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# West of Orkney Windfarm

## Offshore Ornithology Supplementary Environmental Information

### Annex 1D: Design-based analysis abundance estimates from each survey recorded of sitting birds

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## 1.1 Arctic Skua

**Table 1. Abundance of Arctic skua recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.**

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Nov-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jan-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jun-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Nov-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jun-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2022	7.93 (7.4)	8.08	0-23.79	0.93	23.79 (14.72)	23.54	0-55.52	0.62	23.79 (14.76)	23.36	0-55.52	0.62
Aug-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	

## 1.2 Arctic Tern

**Table 2. Abundance of Arctic tern recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.**

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Nov-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jan-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jun-2021	77.52 (75.07)	77.13	0-232.55	0.97	77.52 (72.78)	78.83	0-232.55	0.94	77.52 (71.54)	78.37	0-232.55	0.92
Jul-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Nov-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jun-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2022	62.43 (59.8)	65.36	0-187.28	0.96	62.43 (62.83)	65.86	0-187.28	1.01	70.23 (59.58)	69.78	0-195.28	0.85
Sep-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	

### 1.3 Auk sp.

**Table 3. Abundance of auk sp. recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.**

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	248.63 (63.05)	250.70	136.35-376.96	0.25	376.96 (71.73)	382.79	248.43-537.37	0.19	553.41 (106.7)	550.68	360.92-769.97	0.19
Aug-2020	47.77 (20.15)	47.01	15.92-87.58	0.42	95.54 (26.55)	95.29	47.77-151.27	0.28	159.23 (40.67)	160.08	87.58-246.81	0.26
Sep-2020	23.24 (12.39)	22.79	0-46.48	0.53	30.99 (13.66)	30.79	7.75-61.98	0.44	38.74 (15.94)	38.92	7.75-69.73	0.41
Oct-2020	54.28 (18.86)	54.34	23.26-93.05	0.35	69.79 (21.19)	69.20	31.02-116.31	0.30	77.54 (22.72)	77.28	38.58-124.06	0.29
Nov-2020	38.78 (18.45)	37.15	7.76-77.55	0.48	62.04 (23.05)	63.72	23.27-116.33	0.37	69.8 (23.97)	70.46	23.27-116.33	0.34
Dec-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jan-2021	77.48 (27.42)	76.65	30.99-139.47	0.35	123.97 (32.53)	124.34	61.98-185.95	0.26	123.97 (32.97)	124.62	69.73-193.7	0.27
Feb-2021	15.49 (10.47)	15.46	0-38.73	0.68	15.49 (10.02)	15.44	0-38.73	0.65	30.98 (14.28)	31.47	7.75-61.96	0.46
Mar-2021	30.98 (18.66)	31.54	0-69.71	0.60	38.73 (19.72)	38.32	7.75-77.65	0.51	46.47 (21.32)	46.71	7.75-92.94	0.46
Apr-2021	201.66 (46.69)	201.21	116.34-294.73	0.23	263.7 (48.29)	265.11	178.39-372.29	0.18	380.05 (57.97)	381.39	279.22-496.58	0.15
May-2021	7.75 (7.49)	7.91	0-23.25	0.97	7.75 (7.51)	8.10	0-23.25	0.97	15.5 (10.3)	15.40	0-38.75	0.66
Jun-2021	7.75 (6.88)	7.49	0-23.25	0.89	7.75 (7.11)	7.67	0-23.25	0.92	15.5 (9.03)	15.63	0-38.76	0.58
Jul-2021	15.5 (9.6)	15.27	0-38.76	0.62	46.51 (19.23)	46.81	15.5-85.27	0.41	54.26 (20.41)	54.47	15.5-93.02	0.38
Aug-2021	162.62 (41.21)	158.98	85.18-240.05	0.25	232.31 (45.03)	232.97	147.13-325.23	0.19	263.28 (48.1)	263.55	170.36-356.4	0.18
Sep-2021	108.47 (35.78)	106.88	46.49-178.21	0.33	139.47 (37.63)	138.66	69.73-224.69	0.27	185.95 (50.32)	185.81	92.98-286.87	0.27
Oct-2021	23.26 (13.08)	23.32	0-54.28	0.56	69.79 (24.03)	69.55	23.26-116.31	0.34	85.29 (25.28)	86.30	38.77-139.57	0.30
Nov-2021	61.92 (21.19)	61.57	23.22-108.37	0.34	77.4 (24.08)	77.88	30.96-123.85	0.31	77.4 (23.42)	76.29	30.96-123.85	0.30
Dec-2021	54.25 (21.64)	54.48	15.5-100.75	0.40	77.5 (24.54)	77.40	31-131.74	0.32	85.25 (24.97)	85.52	38.75-139.49	0.29
Feb-2022	7.75 (7.22)	7.95	0-23.25	0.93	7.75 (7.41)	7.79	0-23.25	0.96	7.75 (7.04)	7.94	0-23.25	0.91
Feb-2022	15.49 (10.24)	15.24	0-38.73	0.66	15.49 (9.79)	14.97	0-38.73	0.63	15.49 (10.11)	15.61	0-38.73	0.65
Mar-2022	0 (0)	0.00	0-0		7.75 (7.32)	8.08	0-23.26	0.94	7.75 (7.3)	7.48	0-23.26	0.94
Apr-2022	30.95 (16.55)	31.70	7.74-69.63	0.53	38.68 (17.8)	39.54	7.74-77.36	0.46	38.68 (17.75)	39.08	7.74-77.36	0.46
May-2022	46.58 (22.49)	47.65	7.76-93.17	0.48	85.4 (30.7)	87.82	38.82-155.28	0.36	139.75 (35.43)	140.08	69.87-209.62	0.25
Jun-2022	69.69 (28.54)	70.88	23.23-131.63	0.41	92.92 (32.15)	94.19	30.97-162.6	0.35	147.12 (37.27)	148.87	84.98-224.55	0.25
Jul-2022	253.81 (65.96)	253.00	134.83-388.64	0.26	309.33 (70.43)	309.10	174.49-452.09	0.23	404.5 (74.88)	406.60	277.4-563.13	0.19
Aug-2022	31.21 (17.6)	31.17	0-70.23	0.56	39.02 (19.18)	39.47	7.8-78.03	0.49	46.82 (19.71)	46.39	15.61-85.84	0.42
Sep-2022	110.67 (28.11)	110.70	63.24-166	0.25	158.09 (36.11)	156.80	86.95-229.24	0.23	173.9 (37.23)	170.50	102.76-245.24	0.21



## 1.4 Black Guillemot

**Table 4. Abundance of black guillemot recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.**

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Nov-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jan-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jun-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2021	7.75 (7.01)	7.84	0-23.26	0.9	7.75 (7.33)	7.99	0-23.26	0.94	7.75 (6.9)	7.59	0-23.26	0.89
Aug-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Nov-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jun-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	

1.5 Fulmar

Table 5. Abundance of fulmar recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	336.86 (97.02)	335.85	160.41-537.37	0.29	553.41 (117.35)	551.92	344.88-794.03	0.21	1018.6 (176.47)	1,007.11	673.72-1371.5	0.17
Aug-2020	1146.48 (654.54)	1,126.20	111.26-2603.87	0.57	1186.29 (655.64)	1,184.22	95.54-2563.66	0.55	1281.83 (653.82)	1,303.54	246.81-2691.65	0.51
Sep-2020	2324.18 (1302.7)	2,345.55	371.29-5153.48	0.56	2479.12 (1339.74)	2,496.93	472.58-5416.69	0.54	2517.86 (1332.22)	2,443.51	457.09-	0.53
Oct-2020	759.89 (274.5)	757.28	340.98-1372.45	0.36	1139.83 (283.52)	1,139.76	651.14-1713.62	0.25	2768.16 (737.97)	2,725.29	1504.07-	0.27
Nov-2020	387.76 (263.16)	378.07	54.29-977.15	0.68	411.02 (260.36)	418.14	77.55-977.34	0.63	728.98 (308.18)	733.39	209.19-1411.43	0.42
Dec-2020	395.21 (94.35)	399.27	224.72-604.43	0.24	883.4 (255.46)	883.69	433.76-1402.59	0.29	1046.13 (265.75)	1,050.39	604.43-1596.51	0.25
Jan-2021	573.36 (211.93)	574.97	232.44-1007.45	0.37	867.79 (257.04)	872.30	395.15-1418.1	0.30	1293.93 (272.49)	1,283.59	790.31-1828.75	0.21
Feb-2021	77.45 (29.42)	77.50	23.24-139.61	0.38	116.18 (32.78)	115.41	54.22-185.88	0.28	139.41 (35.4)	139.26	77.45-209.12	0.25
Mar-2021	116.18 (41.61)	116.16	38.73-201.57	0.36	224.61 (81.22)	223.82	85.2-410.5	0.36	278.83 (81.94)	276.67	139.42-449.23	0.29
Apr-2021	209.41 (195.79)	214.39	0-620.48	0.93	224.92 (186.72)	227.58	7.76-635.99	0.83	255.95 (188.12)	244.98	23.27-674.97	0.73
May-2021	0 (0)	0.00	0-0		38.75 (22.02)	38.18	0-85.26	0.57	38.75 (22.47)	37.80	0-85.26	0.58
Jun-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2021	23.26 (11.56)	22.98	0-46.51	0.50	38.76 (15.13)	38.57	15.31-69.77	0.39	77.52 (22.59)	77.21	38.76-124.03	0.29
Aug-2021	689.18 (99.06)	689.53	503.14-882.97	0.14	906 (101.81)	910.08	720.16-1122.82	0.11	1177.03 (103.43)	1,171.83	975.5-1370.81	0.09
Sep-2021	364.16 (73.99)	366.16	232.44-526.87	0.20	449.39 (75.17)	447.41	317.67-604.35	0.17	604.35 (93.68)	605.68	433.89-805.8	0.16
Oct-2021	783.16 (461.32)	793.30	108.56-1845.65	0.59	914.98 (465.41)	902.91	224.87-1938.7	0.51	1132.09 (487.56)	1,115.36	341.18-2140.31	0.43
Nov-2021	46.44 (16.59)	46.36	15.48-85.14	0.36	61.92 (20.63)	62.67	23.22-100.82	0.33	239.95 (150.77)	234.45	46.44-572.98	0.63
Dec-2021	480.48 (135.36)	486.00	240.24-775.16	0.28	689.72 (162.98)	692.44	410.73-1038.45	0.24	836.96 (179.59)	840.41	511.48-1224.44	0.21
Feb-2022	62 (21.69)	62.46	23.25-108.69	0.35	124 (35.85)	122.27	62-193.75	0.29	139.5 (40.01)	140.60	69.75-224.75	0.29
Feb-2022	185.91 (74.34)	185.76	54.22-340.83	0.40	232.38 (72.99)	231.45	108.45-379.56	0.31	309.85 (75.2)	305.57	170.42-464.77	0.24
Mar-2022	255.91 (57.92)	254.83	147.34-379.99	0.23	457.54 (111.48)	459.13	271.23-713.45	0.24	542.84 (113.54)	543.23	333.46-783.24	0.21
Apr-2022	30.95 (13.24)	30.95	7.74-54.35	0.43	30.95 (13.56)	30.34	7.74-61.89	0.44	46.42 (17.41)	46.66	15.47-85.1	0.38
May-2022	23.29 (12.08)	24.28	0-46.58	0.52	38.82 (17.13)	39.54	7.76-77.64	0.44	62.11 (20.85)	62.19	23.29-108.69	0.34
Jun-2022	23.23 (12.59)	22.98	0-46.46	0.54	30.97 (14.06)	30.84	7.74-61.94	0.45	54.2 (18.09)	54.04	23.23-92.92	0.33
Jul-2022	150.7 (68.45)	148.75	39.66-301.39	0.45	166.56 (70.88)	169.56	55.52-325.19	0.43	214.15 (78.63)	211.62	79.31-380.91	0.37
Aug-2022	23.41 (12.78)	23.07	0-46.82	0.55	54.62 (21.57)	56.09	15.61-101.44	0.39	117.05 (33)	117.54	62.43-187.28	0.28
Sep-2022	1035.52 (126.66)	1,043.85	814.18-1304.67	0.12	1351.7 (131.47)	1,347.45	1098.75-	0.10	1667.89 (134.56)	1,667.05	1399.13-	0.08

## 1.6 Gannet

Table 6. Abundance of gannet recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	152.39 (118.57)	156.89	8.02-425.08	0.78	160.41 (115.58)	158.92	8.02-425.29	0.72	473.21 (300.03)	486.03	40.1-1203.27	0.63
Aug-2020	1671.95 (1296.58)	1,707.05	71.66-4721.48	0.78	1679.92	1,705.61	87.58-4554.28	0.74	1719.72 (1260.87)	1,749.34	127.39-4642.46	0.73
Sep-2020	418.35 (75.34)	419.42	278.9-573.3	0.18	526.81 (85.68)	524.22	371.87-697.25	0.16	643.02 (97.21)	638.66	457.09-836.7	0.15
Oct-2020	395.45 (93.07)	394.20	232.62-597.05	0.24	496.25 (98.37)	493.18	317.91-682.54	0.20	604.81 (102.44)	602.69	418.71-814.36	0.17
Nov-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2020	23.25 (14.65)	23.10	0-54.24	0.63	38.75 (18.03)	39.43	7.75-77.49	0.47	38.75 (17.63)	39.01	7.75-77.49	0.45
Jan-2021	15.5 (12.67)	15.47	0-46.49	0.82	23.24 (14.23)	23.84	0-54.24	0.61	23.24 (14.73)	23.28	0-54.24	0.63
Feb-2021	7.75 (7.46)	7.97	0-23.24	0.96	7.75 (7.36)	7.93	0-23.24	0.95	7.75 (7.28)	8.04	0-23.24	0.94
Mar-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		15.49 (9.4)	15.93	0-38.73	0.61
Apr-2021	77.56 (27.23)	76.65	31.02-131.85	0.35	131.85 (32.29)	131.31	69.8-201.66	0.24	186.14 (40.08)	184.90	108.58-263.7	0.22
May-2021	100.76 (37.03)	98.80	38.56-178.26	0.37	201.51 (65.3)	202.36	93.01-341.02	0.32	224.76 (63.85)	224.31	116.06-356.52	0.28
Jun-2021	7.75 (7.11)	7.77	0-23.25	0.92	23.25 (13.1)	23.23	0-54.26	0.56	38.76 (15.86)	36.66	7.75-69.76	0.41
Jul-2021	46.51 (17.12)	45.82	15.5-77.52	0.37	85.27 (29.76)	83.97	31.01-147.28	0.35	131.78 (42.6)	135.27	62.01-217.05	0.32
Aug-2021	100.67 (26.54)	100.35	54.21-154.87	0.26	131.64 (31.34)	130.52	77.44-193.59	0.24	147.13 (33.21)	146.56	85.18-216.82	0.23
Sep-2021	240.19 (46.54)	240.97	154.96-333.17	0.19	278.93 (47.43)	277.96	185.95-371.91	0.17	588.85 (186.03)	591.65	325.42-1022.75	0.32
Oct-2021	721.13 (113.54)	730.52	504.01-953.75	0.16	938.24 (128.82)	942.88	690.11-1209.63	0.14	1139.84 (140.52)	1,141.81	883.77-1434.69	0.12
Nov-2021	7.74 (6.95)	7.76	0-23.22	0.90	23.22 (12.37)	22.85	0-46.44	0.53	30.96 (14.01)	30.71	7.74-61.92	0.45
Dec-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		7.75 (7.07)	7.35	0-23.25	0.91
Feb-2022	7.75 (6.39)	7.58	0-23.24	0.83	7.75 (6.54)	7.84	0-23.24	0.84	15.49 (10.09)	15.62	0-38.73	0.65
Mar-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2022	417.76 (76.37)	419.73	286.24-572.49	0.18	526.07 (82.73)	528.81	363.61-688.53	0.16	618.9 (83.75)	620.58	456.44-781.56	0.14
May-2022	93.17 (26.43)	92.04	46.58-147.51	0.28	155.28 (33.56)	154.94	93.17-217.39	0.22	232.92 (54.14)	235.85	139.75-357.14	0.23
Jun-2022	240.03 (75.02)	241.92	108.4-402.83	0.31	317.47 (80.22)	314.45	170.35-480.07	0.25	402.64 (76.45)	405.05	263.26-557.5	0.19
Jul-2022	142.77 (33.38)	141.74	79.31-214.15	0.23	166.56 (34.72)	167.92	103.11-238.14	0.21	190.35 (36.55)	190.52	126.9-269.67	0.19
Aug-2022	101.44 (24.33)	101.36	54.62-148.26	0.24	132.66 (26.02)	133.12	85.84-187.28	0.20	195.08 (34.84)	193.97	124.85-257.51	0.18
Sep-2022	150.19 (37.66)	150.84	79.05-229.24	0.25	229.24 (45.12)	226.62	142.28-316.19	0.20	324.09 (63.93)	323.92	205.52-450.57	0.20

## 1.7 Great Black-backed Gull

**Table 7. Abundance of great black-backed gull recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.**

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2020	0 (0)	0.00	0-0		7.75 (6.91)	7.95	0-23.26	0.89	7.75 (7.25)	7.89	0-23.26	0.94
Nov-2020	46.53 (18.98)	46.42	7.76-85.31	0.41	46.53 (20.44)	46.10	7.76-85.31	0.44	46.53 (19.88)	46.42	7.76-85.31	0.43
Dec-2020	7.75 (7.31)	7.34	0-23.25	0.94	46.49 (19.51)	47.11	15.5-92.99	0.42	46.49 (19.07)	46.61	15.5-85.24	0.41
Jan-2021	38.74 (15.63)	39.05	7.75-69.73	0.40	38.74 (14.99)	38.91	15.5-69.73	0.39	61.98 (18.97)	61.17	23.24-100.73	0.31
Feb-2021	23.24 (12.53)	22.69	0-54.22	0.54	139.41 (102.73)	135.09	15.3-364.02	0.74	162.65 (120.82)	168.82	23.24-433.73	0.74
Mar-2021	15.49 (9.89)	15.85	0-38.73	0.64	23.24 (12.16)	23.38	0-46.47	0.52	23.24 (11.27)	22.72	0-46.47	0.48
Apr-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jun-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Nov-2021	108.37 (32.99)	107.59	46.44-178.03	0.30	147.07 (36.02)	148.12	77.4-216.73	0.24	170.29 (37.23)	170.26	100.62-247.69	0.22
Dec-2021	154.99 (46.5)	155.40	77.5-255.74	0.30	224.74 (53.8)	226.04	131.74-340.98	0.24	278.99 (59.51)	279.86	170.49-402.98	0.21
Feb-2022	38.75 (20.18)	39.10	0-77.69	0.52	38.75 (19.69)	38.73	0-77.5	0.51	77.5 (24.92)	77.84	31-124	0.32
Feb-2022	85.21 (30.85)	86.67	30.98-147.18	0.36	85.21 (30.63)	84.95	30.98-147.18	0.36	100.7 (29.26)	100.37	46.48-162.67	0.29
Mar-2022	0 (0)	0.00	0-0		7.75 (7.21)	7.76	0-23.26	0.93	15.51 (9.61)	15.92	0-38.77	0.62
Apr-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jun-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	

## 1.8 Great Northern Diver

**Table 8. Abundance of great northern diver recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.**

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Nov-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jan-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2021	7.75 (7.07)	7.95	0-23.25	0.91	7.75 (7.23)	7.87	0-23.25	0.93	7.75 (7.64)	8.28	0-23.25	0.99
Jun-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Nov-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2022	7.76 (6.85)	7.60	0-23.29	0.88	7.76 (7.19)	8.32	0-23.29	0.93	7.76 (6.98)	7.59	0-23.29	0.90
Jun-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	

## 1.9 Great Skua

Table 9. Abundance of great skua recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	8.02 (7.19)	7.92	0-24.06	0.90	8.02 (7.04)	7.88	0-24.06	0.88	8.02 (6.78)	7.80	0-24.06	0.84
Aug-2020	238.85 (198.19)	234.97	0-660.82	0.83	238.85 (201.77)	250.91	0-716.55	0.84	238.85 (200.09)	248.48	0-716.55	0.84
Sep-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2020	7.75 (7.13)	7.72	0-23.26	0.92	7.75 (7.12)	7.39	0-23.26	0.92	7.75 (7.12)	7.45	0-23.26	0.92
Nov-2020	7.76 (6.77)	7.44	0-23.27	0.87	7.76 (7.32)	7.79	0-23.27	0.94	7.76 (7.06)	7.76	0-23.27	0.91
Dec-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jan-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2021	7.76 (7.16)	7.72	0-23.27	0.92	15.51 (9.45)	15.18	0-38.78	0.61	31.02 (13.4)	31.22	7.76-54.49	0.43
May-2021	7.75 (7.14)	7.72	0-23.25	0.92	7.75 (7.21)	7.83	0-23.25	0.93	15.5 (9.88)	15.55	0-38.75	0.64
Jun-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2021	23.23 (21.15)	23.60	0-69.69	0.91	23.23 (21.06)	23.21	0-69.69	0.91	23.23 (20.62)	22.98	0-69.69	0.89
Sep-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Nov-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2022	7.74 (7.06)	7.47	0-23.21	0.91	7.74 (6.95)	7.73	0-23.21	0.90	7.74 (6.94)	7.47	0-23.21	0.90
May-2022	0 (0)	0.00	0-0		7.76 (6.86)	8.09	0-23.29	0.88	15.53 (9.25)	15.33	0-31.06	0.60
Jun-2022	30.97 (14.78)	31.55	7.74-61.94	0.48	30.97 (14.59)	31.35	7.74-61.94	0.47	38.72 (16.27)	39.16	7.74-77.43	0.42
Jul-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		7.93 (7.35)	8.06	0-23.79	0.93
Aug-2022	7.8 (7.44)	7.97	0-23.41	0.95	7.8 (7.14)	7.97	0-23.41	0.92	7.8 (7.39)	7.75	0-23.41	0.95
Sep-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	

## 1.10 Guillemot

Table 10. Abundance of guillemot recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	2005.12 (367.04)	1,984.67	1291.1-2711.12	0.18	2831.23 (377.69)	2,804.95	2077.1-3537.43	0.13	3448.8 (393.42)	3,443.48	2686.86-	0.11
Aug-2020	573.24 (98.1)	569.52	381.96-772.28	0.17	939.48 (138.44)	934.73	676.74-1210.18	0.15	1297.75 (153.48)	1,303.87	1026.86-	0.12
Sep-2020	2293.19 (302.24)	2,291.73	1727.45-	0.13	3323.58 (324.65)	3,342.39	2695.85-	0.10	4051.82 (336.75)	4,053.60	3393.11-	0.08
Oct-2020	1829.93 (286.25)	1,816.84	1287.16-	0.16	2969.77 (370.48)	2,960.87	2271.72-3745.16	0.12	3659.87 (362.26)	3,667.24	3008.53-	0.10
Nov-2020	178.37 (33.64)	180.50	116.33-248.16	0.19	356.74 (61.77)	356.29	240.41-480.82	0.17	457.55 (66.61)	455.69	333.47-589.39	0.15
Dec-2020	271.22 (56.12)	268.75	154.98-379.71	0.21	526.94 (87.76)	525.54	364.21-705.17	0.17	767.16 (90.92)	771.80	596.68-960.89	0.12
Jan-2021	542.37 (94.84)	541.61	363.97-743.82	0.17	968.51 (125.48)	973.05	751.57-1224.39	0.13	1293.93 (151.44)	1,285.84	1007.06-	0.12
Feb-2021	1448.33 (396.98)	1,466.87	805.3-2285	0.27	1719.41 (401.9)	1,722.72	1092.06-	0.23	2106.66 (378.94)	2,103.33	1448.14-	0.18
Mar-2021	1270.23 (152.15)	1,262.50	983.65-1557	0.12	1835.63 (194.24)	1,836.62	1463.86-	0.11	2780.56 (341.46)	2,768.02	2153.19-	0.12
Apr-2021	3342.85 (437.81)	3,332.75	2497.44-	0.13	4855.27 (449.91)	4,821.63	3962.75-5731.9	0.09	6918.38 (485.97)	6,890.28	6002.39-	0.07
May-2021	162.76 (55.09)	164.88	69.75-286.77	0.34	279.02 (95.47)	276.89	124.01-488.28	0.34	565.78 (161.59)	548.06	271.27-899.05	0.29
Jun-2021	565.87 (166.74)	582.97	302.31-930.19	0.29	697.64 (169.74)	691.41	387.58-	0.24	992.2 (189.89)	985.09	658.88-1387.92	0.19
Jul-2021	480.61 (96.42)	488.34	302.32-682.16	0.20	844.94 (163.63)	854.98	573.63-1209.47	0.19	1294.55 (173.16)	1,279.55	976.72-1635.63	0.13
Aug-2021	1618.42 (169.05)	1,612.38	1293.18-1936.1	0.10	2439.24 (258.9)	2,444.85	1966.68-	0.11	3314.27 (263.95)	3,321.24	2810.74-	0.08
Sep-2021	2347.67 (241.11)	2,349.13	1906.03-	0.10	3068.24 (256.74)	3,063.74	2595.61-	0.08	4160.72 (287.13)	4,168.74	3625.71-	0.07
Oct-2021	1356.96 (168.84)	1,366.10	1038.85-1721.4	0.12	1915.25 (194.35)	1,920.78	1558.56-	0.10	2481.29 (197.72)	2,478.24	2116.46-	0.08
Nov-2021	580.53 (101.1)	575.33	387.02-774.04	0.17	727.59 (105.16)	723.24	526.34-936.78	0.14	1006.25 (103.23)	1,004.24	812.74-1207.5	0.10
Dec-2021	689.72 (97.05)	690.41	503.53-883.65	0.14	1146.94 (127.56)	1,145.57	906.71-1395.13	0.11	1604.17 (142.99)	1,603.38	1325.19-	0.09
Feb-2022	69.75 (21.29)	70.09	31-108.69	0.31	147.25 (30.72)	148.81	93-209.25	0.21	286.75 (45.91)	289.07	201.5-379.75	0.16
Feb-2022	271.12 (52.91)	269.61	170.42-379.56	0.20	402.8 (62.37)	402.60	286.61-542.23	0.15	526.74 (75.03)	524.14	387.31-689.41	0.14
Mar-2022	131.83 (41.76)	131.91	61.85-217.33	0.32	240.4 (48.38)	239.33	147.34-341.21	0.20	325.7 (56.48)	327.70	224.89-449.78	0.17
Apr-2022	889.67 (130.18)	883.78	642.11-1152.71	0.15	1168.18 (138.93)	1,179.34	912.69-1454.62	0.12	1585.94 (148.47)	1,583.79	1291.96-1872.18	0.09
May-2022	683.22 (127.27)	682.24	434.78-931.66	0.19	993.77 (173.81)	993.19	667.69-1343.14	0.17	1917.67 (363.02)	1,895.80	1234.45-	0.19
Jun-2022	1502.15 (393.84)	1,476.23	782.05-2307.43	0.26	1718.96 (417.19)	1,715.18	975.62-2601.86	0.24	2013.19 (443.87)	2,058.30	1316.32-	0.22
Jul-2022	4084.68	4,094.88	2855.31-	0.17	6456.18 (974)	6,455.70	4560.37-	0.15	7400.02 (938.21)	7,399.96	5646.78-	0.13
Aug-2022	1966.43 (428.75)	1,967.59	1185.91-	0.22	3285.19 (544.14)	3,273.89	2199.75-	0.17	5626.18 (737.76)	5,640.55	4283.62-	0.13
Sep-2022	1889.22 (325.79)	1,857.62	1280.56-2521.6	0.17	2877.31 (429.69)	2,899.13	2125.97-	0.15	4442.44 (615.35)	4,439.53	3272.54-	0.14

**Table 11. Abundance of guillemot (including unidentified auks apportioned using identified auk ratios) recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.**

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	2189.59 (400.81)	2,167.26	1409.88-	0.18	3095.9 (413)	3,067.17	2271.28-	0.13	3761.6 (429.11)	3,755.80	2930.55-	0.11
Aug-2020	621.01 (106.27)	616.98	413.79-836.64	0.17	1003.17 (147.83)	998.11	722.62-1292.22	0.15	1401.26 (165.72)	1,407.86	1108.76-	0.12
Sep-2020	2355.17 (310.41)	2,353.67	1774.13-	0.13	3401.05 (332.22)	3,420.30	2758.69-	0.10	4144.79 (344.48)	4,146.61	3470.96-	0.08
Oct-2020	1922.98 (300.8)	1,909.23	1352.61-	0.16	3124.84 (389.83)	3,115.49	2390.34-	0.12	3822.7 (378.38)	3,830.40	3142.39-4600.2	0.10
Nov-2020	232.65 (43.88)	235.44	151.73-323.69	0.19	449.8 (77.89)	449.23	303.12-606.25	0.17	566.12 (82.42)	563.82	412.6-729.24	0.15
Dec-2020	294.47 (60.93)	291.79	168.27-412.25	0.21	588.93 (98.09)	587.37	407.06-788.13	0.17	844.65 (100.11)	849.76	656.95-1057.95	0.12
Jan-2021	635.34 (111.1)	634.46	426.36-871.33	0.17	1115.73 (144.55)	1,120.95	865.8-1410.5	0.13	1472.14 (172.3)	1,462.93	1145.76-	0.12
Feb-2021	1494.8 (409.71)	1,513.93	831.13-2358.31	0.27	1773.63 (414.57)	1,777.04	1126.49-	0.23	2176.37 (391.48)	2,172.93	1496.05-	0.18
Mar-2021	1370.91 (164.21)	1,362.57	1061.62-	0.12	1967.3 (208.18)	1,968.36	1568.86-	0.11	2935.46 (360.48)	2,922.22	2273.14-	0.12
Apr-2021	3591.04 (470.32)	3,580.19	2682.87-	0.13	5173.27 (479.38)	5,137.42	4222.29-	0.09	7368.22 (517.56)	7,338.30	6392.68-	0.07
May-2021	170.51 (57.72)	172.73	73.08-300.42	0.34	286.77 (98.13)	284.58	127.45-501.84	0.34	581.28 (166.02)	563.07	278.7-923.69	0.29
Jun-2021	573.62 (169.03)	590.95	306.45-942.93	0.29	705.39 (171.63)	699.09	391.89-1058.09	0.24	999.95 (191.38)	992.79	664.03-	0.19
Jul-2021	488.36 (97.97)	496.22	307.2-693.16	0.20	860.45 (166.63)	870.67	584.16-1231.66	0.19	1317.8 (176.27)	1,302.53	994.27-1665.01	0.13
Aug-2021	1726.83 (180.37)	1,720.39	1379.81-	0.10	2594.11 (275.34)	2,600.08	2091.55-3121.17	0.11	3484.63 (277.51)	3,491.95	2955.22-	0.08
Sep-2021	2479.39 (254.63)	2,480.93	2012.97-	0.10	3215.45 (269.06)	3,210.74	2720.14-	0.08	4346.67 (299.97)	4,355.05	3787.76-	0.07
Oct-2021	1450 (180.42)	1,459.77	1110.08-	0.12	2070.33 (210.08)	2,076.30	1684.76-	0.10	2698.4 (215.02)	2,695.09	2301.65-3111.6	0.08
Nov-2021	681.15 (118.62)	675.06	454.1-908.2	0.17	859.18 (124.17)	854.04	621.53-1106.19	0.14	1145.57 (117.52)	1,143.29	925.27-1374.69	0.10
Dec-2021	813.71 (114.5)	814.53	594.05-1042.51	0.14	1340.69 (149.11)	1,339.08	1059.87-	0.11	1821.16 (162.33)	1,820.26	1504.44-	0.09
Feb-2022	77.5 (23.65)	77.88	34.44-120.77	0.31	162.75 (33.95)	164.47	102.79-231.27	0.21	341 (54.6)	343.76	239.62-451.59	0.16
Feb-2022	317.59 (61.98)	315.83	199.63-444.63	0.20	488.01 (75.57)	487.76	347.24-656.93	0.15	619.69 (88.27)	616.64	455.66-811.07	0.14
Mar-2022	162.85 (51.59)	162.95	76.4-268.47	0.32	286.93 (57.74)	285.65	175.86-407.26	0.20	403.25 (69.93)	405.72	278.44-556.87	0.17
Apr-2022	912.88 (133.58)	906.83	658.86-1182.78	0.15	1206.86 (143.53)	1,218.39	942.91-1502.78	0.12	1632.36 (152.81)	1,630.14	1329.77-	0.09
May-2022	698.75 (130.16)	697.75	444.66-952.83	0.19	1017.06 (177.88)	1,016.47	683.34-1374.62	0.17	1995.31 (377.72)	1,972.55	1284.43-	0.19
Jun-2022	1540.87 (404)	1,514.28	802.2-2366.9	0.26	1757.67 (426.58)	1,753.81	997.6-2660.46	0.24	2067.4 (455.82)	2,113.71	1351.76-	0.22
Jul-2022	4282.97 (721.67)	4,293.66	2993.92-	0.17	6741.71 (1017.08)	6,741.21	4762.06-	0.15	7772.8 (985.47)	7,772.74	5931.23-	0.13
Aug-2022	1982.04 (432.15)	1,983.20	1195.32-	0.22	3308.6 (548.02)	3,297.22	2215.42-	0.17	5680.8 (744.92)	5,695.31	4325.21-	0.13
Sep-2022	1991.98 (343.52)	1,958.66	1350.21-	0.17	3059.12 (456.84)	3,082.31	2260.3-4017.19	0.15	4655.87 (644.91)	4,652.82	3429.77-6022.8	0.14



**Table 12. Abundance of guillemot (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.**

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	2871.33 (525.6)	2,842.05	1848.85-	0.18	4058.36 (541.39)	4,020.69	2977.37-	0.13	4932.59 (562.69)	4,924.98	3842.83-	0.11
Aug-2020	812.09 (138.97)	806.82	541.11-1094.07	0.17	1313.68 (193.58)	1,307.04	946.29-1692.2	0.15	1839.15 (217.51)	1,847.82	1455.24-	0.12
Sep-2020	3083.41 (406.39)	3,081.45	2322.72-	0.13	4454.68 (435.14)	4,479.89	3613.32-	0.10	5430.83 (451.36)	5,433.22	4547.93-	0.08
Oct-2020	2520.04 (394.2)	2,502.01	1772.57-	0.16	4094.09 (510.75)	4,081.83	3131.76-	0.12	5009.06 (495.8)	5,019.15	4117.61-	0.10
Nov-2020	302.45 (57.04)	306.07	197.25-420.8	0.19	589.39 (102.06)	588.65	397.2-794.39	0.17	744.49 (108.39)	741.46	542.6-959.01	0.15
Dec-2020	387.46 (80.17)	383.94	221.4-542.44	0.21	774.91 (129.06)	772.85	535.6-1037.01	0.17	1108.12 (131.33)	1,114.83	861.87-1387.95	0.12
Jan-2021	836.8 (146.33)	835.62	561.55-1147.61	0.17	1464.39 (189.73)	1,471.25	1136.37-1851.28	0.13	1929.28 (225.8)	1,917.21	1501.54-	0.12
Feb-2021	1959.51 (537.09)	1,984.58	1089.52-	0.27	2323.53 (543.1)	2,328.00	1475.75-	0.23	2850.19 (512.68)	2,845.69	1959.25-	0.18
Mar-2021	1796.91 (215.24)	1,785.97	1391.51-2202.58	0.12	2579.18 (272.93)	2,580.57	2056.81-	0.11	3849.4 (472.72)	3,832.04	2980.88-	0.12
Apr-2021	4707.91 (616.6)	4,693.69	3517.28-	0.13	6778.77 (628.15)	6,731.79	5532.65-	0.09	9656.25 (678.28)	9,617.03	8377.77-	0.07
May-2021	224.76 (76.08)	227.69	96.33-396.01	0.34	379.77 (129.95)	376.87	168.79-664.6	0.34	759.55 (216.93)	735.75	364.17-1206.95	0.29
Jun-2021	751.9 (221.56)	774.63	401.7-1236.01	0.29	922.44 (224.44)	914.20	512.47-1383.66	0.24	1310.02 (250.72)	1,300.63	869.93-	0.19
Jul-2021	643.4 (129.07)	653.74	404.72-913.21	0.20	1131.76 (219.17)	1,145.21	768.35-1620.03	0.19	1728.65 (231.22)	1,708.62	1304.25-2184.1	0.13
Aug-2021	2261.14 (236.19)	2,252.71	1806.74-	0.10	3399.45 (360.81)	3,407.27	2740.87-	0.11	4568.73 (363.85)	4,578.34	3874.62-	0.08
Sep-2021	3254.19 (334.21)	3,256.22	2642.02-	0.10	4214.96 (352.69)	4,208.77	3565.68-	0.08	5694.84 (393.01)	5,705.82	4962.57-	0.07
Oct-2021	1899.74 (236.38)	1,912.54	1454.39-	0.12	2713.91 (275.39)	2,721.75	2208.49-	0.10	3535.84 (281.75)	3,531.50	3015.96-	0.08
Nov-2021	890.14 (155.02)	882.18	593.43-1186.86	0.17	1130.09 (163.33)	1,123.34	817.51-1455	0.14	1501.63 (154.05)	1,498.64	1212.86-	0.10
Dec-2021	1069.45 (150.49)	1,070.53	780.76-1370.16	0.14	1751.42 (194.79)	1,749.32	1384.56-2130.4	0.11	2386.88 (212.76)	2,385.71	1971.77-	0.09
Feb-2022	100.75 (30.75)	101.24	44.78-157	0.31	217 (45.27)	219.29	137.05-308.37	0.21	449.5 (71.97)	453.14	315.86-595.28	0.16
Feb-2022	418.29 (81.63)	415.97	262.93-585.61	0.20	642.93 (99.56)	642.61	457.47-865.48	0.15	813.35 (115.86)	809.34	598.05-	0.14
Mar-2022	217.14 (68.78)	217.26	101.86-357.96	0.32	379.99 (76.47)	378.30	232.9-539.34	0.20	527.33 (91.44)	530.56	364.11-728.22	0.17
Apr-2022	1199.13 (175.47)	1,191.18	865.46-1553.65	0.15	1585.94 (188.61)	1,601.08	1239.08-	0.12	2142.95 (200.61)	2,140.05	1745.72-	0.09
May-2022	916.13 (170.66)	914.82	582.99-1249.27	0.19	1335.38 (233.55)	1,334.60	897.21-1804.85	0.17	2616.41 (495.3)	2,586.57	1684.25-	0.19
Jun-2022	2020.94 (529.86)	1,986.06	1052.14-	0.26	2307.43 (560.01)	2,302.36	1309.62-	0.24	2710.07 (597.52)	2,770.78	1771.97-	0.22
Jul-2022	5615.45 (946.19)	5,629.47	3925.36-	0.17	8835.61 (1332.97)	8,834.95	6241.1-11540.02	0.15	10183.95 (1291.17)	10,183.87	7771.13-	0.13
Aug-2022	2598.5 (566.56)	2,600.02	1567.09-	0.22	4338.63 (718.63)	4,323.71	2905.13-	0.17	7444.34 (976.17)	7,463.36	5667.92-	0.13
Sep-2022	2608.55 (449.84)	2,564.91	1768.14-3481.7	0.17	4007.68	4,038.07	2961.17-	0.15	6102.43 (845.28)	6,098.43	4495.38-	0.14

## 1.11 Herring Gull

Table 13. Abundance of herring gull recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Nov-2020	7.76 (6.85)	7.66	0-23.27	0.88	7.76 (7.34)	8.01	0-23.27	0.95	7.76 (7.17)	7.52	0-23.27	0.92
Dec-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jan-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2021	0 (0)	0.00	0-0		15.5 (13.22)	15.39	0-46.5	0.85	15.5 (13.96)	16.32	0-46.5	0.90
Jun-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Nov-2021	7.74 (7.1)	7.89	0-23.22	0.92	7.74 (6.93)	7.75	0-23.22	0.90	7.74 (6.88)	7.63	0-23.22	0.89
Dec-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2022	7.75 (7.42)	7.72	0-23.26	0.96	7.75 (7.16)	7.46	0-23.26	0.92	7.75 (7.2)	7.50	0-23.26	0.93
Apr-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jun-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	

## 1.12 Kittiwake

Table 14. Abundance of kittiwake recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	64.16 (38.94)	64.37	8.02-152.39	0.61	80.2 (41.23)	80.80	16.04-168.43	0.51	96.25 (41.5)	96.30	24.06-184.47	0.43
Aug-2020	47.77 (18.54)	49.43	15.92-87.58	0.39	47.77 (19.2)	46.95	15.92-87.58	0.40	79.62 (23.23)	78.18	31.85-119.43	0.29
Sep-2020	0 (0)	0.00	0-0		7.75 (6.39)	7.67	0-23.24	0.82	7.75 (6.4)	7.81	0-23.24	0.83
Oct-2020	333.42 (135.52)	331.03	116.31-628.26	0.41	426.47 (146.41)	423.45	170.59-744.38	0.34	581.55 (173.64)	589.95	286.9-961.49	0.30
Nov-2020	15.51 (10.12)	15.82	0-38.78	0.65	15.51 (10.06)	15.35	0-38.78	0.65	15.51 (9.56)	14.95	0-38.78	0.62
Dec-2020	38.75 (20.96)	38.86	7.75-85.24	0.54	38.75 (21.86)	39.72	0-85.24	0.56	46.49 (22.32)	46.14	7.75-92.99	0.48
Jan-2021	0 (0)	0.00	0-0		7.75 (7.51)	7.59	0-23.24	0.97	23.24 (12.3)	23.15	0-46.49	0.53
Feb-2021	92.94 (38.2)	90.97	23.24-178.14	0.41	92.94 (38.07)	92.47	23.24-178.14	0.41	100.69 (38.21)	100.42	38.73-185.88	0.38
Mar-2021	418.25 (122.95)	418.02	185.89-673.84	0.29	542.17 (134.86)	545.66	302.07-797.96	0.25	813.25 (141.14)	815.16	557.66-1107.58	0.17
Apr-2021	23.27 (16.12)	22.79	0-62.05	0.69	23.27 (16.72)	23.33	0-62.05	0.72	23.27 (16.09)	23.21	0-54.29	0.69
May-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jun-2021	100.77 (80.01)	96.24	0-271.31	0.79	108.52 (81.19)	108.55	0-286.81	0.75	124.03 (85.21)	128.45	15.5-310.06	0.69
Jul-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2021	7.75 (7.09)	7.52	0-23.26	0.91	7.75 (7.35)	7.98	0-23.26	0.95	15.51 (10.22)	15.02	0-38.77	0.66
Nov-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	30.98 (13.86)	30.52	7.75-61.97	0.45	46.48 (20.07)	47.44	15.49-92.95	0.43	61.97 (21.72)	60.94	23.24-108.45	0.35
Mar-2022	294.69 (100.29)	293.44	108.57-496.31	0.34	372.23 (105.02)	376.27	193.87-612.63	0.28	535.09 (111.15)	537.71	333.46-767.73	0.21
Apr-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2022	0 (0)	0.00	0-0		7.76 (7.25)	8.00	0-23.29	0.93	7.76 (7.12)	7.79	0-23.29	0.92
Jun-2022	54.2 (44.41)	53.08	0-154.86	0.82	54.2 (45.28)	55.63	0-154.86	0.84	54.2 (44.04)	53.91	0-154.86	0.81
Jul-2022	594.86 (302.69)	597.62	111.04-1237.7	0.51	642.45 (314.5)	651.91	126.9-1364.2	0.49	705.9 (293.42)	702.41	230.01-1324.55	0.42
Aug-2022	7.8 (7.41)	7.93	0-23.41	0.95	7.8 (7.42)	7.79	0-23.41	0.95	31.21 (21.9)	31.71	0-78.03	0.70
Sep-2022	7.9 (7.26)	7.73	0-23.71	0.92	7.9 (7.28)	7.93	0-23.71	0.92	7.9 (7.5)	8.49	0-23.71	0.95

## 1.13 Large Auk sp.

Table 15. Abundance of large auk sp. recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2020	23.89 (15.61)	24.16	0-55.73	0.65	23.89 (15.2)	23.78	0-55.73	0.64	39.81 (18.02)	40.58	7.96-79.62	0.45
Sep-2020	38.74 (15.15)	38.83	7.75-69.73	0.39	46.48 (16.02)	46.22	15.49-77.47	0.34	54.23 (18.78)	54.84	23.24-92.97	0.35
Oct-2020	38.77 (15.05)	38.02	15.31-69.79	0.39	85.29 (28.24)	84.22	38.77-139.57	0.33	85.29 (27.9)	84.61	38.58-139.57	0.33
Nov-2020	15.51 (10.16)	15.42	0-38.78	0.66	31.02 (13.88)	30.90	7.76-62.04	0.45	38.78 (14.97)	39.23	15.51-69.8	0.39
Dec-2020	23.25 (15.88)	23.48	0-54.44	0.68	61.99 (22.51)	62.75	23.25-108.49	0.36	77.49 (23.87)	76.60	31-123.99	0.31
Jan-2021	15.5 (10.81)	15.92	0-38.74	0.70	23.24 (12.56)	23.66	0-46.49	0.54	54.24 (20.78)	54.14	15.5-100.73	0.38
Feb-2021	30.98 (21.64)	31.01	0-77.45	0.70	38.73 (20.41)	38.73	7.75-77.45	0.53	38.73 (21.23)	39.79	7.75-85.2	0.55
Mar-2021	69.71 (27.24)	70.11	23.24-131.67	0.39	92.94 (28.85)	92.68	38.73-154.91	0.31	108.43 (31.37)	109.01	54.22-178.14	0.29
Apr-2021	85.32 (24.86)	85.64	38.78-131.85	0.29	108.58 (27.04)	107.85	54.29-162.88	0.25	139.61 (28.58)	139.42	85.32-193.9	0.20
May-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		7.75 (7.16)	7.87	0-23.25	0.92
Jun-2021	7.75 (7.56)	7.71	0-23.25	0.98	7.75 (7.29)	7.49	0-23.25	0.94	7.75 (7.28)	7.77	0-23.25	0.94
Jul-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		7.75 (6.15)	7.69	0-23.26	0.79
Aug-2021	15.49 (9.94)	15.70	0-38.72	0.64	15.49 (10.08)	15.53	0-38.72	0.65	15.49 (10.28)	15.43	0-38.72	0.66
Sep-2021	69.73 (45.43)	71.06	0-170.46	0.65	69.73 (46.25)	70.52	0-170.46	0.66	77.48 (46.63)	77.36	7.75-178.21	0.60
Oct-2021	69.79 (20.99)	70.24	31.02-116.31	0.30	93.05 (22.7)	92.32	54.08-139.57	0.24	139.57 (28.16)	139.78	85.29-193.85	0.20
Nov-2021	38.7 (15.17)	39.03	15.48-69.66	0.39	54.18 (18.53)	53.16	15.48-92.88	0.34	61.92 (19.02)	62.82	23.22-100.62	0.31
Dec-2021	69.75 (26.65)	69.54	23.25-123.99	0.38	116.24 (38.98)	114.93	46.5-201.49	0.34	131.74 (39.13)	133.85	62-216.99	0.30
Feb-2022	0 (0)	0.00	0-0		7.75 (6.58)	7.77	0-23.25	0.85	46.5 (19.54)	47.80	15.5-85.25	0.42
Feb-2022	38.73 (17.21)	39.18	7.75-77.46	0.44	77.46 (23.82)	76.45	30.98-123.94	0.31	85.21 (24.96)	85.97	38.73-139.43	0.29
Mar-2022	46.53 (20.24)	46.42	7.75-93.06	0.43	62.04 (22.44)	62.23	23.26-100.81	0.36	93.06 (32.21)	92.84	31.02-155.1	0.35
Apr-2022	7.74 (7.46)	7.84	0-23.21	0.96	15.47 (10)	15.74	0-38.68	0.65	23.21 (12.37)	23.54	0-46.61	0.53
May-2022	7.76 (7.57)	7.76	0-23.29	0.97	7.76 (7.42)	7.94	0-23.29	0.96	38.82 (23.62)	39.24	0-77.64	0.61
Jun-2022	15.49 (14.87)	15.32	0-46.46	0.96	15.49 (14.72)	15.75	0-46.46	0.95	15.49 (14.69)	16.07	0-46.46	0.95
Jul-2022	47.59 (24.16)	48.23	7.93-95.18	0.51	95.18 (34.61)	94.41	31.73-166.56	0.36	142.77 (42.21)	143.47	63.45-230.01	0.30
Aug-2022	0 (0)	0.00	0-0		7.8 (7.31)	7.65	0-23.41	0.94	31.21 (13.96)	30.37	7.8-62.43	0.45
Sep-2022	15.81 (15.26)	16.65	0-47.43	0.96	63.24 (40.96)	62.04	0-158.09	0.65	79.05 (40.86)	78.42	15.81-166	0.52

## 1.14 Lesser Black-backed Gull

Table 16. Abundance of lesser black-backed gull recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Nov-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jan-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jun-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2021	7.74 (7.01)	7.51	0-23.23	0.91	7.74 (7.33)	7.98	0-23.23	0.95	15.49 (9.96)	14.84	0-38.72	0.64
Sep-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Nov-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jun-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	

## 1.15 Little Auk

Table 17. Abundance of little auk recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Nov-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jan-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2021	7.75 (7.09)	7.42	0-23.24	0.91	7.75 (7.59)	7.69	0-23.24	0.98	7.75 (7.37)	7.47	0-23.24	0.95
Mar-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jun-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Nov-2021	7.74 (7)	8.06	0-23.22	0.90	23.22 (12.11)	22.90	0-46.44	0.52	38.7 (15.75)	38.81	7.74-69.66	0.41
Dec-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0.00	0-0		7.75 (7.48)	8.08	0-23.25	0.96	7.75 (7.09)	7.71	0-23.25	0.91
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jun-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	

## 1.16 Manx Shearwater

Table 18. Abundance of Manx shearwater recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Nov-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jan-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jun-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Nov-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jun-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		7.93 (7.37)	7.94	0-23.79	0.93
Aug-2022	7.8 (6.5)	7.71	0-23.41	0.83	7.8 (6.38)	7.54	0-23.41	0.82	15.61 (9.82)	15.54	0-31.41	0.63
Sep-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	

## 1.17 Puffin

Table 19. Abundance of puffin recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	721.84 (106.62)	730.01	529.35-954.44	0.15	1243.17 (177.26)	1,251.68	930.37-1620.13	0.14	2566.55 (742.63)	2,604.82	1467.55-	0.29
Aug-2020	732.48 (132.38)	732.41	485.66-987.65	0.18	1218.14 (179.18)	1,218.03	867.82-1568.45	0.15	2078 (300.64)	2,067.72	1536.21-	0.14
Sep-2020	108.46 (30.01)	109.12	54.23-170.44	0.28	139.45 (33.88)	139.64	77.47-209.18	0.24	201.43 (39.5)	201.88	131.7-286.65	0.20
Oct-2020	77.54 (24.72)	77.73	31.02-124.06	0.32	100.8 (27.16)	100.58	54.28-155.08	0.27	124.06 (29.11)	124.43	69.79-178.34	0.23
Nov-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		7.76 (7.44)	7.89	0-23.27	0.96
Dec-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jan-2021	0 (0)	0.00	0-0		7.75 (7.51)	8.05	0-23.24	0.97	7.75 (7.22)	7.66	0-23.24	0.93
Feb-2021	7.75 (6.92)	7.92	0-23.24	0.89	7.75 (7.04)	7.57	0-23.24	0.91	7.75 (6.82)	7.30	0-23.24	0.88
Mar-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2021	822.14 (137.11)	830.81	589.26-1109.11	0.17	1070.33 (144.54)	1,067.46	806.63-1357.5	0.14	1334.04 (140.61)	1,336.60	1070.14-1613.25	0.11
May-2021	100.76 (35.76)	99.82	38.75-170.51	0.35	201.51 (48.18)	200.96	108.51-302.27	0.24	403.02 (92.87)	404.87	240.07-596.98	0.23
Jun-2021	3201.4 (525.78)	3,184.92	2255.52-	0.16	3883.54 (558.18)	3,902.96	2906.65-	0.14	4976.51 (617.5)	4,973.17	3858.35-	0.12
Jul-2021	1077.5 (168.53)	1,083.27	775.18-1434.47	0.16	1767.41 (223.68)	1,789.88	1387.57-	0.13	2449.56 (257.4)	2,458.90	1976.51-2961.18	0.11
Aug-2021	1107.34 (163.41)	1,097.29	782.11-1440.51	0.15	1641.65 (175.59)	1,635.64	1308.67-	0.11	2292.11 (211.51)	2,286.71	1904.74-	0.09
Sep-2021	1797.55 (264.69)	1,795.82	1355.72-2386.6	0.15	2270.19 (270.92)	2,275.53	1774.12-2820.3	0.12	2758.32 (249.04)	2,752.17	2316.68-	0.09
Oct-2021	147.33 (35.82)	144.80	77.54-224.87	0.24	178.34 (38.79)	178.99	108.56-263.64	0.22	201.6 (41.05)	200.99	124.06-286.9	0.20
Nov-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2021	7.75 (7.2)	7.86	0-23.25	0.93	7.75 (7.2)	7.68	0-23.25	0.93	15.5 (9.26)	15.58	0-38.75	0.60
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2022	673.06 (97.23)	674.35	479.65-866.46	0.14	881.94 (94.46)	886.16	711.74-1067.61	0.11	1013.45 (102.07)	1,015.04	820.05-1214.6	0.10
May-2022	2267.04 (439.52)	2,261.13	1475.13-	0.19	3563.6 (507.29)	3,546.72	2592.93-	0.14	5162.95 (551.98)	5,178.78	4153.27-6312	0.11
Jun-2022	3747.64 (791.82)	3,749.43	2338.21-	0.21	4684.55 (778.7)	4,687.44	3290.8-6264.13	0.17	5962.15 (839.33)	5,908.35	4421.09-	0.14
Jul-2022	2768.07 (406.96)	2,769.59	2022.51-	0.15	4068.82 (528.29)	4,096.63	3077.19-	0.13	5282.33 (672.25)	5,208.92	3893.34-	0.13
Aug-2022	1755.74 (367.6)	1,756.77	1154.69-	0.21	3745.58 (801.84)	3,748.64	2317.38-	0.21	5282.83 (913.15)	5,360.68	3722.17-	0.17
Sep-2022	450.57 (86.16)	449.11	292.47-632.38	0.19	521.71 (94.93)	523.27	339.9-711.82	0.18	663.99 (94.42)	664.05	482.19-861.61	0.14



**Table 20. Abundance of puffin (including unidentified auks apportioned using identified auk ratios) recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.**

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	786.01 (116.1)	794.90	576.4-1039.27	0.15	1355.46 (193.27)	1,364.74	1014.41-	0.14	2799.14 (809.93)	2,840.88	1600.54-	0.29
Aug-2020	756.36 (136.69)	756.29	501.5-1019.85	0.18	1273.87 (187.38)	1,273.75	907.53-1640.21	0.15	2173.54 (314.46)	2,162.79	1606.84-2823.1	0.14
Sep-2020	108.46 (30.01)	109.12	54.23-170.44	0.28	139.45 (33.88)	139.64	77.47-209.18	0.24	201.43 (39.5)	201.88	131.7-286.65	0.20
Oct-2020	77.54 (24.72)	77.73	31.02-124.06	0.32	100.8 (27.16)	100.58	54.28-155.08	0.27	124.06 (29.11)	124.43	69.79-178.34	0.23
Nov-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		7.76 (7.44)	7.89	0-23.27	0.96
Dec-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jan-2021	0 (0)	0.00	0-0		7.75 (7.51)	8.05	0-23.24	0.97	7.75 (7.22)	7.66	0-23.24	0.93
Feb-2021	7.75 (6.92)	7.92	0-23.24	0.89	7.75 (7.04)	7.57	0-23.24	0.91	7.75 (6.82)	7.30	0-23.24	0.88
Mar-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2021	860.92 (143.58)	870.00	617.06-1161.43	0.17	1116.87 (150.83)	1,113.87	841.7-1416.52	0.14	1396.08 (147.15)	1,398.76	1119.91-1688.29	0.11
May-2021	100.76 (35.76)	99.82	38.75-170.51	0.35	201.51 (48.18)	200.96	108.51-302.27	0.24	410.77 (94.65)	412.65	244.69-608.46	0.23
Jun-2021	3209.15 (527.05)	3,192.63	2260.98-	0.16	3891.29 (559.29)	3,910.75	2912.45-	0.14	4992.02 (619.42)	4,988.66	3870.37-	0.12
Jul-2021	1085.25 (169.74)	1,091.06	780.76-1444.79	0.16	1798.41 (227.61)	1,821.28	1411.91-2287.46	0.13	2488.32 (261.47)	2,497.81	2007.78-	0.11
Aug-2021	1169.29 (172.55)	1,158.68	825.86-1521.09	0.15	1734.57 (185.53)	1,728.22	1382.75-2111.14	0.11	2400.52 (221.51)	2,394.87	1994.82-	0.09
Sep-2021	1844.04 (271.54)	1,842.26	1390.78-	0.15	2332.17 (278.32)	2,337.66	1822.56-	0.12	2828.05 (255.33)	2,821.75	2375.24-	0.09
Oct-2021	147.33 (35.82)	144.80	77.54-224.87	0.24	186.1 (40.47)	186.77	113.28-275.1	0.22	209.36 (42.63)	208.72	128.84-297.93	0.20
Nov-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2021	7.75 (7.2)	7.86	0-23.25	0.93	7.75 (7.2)	7.68	0-23.25	0.93	15.5 (9.26)	15.58	0-38.75	0.60
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2022	688.53 (99.47)	689.85	490.68-886.38	0.14	897.41 (96.12)	901.71	724.23-1086.34	0.11	1028.93 (103.63)	1,030.54	832.57-1233.14	0.10
May-2022	2305.86 (447.04)	2,299.85	1500.39-3190.5	0.19	3633.48 (517.23)	3,616.27	2643.77-	0.14	5263.88 (562.77)	5,280.02	4234.46-	0.11
Jun-2022	3794.1 (801.64)	3,795.91	2367.19-	0.21	4754.24 (790.29)	4,757.17	3339.75-	0.17	6070.55 (854.59)	6,015.78	4501.47-	0.14
Jul-2022	2871.18 (422.12)	2,872.76	2097.85-	0.15	4187.79 (543.74)	4,216.41	3167.17-5314.33	0.13	5448.89 (693.45)	5,373.17	4016.1-6815.2	0.13
Aug-2022	1771.35 (370.87)	1,772.39	1164.96-	0.21	3768.99 (806.85)	3,772.07	2331.87-	0.21	5306.24 (917.19)	5,384.44	3738.67-	0.17
Sep-2022	474.28 (90.7)	472.74	307.87-665.66	0.19	545.42 (99.25)	547.05	355.35-744.17	0.18	687.71 (97.79)	687.77	499.41-892.38	0.14

**Table 21. Abundance of puffin (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.**

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	914.33 (135.05)	924.68	670.51-1208.95	0.15	1580.03 (225.29)	1,590.85	1182.48-	0.14	3264.33 (944.53)	3,313.00	1866.53-	0.29
Aug-2020	883.75 (159.72)	883.67	585.96-1191.62	0.18	1480.87 (217.82)	1,480.74	1055-1906.75	0.15	2531.82 (366.3)	2,519.29	1871.7-3288.45	0.14
Sep-2020	123.96 (34.3)	124.71	61.98-194.79	0.28	162.69 (39.53)	162.91	90.38-244.04	0.24	232.42 (45.57)	232.94	151.97-330.75	0.20
Oct-2020	93.05 (29.66)	93.27	37.22-148.88	0.32	116.31 (31.34)	116.06	62.63-178.94	0.27	147.33 (34.57)	147.76	82.87-211.78	0.23
Nov-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		7.76 (7.44)	7.89	0-23.27	0.96
Dec-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jan-2021	0 (0)	0.00	0-0		7.75 (7.51)	8.05	0-23.24	0.97	7.75 (7.22)	7.66	0-23.24	0.93
Feb-2021	7.75 (6.92)	7.92	0-23.24	0.89	7.75 (7.04)	7.57	0-23.24	0.91	7.75 (6.82)	7.30	0-23.24	0.88
Mar-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2021	1000.53 (166.86)	1,011.08	717.12-1349.77	0.17	1303.01 (175.97)	1,299.52	981.98-1652.61	0.14	1628.77 (171.67)	1,631.89	1306.56-	0.11
May-2021	116.26 (41.26)	115.17	44.71-196.74	0.35	232.51 (55.59)	231.88	125.2-348.77	0.24	480.53 (110.73)	482.73	286.24-711.78	0.23
Jun-2021	3736.26 (613.62)	3,717.03	2632.35-	0.16	4534.67 (651.77)	4,557.35	3393.99-	0.14	5813.68 (721.38)	5,809.77	4507.42-	0.12
Jul-2021	1263.54 (197.63)	1,270.30	909.02-1682.15	0.16	2092.98 (264.89)	2,119.59	1643.17-	0.13	2899.17 (304.64)	2,910.22	2339.29-	0.11
Aug-2021	1362.88 (201.12)	1,350.51	962.59-1772.93	0.15	2021.08 (216.18)	2,013.69	1611.15-	0.11	2795.44 (257.96)	2,788.86	2323.01-	0.09
Sep-2021	2146.22 (316.04)	2,144.15	1618.68-	0.15	2719.58 (324.55)	2,725.97	2125.31-	0.12	3292.93 (297.31)	3,285.60	2765.7-	0.09
Oct-2021	170.59 (41.47)	167.66	89.78-260.37	0.24	217.11 (47.22)	217.90	132.16-320.95	0.22	240.38 (48.95)	239.64	147.92-342.07	0.20
Nov-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2021	7.75 (7.2)	7.86	0-23.25	0.93	7.75 (7.2)	7.68	0-23.25	0.93	15.5 (9.26)	15.58	0-38.75	0.60
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2022	804.57 (116.23)	806.12	573.37-1035.77	0.14	1044.4 (111.87)	1,049.40	842.85-1264.27	0.11	1199.13 (120.77)	1,201.00	970.28-1437.12	0.10
May-2022	2686.29 (520.8)	2,679.29	1747.93-	0.19	4231.29 (602.33)	4,211.25	3078.75-	0.14	6133.43 (655.73)	6,152.24	4933.96-	0.11
Jun-2022	4421.28 (934.15)	4,423.39	2758.51-	0.21	5536.28 (920.28)	5,539.71	3889.12-	0.17	7069.41 (995.2)	7,005.62	5242.15-9017.17	0.14
Jul-2022	3347.06 (492.09)	3,348.90	2445.56-	0.15	4877.83 (633.33)	4,911.16	3689.03-	0.13	6345.14 (807.51)	6,256.96	4676.68-	0.13
Aug-2022	2060.07 (431.32)	2,061.28	1354.84-	0.21	4393.26 (940.49)	4,396.84	2718.1-6297.23	0.21	6180.21 (1068.26)	6,271.29	4354.45-	0.17
Sep-2022	553.33 (105.82)	551.53	359.18-776.6	0.19	632.38 (115.07)	634.26	412-862.81	0.18	798.37 (113.53)	798.44	579.77-1035.99	0.14

**1.18 Razorbill**

**Table 22. Abundance of razorbill recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.**

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	16.04 (14.29)	16.46	0-48.12	0.89	16.04 (14.48)	16.20	0-48.12	0.90	16.04 (14.62)	16.54	0-48.12	0.91
Aug-2020	15.92 (13.86)	16.23	0-47.77	0.87	15.92 (13.54)	15.11	0-47.77	0.85	15.92 (14.36)	16.32	0-47.77	0.90
Sep-2020	61.98 (28.96)	62.87	15.49-131.7	0.47	77.47 (30.48)	78.84	30.99-139.45	0.39	92.97 (32.09)	94.53	38.74-162.69	0.35
Oct-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		15.51 (13.88)	15.69	0-46.52	0.89
Nov-2020	0 (0)	0.00	0-0		7.76 (7.1)	7.71	0-23.27	0.92	7.76 (7.65)	7.86	0-23.27	0.99
Dec-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jan-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2021	54.22 (23.11)	52.17	7.75-100.69	0.43	69.71 (28.1)	69.54	23.24-123.92	0.40	69.71 (26.97)	68.88	23.24-123.92	0.39
Mar-2021	7.75 (7.27)	7.69	0-23.24	0.94	15.49 (9.8)	15.22	0-38.73	0.63	61.96 (27.99)	62.02	15.49-123.92	0.45
Apr-2021	46.54 (17.08)	47.31	15.51-85.32	0.37	100.83 (28.58)	100.94	54.29-162.88	0.28	155.12 (35.24)	155.29	93.07-224.92	0.23
May-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		23.25 (13.13)	23.31	0-46.5	0.56
Jun-2021	31.01 (13.71)	30.22	7.75-62.01	0.44	31.01 (13.45)	31.16	7.75-62.01	0.43	85.27 (34.73)	85.08	23.25-155.03	0.41
Jul-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2021	85.18 (44.76)	86.08	15.49-185.85	0.53	92.92 (42.52)	91.94	23.23-178.1	0.46	116.15 (45.43)	117.69	38.72-216.82	0.39
Sep-2021	54.24 (37.22)	55.86	0-139.47	0.69	54.24 (36.82)	53.04	0-131.91	0.68	77.48 (39.96)	76.97	15.5-162.71	0.52
Oct-2021	15.51 (10.2)	15.09	0-38.77	0.66	15.51 (10.29)	15.42	0-38.77	0.66	15.51 (10.29)	15.51	0-38.77	0.66
Nov-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2021	15.5 (10.19)	15.38	0-38.75	0.66	23.25 (12.78)	23.43	0-54.25	0.55	23.25 (12.66)	23.06	0-54.25	0.54
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	38.73 (22.26)	38.65	0-85.21	0.57	38.73 (22.2)	38.88	0-85.21	0.57	38.73 (21.37)	38.39	0-85.21	0.55
Mar-2022	69.79 (30.02)	69.62	15.51-131.83	0.43	116.32 (42.85)	114.69	38.77-209.38	0.37	131.83 (42.3)	131.38	54.28-217.14	0.32
Apr-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2022	7.76 (6.18)	7.72	0-23.29	0.80	7.76 (6.28)	7.56	0-23.29	0.81	7.76 (6.24)	7.58	0-23.29	0.80
Jun-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2022	79.31 (50.74)	80.89	7.93-190.35	0.64	118.97 (55.37)	117.69	23.79-238.14	0.47	182.42 (64.07)	181.76	71.38-317.26	0.35
Aug-2022	7.8 (6.77)	7.83	0-23.41	0.87	39.02 (22.34)	39.27	0-85.84	0.57	39.02 (21.83)	39.28	0-85.84	0.56
Sep-2022	79.05 (29.33)	78.13	23.71-134.58	0.37	213.43 (91.18)	214.71	63.24-411.04	0.43	347.81 (135.58)	346.54	110.67-640.48	0.39

**Table 23. Abundance of razorbill (including unidentified auks apportioned using identified auk ratios) recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.**

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	16.04 (14.29)	16.46	0-48.12	0.89	16.04 (14.48)	16.20	0-48.12	0.90	16.04 (14.62)	16.54	0-48.12	0.91
Aug-2020	15.92 (13.86)	16.23	0-47.77	0.87	15.92 (13.54)	15.11	0-47.77	0.85	15.92 (14.36)	16.32	0-47.77	0.90
Sep-2020	61.98 (28.96)	62.87	15.49-131.7	0.47	77.47 (30.48)	78.84	30.99-139.45	0.39	92.97 (32.09)	94.53	38.74-162.69	0.35
Oct-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		15.51 (13.88)	15.69	0-46.52	0.89
Nov-2020	0 (0)	0.00	0-0		7.76 (7.1)	7.71	0-23.27	0.92	7.76 (7.65)	7.86	0-23.27	0.99
Dec-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jan-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2021	54.22 (23.11)	52.17	7.75-100.69	0.43	69.71 (28.1)	69.54	23.24-123.92	0.40	69.71 (26.97)	68.88	23.24-123.92	0.39
Mar-2021	7.75 (7.27)	7.69	0-23.24	0.94	15.49 (9.8)	15.22	0-38.73	0.63	61.96 (27.99)	62.02	15.49-123.92	0.45
Apr-2021	46.54 (17.08)	47.31	15.51-85.32	0.37	108.58 (30.78)	108.71	58.47-175.41	0.28	162.88 (37)	163.06	97.73-236.17	0.23
May-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		23.25 (13.13)	23.31	0-46.5	0.56
Jun-2021	31.01 (13.71)	30.22	7.75-62.01	0.44	31.01 (13.45)	31.16	7.75-62.01	0.43	85.27 (34.73)	85.08	23.25-155.03	0.41
Jul-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2021	92.92 (48.82)	93.90	16.9-202.74	0.53	100.67 (46.06)	99.60	25.17-192.95	0.46	123.9 (48.46)	125.53	41.3-231.28	0.39
Sep-2021	54.24 (37.22)	55.86	0-139.47	0.69	54.24 (36.82)	53.04	0-131.91	0.68	77.48 (39.96)	76.97	15.5-162.71	0.52
Oct-2021	15.51 (10.2)	15.09	0-38.77	0.66	15.51 (10.29)	15.42	0-38.77	0.66	15.51 (10.29)	15.51	0-38.77	0.66
Nov-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2021	15.5 (10.19)	15.38	0-38.75	0.66	23.25 (12.78)	23.43	0-54.25	0.55	23.25 (12.66)	23.06	0-54.25	0.54
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	46.48 (26.71)	46.37	0-102.25	0.57	46.48 (26.64)	46.65	0-102.25	0.57	46.48 (25.65)	46.07	0-102.25	0.55
Mar-2022	85.3 (36.69)	85.09	18.96-161.13	0.43	139.59 (51.42)	137.63	46.53-251.26	0.37	155.1 (49.76)	154.57	63.86-255.45	0.32
Apr-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2022	7.76 (6.18)	7.72	0-23.29	0.80	7.76 (6.28)	7.56	0-23.29	0.81	7.76 (6.24)	7.58	0-23.29	0.80
Jun-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2022	79.31 (50.74)	80.89	7.93-190.35	0.64	118.97 (55.37)	117.69	23.79-238.14	0.47	190.35 (66.85)	189.66	74.49-331.05	0.35
Aug-2022	7.8 (6.77)	7.83	0-23.41	0.87	39.02 (22.34)	39.27	0-85.84	0.57	39.02 (21.83)	39.28	0-85.84	0.56
Sep-2022	79.05 (29.33)	78.13	23.71-134.58	0.37	229.24 (97.93)	230.61	67.92-441.49	0.43	363.62 (141.74)	362.29	115.7-669.59	0.39

**Table 24. Abundance of razorbill (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.**

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	0 (14.29)	16.46	0-48.12		0 (14.48)	16.20	0-48.12		0 (14.62)	16.54	0-48.12	
Aug-2020	0 (13.86)	16.23	0-47.77		0 (13.54)	15.11	0-47.77		0 (14.36)	16.32	0-47.77	
Sep-2020	0 (28.96)	62.87	15.49-131.7		0 (30.48)	78.84	30.99-139.45		0 (32.09)	94.53	38.74-162.69	
Oct-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (13.88)	15.69	0-46.52	
Nov-2020	0 (0)	0.00	0-0		0 (7.1)	7.71	0-23.27		0 (7.65)	7.86	0-23.27	
Dec-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jan-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2021	0 (23.11)	52.17	7.75-100.69		0 (28.1)	69.54	23.24-123.92		0 (26.97)	68.88	23.24-123.92	
Mar-2021	0 (7.27)	7.69	0-23.24		0 (9.8)	15.22	0-38.73		0 (27.99)	62.02	15.49-123.92	
Apr-2021	0 (17.08)	47.31	15.51-85.32		0 (28.58)	100.94	54.29-162.88		0 (35.24)	155.29	93.07-224.92	
May-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (13.13)	23.31	0-46.5	
Jun-2021	0 (13.71)	30.22	7.75-62.01		0 (13.45)	31.16	7.75-62.01		0 (34.73)	85.08	23.25-155.03	
Jul-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2021	0 (44.76)	86.08	15.49-185.85		0 (42.52)	91.94	23.23-178.1		0 (45.43)	117.69	38.72-216.82	
Sep-2021	0 (37.22)	55.86	0-139.47		0 (36.82)	53.04	0-131.91		0 (39.96)	76.97	15.5-162.71	
Oct-2021	0 (10.2)	15.09	0-38.77		0 (10.29)	15.42	0-38.77		0 (10.29)	15.51	0-38.77	
Nov-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2021	0 (10.19)	15.38	0-38.75		0 (12.78)	23.43	0-54.25		0 (12.66)	23.06	0-54.25	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (22.26)	38.65	0-85.21		0 (22.2)	38.88	0-85.21		0 (21.37)	38.39	0-85.21	
Mar-2022	0 (30.02)	69.62	15.51-131.83		0 (42.85)	114.69	38.77-209.38		0 (42.3)	131.38	54.28-217.14	
Apr-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2022	0 (6.18)	7.72	0-23.29		0 (6.28)	7.56	0-23.29		0 (6.24)	7.58	0-23.29	
Jun-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2022	0 (50.74)	80.89	7.93-190.35		0 (55.37)	117.69	23.79-238.14		0 (64.07)	181.76	71.38-317.26	
Aug-2022	0 (6.77)	7.83	0-23.41		0 (22.34)	39.27	0-85.84		0 (21.83)	39.28	0-85.84	
Sep-2022	0 (29.33)	78.13	23.71-134.58		0 (91.18)	214.71	63.24-411.04		0 (135.58)	346.54	110.67-640.48	

## 1.19 Red-throated Diver

**Table 25. Abundance of red-throated diver recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.**

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2020	7.75 (7.12)	7.46	0-23.26	0.92	7.75 (7.17)	7.72	0-23.26	0.92	7.75 (7.32)	7.96	0-23.26	0.94
Nov-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jan-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jun-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Nov-2021	0 (0)	0.00	0-0		7.74 (7.02)	7.52	0-23.22	0.91	7.74 (6.89)	7.47	0-23.22	0.89
Dec-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2022	0 (0)	0.00	0-0		7.76 (6.54)	7.76	0-23.29	0.84	7.76 (6.4)	7.92	0-23.29	0.82
Jun-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	

## 1.20 Shag

Table 26. Abundance of Shag recorded on the sea in each survey, S.D., mean of bootstraps, coefficient of variation (CV) and 95% confidence intervals, in the OAA, OAA plus 2 km buffer plus OAA plus 4 km buffer.

Survey	Abundance											
	OAA				OAA plus 2 km buffer				OAA plus 4 km buffer			
	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV	Estimate (S.D.)	Mean (bs)	95% c.i.	CV
Jul-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Nov-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jan-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2021	7.76 (7.56)	7.63	0-23.27	0.98	7.76 (7.22)	7.81	0-23.27	0.93	7.76 (7.06)	7.72	0-23.27	0.91
May-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jun-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Nov-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		7.75 (7.64)	7.89	0-23.25	0.99
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jun-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	