81	1,033	838	1,209	95	9.14
January 2023	410	295	531	60	14.54	71	30	119	24	33.22	343	242	439	52	14.98
February 2023	198	97	309	57	28.57	100	48	166	31	30.58	101	40	178	37	36.13

Table 1.12: Fulmar Design-based Abundance Estimates for Array plus 8 km Buffer

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	77	20	138	30	38.81	0	88	23	57.36	39	41	0	90	23	56.8
April 2021	789	323	1,506	340	43.07	655	238	1,388	330	50.35	111	50	176	32	28.19
May 2021	1,344	605	2,533	559	41.58	975	340	2,072	504	51.67	376	248	535	75	19.82
June 2021	2,341	1,613	3,200	419	17.86	1,709	1,049	2,703	407	23.81	600	444	773	83	13.69
July 2021	840	616	1,091	124	14.67	527	357	719	94	17.70	319	209	447	62	19.23
August 2021	879	625	1,175	138	15.67	603	412	814	105	17.38	279	166	419	64	22.91
September 2021	908	593	1,247	171	18.80	1,190	509	2,260	456	38.25	307	204	414	56	18.11
October 2021	221	108	346	62	27.92	171	77	272	51	29.31	171	77	272	51	29.31
November 2021	918	744	1,107	92	10.02	450	329	585	64	14.16	473	369	589	59	12.38
December 2021	824	613	1,043	110	13.23	243	130	370	61	24.99	581	416	765	88	15.08
January 2022	300	185	428	60	20.03	120	58	189	37	30.26	182	116	258	38	20.56
February 2022	487	327	670	88	18.01	370	235	522	78	20.95	121	58	195	37	30.09
March 2022	160	77	258	47	29.05	102	30	197	43	42.26	60	20	108	23	37.87
April 2022	474	268	733	121	25.51	339	170	566	102	30.04	130	59	216	41	31.27
May 2022	309	160	505	88	28.27	73	10	167	42	57.19	231	130	345	55	23.49
June 2022	1,639	1,351	1,931	156	9.51	289	179	401	58	19.95	651	506	810	78	11.92
July 2022	4,853	1,776	9,190	1,869	38.5	4,200	1,372	8,411	1,765	42.01	660	446	934	127	19.25
August 2022	299	208	387	46	15.07	202	126	287	42	20.64	102	58	157	26	25.05
September 2022	734	542	939	104	14.13	588	435	756	81	13.65	133	70	201	35	26
October 2022	122	20	266	68	55.37	110	10	258	66	59.9	10	0	30	10	93.61
November 2022	702	363	1,220	226	32.19	0.33	440	206	758	145	239	90	431	88	36.55
December 2022	1,819	1,517	2,179	171	9.36	252	160	365	54	21.37	1,552	1,292	1,871	147	9.46
January 2023	562	410	721	78	13.78	119	49	206	41	34.16	432	314	560	64	14.61
February 2023	366	228	519	75	20.27	131	68	201	37	27.86	232	129	350	56	24.03

RAZORBILL

Table 1.13: Razorbill Design-based Abundance Estimates for Array Only

Survey	All Behaviours (Corrected for Availability Bias)					Sitting Only (Not Corrected for Availability Bias)					Flying Only (Not Corrected for Availability Bias)				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	160	50	310	78	48.75	131	41	254	55	41.79	-	-	-	-	-
April 2021	817	194	1,733	458	56.06	667	159	1,412	320	47.89	2	0	7	3	105.05
May 2021	183	64	318	77	42.08	150	52	260	54	36.04	-	-	-	-	-
June 2021	486	284	744	139	28.60	398	232	609	98	24.56	-	-	-	-	-
July 2021	445	215	743	158	35.51	364	176	608	113	31.08	-	-	-	-	-
August 2021	18	2	44	14	77.78	15	2	36	10	67.07	-	-	-	-	-
September 2021	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
October 2021	2	1	4	1	50.00	2	1	3	1	43.81	-	-	-	-	-
November 2021	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
December 2021	44	12	79	22	50.00	36	10	65	16	43.16	-	-	-	-	-
January 2022	28	2	64	20	71.43	23	2	52	14	61.34	-	-	-	-	-
February 2022	13	1	38	14	107.69	11	1	31	10	94.52	-	-	-	-	-
March 2022	81	12	180	54	66.67	66	10	147	38	57.83	-	-	-	-	-
April 2022	160	66	285	57	35.62	122	54	208	41	33.47	11	0	31	10	96.77
May 2022	40	2	87	25	62.50	33	2	71	18	53.82	-	-	-	-	-
June 2022	98	17	200	45	45.92	72	14	139	31	42.79	10	0	30	10	96.02
July 2022	2,242	1,769	2,760	302	13.47	1,834	1,447	2,258	216	11.75	-	-	-	-	-
August 2022	2,066	1,349	2,881	457	22.12	1,690	1,104	2,357	319	18.86	-	-	-	-	-
September 2022	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
October 2022	256	7	627	148	57.81	35	6	66	16	44.61	213	0	546	152	71.14
November 2022	134	62	227	49	36.57	110	51	186	35	31.79	-	-	-	-	-
December 2022	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
January 2023	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
February 2023	112	37	212	35	31.25	73	30	122	24	32.25	23	0	63	20	84.71

Table 1.14: Razorbill Design-based Abundance Estimates for Array Plus 2 km Buffer

Survey	All Behaviours (Corrected for Availability Bias)					Sitting Only (Not Corrected for Availability Bias)					Flying Only (Not Corrected for Availability Bias)				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	266	82	545	124	46.62	201	67	397	89	44.01	20	0	60	20	99.80
April 2021	1,323	430	2,570	628	47.47	1,062	352	2,050	435	40.92	25	0	65	20	81.24
May 2021	224	93	369	83	37.05	183	76	302	59	31.84	-	-	-	-	-
June 2021	640	402	892	148	23.12	524	329	730	106	20.13	-	-	-	-	-
July 2021	607	263	1,071	242	39.87	497	215	876	169	33.87	-	-	-	-	-
August 2021	32	5	67	20	62.50	26	4	55	14	53.40	-	-	-	-	-
September 2021	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
October 2021	2	1	5	1	50.00	2	1	4	1	34.14	-	-	-	-	-
November 2021	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
December 2021	49	15	89	22	44.90	40	12	73	16	40.05	-	-	-	-	-
January 2022	42	6	88	25	59.52	34	5	72	17	48.88	-	-	-	-	-
February 2022	35	1	110	43	122.86	29	1	90	29	98.70	-	-	-	-	-
March 2022	134	37	287	60	44.78	93	30	186	42	44.63	20	0	60	20	98.46
April 2022	310	183	457	77	24.84	245	150	349	52	20.96	11	0	30	10	92.41
May 2022	77	16	171	49	63.64	63	13	140	34	54.04	-	-	-	-	-
June 2022	145	57	255	51	35.17	110	47	183	36	32.69	11	0	31	11	94.73
July 2022	3,119	2,469	3,770	380	12.18	2,552	2,020	3,085	267	10.45	-	-	-	-	-
August 2022	3,038	1,931	4,142	665	21.89	2,486	1,580	3,389	469	18.83	-	-	-	-	-
September 2022	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
October 2022	248	11	632	147	59.27	37	9	72	16	44.04	203	0	544	146	72.07
November 2022	226	122	346	68	30.09	185	100	283	48	25.49	-	-	-	-	-
December 2022	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
January 2023	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
February 2023	135	39	265	50	37.04	92	32	164	34	36.33	23	0	65	20	87.35

Table 1.15: Razorbill Design-based Abundance Estimates for Array Plus 4 km Buffer (Array Offshore Ornithology Study Area)

Survey	All Behaviours (Corrected for Availability Bias)					Sitting Only (Not Corrected for Availability Bias)					Flying Only (Not Corrected for Availability Bias)				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	437	177	790	167	38.22	340	145	597	116	33.90	21	0	60	20	96.77
April 2021	1,756	632	3,165	725	41.29	1,400	517	2,507	511	36.50	45	0	101	27	59.63
May 2021	266	131	419	90	33.83	218	107	343	62	28.05	-	-	-	-	-
June 2021	766	543	1,005	144	18.80	627	444	822	100	15.94	-	-	-	-	-
July 2021	874	357	1,507	359	41.08	715	292	1,233	246	34.42	-	-	-	-	-
August 2021	33	7	68	20	60.61	27	6	56	14	50.59	-	-	-	-	-
September 2021	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
October 2021	2	1	5	1	50.00	2	1	4	1	32.08	-	-	-	-	-
November 2021	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
December 2021	98	44	159	35	35.71	80	36	130	25	30.25	-	-	-	-	-
January 2022	54	17	100	27	50.00	44	14	82	19	42.75	-	-	-	-	-
February 2022	38	1	110	42	110.53	31	1	90	29	94.80	-	-	-	-	-
March 2022	137	37	297	60	43.80	95	30	194	42	43.52	21	0	60	20	95.25
April 2022	384	220	569	91	23.70	297	180	425	61	20.37	21	0	50	15	69.31
May 2022	148	38	304	66	44.59	105	31	200	44	41.32	20	0	60	20	97.97
June 2022	211	106	342	63	29.86	164	87	255	45	27.49	11	0	30	10	91.22
July 2022	4,636	3,535	5,930	702	15.14	3,793	2,892	4,852	497	13.08	-	-	-	-	-
August 2022	3,660	2,304	5,100	826	22.57	2,995	1,885	4,173	586	19.54	-	-	-	-	-
September 2022	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
October 2022	324	31	790	148	45.68	88	25	177	41	46.25	216	0	574	152	70.55
November 2022	340	188	510	92	27.06	278	154	417	66	23.75	-	-	-	-	-
December 2022	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
January 2023	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
February 2023	212	74	377	61	28.77	122	53	195	37	30.21	63	9	139	35	54.63

Table 1.16: Razorbill Design-based Abundance Estimates for Array Plus 8 km Buffer

Survey	All Behaviours (Corrected for Availability Bias)					Sitting Only (Not Corrected for Availability Bias)					Flying Only (Not Corrected for Availability Bias)				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	802	418	1,250	228	28.43	632	342	958	160	25.21	30	0	79	22	73.49
April 2021	2,833	1,171	4,894	1,040	36.71	2,213	929	3,808	751	33.91	128	36	240	52	40.11
May 2021	398	235	595	109	27.39	326	192	487	77	23.43	-	-	-	-	-
June 2021	1,468	1,118	1,819	207	14.10	1,201	915	1,488	147	12.17	-	-	-	-	-
July 2021	1,328	631	2,245	498	37.50	1,078	516	1,812	346	32.08	10	0	30	10	97.01
August 2021	90	26	193	51	56.67	74	21	158	36	48.73	-	-	-	-	-
September 2021	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
October 2021	16	2	42	15	93.75	13	2	34	10	72.39	-	-	-	-	-
November 2021	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
December 2021	121	64	191	38	31.40	99	52	156	27	27.41	-	-	-	-	-
January 2022	95	29	185	46	48.42	78	24	151	34	43.47	-	-	-	-	-
February 2022	39	1	111	45	115.38	32	1	91	32	98.25	-	-	-	-	-
March 2022	235	105	419	79	33.62	176	86	294	56	31.34	20	0	60	20	96.19
April 2022	588	358	852	136	23.13	464	293	656	95	20.33	21	0	50	15	69.43
May 2022	383	188	631	117	30.55	297	154	467	82	27.34	20	0	60	20	100.54
June 2022	373	210	560	95	25.47	297	172	434	68	22.91	10	0	30	10	99.56
July 2022	7,215	5,677	9,004	974	13.50	5,903	4,645	7,367	688	11.64	-	-	-	-	-
August 2022	4,991	3,444	6,518	919	18.41	4,084	2,818	5,333	645	15.79	-	-	-	-	-
September 2022	13	0	38	15	115.38	11	0	31	10	95.20	-	-	-	-	-
October 2022	393	71	832	153	38.93	118	49	210	42	35.42	249	11	575	144	57.75
November 2022	484	330	651	93	19.21	396	270	533	65	16.43	-	-	-	-	-
December 2022	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
January 2023	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
February 2023	310	129	524	80	25.81	161	81	248	44	27.14	113	30	221	51	45.15

Table 1.17: Guillemot Design-based Abundance Estimates for Array Only

Survey	All Behaviours (Corrected for Availability Bias)					Sitting Only (Not Corrected for Availability Bias)					Flying Only (Not Corrected for Availability Bias)				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	1,458	950	2,029	203	13.92	919	691	1,147	117	12.73	248	40	519	124	49.77
April 2021	10,187	4,166	18,222	3,873	38.02	7,583	3,089	13,601	2,670	35.20	203	99	314	54	26.25
May 2021	8,822	6,084	11,654	1,479	16.76	6,685	4,621	8,813	1,045	15.62	20	0	50	14	68.66
June 2021	1,411	903	2,030	311	22.04	1,072	686	1,542	225	21.00	-	-	-	-	-
July 2021	3,667	2,885	4,545	428	11.67	2,731	2,168	3,362	308	11.27	71	30	118	23	32.45
August 2021	1,726	1,272	2,254	271	15.7	1,311	966	1,712	194	14.75	-	-	-	-	-
September 2021	11,708	5,966	18,945	3,682	31.45	8,892	4,531	14,389	2,569	28.89	-	-	-	-	-
October 2021	1,246	861	1,682	228	18.3	938	654	1,255	160	17.04	11	0	30	10	90.74
November 2021	2,145	1,643	2,671	282	13.15	1,629	1,248	2,029	202	12.39	-	-	-	-	-
December 2021	2,080	1,457	2,751	318	15.29	1,540	1,099	2,013	227	14.72	52	10	101	25	47.14
January 2022	1,404	1,127	1,692	156	11.11	1,066	856	1,285	109	10.23	-	-	-	-	-
February 2022	4,158	3,609	4,700	307	7.38	3,158	2,741	3,570	219	6.91	-	-	-	-	-
March 2022	2,471	1,895	3,117	275	11.13	1,623	1,335	1,940	153	9.41	334	137	563	115	34.25
April 2022	4,869	3,744	6,151	614	12.61	3,569	2,786	4,455	430	12.04	170	76	285	54	31.75
May 2022	2,426	1,153	4,003	718	29.6	1,729	838	2,831	510	29.49	150	50	276	58	38.76
June 2022	1,957	1,218	2,827	452	23.1	1,486	925	2,147	320	21.52	-	-	-	-	-
July 2022	26,300	22,826	30,149	2,087	7.94	19,975	17,336	22,898	1,461	7.31	-	-	-	-	-
August 2022	54,987	38,383	73,543	9,457	17.2	41,763	29,152	55,856	6,731	16.12	-	-	-	-	-
September 2022	536	311	838	130	24.25	399	236	614	93	23.29	11	0	30	10	94.05
October 2022	2,244	1,427	3,037	441	19.65	1,697	1,084	2,284	300	17.68	10	0	30	10	97.63
November 2022	6,770	5,847	7,732	470	6.94	5,033	4,388	5,713	333	6.61	143	70	210	37	25.53
December 2022	1,394	1,064	1,739	157	11.26	1,014	808	1,216	107	10.49	59	0	138	36	59.57
January 2023	817	571	1,064	120	14.69	590	434	740	79	13.39	40	0	90	24	60.67
February 2023	1,057	631	1,514	190	17.98	696	436	963	138	19.72	141	57	246	50	35.27

Table 1.18: Guillemot Design-based Abundance Estimates for Array Plus 2 km Buffer

Survey	All Behaviours (Corrected for Availability Bias)					Sitting Only (Not Corrected for Availability Bias)					Flying Only (Not Corrected for Availability Bias)				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	1,995	1,400	2,659	254	12.73	1,317	1,025	1,631	158	11.98	261	50	512	121	46.38
April 2021	16,342	6,995	28,015	5,598	34.26	11,999	5,137	20,563	3,931	32.76	543	231	941	187	34.28
May 2021	12,034	8,895	15,334	1,824	15.16	9,117	6,756	11,594	1,305	14.31	30	0	69	17	56.95
June 2021	2,092	1,300	3,065	482	23.04	1,589	987	2,328	341	21.43	-	-	-	-	-
July 2021	5,535	4,412	6,699	580	10.48	4,150	3,328	5,000	414	9.96	71	30	116	23	31.45
August 2021	2,549	2,017	3,148	325	12.75	1,936	1,532	2,391	229	11.79	-	-	-	-	-
September 2021	14,409	8,302	21,874	3,834	26.61	10,944	6,305	16,613	2,756	25.18	-	-	-	-	-
October 2021	1,572	1,168	2,005	226	14.38	1,186	887	1,500	160	13.46	10	0	30	10	92.19
November 2021	2,945	2,313	3,600	352	11.95	2,237	1,757	2,734	251	11.22	-	-	-	-	-
December 2021	2,512	1,790	3,241	368	14.65	1,868	1,351	2,377	259	13.86	52	11	111	26	49.28
January 2022	1,880	1,487	2,269	211	11.22	1,428	1,129	1,723	149	10.42	-	-	-	-	-
February 2022	5,753	5,063	6,397	363	6.31	4,362	3,845	4,836	253	5.78	10	0	30	10	98.05
March 2022	3,816	3,097	4,573	344	9.01	2,571	2,185	2,960	202	7.82	431	220	676	119	27.45
April 2022	7,976	6,356	10,135	931	11.67	5,907	4,762	7,451	669	11.32	199	86	325	62	31.28
May 2022	4,851	2,187	8,227	1,619	33.37	3,531	1,594	5,984	1,143	32.37	202	88	348	68	33.30
June 2022	3,185	2,049	4,561	690	21.66	2,419	1,556	3,464	489	20.21	-	-	-	-	-
July 2022	41,466	34,367	49,201	4,215	10.16	31,485	26,102	37,345	2,984	9.48	11	0	30	10	93.78
August 2022	77,377	53,975	103,623	13,741	17.76	58,768	40,994	78,702	9,473	16.12	-	-	-	-	-
September 2022	783	449	1,142	173	22.09	579	341	829	126	21.74	21	0	50	14	66.02
October 2022	3,073	2,042	4,092	534	17.38	2,318	1,551	3,070	379	16.34	21	0	50	14	66.91
November 2022	9,554	8,284	10,847	650	6.80	7,087	6,195	7,988	457	6.44	223	127	330	53	23.79
December 2022	2,007	1,597	2,512	206	10.26	1,446	1,198	1,736	139	9.62	103	20	226	53	51.62
January 2023	1,095	813	1,399	140	12.79	794	610	987	94	11.83	50	10	99	24	48.43
February 2023	1,330	852	1,881	205	15.41	838	565	1,151	150	17.86	227	108	366	68	29.91

Table 1.19: Guillemot Design-based Abundance Estimates for Array Plus 4 km Buffer (Array Offshore Ornithology Study Area)

Survey	All Behaviours (Corrected for Availability Bias)					Sitting Only (Not Corrected for Availability Bias)					Flying Only (Not Corrected for Availability Bias)				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	2,839	2,012	3,816	375	13.21	1,919	1,453	2,461	263	1,919	312	99	576	122	39.10
April 2021	22,597	10,707	37,061	7,227	31.98	16,595	7,829	27,187	4,990	16,595	747	399	1,265	218	29.09
May 2021	16,006	11,939	20,105	2,268	14.17	12,134	9,068	15,218	1,560	12,134	30	0	68	18	57.72
June 2021	4,105	2,062	6,815	1,364	33.23	3,118	1,566	5,176	957	3,118	-	-	-	-	-
July 2021	7,417	5,908	8,953	831	11.2	5,549	4,443	6,668	581	5,549	111	58	174	31	27.62
August 2021	3,696	2,997	4,482	410	11.09	2,807	2,276	3,404	286	2,807	-	-	-	-	-
September 2021	16,452	9,945	24,420	3,995	24.28	12,495	7,553	18,547	2,862	12,495	-	-	-	-	-
October 2021	2,119	1,655	2,636	260	12.27	1,601	1,257	1,979	185	1,601	11	0	30	10	95.86
November 2021	3,564	2,886	4,287	390	10.94	2,707	2,192	3,256	276	2,707	-	-	-	-	-
December 2021	3,149	2,413	3,931	400	12.7	2,354	1,825	2,908	278	2,354	50	10	102	25	48.32
January 2022	2,445	2,007	2,897	242	9.9	1,857	1,524	2,200	174	1,857	-	-	-	-	-
February 2022	7,844	7,036	8,785	444	5.66	5,913	5,344	6,544	314	5,913	59	0	169	49	81.86
March 2022	6,093	4,613	7,977	729	11.96	4,000	3,227	4,981	443	4,000	826	364	1,419	271	32.79
April 2022	11,488	9,234	14,417	1,379	12	8,505	6,902	10,604	964	8,505	290	146	455	81	27.88
May 2022	7,946	3,346	13,874	2,734	34.41	5,845	2,447	10,230	1,941	5,845	250	124	405	69	27.42
June 2022	3,958	2,698	5,509	771	19.48	3,006	2,049	4,184	555	3,006	-	-	-	-	-
July 2022	55,098	45,514	66,126	5,592	10.15	41,825	34,568	50,177	3,962	41,825	29	0	60	16	55.13
August 2022	101,300	72,664	132,525	17,685	17.46	76,937	55,188	100,653	12,204	76,937	-	-	-	-	-
September 2022	1,042	728	1,390	172	16.51	776	553	1,018	118	776	20	0	50	14	70.67
October 2022	4,098	2,799	5,543	693	16.91	3,054	2,118	4,071	503	3,054	77	10	183	50	64.98
November 2022	11,725	9,994	13,462	846	7.22	8,654	7,471	9,811	596	8,654	331	157	544	100	30.09
December 2022	2,750	2,193	3,365	280	10.18	1,992	1,636	2,360	187	1,992	127	39	258	57	44.71
January 2023	1,336	1,013	1,694	165	12.35	976	762	1,211	115	976	51	10	100	24	45.48
February 2023	1,756	1,169	2,377	224	12.76	1,099	785	1,430	164	1,099	309	135	494	96	30.90

Table 1.20: Guillemot Design-based Abundance Estimates for Array Plus 8 km Buffer

Survey	All Behaviours (Corrected for Availability Bias)					Sitting Only (Not Corrected for Availability Bias)					Flying Only (Not Corrected for Availability Bias)				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	5,754	3,440	8,780	1,365	23.72	4,041	2,472	6,105	946	23.41	433	185	742	141	32.42
April 2021	35,334	18,432	55,478	9,997	28.29	25,967	13,484	40,791	6,982	26.89	1,144	678	1,770	284	24.78
May 2021	25,549	18,670	33,444	3,981	15.58	19,374	14,172	25,340	2,879	14.86	40	10	80	20	48.72
June 2021	10,265	4,569	17,934	3,802	37.04	7,796	3,470	13,621	2,677	34.33	-	-	-	-	-
July 2021	11,421	9,293	13,639	1,191	10.43	8,516	6,962	10,125	831	9.75	208	126	308	48	22.70
August 2021	7,635	5,157	10,965	1,698	22.24	5,783	3,917	8,290	1,153	19.92	21	0	50	15	69.13
September 2021	21,291	14,390	30,139	4,434	20.83	16,163	10,929	22,868	3,128	19.35	10	0	30	10	100.27
October 2021	3,172	2,636	3,686	285	8.98	2,401	2,002	2,777	194	8.05	11	0	30	11	100.29
November 2021	5,577	4,623	6,590	530	9.50	4,236	3,511	5,005	377	8.88	-	-	-	-	-
December 2021	4,290	3,290	5,304	501	11.68	3,156	2,453	3,854	359	11.36	135	60	230	45	32.97
January 2022	3,850	3,373	4,321	264	6.86	2,924	2,562	3,282	184	6.29	-	-	-	-	-
February 2022	12,509	11,010	14,123	812	6.49	9,454	8,362	10,599	578	6.11	61	0	168	50	80.66
March 2022	9,087	6,962	11,479	976	10.74	6,060	4,879	7,327	622	10.25	1,108	538	1,832	327	29.51
April 2022	21,056	16,282	26,875	2,827	13.43	15,676	12,179	19,945	2,004	12.78	416	246	614	95	22.74
May 2022	12,762	6,662	20,372	3,664	28.71	9,318	4,813	14,949	2,525	27.10	493	325	689	94	18.90
June 2022	8,230	5,375	11,506	1,718	20.87	6,251	4,082	8,739	1,196	19.12	-	-	-	-	-
July 2022	88,858	75,726	104,151	7,934	8.93	67,450	57,499	79,034	5,627	8.34	50	20	90	21	40.42
August 2022	158,641	111,039	211,023	27,947	17.62	120,488	84,334	160,272	19,675	16.33	-	-	-	-	-
September 2022	1,796	1,404	2,293	223	12.42	1,341	1,066	1,690	158	11.72	30	0	68	17	55.41
October 2022	6,696	4,560	9,139	1,032	15.41	4,911	3,452	6,441	737	14.99	230	15	658	197	85.76
November 2022	17,166	14,941	19,324	1,101	6.41	12,697	11,169	14,134	756	5.95	448	235	714	121	27.01
December 2022	3,897	3,216	4,654	355	9.11	2,813	2,376	3,283	236	8.39	193	88	331	65	33.72
January 2023	2,042	1,707	2,399	165	8.08	1,496	1,274	1,724	115	7.65	72	30	129	27	37.88
February 2023	2,465	1,829	3,218	273	11.08	1,547	1,204	1,951	193	12.46	428	244	649	103	23.98

Table 1.21: Puffin Design-based Abundance Estimates for Array Only

Survey	All Behaviours (Corrected for Availability Bias)					Sitting Only (Not Corrected for Availability Bias)					Flying Only (Not Corrected for Availability Bias)				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	741	513	989	153	20.65	636	440	849	106	16.61	-	-	-	-	-
April 2021	503	320	706	115	22.86	425	275	585	81	18.98	8	0	24	8	99.07
May 2021	1,615	1,064	2,223	374	23.16	1,386	913	1,908	260	18.74	-	-	-	-	-
June 2021	640	381	913	165	25.78	549	327	784	118	21.41	-	-	-	-	-
July 2021	228	110	393	95	41.67	196	94	337	67	33.77	-	-	-	-	-
August 2021	51	12	104	30	58.82	44	10	89	21	47.37	-	-	-	-	-
September 2021	291	127	483	108	37.11	250	109	415	78	30.87	-	-	-	-	-
October 2021	70	23	123	31	44.29	60	20	106	22	36.34	-	-	-	-	-
November 2021	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
December 2021	8	0	19	7	87.50	7	0	16	5	63.39	-	-	-	-	-
January 2022	33	0	70	21	63.64	28	0	60	15	53.41	-	-	-	-	-
February 2022	252	142	370	72	28.57	216	122	318	52	24.01	-	-	-	-	-
March 2022	309	160	468	84	27.18	257	137	376	62	24.05	10	0	30	10	96.56
April 2022	609	414	815	123	20.20	523	355	700	89	17.00	-	-	-	-	-
May 2022	542	346	769	129	23.80	465	297	660	94	20.05	-	-	-	-	-
June 2022	80	23	149	42	52.50	69	20	128	30	42.29	-	-	-	-	-
July 2022	706	581	830	69	9.77	597	499	687	49	8.15	11	0	30	10	96.13
August 2022	1,657	818	2,739	602	36.33	1,422	702	2,351	426	29.92	-	-	-	-	-
September 2022	437	301	582	91	20.82	375	258	500	64	16.96	-	-	-	-	-
October 2022	211	93	346	80	37.91	181	80	297	56	30.90	-	-	-	-	-
November 2022	77	35	126	28	36.36	66	30	108	20	29.62	-	-	-	-	-
December 2022	101	26	203	54	53.47	87	22	174	39	44.27	-	-	-	-	-
January 2023	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
February 2023	271	163	412	78	28.78	233	140	354	55	23.22	-	-	-	-	-

Table 1.22: Puffin Design-based Abundance Estimates for Array Plus 2 km Buffer

Survey	All Behaviours (Corrected for Availability Bias)					Sitting Only (Not Corrected for Availability Bias)					Flying Only (Not Corrected for Availability Bias)				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	1,053	775	1,351	182	17.28	904	665	1,160	126	13.85	-	-	-	-	-
April 2021	766	497	1,096	169	22.06	634	427	874	111	17.41	27	0	78	27	100.11
May 2021	2,188	1,541	2,862	418	19.10	1,878	1,323	2,457	303	16.09	-	-	-	-	-
June 2021	848	566	1,177	192	22.64	728	486	1,010	135	18.48	-	-	-	-	-
July 2021	288	140	487	117	40.62	247	120	418	82	32.99	-	-	-	-	-
August 2021	83	33	140	35	42.17	71	28	120	24	33.43	-	-	-	-	-
September 2021	416	227	613	120	28.85	357	195	526	85	23.60	-	-	-	-	-
October 2021	105	45	172	42	40.00	90	39	148	30	32.97	-	-	-	-	-
November 2021	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
December 2021	15	5	29	8	53.33	13	4	25	6	44.87	-	-	-	-	-
January 2022	64	10	115	33	51.56	55	9	99	23	41.44	-	-	-	-	-
February 2022	461	325	607	87	18.87	396	279	521	63	15.81	-	-	-	-	-
March 2022	455	282	642	102	22.42	382	242	525	73	18.89	10	0	30	10	97.76
April 2022	960	634	1,294	204	21.25	824	544	1,111	145	17.60	-	-	-	-	-
May 2022	708	504	944	137	19.35	608	433	810	97	15.92	-	-	-	-	-
June 2022	179	97	273	57	31.84	154	83	234	40	25.92	-	-	-	-	-
July 2022	900	740	1,061	92	10.22	763	635	885	65	8.51	11	0	30	10	93.39
August 2022	2,494	1,256	3,893	804	32.24	2,141	1,078	3,342	582	27.18	-	-	-	-	-
September 2022	796	592	1,029	134	16.83	683	508	883	95	13.86	-	-	-	-	-
October 2022	257	126	405	86	33.46	221	108	348	62	28.06	-	-	-	-	-
November 2022	121	71	176	31	25.62	104	61	151	23	21.42	-	-	-	-	-
December 2022	141	50	250	62	43.97	121	43	215	44	35.83	-	-	-	-	-
January 2023	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
February 2023	376	241	553	97	25.80	323	207	475	69	21.34	-	-	-	-	-

Table 1.23: Puffin Design-based Abundance Estimates for Array Plus 4 km Buffer (Array Offshore Ornithology Study Area)

Survey	All Behaviours (Corrected for Availability Bias)					Sitting Only (Not Corrected for Availability Bias)					Flying Only (Not Corrected for Availability Bias)				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	1,306	1,014	1,629	192	14.70	1,121	870	1,398	134	11.92	-	-	-	-	-
April 2021	956	610	1,351	218	22.80	791	524	1,084	143	18.00	35	0	88	26	74.45
May 2021	2,555	1,848	3,304	447	17.50	2,193	1,586	2,836	322	14.67	-	-	-	-	-
June 2021	1,262	850	1,719	269	21.32	1,083	730	1,476	191	17.60	-	-	-	-	-
July 2021	422	202	711	161	38.15	362	173	610	114	31.56	-	-	-	-	-
August 2021	104	35	186	46	44.23	89	30	160	33	36.44	-	-	-	-	-
September 2021	570	323	866	170	29.82	489	277	743	119	24.33	-	-	-	-	-
October 2021	183	91	290	61	33.33	157	78	249	44	27.58	-	-	-	-	-
November 2021	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
December 2021	34	15	55	13	38.24	29	13	47	9	29.90	-	-	-	-	-
January 2022	107	52	169	37	34.58	92	45	145	27	28.44	-	-	-	-	-
February 2022	708	485	939	144	20.34	608	416	806	101	16.50	-	-	-	-	-
March 2022	632	422	854	123	19.46	533	362	700	88	16.39	11	0	39	11	97.66
April 2022	1,226	859	1,655	236	19.25	1,052	737	1,421	173	16.42	-	-	-	-	-
May 2022	784	565	1,018	141	17.98	673	485	874	100	14.78	-	-	-	-	-
June 2022	235	133	358	71	30.21	202	114	307	50	24.62	-	-	-	-	-
July 2022	1,181	916	1,472	167	14.14	1,004	786	1,238	118	11.75	11	0	30	11	99.16
August 2022	3,357	1,754	5,058	1,008	30.03	2,882	1,506	4,342	711	24.67	-	-	-	-	-
September 2022	977	733	1,245	163	16.68	839	629	1,069	113	13.40	-	-	-	-	-
October 2022	433	268	613	109	25.17	372	230	526	77	20.73	-	-	-	-	-
November 2022	196	128	273	46	23.47	168	110	234	32	18.97	-	-	-	-	-
December 2022	154	63	268	63	40.91	132	54	230	46	34.20	-	-	-	-	-
January 2023	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
February 2023	559	402	743	107	19.14	480	345	638	74	15.38	-	-	-	-	-

Table 1.24: Puffin Design-based Abundance Estimates for Array Plus 8 km Buffer

Survey	All Behaviours (Corrected for Availability Bias)					Sitting Only (Not Corrected for Availability Bias)					Flying Only (Not Corrected for Availability Bias)				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	2,091	1,644	2,580	294	14.06	1,795	1,411	2,215	211	11.72	-	-	-	-	-
April 2021	1,471	1,072	1,942	260	17.68	1,232	920	1,583	178	14.43	36	0	98	27	76.28
May 2021	3,973	3,101	4,946	587	14.77	3,410	2,662	4,246	415	12.15	-	-	-	-	-
June 2021	1,835	1,321	2,436	345	18.80	1,575	1,134	2,091	247	15.68	-	-	-	-	-
July 2021	772	409	1,270	284	36.79	663	351	1,090	196	29.57	-	-	-	-	-
August 2021	177	86	290	65	36.72	152	74	249	46	29.88	-	-	-	-	-
September 2021	934	591	1,314	234	25.05	802	507	1,128	162	20.13	-	-	-	-	-
October 2021	306	182	445	80	26.14	263	156	382	57	21.68	-	-	-	-	-
November 2021	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
December 2021	61	33	97	20	32.79	52	28	83	14	26.88	-	-	-	-	-
January 2022	149	76	231	48	32.21	128	65	198	34	26.60	-	-	-	-	-
February 2022	1,187	854	1,573	223	18.79	1,019	733	1,350	157	15.41	-	-	-	-	-
March 2022	1,110	750	1,532	225	20.27	936	644	1,273	160	17.00	20	0	49	14	70.13
April 2022	1,843	1,422	2,294	257	13.94	1,565	1,221	1,926	181	11.52	20	0	50	14	68.95
May 2022	1,226	901	1,591	196	15.99	1,043	773	1,340	139	13.32	11	0	30	10	95.93
June 2022	433	256	633	118	27.25	372	220	543	84	22.59	-	-	-	-	-
July 2022	1,643	1,279	2,044	212	12.90	1,384	1,098	1,696	151	10.86	31	0	68	17	55.04
August 2022	5,693	3,312	8,392	1,670	29.33	4,887	2,843	7,204	1,137	23.25	-	-	-	-	-
September 2022	1,589	1,238	1,954	222	13.97	1,364	1,063	1,677	159	11.59	-	-	-	-	-
October 2022	655	405	992	132	20.15	509	348	697	89	17.47	62	0	180	60	96.75
November 2022	303	214	396	58	19.14	260	184	340	41	15.59	-	-	-	-	-
December 2022	185	87	305	66	35.68	159	75	262	47	29.56	-	-	-	-	-
January 2023	0	0	0	0	0.00	-	-	-	-	-	-	-	-	-	-
February 2023	790	598	1,029	144	18.23	678	513	883	99	14.59	-	-	-	-	-

GREAT BLACK-BACKED GULL

Table 1.25: Great Black-backed Gull Design-based Abundance Estimates for Array Only

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2021	31	0	60	16	51.69	30	0	60	16	52.99	-	-	-	-	-
December 2021	51	11	89	19	37.49	31	0	61	16	51.60	20	0	50	13	65.83
January 2022	20	0	60	20	96.14	-	-	-	-	-	20	0	60	20	98.07
February 2022	31	10	61	16	50.70	21	0	50	14	66.71	11	0	39	11	96.83
March 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2022	70	19	133	32	44.94	51	0	110	27	52.80	20	0	49	13	63.05
December 2022	199	100	307	52	26.01	111	38	208	46	41.75	88	39	151	30	34.17
January 2023	51	0	120	31	61.68	30	0	86	23	74.80	19	0	60	20	103.91
February 2023	10	0	30	10	97.51	-	-	-	-	-	10	0	30	10	101.29

Table 1.26: Great Black-backed Gull Design-based Abundance Estimates for Array Plus 2 km Buffer

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2021	41	0	90	23	56.87	42	0	96	25	58.76	-	-	-	-	-
December 2021	122	62	186	31	25.27	61	20	112	25	40.29	63	20	121	27	43.03
January 2022	21	0	60	20	92.96	-	-	-	-	-	20	0	60	19	94.15
February 2022	29	0	60	16	53.62	21	0	49	13	64.23	10	0	30	10	99.82
March 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2022	91	20	161	35	38.45	71	10	139	33	46.69	21	0	50	14	64.59
December 2022	280	180	390	55	19.37	148	68	257	50	33.44	132	70	205	34	25.77
January 2023	50	0	120	31	62.53	29	0	79	22	73.80	19	0	60	20	101.66
February 2023	10	0	30	10	99.72	-	-	-	-	-	11	0	30	10	91.30

Table 1.27: Great Black-backed Gull Design-based Abundance Estimates for Array Plus 4 km Buffer (Array Offshore Ornithology Study Area)

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2021	40	0	90	24	59.78	40	0	89	24	58.68	-	-	-	-	-
December 2021	141	70	212	37	26.16	72	29	128	26	36.08	72	20	129	27	37.81
January 2022	21	0	60	20	97.39	-	-	-	-	-	21	0	60	18	85.85
February 2022	31	0	67	17	53.37	21	0	50	14	67.88	10	0	30	10	95.47
March 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2022	11	0	30	11	97.43	11	0	30	10	94.93	-	-	-	-	-
July 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2022	129	39	229	49	37.83	113	20	215	50	43.70	20	0	50	14	69.13
December 2022	359	256	475	58	16.05	203	109	315	53	25.70	160	89	240	39	24.01
January 2023	60	10	125	31	51.35	39	0	89	24	60.52	21	0	60	20	94.89
February 2023	10	0	30	10	98.24	-	-	-	-	-	10	0	30	10	95.32

Table 1.28: Great Black-backed Gull Design-based Abundance Estimates for Array Plus 8 km Buffer

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2021	10	0	30	10	99.14	11	0	30	10	91.39	-	-	-	-	-
June 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2021	60	10	116	26	43.94	42	0	98	24	57.40	21	0	50	14	66.57
December 2021	255	182	334	41	15.76	141	88	201	30	21.24	113	51	177	33	28.56
January 2022	20	0	60	19	93.34	-	-	-	-	-	22	0	60	20	91.44
February 2022	40	10	80	19	46.44	30	0	69	17	55.58	11	0	30	10	94.52
March 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2022	11	0	30	10	95.07	10	0	30	10	98.33	-	-	-	-	-
July 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2022	131	40	240	52	39.69	110	30	208	48	43.67	21	0	50	14	66.65
December 2022	471	351	594	63	13.19	250	142	361	56	22.38	222	140	305	43	19.22
January 2023	111	40	197	42	37.73	81	21	146	32	39.36	30	0	79	21	70.36
February 2023	40	10	80	19	46.72	20	0	51	14	67.24	20	0	50	15	71.46

HERRING GULL

Table 1.29: Herring Gull Design-based Abundance Estimates for Array Only

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	11	0	30	10	92.06	10	0	30	10	92.67	-	-	-	-	-
April 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2021	11	0	30	10	96.54	-	-	-	-	-	11	0	30	10	93.76
December 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
March 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2022	71	30	125	25	34.69	-	-	-	-	-	71	29	120	24	34.21
January 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 1.30: Herring Gull Design-based Abundance Estimates for Array Plus 2 km Buffer

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	11	0	30	10	95.18	10	0	31	10	104.19	-	-	-	-	-
April 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2021	11	0	30	10	93.50	-	-	-	-	-	10	0	30	10	104.2
July 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2021	20	0	50	14	67.65	-	-	-	-	-	20	0	50	15	72.33
December 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
March 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2022	99	49	160	31	30.55	10	0	30	10	99.83	92	48	142	26	27.52
January 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2023	11	0	30	10	95.71	-	-	-	-	-	11	0	39	11	101.93

Table 1.31: Herring Gull Design-based Abundance Estimates for Array Plus 4 km Buffer (Array Offshore Ornithology Study Area)

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	10	0	30	10	96.15	10	0	30	10	98.22	-	-	-	-	-
April 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2021	11	0	30	11	98.23	-	-	-	-	-	11	0	30	11	100.09
July 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2021	30	0	68	17	53.96	-	-	-	-	-	30	0	60	17	55.52
December 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
March 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2022	111	59	169	30	26.82	10	0	30	10	101.97	101	50	155	27	26.09
January 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2023	11	0	30	10	95.07	-	-	-	-	-	11	0	30	10	95.26

Table 1.32: Herring Gull Design-based Abundance Estimates for Array Plus 8 km Buffer

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	10	0	30	10	94.18	10	0	30	10	100.28	-	-	-	-	-
April 2021	10	0	30	10	102.43	-	-	-	-	-	10	0	30	10	103.07
May 2021	10	0	30	10	98.30	10	0	30	10	100.19	-	-	-	-	-
June 2021	20	0	50	14	67.88	-	-	-	-	-	21	0	50	14	68.44
July 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2021	10	0	30	11	101.14	-	-	-	-	-	11	0	30	11	97.59
September 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2021	51	10	107	26	49.48	-	-	-	-	-	50	10	100	24	47.64
December 2021	11	0	31	11	95.83	11	0	31	10	92.61	-	-	-	-	-
January 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
March 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2022	10	0	30	10	97.77	-	-	-	-	-	10	0	30	11	101.78
August 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2022	131	70	200	34	25.91	11	0	31	10	95.16	121	69	182	31	25.14
January 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2023	21	0	50	14	68.49	-	-	-	-	-	20	0	50	14	68.62

Table 1.33: Little Auk Design-based Abundance Estimates for Array Only

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2021	11	0	38	11	96.99	10	0	31	10	99.36	-	-	-	-	-
January 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2022	21	0	50	14	66.54	21	0	50	14	68.93	-	-	-	-	-
March 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2022	19	4	36	8	42.51	19	6	34	8	39.89	-	-	-	-	-
January 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2023	36	12	78	19	52.24	38	12	81	20	52.32	-	-	-	-	-

Table 1.34: Little Auk Design-based Abundance Estimates for Array Plus 2 km Buffer

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2021	13	1	34	11	77.74	14	2	42	11	77.44	-	-	-	-	-
January 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2022	26	4	56	14	53.75	26	4	56	14	54.68	-	-	-	-	-
March 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2022	34	13	63	14	39.53	35	11	66	15	41.74	-	-	-	-	-
January 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2023	44	18	84	19	43.36	44	18	86	19	42.15	-	-	-	-	-

Table 1.35: Little Auk Design-based Abundance Estimates for Array Plus 4 km Buffer

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2021	16	4	38	10	64.41	16	4	38	10	61.83	-	-	-	-	-
January 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2022	28	6	61	15	52.04	29	7	59	15	50.63	-	-	-	-	-
March 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2022	38	16	67	14	35.07	38	17	66	13	34.1	-	-	-	-	-
January 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2023	53	27	97	19	35.53	54	28	95	19	34.34	-	-	-	-	-

Table 1.36: Little Auk Design-based Abundance Estimates for Array Plus 8 km Buffer

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2021	19	6	43	11	55.62	19	6	43	10	53.67	-	-	-	-	-
January 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2022	32	9	64	15	46.14	32	9	63	14	44.08	-	-	-	-	-
March 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2022	54	21	93	19	35.01	55	26	92	18	32.86	-	-	-	-	-
January 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2023	76	41	125	22	28.96	77	41	121	21	27.11	-	-	-	-	-

Table 1.37: Manx Shearwater Design-based Abundance Estimates for Array Only

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2021	10	0	30	10	99.87	-	-	-	-	-	11	0	30	10	95.55
August 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
March 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2022	11	0	30	10	99.2	10	0	30	11	100.8	-	-	-	-	-
June 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2022	10	0	30	10	101.03	-	-	-	-	-	11	0	30	10	94.7
September 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 1.38: Manx Shearwater Design-based Abundance Estimates For Array Plus 2 km Buffer

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2021	21	0	50	14	68.87	-	-	-	-	-	20	0	50	14	68.22
August 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
March 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2022	10	0	30	10	104.00	11	0	39	11	104.18	-	-	-	-	-
June 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2022	10	0	30	10	98.35	-	-	-	-	-	11	0	30	10	93.81
September 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 1.39: Manx Shearwater Design-based Abundance Estimates For Array Plus 4 km Buffer

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2021	21	0	50	14	65.47	-	-	-	-	-	20	0	50	14	69.23
August 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
March 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2022	11	0	39	11	98.20	10	0	30	10	97.88	-	-	-	-	-
June 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2022	10	0	30	10	99.68	-	-	-	-	-	10	0	30	10	96.96
September 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 1.40: Manx Shearwater Design-based Abundance Estimates for Array Plus 8 km Buffer

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2021	10	0	30	10	102.09	10	0	30	10	102.09	-	-	-	-	-
June 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2021	20	0	50	14	68.85	-	-	-	-	-	21	0	50	14	65.85
August 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
March 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2022	10	0	30	10	98.13	10	0	30	10	99.02	-	-	-	-	-
June 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2022	30	0	60	16	53.32	21	0	50	14	65.54	10	0	30	10	95.91
September 2022	10	0	30	10	99.38	-	-	-	-	-	11	0	31	11	102.04
October 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

COMMON GULL

Table 1.41: Common Gull Design-based Abundance Estimates for Array Only

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2021	10	0	30	10	95.26	-	-	-	-	-	10	0	30	9	97.32
July 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2021	20	0	50	14	68.06	-	-	-	-	-	20	0	50	14	67.48
December 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
March 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2022	22	0	60	19	88.79	-	-	-	-	-	20	0	60	19	94.87
June 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2022	21	0	60	19	91.09	-	-	-	-	-	20	0	60	19	95.33
September 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2022	21	0	49	13	63.23	-	-	-	-	-	21	0	49	14	65.66
December 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 1.42: Common Gull Design-based Abundance Estimates for Array Plus 2 km Buffer

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2021	11	0	30	10	95.82	-	-	-	-	-	10	0	30	10	98.49
July 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2021	21	0	50	14	66.66	-	-	-	-	-	21	0	50	14	67.29
December 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
March 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2022	21	0	60	20	96.64	-	-	-	-	-	20	0	60	19	92.95
June 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2022	31	0	80	22	69.91	-	-	-	-	-	30	0	77	21	72.08
September 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2022	31	0	70	20	65.28	-	-	-	-	-	31	0	80	22	71.01
December 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 1.43: Common Gull Design-based Abundance Estimates for Array Plus 4 km Buffer

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2021	11	0	30	10	93.76	-	-	-	-	-	10	0	30	10	97.77
July 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2021	20	0	50	14	68.05	-	-	-	-	-	20	0	49	14	68.19
December 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
March 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2022	20	0	60	19	94.75	-	-	-	-	-	20	0	60	19	93.77
June 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2022	29	0	77	21	71.3	-	-	-	-	-	32	0	80	22	69.28
September 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2022	30	0	79	22	71.71	-	-	-	-	-	30	0	70	20	67.78
December 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 1.44: Common Gull Design-based Abundance Estimates for Array Plus 8 km Buffer

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2021	21	0	50	14	67.03	-	-	-	-	-	21	0	50	14	65.66
July 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2021	10	0	30	10	93.66	-	-	-	-	-	11	0	30	10	92.56
September 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2021	40	10	79	19	46.19	-	-	-	-	-	41	10	88	20	48.12
December 2021	11	0	31	11	97.79	-	-	-	-	-	10	0	31	10	98.35
January 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
March 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2022	10	0	30	10	96.26	-	-	-	-	-	11	0	30	11	99.07
May 2022	20	0	60	20	97.19	-	-	-	-	-	21	0	60	19	90.77
June 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2022	29	0	79	22	74.64	-	-	-	-	-	30	0	79	21	70.53
September 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2022	51	10	108	26	50.04	-	-	-	-	-	52	10	100	24	46.16
December 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Table 1.45: Arctic Tern Design-based Abundance Estimates for Array Area Only

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
March 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2022	10	0	30	10	99.7	-	-	-	-	-	10	0	30	10	99.59
July 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 1.46: Arctic Tern Design-based Abundance Estimates for Array Area Plus 2 km Buffer

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
March 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2022	11	0	30	11	101.28	-	-	-	-	-	10	0	30	10	104.68
July 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 1.47: Arctic Tern Design-based Abundance Estimates for Array Plus 4 km Buffer (Array Offshore Ornithology Study Area)

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2021	118	39	223	50	41.58	-	-	-	-	-	121	39	227	50	40.86
September 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
March 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2022	173	39	347	80	46.21	-	-	-	-	-	171	39	343	80	46.38
June 2022	11	0	30	10	95.27	-	-	-	-	-	11	0	30	10	94.17
July 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 1.48: Arctic Tern Design-based Abundance Estimates for Array Plus 8 km Buffer

Survey	All Behaviours					Sitting Only					Flying Only				
	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)	Estimated Abundance	LCL	UCL	SD	CV (%)
March 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2021	1,074	128	2,582	657	61.17	307	0	823	227	73.89	731	119	1,669	416	56.88
September 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
March 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2022	178	49	342	77	43.39	-	-	-	-	-	179	49	350	80	44.45
June 2022	10	0	30	10	100.97	-	-	-	-	-	11	0	30	11	98.18
July 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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