

## West of Orkney Windfarm

### Offshore Ornithology Supplementary Environmental Information

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

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## 1.1 Arctic Skua

**Table 1. Density 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 and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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	0.01 (0.01)	0.01	0-0.04	0.93	0.03 (0.02)	0.03	0-0.06	0.62	0.02 (0.01)	0.02	0-0.05	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. Density 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 and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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	0.12 (0.11)	0.12	0-0.35	0.97	0.09 (0.08)	0.09	0-0.26	0.94	0.07 (0.06)	0.07	0-0.2	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	0.1 (0.09)	0.10	0-0.29	0.96	0.07 (0.07)	0.07	0-0.21	1.01	0.06 (0.05)	0.06	0-0.17	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. Density 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 and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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	0.38 (0.1)	0.38	0.21-0.57	0.25	0.42 (0.08)	0.43	0.28-0.6	0.19	0.48 (0.09)	0.48	0.31-0.67	0.19
Aug-2020	0.07 (0.03)	0.07	0.02-0.13	0.42	0.11 (0.03)	0.11	0.05-0.17	0.28	0.14 (0.04)	0.14	0.08-0.21	0.26
Sep-2020	0.04 (0.02)	0.03	0-0.07	0.53	0.03 (0.02)	0.03	0.01-0.07	0.44	0.03 (0.01)	0.03	0.01-0.06	0.41
Oct-2020	0.08 (0.03)	0.08	0.04-0.14	0.35	0.08 (0.02)	0.08	0.03-0.13	0.30	0.07 (0.02)	0.07	0.03-0.11	0.29
Nov-2020	0.06 (0.03)	0.06	0.01-0.12	0.48	0.07 (0.03)	0.07	0.03-0.13	0.37	0.06 (0.02)	0.06	0.02-0.1	0.34
Dec-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jan-2021	0.12 (0.04)	0.12	0.05-0.21	0.35	0.14 (0.04)	0.14	0.07-0.21	0.26	0.11 (0.03)	0.11	0.06-0.17	0.27
Feb-2021	0.02 (0.02)	0.02	0-0.06	0.68	0.02 (0.01)	0.02	0-0.04	0.65	0.03 (0.01)	0.03	0.01-0.05	0.46
Mar-2021	0.05 (0.03)	0.05	0-0.11	0.60	0.04 (0.02)	0.04	0.01-0.09	0.51	0.04 (0.02)	0.04	0.01-0.08	0.46
Apr-2021	0.31 (0.07)	0.31	0.18-0.45	0.23	0.29 (0.05)	0.30	0.2-0.42	0.18	0.33 (0.05)	0.33	0.24-0.43	0.15
May-2021	0.01 (0.01)	0.01	0-0.04	0.97	0.01 (0.01)	0.01	0-0.03	0.97	0.01 (0.01)	0.01	0-0.03	0.66
Jun-2021	0.01 (0.01)	0.01	0-0.04	0.89	0.01 (0.01)	0.01	0-0.03	0.92	0.01 (0.01)	0.01	0-0.03	0.58
Jul-2021	0.02 (0.01)	0.02	0-0.06	0.62	0.05 (0.02)	0.05	0.02-0.1	0.41	0.05 (0.02)	0.05	0.01-0.08	0.38
Aug-2021	0.25 (0.06)	0.24	0.13-0.37	0.25	0.26 (0.05)	0.26	0.16-0.36	0.19	0.23 (0.04)	0.23	0.15-0.31	0.18
Sep-2021	0.17 (0.05)	0.16	0.07-0.27	0.33	0.16 (0.04)	0.16	0.08-0.25	0.27	0.16 (0.04)	0.16	0.08-0.25	0.27
Oct-2021	0.04 (0.02)	0.04	0-0.08	0.56	0.08 (0.03)	0.08	0.03-0.13	0.34	0.07 (0.02)	0.07	0.03-0.12	0.30
Nov-2021	0.09 (0.03)	0.09	0.04-0.17	0.34	0.09 (0.03)	0.09	0.03-0.14	0.31	0.07 (0.02)	0.07	0.03-0.11	0.30
Dec-2021	0.08 (0.03)	0.08	0.02-0.15	0.40	0.09 (0.03)	0.09	0.03-0.15	0.32	0.07 (0.02)	0.07	0.03-0.12	0.29
Feb-2022	0.01 (0.01)	0.01	0-0.04	0.93	0.01 (0.01)	0.01	0-0.03	0.96	0.01 (0.01)	0.01	0-0.02	0.91
Feb-2022	0.02 (0.02)	0.02	0-0.06	0.66	0.02 (0.01)	0.02	0-0.04	0.63	0.01 (0.01)	0.01	0-0.03	0.65
Mar-2022	0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.03	0.94	0.01 (0.01)	0.01	0-0.02	0.94
Apr-2022	0.05 (0.03)	0.05	0.01-0.11	0.53	0.04 (0.02)	0.04	0.01-0.09	0.46	0.03 (0.02)	0.03	0.01-0.07	0.46
May-2022	0.07 (0.03)	0.07	0.01-0.14	0.48	0.1 (0.03)	0.10	0.04-0.17	0.36	0.12 (0.03)	0.12	0.06-0.18	0.25
Jun-2022	0.11 (0.04)	0.11	0.04-0.2	0.41	0.1 (0.04)	0.11	0.03-0.18	0.35	0.13 (0.03)	0.13	0.07-0.19	0.25
Jul-2022	0.39 (0.1)	0.39	0.21-0.59	0.26	0.35 (0.08)	0.35	0.2-0.51	0.23	0.35 (0.06)	0.35	0.24-0.49	0.19
Aug-2022	0.05 (0.03)	0.05	0-0.11	0.56	0.04 (0.02)	0.04	0.01-0.09	0.49	0.04 (0.02)	0.04	0.01-0.07	0.42
Sep-2022	0.17 (0.04)	0.17	0.1-0.25	0.25	0.18 (0.04)	0.18	0.1-0.26	0.23	0.15 (0.03)	0.15	0.09-0.21	0.21

## 1.4 Black Guillemot

**Table 4. Density 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 and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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	0.01(0.01)	0.01	0-0.04	0.9	0.01(0.01)	0.01	0-0.03	0.94	0.01(0.01)	0.01	0-0.02	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. Density 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 and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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	0.51 (0.15)	0.51	0.24-0.82	0.29	0.62 (0.13)	0.62	0.39-0.89	0.21	0.88 (0.15)	0.87	0.58-1.19	0.17
Aug-2020	1.75 (1)	1.72	0.17-3.97	0.57	1.33 (0.73)	1.32	0.11-2.87	0.55	1.11 (0.57)	1.13	0.21-2.33	0.51
Sep-2020	3.54 (1.98)	3.57	0.57-7.85	0.56	2.77 (1.5)	2.79	0.53-6.06	0.54	2.18 (1.15)	2.11	0.4-4.76	0.53
Oct-2020	1.16 (0.42)	1.15	0.52-2.09	0.36	1.27 (0.32)	1.27	0.73-1.92	0.25	2.39 (0.64)	2.36	1.3-3.62	0.27
Nov-2020	0.59 (0.4)	0.58	0.08-1.49	0.68	0.46 (0.29)	0.47	0.09-1.09	0.63	0.63 (0.27)	0.63	0.18-1.22	0.42
Dec-2020	0.6 (0.14)	0.61	0.34-0.92	0.24	0.99 (0.29)	0.99	0.49-1.57	0.29	0.9 (0.23)	0.91	0.52-1.38	0.25
Jan-2021	0.87 (0.32)	0.88	0.35-1.53	0.37	0.97 (0.29)	0.98	0.44-1.59	0.30	1.12 (0.24)	1.11	0.68-1.58	0.21
Feb-2021	0.12 (0.04)	0.12	0.04-0.21	0.38	0.13 (0.04)	0.13	0.06-0.21	0.28	0.12 (0.03)	0.12	0.07-0.18	0.25
Mar-2021	0.18 (0.06)	0.18	0.06-0.31	0.36	0.25 (0.09)	0.25	0.1-0.46	0.36	0.24 (0.07)	0.24	0.12-0.39	0.29
Apr-2021	0.32 (0.3)	0.33	0-0.95	0.93	0.25 (0.21)	0.25	0.01-0.71	0.83	0.22 (0.16)	0.21	0.02-0.58	0.73
May-2021	0 (0)	0.00	0-0		0.04 (0.02)	0.04	0-0.1	0.57	0.03 (0.02)	0.03	0-0.07	0.58
Jun-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2021	0.04 (0.02)	0.04	0-0.07	0.50	0.04 (0.02)	0.04	0.02-0.08	0.39	0.07 (0.02)	0.07	0.03-0.11	0.29
Aug-2021	1.05 (0.15)	1.05	0.77-1.35	0.14	1.01 (0.11)	1.02	0.81-1.26	0.11	1.02 (0.09)	1.01	0.84-1.18	0.09
Sep-2021	0.55 (0.11)	0.56	0.35-0.8	0.20	0.5 (0.08)	0.50	0.36-0.68	0.17	0.52 (0.08)	0.52	0.38-0.7	0.16
Oct-2021	1.19 (0.7)	1.21	0.17-2.81	0.59	1.02 (0.52)	1.01	0.25-2.17	0.51	0.98 (0.42)	0.96	0.29-1.85	0.43
Nov-2021	0.07 (0.03)	0.07	0.02-0.13	0.36	0.07 (0.02)	0.07	0.03-0.11	0.33	0.21 (0.13)	0.20	0.04-0.5	0.63
Dec-2021	0.73 (0.21)	0.74	0.37-1.18	0.28	0.77 (0.18)	0.77	0.46-1.16	0.24	0.72 (0.16)	0.73	0.44-1.06	0.21
Feb-2022	0.09 (0.03)	0.10	0.04-0.17	0.35	0.14 (0.04)	0.14	0.07-0.22	0.29	0.12 (0.03)	0.12	0.06-0.19	0.29
Feb-2022	0.28 (0.11)	0.28	0.08-0.52	0.40	0.26 (0.08)	0.26	0.12-0.42	0.31	0.27 (0.07)	0.26	0.15-0.4	0.24
Mar-2022	0.39 (0.09)	0.39	0.22-0.58	0.23	0.51 (0.12)	0.51	0.3-0.8	0.24	0.47 (0.1)	0.47	0.29-0.68	0.21
Apr-2022	0.05 (0.02)	0.05	0.01-0.08	0.43	0.03 (0.02)	0.03	0.01-0.07	0.44	0.04 (0.02)	0.04	0.01-0.07	0.38
May-2022	0.04 (0.02)	0.04	0-0.07	0.52	0.04 (0.02)	0.04	0.01-0.09	0.44	0.05 (0.02)	0.05	0.02-0.09	0.34
Jun-2022	0.04 (0.02)	0.04	0-0.07	0.54	0.03 (0.02)	0.03	0.01-0.07	0.45	0.05 (0.02)	0.05	0.02-0.08	0.33
Jul-2022	0.23 (0.1)	0.23	0.06-0.46	0.45	0.19 (0.08)	0.19	0.06-0.36	0.43	0.19 (0.07)	0.18	0.07-0.33	0.37
Aug-2022	0.04 (0.02)	0.04	0-0.07	0.55	0.06 (0.02)	0.06	0.02-0.11	0.39	0.1 (0.03)	0.10	0.05-0.16	0.28
Sep-2022	1.58 (0.19)	1.59	1.24-1.99	0.12	1.51 (0.15)	1.51	1.23-1.79	0.10	1.44 (0.12)	1.44	1.21-1.67	0.08

## 1.6 Gannet

**Table 6. Density 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 and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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	0.23 (0.18)	0.24	0.01-0.65	0.78	0.18 (0.13)	0.18	0.01-0.48	0.72	0.41 (0.26)	0.42	0.03-1.04	0.63
Aug-2020	2.55 (1.98)	2.60	0.11-7.19	0.78	1.88 (1.4)	1.91	0.1-5.09	0.74	1.49 (1.09)	1.51	0.11-4.01	0.73
Sep-2020	0.64 (0.11)	0.64	0.42-0.87	0.18	0.59 (0.1)	0.59	0.42-0.78	0.16	0.56 (0.08)	0.55	0.4-0.72	0.15
Oct-2020	0.6 (0.14)	0.60	0.35-0.91	0.24	0.55 (0.11)	0.55	0.36-0.76	0.20	0.52 (0.09)	0.52	0.36-0.7	0.17
Nov-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2020	0.04 (0.02)	0.04	0-0.08	0.63	0.04 (0.02)	0.04	0.01-0.09	0.47	0.03 (0.02)	0.03	0.01-0.07	0.45
Jan-2021	0.02 (0.02)	0.02	0-0.07	0.82	0.03 (0.02)	0.03	0-0.06	0.61	0.02 (0.01)	0.02	0-0.05	0.63
Feb-2021	0.01 (0.01)	0.01	0-0.04	0.96	0.01 (0.01)	0.01	0-0.03	0.95	0.01 (0.01)	0.01	0-0.02	0.94
Mar-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.03	0.61
Apr-2021	0.12 (0.04)	0.12	0.05-0.2	0.35	0.15 (0.04)	0.15	0.08-0.23	0.24	0.16 (0.03)	0.16	0.09-0.23	0.22
May-2021	0.15 (0.06)	0.15	0.06-0.27	0.37	0.23 (0.07)	0.23	0.1-0.38	0.32	0.19 (0.06)	0.19	0.1-0.31	0.28
Jun-2021	0.01 (0.01)	0.01	0-0.04	0.92	0.03 (0.01)	0.03	0-0.06	0.56	0.03 (0.01)	0.03	0.01-0.06	0.41
Jul-2021	0.07 (0.03)	0.07	0.02-0.12	0.37	0.1 (0.03)	0.09	0.03-0.16	0.35	0.11 (0.04)	0.12	0.05-0.19	0.32
Aug-2021	0.15 (0.04)	0.15	0.08-0.24	0.26	0.15 (0.04)	0.15	0.09-0.22	0.24	0.13 (0.03)	0.13	0.07-0.19	0.23
Sep-2021	0.37 (0.07)	0.37	0.24-0.51	0.19	0.31 (0.05)	0.31	0.21-0.42	0.17	0.51 (0.16)	0.51	0.28-0.88	0.32
Oct-2021	1.1 (0.17)	1.11	0.77-1.45	0.16	1.05 (0.14)	1.05	0.77-1.35	0.14	0.99 (0.12)	0.99	0.76-1.24	0.12
Nov-2021	0.01 (0.01)	0.01	0-0.04	0.90	0.03 (0.01)	0.03	0-0.05	0.53	0.03 (0.01)	0.03	0.01-0.05	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		0.01 (0.01)	0.01	0-0.02	0.91
Feb-2022	0.01 (0.01)	0.01	0-0.04	0.83	0.01 (0.01)	0.01	0-0.03	0.84	0.01 (0.01)	0.01	0-0.03	0.65
Mar-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2022	0.64 (0.12)	0.64	0.44-0.87	0.18	0.59 (0.09)	0.59	0.41-0.77	0.16	0.53 (0.07)	0.54	0.39-0.68	0.14
May-2022	0.14 (0.04)	0.14	0.07-0.22	0.28	0.17 (0.04)	0.17	0.1-0.24	0.22	0.2 (0.05)	0.20	0.12-0.31	0.23
Jun-2022	0.37 (0.11)	0.37	0.17-0.61	0.31	0.36 (0.09)	0.35	0.19-0.54	0.25	0.35 (0.07)	0.35	0.23-0.48	0.19
Jul-2022	0.22 (0.05)	0.22	0.12-0.33	0.23	0.19 (0.04)	0.19	0.12-0.27	0.21	0.16 (0.03)	0.16	0.11-0.23	0.19
Aug-2022	0.15 (0.04)	0.15	0.08-0.23	0.24	0.15 (0.03)	0.15	0.1-0.21	0.20	0.17 (0.03)	0.17	0.11-0.22	0.18
Sep-2022	0.23 (0.06)	0.23	0.12-0.35	0.25	0.26 (0.05)	0.25	0.16-0.35	0.20	0.28 (0.06)	0.28	0.18-0.39	0.20

## 1.7 Great Black-backed Gull

**Table 7. Density 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 and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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		0.01 (0.01)	0.01	0-0.03	0.89	0.01 (0.01)	0.01	0-0.02	0.94
Nov-2020	0.07 (0.03)	0.07	0.01-0.13	0.41	0.05 (0.02)	0.05	0.01-0.1	0.44	0.04 (0.02)	0.04	0.01-0.07	0.43
Dec-2020	0.01 (0.01)	0.01	0-0.04	0.94	0.05 (0.02)	0.05	0.02-0.1	0.42	0.04 (0.02)	0.04	0.01-0.07	0.41
Jan-2021	0.06 (0.02)	0.06	0.01-0.11	0.40	0.04 (0.02)	0.04	0.02-0.08	0.39	0.05 (0.02)	0.05	0.02-0.09	0.31
Feb-2021	0.04 (0.02)	0.03	0-0.08	0.54	0.16 (0.11)	0.15	0.02-0.41	0.74	0.14 (0.1)	0.15	0.02-0.37	0.74
Mar-2021	0.02 (0.02)	0.02	0-0.06	0.64	0.03 (0.01)	0.03	0-0.05	0.52	0.02 (0.01)	0.02	0-0.04	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	0.17 (0.05)	0.16	0.07-0.27	0.30	0.16 (0.04)	0.17	0.09-0.24	0.24	0.15 (0.03)	0.15	0.09-0.21	0.22
Dec-2021	0.24 (0.07)	0.24	0.12-0.39	0.30	0.25 (0.06)	0.25	0.15-0.38	0.24	0.24 (0.05)	0.24	0.15-0.35	0.21
Feb-2022	0.06 (0.03)	0.06	0-0.12	0.52	0.04 (0.02)	0.04	0-0.09	0.51	0.07 (0.02)	0.07	0.03-0.11	0.32
Feb-2022	0.13 (0.05)	0.13	0.05-0.22	0.36	0.1 (0.03)	0.10	0.03-0.16	0.36	0.09 (0.03)	0.09	0.04-0.14	0.29
Mar-2022	0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.03	0.93	0.01 (0.01)	0.01	0-0.03	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. Density 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 and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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	0.01 (0.01)	0.01	0-0.04	0.91	0.01 (0.01)	0.01	0-0.03	0.93	0.01 (0.01)	0.01	0-0.02	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	0.01 (0.01)	0.01	0-0.04	0.88	0.01 (0.01)	0.01	0-0.03	0.93	0.01 (0.01)	0.01	0-0.02	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. Density 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 and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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	0.01 (0.01)	0.01	0-0.04	0.90	0.01 (0.01)	0.01	0-0.03	0.88	0.01 (0.01)	0.01	0-0.02	0.84
Aug-2020	0.36 (0.3)	0.36	0-1.01	0.83	0.27 (0.23)	0.28	0-0.8	0.84	0.21 (0.17)	0.21	0-0.62	0.84
Sep-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2020	0.01 (0.01)	0.01	0-0.04	0.92	0.01 (0.01)	0.01	0-0.03	0.92	0.01 (0.01)	0.01	0-0.02	0.92
Nov-2020	0.01 (0.01)	0.01	0-0.04	0.87	0.01 (0.01)	0.01	0-0.03	0.94	0.01 (0.01)	0.01	0-0.02	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	0.01 (0.01)	0.01	0-0.04	0.92	0.02 (0.01)	0.02	0-0.04	0.61	0.03 (0.01)	0.03	0-0.05	0.43
May-2021	0.01 (0.01)	0.01	0-0.04	0.92	0.01 (0.01)	0.01	0-0.03	0.93	0.01 (0.01)	0.01	0-0.03	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	0.04 (0.03)	0.04	0-0.11	0.91	0.03 (0.02)	0.03	0-0.08	0.91	0.02 (0.02)	0.02	0-0.06	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	0.01 (0.01)	0.01	0-0.04	0.91	0.01 (0.01)	0.01	0-0.03	0.90	0.01 (0.01)	0.01	0-0.02	0.90
May-2022	0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.03	0.88	0.01 (0.01)	0.01	0-0.03	0.60
Jun-2022	0.05 (0.02)	0.05	0.01-0.09	0.48	0.03 (0.02)	0.04	0.01-0.07	0.47	0.03 (0.01)	0.03	0.01-0.07	0.42
Jul-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.02	0.93
Aug-2022	0.01 (0.01)	0.01	0-0.04	0.95	0.01 (0.01)	0.01	0-0.03	0.92	0.01 (0.01)	0.01	0-0.02	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. Density 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 and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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	3.05 (0.56)	3.02	1.97-4.13	0.18	3.17 (0.42)	3.14	2.32-3.96	0.13	2.98 (0.34)	2.98	2.32-3.64	0.11
Aug-2020	0.87 (0.15)	0.87	0.58-1.18	0.17	1.05 (0.15)	1.05	0.76-1.35	0.15	1.12 (0.13)	1.13	0.89-1.4	0.12
Sep-2020	3.49 (0.46)	3.49	2.63-4.4	0.13	3.72 (0.36)	3.74	3.01-4.44	0.10	3.5 (0.29)	3.50	2.93-4.08	0.08
Oct-2020	2.79 (0.44)	2.77	1.96-3.64	0.16	3.32 (0.41)	3.31	2.54-4.19	0.12	3.16 (0.31)	3.17	2.6-3.81	0.10
Nov-2020	0.27 (0.05)	0.27	0.18-0.38	0.19	0.4 (0.07)	0.40	0.27-0.54	0.17	0.4 (0.06)	0.39	0.29-0.51	0.15
Dec-2020	0.41 (0.09)	0.41	0.24-0.58	0.21	0.59 (0.1)	0.59	0.41-0.79	0.17	0.66 (0.08)	0.67	0.52-0.83	0.12
Jan-2021	0.83 (0.14)	0.83	0.55-1.13	0.17	1.08 (0.14)	1.09	0.84-1.37	0.13	1.12 (0.13)	1.11	0.87-1.37	0.12
Feb-2021	2.21 (0.6)	2.23	1.23-3.48	0.27	1.92 (0.45)	1.93	1.22-2.89	0.23	1.82 (0.33)	1.82	1.25-2.53	0.18
Mar-2021	1.94 (0.23)	1.92	1.5-2.37	0.12	2.05 (0.22)	2.05	1.64-2.5	0.11	2.4 (0.3)	2.39	1.86-3.01	0.12
Apr-2021	5.09 (0.67)	5.08	3.8-6.36	0.13	5.43 (0.5)	5.39	4.43-6.41	0.09	5.98 (0.42)	5.96	5.19-6.81	0.07
May-2021	0.25 (0.08)	0.25	0.11-0.44	0.34	0.31 (0.11)	0.31	0.14-0.55	0.34	0.49 (0.14)	0.47	0.23-0.78	0.29
Jun-2021	0.86 (0.25)	0.89	0.46-1.42	0.29	0.78 (0.19)	0.77	0.43-1.17	0.24	0.86 (0.16)	0.85	0.57-1.2	0.19
Jul-2021	0.73 (0.15)	0.74	0.46-1.04	0.20	0.94 (0.18)	0.96	0.64-1.35	0.19	1.12 (0.15)	1.11	0.84-1.41	0.13
Aug-2021	2.47 (0.26)	2.46	1.97-2.95	0.10	2.73 (0.29)	2.73	2.2-3.28	0.11	2.86 (0.23)	2.87	2.43-3.32	0.08
Sep-2021	3.58 (0.37)	3.58	2.9-4.29	0.10	3.43 (0.29)	3.43	2.9-3.99	0.08	3.6 (0.25)	3.60	3.13-4.11	0.07
Oct-2021	2.07 (0.26)	2.08	1.58-2.62	0.12	2.14 (0.22)	2.15	1.74-2.58	0.10	2.14 (0.17)	2.14	1.83-2.47	0.08
Nov-2021	0.88 (0.15)	0.88	0.59-1.18	0.17	0.81 (0.12)	0.81	0.59-1.05	0.14	0.87 (0.09)	0.87	0.7-1.04	0.10
Dec-2021	1.05 (0.15)	1.05	0.77-1.35	0.14	1.28 (0.14)	1.28	1.01-1.56	0.11	1.39 (0.12)	1.39	1.15-1.64	0.09
Feb-2022	0.11 (0.03)	0.11	0.05-0.17	0.31	0.16 (0.03)	0.17	0.1-0.23	0.21	0.25 (0.04)	0.25	0.17-0.33	0.16
Feb-2022	0.41 (0.08)	0.41	0.26-0.58	0.20	0.45 (0.07)	0.45	0.32-0.61	0.15	0.46 (0.06)	0.45	0.33-0.6	0.14
Mar-2022	0.2 (0.06)	0.20	0.09-0.33	0.32	0.27 (0.05)	0.27	0.16-0.38	0.20	0.28 (0.05)	0.28	0.19-0.39	0.17
Apr-2022	1.36 (0.2)	1.35	0.98-1.76	0.15	1.31 (0.16)	1.32	1.02-1.63	0.12	1.37 (0.13)	1.37	1.12-1.62	0.09
May-2022	1.04 (0.19)	1.04	0.66-1.42	0.19	1.11 (0.19)	1.11	0.75-1.5	0.17	1.66 (0.31)	1.64	1.07-2.3	0.19
Jun-2022	2.29 (0.6)	2.25	1.19-3.52	0.26	1.92 (0.47)	1.92	1.09-2.91	0.24	1.74 (0.38)	1.78	1.14-2.62	0.22
Jul-2022	6.22 (1.05)	6.24	4.35-8.41	0.17	7.22 (1.09)	7.22	5.1-9.43	0.15	6.4 (0.81)	6.40	4.88-8.16	0.13
Aug-2022	3 (0.65)	3.00	1.81-4.3	0.22	3.67 (0.61)	3.66	2.46-4.83	0.17	4.86 (0.64)	4.88	3.7-6.11	0.13
Sep-2022	2.88 (0.5)	2.83	1.95-3.84	0.17	3.22 (0.48)	3.24	2.38-4.23	0.15	3.84 (0.53)	3.84	2.83-4.97	0.14

**Table 11. Density 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 and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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	3.34 (0.61)	3.30	2.15-4.51	0.18	3.46 (0.46)	3.43	2.54-4.33	0.13	3.25 (0.37)	3.25	2.53-3.97	0.11
Aug-2020	0.95 (0.16)	0.94	0.63-1.27	0.17	1.12 (0.17)	1.12	0.81-1.45	0.15	1.21 (0.14)	1.22	0.96-1.51	0.12
Sep-2020	3.59 (0.47)	3.59	2.7-4.52	0.13	3.8 (0.37)	3.82	3.09-4.54	0.10	3.58 (0.3)	3.58	3-4.18	0.08
Oct-2020	2.93 (0.46)	2.91	2.06-3.82	0.16	3.49 (0.44)	3.48	2.67-4.41	0.12	3.3 (0.33)	3.31	2.72-3.98	0.10
Nov-2020	0.35 (0.07)	0.36	0.23-0.49	0.19	0.5 (0.09)	0.50	0.34-0.68	0.17	0.49 (0.07)	0.49	0.36-0.63	0.15
Dec-2020	0.45 (0.09)	0.44	0.26-0.63	0.21	0.66 (0.11)	0.66	0.46-0.88	0.17	0.73 (0.09)	0.73	0.57-0.91	0.12
Jan-2021	0.97 (0.17)	0.97	0.65-1.33	0.17	1.25 (0.16)	1.25	0.97-1.58	0.13	1.27 (0.15)	1.26	0.99-1.56	0.12
Feb-2021	2.28 (0.62)	2.31	1.27-3.59	0.27	1.98 (0.46)	1.99	1.26-2.98	0.23	1.88 (0.34)	1.88	1.29-2.61	0.18
Mar-2021	2.09 (0.25)	2.08	1.62-2.56	0.12	2.2 (0.23)	2.20	1.75-2.68	0.11	2.54 (0.31)	2.53	1.96-3.17	0.12
Apr-2021	5.47 (0.72)	5.45	4.09-6.83	0.13	5.79 (0.54)	5.75	4.72-6.83	0.09	6.37 (0.45)	6.34	5.53-7.25	0.07
May-2021	0.26 (0.09)	0.26	0.11-0.46	0.34	0.32 (0.11)	0.32	0.14-0.56	0.34	0.5 (0.14)	0.49	0.24-0.8	0.29
Jun-2021	0.87 (0.26)	0.90	0.47-1.44	0.29	0.79 (0.19)	0.78	0.44-1.18	0.24	0.86 (0.17)	0.86	0.57-1.21	0.19
Jul-2021	0.74 (0.15)	0.76	0.47-1.06	0.20	0.96 (0.19)	0.97	0.65-1.38	0.19	1.14 (0.15)	1.13	0.86-1.44	0.13
Aug-2021	2.63 (0.27)	2.62	2.1-3.15	0.10	2.9 (0.31)	2.91	2.34-3.49	0.11	3.01 (0.24)	3.02	2.55-3.49	0.08
Sep-2021	3.78 (0.39)	3.78	3.07-4.53	0.10	3.6 (0.3)	3.59	3.04-4.19	0.08	3.76 (0.26)	3.76	3.27-4.3	0.07
Oct-2021	2.21 (0.27)	2.22	1.69-2.8	0.12	2.32 (0.23)	2.32	1.88-2.78	0.10	2.33 (0.19)	2.33	1.99-2.69	0.08
Nov-2021	1.04 (0.18)	1.03	0.69-1.38	0.17	0.96 (0.14)	0.96	0.7-1.24	0.14	0.99 (0.1)	0.99	0.8-1.19	0.10
Dec-2021	1.24 (0.17)	1.24	0.91-1.59	0.14	1.5 (0.17)	1.50	1.19-1.82	0.11	1.57 (0.14)	1.57	1.3-1.86	0.09
Feb-2022	0.12 (0.04)	0.12	0.05-0.18	0.31	0.18 (0.04)	0.18	0.11-0.26	0.21	0.29 (0.05)	0.30	0.21-0.39	0.16
Feb-2022	0.48 (0.09)	0.48	0.3-0.68	0.20	0.55 (0.08)	0.55	0.39-0.73	0.15	0.54 (0.08)	0.53	0.39-0.7	0.14
Mar-2022	0.25 (0.08)	0.25	0.12-0.41	0.32	0.32 (0.06)	0.32	0.2-0.46	0.20	0.35 (0.06)	0.35	0.24-0.48	0.17
Apr-2022	1.39 (0.2)	1.38	1-1.8	0.15	1.35 (0.16)	1.36	1.05-1.68	0.12	1.41 (0.13)	1.41	1.15-1.67	0.09
May-2022	1.06 (0.2)	1.06	0.68-1.45	0.19	1.14 (0.2)	1.14	0.76-1.54	0.17	1.72 (0.33)	1.71	1.11-2.39	0.19
Jun-2022	2.35 (0.62)	2.31	1.22-3.61	0.26	1.97 (0.48)	1.96	1.12-2.98	0.24	1.79 (0.39)	1.83	1.17-2.69	0.22
Jul-2022	6.53 (1.1)	6.54	4.56-8.82	0.17	7.54 (1.14)	7.54	5.33-9.85	0.15	6.72 (0.85)	6.72	5.13-8.57	0.13
Aug-2022	3.02 (0.66)	3.02	1.82-4.34	0.22	3.7 (0.61)	3.69	2.48-4.86	0.17	4.91 (0.64)	4.92	3.74-6.17	0.13
Sep-2022	3.03 (0.52)	2.98	2.06-4.05	0.17	3.42 (0.51)	3.45	2.53-4.49	0.15	4.02 (0.56)	4.02	2.96-5.21	0.14

**Table 12. Density 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% in the OAA, OAA plus 2 km buffer and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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	4.37 (0.8)	4.33	2.82-5.91	0.18	4.54 (0.61)	4.50	3.33-5.67	0.13	4.26 (0.49)	4.26	3.32-5.21	0.11
Aug-2020	1.24 (0.21)	1.23	0.82-1.67	0.17	1.47 (0.22)	1.46	1.06-1.89	0.15	1.59 (0.19)	1.60	1.26-1.98	0.12
Sep-2020	4.7 (0.62)	4.69	3.54-5.92	0.13	4.98 (0.49)	5.01	4.04-5.95	0.10	4.69 (0.39)	4.70	3.93-5.48	0.08
Oct-2020	3.84 (0.6)	3.81	2.7-5.01	0.16	4.58 (0.57)	4.56	3.5-5.77	0.12	4.33 (0.43)	4.34	3.56-5.21	0.10
Nov-2020	0.46 (0.09)	0.47	0.3-0.64	0.19	0.66 (0.11)	0.66	0.44-0.89	0.17	0.64 (0.09)	0.64	0.47-0.83	0.15
Dec-2020	0.59 (0.12)	0.58	0.34-0.83	0.21	0.87 (0.14)	0.86	0.6-1.16	0.17	0.96 (0.11)	0.96	0.74-1.2	0.12
Jan-2021	1.27 (0.22)	1.27	0.86-1.75	0.17	1.64 (0.21)	1.65	1.27-2.07	0.13	1.67 (0.2)	1.66	1.3-2.05	0.12
Feb-2021	2.99 (0.82)	3.02	1.66-4.71	0.27	2.6 (0.61)	2.60	1.65-3.91	0.23	2.46 (0.44)	2.46	1.69-3.42	0.18
Mar-2021	2.74 (0.33)	2.72	2.12-3.36	0.12	2.88 (0.31)	2.89	2.3-3.52	0.11	3.33 (0.41)	3.31	2.58-4.16	0.12
Apr-2021	7.17 (0.94)	7.15	5.36-8.95	0.13	7.58 (0.7)	7.53	6.19-8.95	0.09	8.35 (0.59)	8.31	7.24-9.51	0.07
May-2021	0.34 (0.12)	0.35	0.15-0.6	0.34	0.42 (0.15)	0.42	0.19-0.74	0.34	0.66 (0.19)	0.64	0.31-1.04	0.29
Jun-2021	1.15 (0.34)	1.18	0.61-1.88	0.29	1.03 (0.25)	1.02	0.57-1.55	0.24	1.13 (0.22)	1.12	0.75-1.58	0.19
Jul-2021	0.98 (0.2)	1.00	0.62-1.39	0.20	1.27 (0.25)	1.28	0.86-1.81	0.19	1.49 (0.2)	1.48	1.13-1.89	0.13
Aug-2021	3.44 (0.36)	3.43	2.75-4.12	0.10	3.8 (0.4)	3.81	3.07-4.57	0.11	3.95 (0.31)	3.96	3.35-4.58	0.08
Sep-2021	4.96 (0.51)	4.96	4.03-5.94	0.10	4.71 (0.39)	4.71	3.99-5.49	0.08	4.92 (0.34)	4.93	4.29-5.63	0.07
Oct-2021	2.89 (0.36)	2.91	2.22-3.67	0.12	3.03 (0.31)	3.04	2.47-3.65	0.10	3.06 (0.24)	3.05	2.61-3.52	0.08
Nov-2021	1.36 (0.24)	1.34	0.9-1.81	0.17	1.26 (0.18)	1.26	0.91-1.63	0.14	1.3 (0.13)	1.30	1.05-1.56	0.10
Dec-2021	1.63 (0.23)	1.63	1.19-2.09	0.14	1.96 (0.22)	1.96	1.55-2.38	0.11	2.06 (0.18)	2.06	1.7-2.44	0.09
Feb-2022	0.15 (0.05)	0.15	0.07-0.24	0.31	0.24 (0.05)	0.25	0.15-0.34	0.21	0.39 (0.06)	0.39	0.27-0.51	0.16
Feb-2022	0.64 (0.12)	0.63	0.4-0.89	0.20	0.72 (0.11)	0.72	0.51-0.97	0.15	0.7 (0.1)	0.70	0.52-0.92	0.14
Mar-2022	0.33 (0.1)	0.33	0.16-0.55	0.32	0.42 (0.09)	0.42	0.26-0.6	0.20	0.46 (0.08)	0.46	0.31-0.63	0.17
Apr-2022	1.83 (0.27)	1.81	1.32-2.37	0.15	1.77 (0.21)	1.79	1.39-2.21	0.12	1.85 (0.17)	1.85	1.51-2.19	0.09
May-2022	1.4 (0.26)	1.39	0.89-1.9	0.19	1.49 (0.26)	1.49	1-2.02	0.17	2.26 (0.43)	2.24	1.46-3.13	0.19
Jun-2022	3.08 (0.81)	3.03	1.6-4.73	0.26	2.58 (0.63)	2.57	1.46-3.91	0.24	2.34 (0.52)	2.39	1.53-3.52	0.22
Jul-2022	8.56 (1.44)	8.58	5.98-11.56	0.17	9.88 (1.49)	9.88	6.98-12.91	0.15	8.8 (1.12)	8.80	6.72-11.23	0.13
Aug-2022	3.96 (0.86)	3.96	2.39-5.69	0.22	4.85 (0.8)	4.84	3.25-6.37	0.17	6.43 (0.84)	6.45	4.9-8.09	0.13
Sep-2022	3.97 (0.69)	3.91	2.69-5.3	0.17	4.48 (0.67)	4.52	3.31-5.89	0.15	5.27 (0.73)	5.27	3.89-6.82	0.14

## 1.11 Herring Gull

**Table 13. Density 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 and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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	0.01(0.01)	0.01	0-0.04	0.88	0.01(0.01)	0.01	0-0.03	0.95	0.01(0.01)	0.01	0-0.02	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		0.02 (0.01)	0.02	0-0.05	0.85	0.01(0.01)	0.01	0-0.04	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	0.01(0.01)	0.01	0-0.04	0.92	0.01(0.01)	0.01	0-0.03	0.90	0.01(0.01)	0.01	0-0.02	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	0.01(0.01)	0.01	0-0.04	0.96	0.01(0.01)	0.01	0-0.03	0.92	0.01(0.01)	0.01	0-0.02	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 Kitiwake

**Table 14. Density 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 and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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	0.1 (0.06)	0.10	0.01-0.23	0.61	0.09 (0.05)	0.09	0.02-0.19	0.51	0.08 (0.04)	0.08	0.02-0.16	0.43
Aug-2020	0.07 (0.03)	0.08	0.02-0.13	0.39	0.05 (0.02)	0.05	0.02-0.1	0.40	0.07 (0.02)	0.07	0.03-0.1	0.29
Sep-2020	0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.03	0.82	0.01 (0.01)	0.01	0-0.02	0.83
Oct-2020	0.51 (0.21)	0.50	0.18-0.96	0.41	0.48 (0.16)	0.47	0.19-0.83	0.34	0.5 (0.15)	0.51	0.25-0.83	0.30
Nov-2020	0.02 (0.02)	0.02	0-0.06	0.65	0.02 (0.01)	0.02	0-0.04	0.65	0.01 (0.01)	0.01	0-0.03	0.62
Dec-2020	0.06 (0.03)	0.06	0.01-0.13	0.54	0.04 (0.02)	0.04	0-0.1	0.56	0.04 (0.02)	0.04	0.01-0.08	0.48
Jan-2021	0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.03	0.97	0.02 (0.01)	0.02	0-0.04	0.53
Feb-2021	0.14 (0.06)	0.14	0.04-0.27	0.41	0.1 (0.04)	0.10	0.03-0.2	0.41	0.09 (0.03)	0.09	0.03-0.16	0.38
Mar-2021	0.64 (0.19)	0.64	0.28-1.03	0.29	0.61 (0.15)	0.61	0.34-0.89	0.25	0.7 (0.12)	0.70	0.48-0.96	0.17
Apr-2021	0.04 (0.02)	0.03	0-0.09	0.69	0.03 (0.02)	0.03	0-0.07	0.72	0.02 (0.01)	0.02	0-0.05	0.69
May-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jun-2021	0.15 (0.12)	0.15	0-0.41	0.79	0.12 (0.09)	0.12	0-0.32	0.75	0.11 (0.07)	0.11	0.01-0.27	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	0.01 (0.01)	0.01	0-0.04	0.91	0.01 (0.01)	0.01	0-0.03	0.95	0.01 (0.01)	0.01	0-0.03	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	0.05 (0.02)	0.05	0.01-0.09	0.45	0.05 (0.02)	0.05	0.02-0.1	0.43	0.05 (0.02)	0.05	0.02-0.09	0.35
Mar-2022	0.45 (0.15)	0.45	0.17-0.76	0.34	0.42 (0.12)	0.42	0.22-0.69	0.28	0.46 (0.1)	0.46	0.29-0.66	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		0.01 (0.01)	0.01	0-0.03	0.93	0.01 (0.01)	0.01	0-0.02	0.92
Jun-2022	0.08 (0.07)	0.08	0-0.24	0.82	0.06 (0.05)	0.06	0-0.17	0.84	0.05 (0.04)	0.05	0-0.13	0.81
Jul-2022	0.91 (0.46)	0.91	0.17-1.89	0.51	0.72 (0.35)	0.73	0.14-1.53	0.49	0.61 (0.25)	0.61	0.2-1.14	0.42
Aug-2022	0.01 (0.01)	0.01	0-0.04	0.95	0.01 (0.01)	0.01	0-0.03	0.95	0.03 (0.02)	0.03	0-0.07	0.70
Sep-2022	0.01 (0.01)	0.01	0-0.04	0.92	0.01 (0.01)	0.01	0-0.03	0.92	0.01 (0.01)	0.01	0-0.02	0.95

### 1.13 Large Auk sp.

**Table 15. Density 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 and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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	0.04 (0.02)	0.04	0-0.08	0.65	0.03 (0.02)	0.03	0-0.06	0.64	0.03 (0.02)	0.04	0.01-0.07	0.45
Sep-2020	0.06 (0.02)	0.06	0.01-0.11	0.39	0.05 (0.02)	0.05	0.02-0.09	0.34	0.05 (0.02)	0.05	0.02-0.08	0.35
Oct-2020	0.06 (0.02)	0.06	0.02-0.11	0.39	0.1 (0.03)	0.09	0.04-0.16	0.33	0.07 (0.02)	0.07	0.03-0.12	0.33
Nov-2020	0.02 (0.02)	0.02	0-0.06	0.66	0.03 (0.02)	0.03	0.01-0.07	0.45	0.03 (0.01)	0.03	0.01-0.06	0.39
Dec-2020	0.04 (0.02)	0.04	0-0.08	0.68	0.07 (0.03)	0.07	0.03-0.12	0.36	0.07 (0.02)	0.07	0.03-0.11	0.31
Jan-2021	0.02 (0.02)	0.02	0-0.06	0.70	0.03 (0.01)	0.03	0-0.05	0.54	0.05 (0.02)	0.05	0.01-0.09	0.38
Feb-2021	0.05 (0.03)	0.05	0-0.12	0.70	0.04 (0.02)	0.04	0.01-0.09	0.53	0.03 (0.02)	0.03	0.01-0.07	0.55
Mar-2021	0.11 (0.04)	0.11	0.04-0.2	0.39	0.1 (0.03)	0.10	0.04-0.17	0.31	0.09 (0.03)	0.09	0.05-0.15	0.29
Apr-2021	0.13 (0.04)	0.13	0.06-0.2	0.29	0.12 (0.03)	0.12	0.06-0.18	0.25	0.12 (0.02)	0.12	0.07-0.17	0.20
May-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.02	0.92
Jun-2021	0.01 (0.01)	0.01	0-0.04	0.98	0.01 (0.01)	0.01	0-0.03	0.94	0.01 (0.01)	0.01	0-0.02	0.94
Jul-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.02	0.79
Aug-2021	0.02 (0.02)	0.02	0-0.06	0.64	0.02 (0.01)	0.02	0-0.04	0.65	0.01 (0.01)	0.01	0-0.03	0.66
Sep-2021	0.11 (0.07)	0.11	0-0.26	0.65	0.08 (0.05)	0.08	0-0.19	0.66	0.07 (0.04)	0.07	0.01-0.15	0.60
Oct-2021	0.11 (0.03)	0.11	0.05-0.18	0.30	0.1 (0.03)	0.10	0.06-0.16	0.24	0.12 (0.02)	0.12	0.07-0.17	0.20
Nov-2021	0.06 (0.02)	0.06	0.02-0.11	0.39	0.06 (0.02)	0.06	0.02-0.1	0.34	0.05 (0.02)	0.05	0.02-0.09	0.31
Dec-2021	0.11 (0.04)	0.11	0.04-0.19	0.38	0.13 (0.04)	0.13	0.05-0.23	0.34	0.11 (0.03)	0.12	0.05-0.19	0.30
Feb-2022	0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.03	0.85	0.04 (0.02)	0.04	0.01-0.07	0.42
Feb-2022	0.06 (0.03)	0.06	0.01-0.12	0.44	0.09 (0.03)	0.09	0.03-0.14	0.31	0.07 (0.02)	0.07	0.03-0.12	0.29
Mar-2022	0.07 (0.03)	0.07	0.01-0.14	0.43	0.07 (0.03)	0.07	0.03-0.11	0.36	0.08 (0.03)	0.08	0.03-0.13	0.35
Apr-2022	0.01 (0.01)	0.01	0-0.04	0.96	0.02 (0.01)	0.02	0-0.04	0.65	0.02 (0.01)	0.02	0-0.04	0.53
May-2022	0.01 (0.01)	0.01	0-0.04	0.97	0.01 (0.01)	0.01	0-0.03	0.96	0.03 (0.02)	0.03	0-0.07	0.61
Jun-2022	0.02 (0.02)	0.02	0-0.07	0.96	0.02 (0.02)	0.02	0-0.05	0.95	0.01 (0.01)	0.01	0-0.04	0.95
Jul-2022	0.07 (0.04)	0.07	0.01-0.15	0.51	0.11 (0.04)	0.11	0.04-0.19	0.36	0.12 (0.04)	0.12	0.05-0.2	0.30
Aug-2022	0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.03	0.94	0.03 (0.01)	0.03	0.01-0.05	0.45
Sep-2022	0.02 (0.02)	0.03	0-0.07	0.96	0.07 (0.05)	0.07	0-0.18	0.65	0.07 (0.04)	0.07	0.01-0.14	0.52

## 1.14 Lesser Black-backed Gull

**Table 16. Density 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 and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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	0.01(0.01)	0.01	0-0.04	0.91	0.01(0.01)	0.01	0-0.03	0.95	0.01(0.01)	0.01	0-0.03	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. Density 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 and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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	0.01(0.01)	0.01	0-0.04	0.91	0.01(0.01)	0.01	0-0.03	0.98	0.01(0.01)	0.01	0-0.02	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	0.01(0.01)	0.01	0-0.04	0.90	0.03(0.01)	0.03	0-0.05	0.52	0.03(0.01)	0.03	0-0.06	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		0.01(0.01)	0.01	0-0.03	0.96	0.01(0.01)	0.01	0-0.02	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. Density 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 and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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		0.01(0.01)	0.01	0-0.02	0.93
Aug-2022	0.01(0.01)	0.01	0-0.04	0.83	0.01(0.01)	0.01	0-0.03	0.82	0.01(0.01)	0.01	0-0.03	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. Density 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 and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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	1.1 (0.16)	1.11	0.81-1.45	0.15	1.39 (0.2)	1.40	1.04-1.81	0.14	2.22 (0.64)	2.25	1.27-3.71	0.29
Aug-2020	1.12 (0.2)	1.12	0.74-1.5	0.18	1.36 (0.2)	1.36	0.97-1.75	0.15	1.8 (0.26)	1.79	1.33-2.33	0.14
Sep-2020	0.17 (0.05)	0.17	0.08-0.26	0.28	0.16 (0.04)	0.16	0.09-0.23	0.24	0.17 (0.03)	0.17	0.11-0.25	0.20
Oct-2020	0.12 (0.04)	0.12	0.05-0.19	0.32	0.11 (0.03)	0.11	0.06-0.17	0.27	0.11 (0.03)	0.11	0.06-0.15	0.23
Nov-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.02	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		0.01 (0.01)	0.01	0-0.03	0.97	0.01 (0.01)	0.01	0-0.02	0.93
Feb-2021	0.01 (0.01)	0.01	0-0.04	0.89	0.01 (0.01)	0.01	0-0.03	0.91	0.01 (0.01)	0.01	0-0.02	0.88
Mar-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2021	1.25 (0.21)	1.27	0.9-1.69	0.17	1.2 (0.16)	1.19	0.9-1.52	0.14	1.15 (0.12)	1.16	0.92-1.39	0.11
May-2021	0.15 (0.05)	0.15	0.06-0.26	0.35	0.23 (0.05)	0.22	0.12-0.34	0.24	0.35 (0.08)	0.35	0.21-0.52	0.23
Jun-2021	4.88 (0.8)	4.85	3.44-6.58	0.16	4.34 (0.62)	4.36	3.25-5.64	0.14	4.3 (0.53)	4.30	3.34-5.4	0.12
Jul-2021	1.64 (0.26)	1.65	1.18-2.19	0.16	1.98 (0.25)	2.00	1.55-2.51	0.13	2.12 (0.22)	2.13	1.71-2.56	0.11
Aug-2021	1.69 (0.25)	1.67	1.19-2.19	0.15	1.84 (0.2)	1.83	1.46-2.23	0.11	1.98 (0.18)	1.98	1.65-2.34	0.09
Sep-2021	2.74 (0.4)	2.74	2.07-3.64	0.15	2.54 (0.3)	2.54	1.98-3.15	0.12	2.38 (0.22)	2.38	2-2.81	0.09
Oct-2021	0.22 (0.05)	0.22	0.12-0.34	0.24	0.2 (0.04)	0.20	0.12-0.29	0.22	0.17 (0.04)	0.17	0.11-0.25	0.20
Nov-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2021	0.01 (0.01)	0.01	0-0.04	0.93	0.01 (0.01)	0.01	0-0.03	0.93	0.01 (0.01)	0.01	0-0.03	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	1.03 (0.15)	1.03	0.73-1.32	0.14	0.99 (0.11)	0.99	0.8-1.19	0.11	0.88 (0.09)	0.88	0.71-1.05	0.10
May-2022	3.45 (0.67)	3.44	2.25-4.78	0.19	3.99 (0.57)	3.97	2.9-5.12	0.14	4.46 (0.48)	4.48	3.59-5.46	0.11
Jun-2022	5.71 (1.21)	5.71	3.56-8.21	0.21	5.24 (0.87)	5.24	3.68-7.01	0.17	5.15 (0.73)	5.11	3.82-6.57	0.14
Jul-2022	4.22 (0.62)	4.22	3.08-5.45	0.15	4.55 (0.59)	4.58	3.44-5.77	0.13	4.57 (0.58)	4.50	3.37-5.71	0.13
Aug-2022	2.67 (0.56)	2.68	1.76-3.97	0.21	4.19 (0.9)	4.19	2.59-6	0.21	4.57 (0.79)	4.63	3.22-6.31	0.17
Sep-2022	0.69 (0.13)	0.68	0.45-0.96	0.19	0.58 (0.11)	0.59	0.38-0.8	0.18	0.57 (0.08)	0.57	0.42-0.74	0.14

**Table 20. Density 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 and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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	1.2 (0.18)	1.21	0.88-1.58	0.15	1.52 (0.22)	1.53	1.13-1.98	0.14	2.42 (0.7)	2.46	1.38-4.05	0.29
Aug-2020	1.15 (0.21)	1.15	0.76-1.55	0.18	1.42 (0.21)	1.42	1.01-1.83	0.15	1.88 (0.27)	1.87	1.39-2.44	0.14
Sep-2020	0.17 (0.05)	0.17	0.08-0.26	0.28	0.16 (0.04)	0.16	0.09-0.23	0.24	0.17 (0.03)	0.17	0.11-0.25	0.20
Oct-2020	0.12 (0.04)	0.12	0.05-0.19	0.32	0.11 (0.03)	0.11	0.06-0.17	0.27	0.11 (0.03)	0.11	0.06-0.15	0.23
Nov-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.02	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		0.01 (0.01)	0.01	0-0.03	0.97	0.01 (0.01)	0.01	0-0.02	0.93
Feb-2021	0.01 (0.01)	0.01	0-0.04	0.89	0.01 (0.01)	0.01	0-0.03	0.91	0.01 (0.01)	0.01	0-0.02	0.88
Mar-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2021	1.31 (0.22)	1.33	0.94-1.77	0.17	1.25 (0.17)	1.25	0.94-1.58	0.14	1.21 (0.13)	1.21	0.97-1.46	0.11
May-2021	0.15 (0.05)	0.15	0.06-0.26	0.35	0.23 (0.05)	0.22	0.12-0.34	0.24	0.36 (0.08)	0.36	0.21-0.53	0.23
Jun-2021	4.89 (0.8)	4.86	3.44-6.59	0.16	4.35 (0.63)	4.37	3.26-5.65	0.14	4.31 (0.54)	4.31	3.35-5.42	0.12
Jul-2021	1.65 (0.26)	1.66	1.19-2.2	0.16	2.01 (0.25)	2.04	1.58-2.56	0.13	2.15 (0.23)	2.16	1.74-2.6	0.11
Aug-2021	1.78 (0.26)	1.77	1.26-2.32	0.15	1.94 (0.21)	1.93	1.55-2.36	0.11	2.07 (0.19)	2.07	1.72-2.45	0.09
Sep-2021	2.81 (0.41)	2.81	2.12-3.73	0.15	2.61 (0.31)	2.61	2.04-3.24	0.12	2.44 (0.22)	2.44	2.05-2.88	0.09
Oct-2021	0.22 (0.05)	0.22	0.12-0.34	0.24	0.21 (0.05)	0.21	0.13-0.31	0.22	0.18 (0.04)	0.18	0.11-0.26	0.20
Nov-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2021	0.01 (0.01)	0.01	0-0.04	0.93	0.01 (0.01)	0.01	0-0.03	0.93	0.01 (0.01)	0.01	0-0.03	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	1.05 (0.15)	1.05	0.75-1.35	0.14	1 (0.11)	1.01	0.81-1.21	0.11	0.89 (0.09)	0.89	0.72-1.07	0.10
May-2022	3.51 (0.68)	3.50	2.29-4.86	0.19	4.06 (0.58)	4.04	2.96-5.22	0.14	4.55 (0.49)	4.56	3.66-5.56	0.11
Jun-2022	5.78 (1.22)	5.78	3.61-8.31	0.21	5.32 (0.88)	5.32	3.73-7.11	0.17	5.25 (0.74)	5.20	3.89-6.69	0.14
Jul-2022	4.37 (0.64)	4.38	3.2-5.65	0.15	4.68 (0.61)	4.72	3.54-5.94	0.13	4.71 (0.6)	4.64	3.47-5.89	0.13
Aug-2022	2.7 (0.57)	2.70	1.77-4.01	0.21	4.21 (0.9)	4.22	2.61-6.04	0.21	4.59 (0.79)	4.65	3.23-6.34	0.17
Sep-2022	0.72 (0.14)	0.72	0.47-1.01	0.19	0.61 (0.11)	0.61	0.4-0.83	0.18	0.59 (0.08)	0.59	0.43-0.77	0.14

**Table 21. Density 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 and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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	1.39 (0.21)	1.41	1.02-1.84	0.15	1.77 (0.25)	1.78	1.32-2.3	0.14	2.82 (0.82)	2.86	1.61-4.72	0.29
Aug-2020	1.35 (0.24)	1.35	0.89-1.82	0.18	1.66 (0.24)	1.66	1.18-2.13	0.15	2.19 (0.32)	2.18	1.62-2.84	0.14
Sep-2020	0.19 (0.05)	0.19	0.09-0.3	0.28	0.18 (0.04)	0.18	0.1-0.27	0.24	0.2 (0.04)	0.20	0.13-0.29	0.20
Oct-2020	0.14 (0.05)	0.14	0.06-0.23	0.32	0.13 (0.04)	0.13	0.07-0.2	0.27	0.13 (0.03)	0.13	0.07-0.18	0.23
Nov-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.02	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		0.01 (0.01)	0.01	0-0.03	0.97	0.01 (0.01)	0.01	0-0.02	0.93
Feb-2021	0.01 (0.01)	0.01	0-0.04	0.89	0.01 (0.01)	0.01	0-0.03	0.91	0.01 (0.01)	0.01	0-0.02	0.88
Mar-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2021	1.52 (0.25)	1.54	1.09-2.06	0.17	1.46 (0.2)	1.45	1.1-1.85	0.14	1.41 (0.15)	1.41	1.13-1.7	0.11
May-2021	0.18 (0.06)	0.18	0.07-0.3	0.35	0.26 (0.06)	0.26	0.14-0.39	0.24	0.42 (0.1)	0.42	0.25-0.62	0.23
Jun-2021	5.69 (0.93)	5.66	4.01-7.68	0.16	5.07 (0.73)	5.10	3.8-6.59	0.14	5.03 (0.62)	5.02	3.9-6.31	0.12
Jul-2021	1.93 (0.3)	1.94	1.38-2.56	0.16	2.34 (0.3)	2.37	1.84-2.98	0.13	2.51 (0.26)	2.52	2.02-3.03	0.11
Aug-2021	2.08 (0.31)	2.06	1.47-2.7	0.15	2.26 (0.24)	2.25	1.8-2.75	0.11	2.42 (0.22)	2.41	2.01-2.85	0.09
Sep-2021	3.27 (0.48)	3.27	2.47-4.34	0.15	3.04 (0.36)	3.05	2.38-3.78	0.12	2.85 (0.26)	2.84	2.39-3.36	0.09
Oct-2021	0.26 (0.06)	0.26	0.14-0.4	0.24	0.24 (0.05)	0.24	0.15-0.36	0.22	0.21 (0.04)	0.21	0.13-0.3	0.20
Nov-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2021	0.01 (0.01)	0.01	0-0.04	0.93	0.01 (0.01)	0.01	0-0.03	0.93	0.01 (0.01)	0.01	0-0.03	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	1.23 (0.18)	1.23	0.87-1.58	0.14	1.17 (0.13)	1.17	0.94-1.41	0.11	1.04 (0.1)	1.04	0.84-1.24	0.10
May-2022	4.09 (0.79)	4.08	2.66-5.66	0.19	4.73 (0.67)	4.71	3.44-6.08	0.14	5.3 (0.57)	5.32	4.26-6.48	0.11
Jun-2022	6.74 (1.42)	6.74	4.2-9.69	0.21	6.19 (1.03)	6.20	4.35-8.28	0.17	6.11 (0.86)	6.06	4.53-7.79	0.14
Jul-2022	5.1 (0.75)	5.10	3.73-6.59	0.15	5.45 (0.71)	5.49	4.13-6.92	0.13	5.48 (0.7)	5.41	4.04-6.86	0.13
Aug-2022	3.14 (0.66)	3.14	2.06-4.66	0.21	4.91 (1.05)	4.92	3.04-7.04	0.21	5.34 (0.92)	5.42	3.76-7.39	0.17
Sep-2022	0.84 (0.16)	0.84	0.55-1.18	0.19	0.71 (0.13)	0.71	0.46-0.96	0.18	0.69 (0.1)	0.69	0.5-0.9	0.14

## 1.18      Razorbill

**Table 22. Density 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 and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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	0.02 (0.02)	0.03	0-0.07	0.89	0.02 (0.02)	0.02	0-0.05	0.90	0.01 (0.01)	0.01	0-0.04	0.91
Aug-2020	0.02 (0.02)	0.02	0-0.07	0.87	0.02 (0.02)	0.02	0-0.05	0.85	0.01 (0.01)	0.01	0-0.04	0.90
Sep-2020	0.09 (0.04)	0.10	0.02-0.2	0.47	0.09 (0.03)	0.09	0.03-0.16	0.39	0.08 (0.03)	0.08	0.03-0.14	0.35
Oct-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.04	0.89
Nov-2020	0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.03	0.92	0.01 (0.01)	0.01	0-0.02	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	0.08 (0.04)	0.08	0.01-0.15	0.43	0.08 (0.03)	0.08	0.03-0.14	0.40	0.06 (0.02)	0.06	0.02-0.11	0.39
Mar-2021	0.01 (0.01)	0.01	0-0.04	0.94	0.02 (0.01)	0.02	0-0.04	0.63	0.05 (0.02)	0.05	0.01-0.11	0.45
Apr-2021	0.07 (0.03)	0.07	0.02-0.13	0.37	0.11 (0.03)	0.11	0.06-0.18	0.28	0.13 (0.03)	0.13	0.08-0.19	0.23
May-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0.02 (0.01)	0.02	0-0.04	0.56
Jun-2021	0.05 (0.02)	0.05	0.01-0.09	0.44	0.03 (0.02)	0.03	0.01-0.07	0.43	0.07 (0.03)	0.07	0.02-0.13	0.41
Jul-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2021	0.13 (0.07)	0.13	0.02-0.28	0.53	0.1 (0.05)	0.10	0.03-0.2	0.46	0.1 (0.04)	0.10	0.03-0.19	0.39
Sep-2021	0.08 (0.06)	0.09	0-0.21	0.69	0.06 (0.04)	0.06	0-0.15	0.68	0.07 (0.03)	0.07	0.01-0.14	0.52
Oct-2021	0.02 (0.02)	0.02	0-0.06	0.66	0.02 (0.01)	0.02	0-0.04	0.66	0.01 (0.01)	0.01	0-0.03	0.66
Nov-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2021	0.02 (0.02)	0.02	0-0.06	0.66	0.03 (0.01)	0.03	0-0.06	0.55	0.02 (0.01)	0.02	0-0.05	0.54
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0.06 (0.03)	0.06	0-0.13	0.57	0.04 (0.02)	0.04	0-0.1	0.57	0.03 (0.02)	0.03	0-0.07	0.55
Mar-2022	0.11 (0.05)	0.11	0.02-0.2	0.43	0.13 (0.05)	0.13	0.04-0.23	0.37	0.11 (0.04)	0.11	0.05-0.19	0.32
Apr-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2022	0.01 (0.01)	0.01	0-0.04	0.80	0.01 (0.01)	0.01	0-0.03	0.81	0.01 (0.01)	0.01	0-0.02	0.80
Jun-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2022	0.12 (0.08)	0.12	0.01-0.29	0.64	0.13 (0.06)	0.13	0.03-0.27	0.47	0.16 (0.06)	0.16	0.06-0.27	0.35
Aug-2022	0.01 (0.01)	0.01	0-0.04	0.87	0.04 (0.02)	0.04	0-0.1	0.57	0.03 (0.02)	0.03	0-0.07	0.56
Sep-2022	0.12 (0.04)	0.12	0.04-0.21	0.37	0.24 (0.1)	0.24	0.07-0.46	0.43	0.3 (0.12)	0.30	0.1-0.55	0.39

**Table 23. Density 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 and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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	0.02 (0.02)	0.03	0-0.07	0.89	0.02 (0.02)	0.02	0-0.05	0.90	0.01 (0.01)	0.01	0-0.04	0.91
Aug-2020	0.02 (0.02)	0.02	0-0.07	0.87	0.02 (0.02)	0.02	0-0.05	0.85	0.01 (0.01)	0.01	0-0.04	0.90
Sep-2020	0.09 (0.04)	0.10	0.02-0.2	0.47	0.09 (0.03)	0.09	0.03-0.16	0.39	0.08 (0.03)	0.08	0.03-0.14	0.35
Oct-2020	0 (0)	0.00	0-0	0 (0)	0.00	0-0	0 (0)	0.01 (0.01)	0.01	0-0.04	0.89	
Nov-2020	0 (0)	0.00	0-0	0 (0)	0.01	0-0.03	0.92	0.01 (0.01)	0.01	0-0.02	0.99	
Dec-2020	0 (0)	0.00	0-0	0 (0)	0.00	0-0	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 (0)	0.00	0-0		
Feb-2021	0.08 (0.04)	0.08	0.01-0.15	0.43	0.08 (0.03)	0.08	0.03-0.14	0.40	0.06 (0.02)	0.06	0.02-0.11	0.39
Mar-2021	0.01 (0.01)	0.01	0-0.04	0.94	0.02 (0.01)	0.02	0-0.04	0.63	0.05 (0.02)	0.05	0.01-0.11	0.45
Apr-2021	0.07 (0.03)	0.07	0.02-0.13	0.37	0.12 (0.03)	0.12	0.07-0.2	0.28	0.14 (0.03)	0.14	0.08-0.2	0.23
May-2021	0 (0)	0.00	0-0	0 (0)	0.00	0-0	0 (0)	0.02 (0.01)	0.02	0-0.04	0.56	
Jun-2021	0.05 (0.02)	0.05	0.01-0.09	0.44	0.03 (0.02)	0.03	0.01-0.07	0.43	0.07 (0.03)	0.07	0.02-0.13	0.41
Jul-2021	0 (0)	0.00	0-0	0 (0)	0.00	0-0	0 (0)	0 (0)	0.00	0-0		
Aug-2021	0.14 (0.07)	0.14	0.03-0.31	0.53	0.11 (0.05)	0.11	0.03-0.22	0.46	0.11 (0.04)	0.11	0.04-0.2	0.39
Sep-2021	0.08 (0.06)	0.09	0-0.21	0.69	0.06 (0.04)	0.06	0-0.15	0.68	0.07 (0.03)	0.07	0.01-0.14	0.52
Oct-2021	0.02 (0.02)	0.02	0-0.06	0.66	0.02 (0.01)	0.02	0-0.04	0.66	0.01 (0.01)	0.01	0-0.03	0.66
Nov-2021	0 (0)	0.00	0-0	0 (0)	0.00	0-0	0 (0)	0 (0)	0.00	0-0		
Dec-2021	0.02 (0.02)	0.02	0-0.06	0.66	0.03 (0.01)	0.03	0-0.06	0.55	0.02 (0.01)	0.02	0-0.05	0.54
Feb-2022	0 (0)	0.00	0-0	0 (0)	0.00	0-0	0 (0)	0 (0)	0.00	0-0		
Feb-2022	0.07 (0.04)	0.07	0-0.16	0.57	0.05 (0.03)	0.05	0-0.11	0.57	0.04 (0.02)	0.04	0-0.09	0.55
Mar-2022	0.13 (0.06)	0.13	0.03-0.25	0.43	0.16 (0.06)	0.15	0.05-0.28	0.37	0.13 (0.04)	0.13	0.06-0.22	0.32
Apr-2022	0 (0)	0.00	0-0	0 (0)	0.00	0-0	0 (0)	0 (0)	0.00	0-0		
May-2022	0.01 (0.01)	0.01	0-0.04	0.80	0.01 (0.01)	0.01	0-0.03	0.81	0.01 (0.01)	0.01	0-0.02	0.80
Jun-2022	0 (0)	0.00	0-0	0 (0)	0.00	0-0	0 (0)	0 (0)	0.00	0-0		
Jul-2022	0.12 (0.08)	0.12	0.01-0.29	0.64	0.13 (0.06)	0.13	0.03-0.27	0.47	0.16 (0.06)	0.16	0.06-0.29	0.35
Aug-2022	0.01 (0.01)	0.01	0-0.04	0.87	0.04 (0.02)	0.04	0-0.1	0.57	0.03 (0.02)	0.03	0-0.07	0.56
Sep-2022	0.12 (0.04)	0.12	0.04-0.21	0.37	0.26 (0.11)	0.26	0.08-0.49	0.43	0.31 (0.12)	0.31	0.1-0.58	0.39

**Table 24. Density 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 and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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 (0.02)	0.03	0-0.07		0 (0.02)	0.02	0-0.05		0 (0.01)	0.01	0-0.04	
Aug-2020	0 (0.02)	0.02	0-0.07		0 (0.02)	0.02	0-0.05		0 (0.01)	0.01	0-0.04	
Sep-2020	0 (0.04)	0.10	0.02-0.2		0 (0.03)	0.09	0.03-0.16		0 (0.03)	0.08	0.03-0.14	
Oct-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0.01)	0.01	0-0.04	
Nov-2020	0 (0)	0.00	0-0		0 (0.01)	0.01	0-0.03		0 (0.01)	0.01	0-0.02	
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 (0.04)	0.08	0.01-0.15		0 (0.03)	0.08	0.03-0.14		0 (0.02)	0.06	0.02-0.11	
Mar-2021	0 (0.01)	0.01	0-0.04		0 (0.01)	0.02	0-0.04		0 (0.02)	0.05	0.01-0.11	
Apr-2021	0 (0.03)	0.07	0.02-0.13		0 (0.03)	0.11	0.06-0.18		0 (0.03)	0.13	0.08-0.19	
May-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0.01)	0.02	0-0.04	
Jun-2021	0 (0.02)	0.05	0.01-0.09		0 (0.02)	0.03	0.01-0.07		0 (0.03)	0.07	0.02-0.13	
Jul-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2021	0 (0.07)	0.13	0.02-0.28		0 (0.05)	0.10	0.03-0.2		0 (0.04)	0.10	0.03-0.19	
Sep-2021	0 (0.06)	0.09	0-0.21		0 (0.04)	0.06	0-0.15		0 (0.03)	0.07	0.01-0.14	
Oct-2021	0 (0.02)	0.02	0-0.06		0 (0.01)	0.02	0-0.04		0 (0.01)	0.01	0-0.03	
Nov-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2021	0 (0.02)	0.02	0-0.06		0 (0.01)	0.03	0-0.06		0 (0.01)	0.02	0-0.05	
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0.03)	0.06	0-0.13		0 (0.02)	0.04	0-0.1		0 (0.02)	0.03	0-0.07	
Mar-2022	0 (0.05)	0.11	0.02-0.2		0 (0.05)	0.13	0.04-0.23		0 (0.04)	0.11	0.05-0.19	
Apr-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2022	0 (0.01)	0.01	0-0.04		0 (0.01)	0.01	0-0.03		0 (0.01)	0.01	0-0.02	
Jun-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2022	0 (0.08)	0.12	0.01-0.29		0 (0.06)	0.13	0.03-0.27		0 (0.06)	0.16	0.06-0.27	
Aug-2022	0 (0.01)	0.01	0-0.04		0 (0.02)	0.04	0-0.1		0 (0.02)	0.03	0-0.07	
Sep-2022	0 (0.04)	0.12	0.04-0.21		0 (0.1)	0.24	0.07-0.46		0 (0.12)	0.30	0.1-0.55	

## 1.19 Red-throated Diver

**Table 25. Density 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 and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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	0.01(0.01)	0.01	0-0.04	0.92	0.01(0.01)	0.01	0-0.03	0.92	0.01(0.01)	0.01	0-0.02	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		0.01(0.01)	0.01	0-0.03	0.91	0.01(0.01)	0.01	0-0.02	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		0.01(0.01)	0.01	0-0.03	0.84	0.01(0.01)	0.01	0-0.02	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. Density 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 and OAA plus 4 km buffer.**

Survey	Density (birds/km <sup>2</sup> )											
	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	0.01(0.01)	0.01	0-0.04	0.98	0.01(0.01)	0.01	0-0.03	0.93	0.01(0.01)	0.01	0-0.02	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		0.01(0.01)	0.01	0-0.02	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	