



## West of Orkney Windfarm

### Offshore Ornithology Supplementary Environmental Information

#### Annex 1E: Design-based analysis density estimates from each survey recorded of all birds (sitting and flying)

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## 1.1 Arctic Skua

**Table 1. Density of Arctic skua recorded in flight and 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	0.01(0.01)	0.01	0-0.04	0.93	0.01(0.01)	0.01	0-0.03	0.91	0.01(0.01)	0.01	0-0.02	0.91
Jul-2022	0.01(0.01)	0.01	0-0.04	0.95	0.04 (0.02)	0.04	0.01-0.07	0.52	0.03 (0.01)	0.03	0-0.05	0.49
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 in flight and 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	0.27 (0.17)	0.27	0-0.66	0.63	0.2 (0.13)	0.20	0-0.49	0.66	0.15 (0.1)	0.15	0-0.38	0.64
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		0.03 (0.02)	0.03	0-0.08	0.80	0.02 (0.02)	0.02	0-0.06	0.78
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	0.95	0.01 (0.01)	0.01	0-0.03	0.94	0.01 (0.01)	0.01	0-0.02	0.94
Jun-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2022	0.02 (0.02)	0.02	0-0.06	0.66	0.05 (0.03)	0.05	0-0.12	0.63	0.04 (0.03)	0.04	0-0.1	0.67
Aug-2022	0.11 (0.09)	0.11	0-0.31	0.84	0.08 (0.07)	0.08	0-0.23	0.83	0.07 (0.05)	0.07	0-0.19	0.71
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 in flight and 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	0.39 (0.1)	0.39	0.22-0.59	0.25	0.43 (0.08)	0.43	0.28-0.6	0.19	0.49 (0.09)	0.48	0.33-0.67	0.19
Aug-2020	0.07 (0.03)	0.07	0.01-0.13	0.44	0.11 (0.03)	0.11	0.05-0.17	0.28	0.14 (0.04)	0.14	0.08-0.22	0.26
Sep-2020	0.04 (0.02)	0.04	0-0.08	0.54	0.03 (0.02)	0.03	0.01-0.07	0.47	0.03 (0.01)	0.03	0.01-0.06	0.39
Oct-2020	0.08 (0.03)	0.08	0.04-0.14	0.35	0.08 (0.02)	0.08	0.03-0.13	0.32	0.07 (0.02)	0.07	0.03-0.11	0.28
Nov-2020	0.06 (0.03)	0.06	0.01-0.12	0.47	0.07 (0.03)	0.07	0.03-0.12	0.38	0.06 (0.02)	0.06	0.02-0.11	0.35
Dec-2020	0.01 (0.01)	0.01	0-0.04	0.98	0.01 (0.01)	0.01	0-0.03	0.92	0.01 (0.01)	0.01	0-0.02	0.95
Jan-2021	0.12 (0.04)	0.12	0.05-0.2	0.35	0.14 (0.04)	0.14	0.07-0.22	0.26	0.11 (0.03)	0.11	0.05-0.16	0.26
Feb-2021	0.02 (0.02)	0.02	0-0.06	0.68	0.02 (0.01)	0.02	0-0.04	0.70	0.03 (0.01)	0.03	0.01-0.05	0.45
Mar-2021	0.05 (0.03)	0.05	0-0.11	0.58	0.04 (0.02)	0.04	0.01-0.09	0.50	0.04 (0.02)	0.04	0.01-0.08	0.44
Apr-2021	0.31 (0.07)	0.30	0.18-0.45	0.22	0.3 (0.06)	0.30	0.2-0.42	0.19	0.34 (0.05)	0.34	0.24-0.44	0.15
May-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	0-0.03	0.66
Jun-2021	0.01 (0.01)	0.01	0-0.04	0.93	0.01 (0.01)	0.01	0-0.03	0.95	0.01 (0.01)	0.01	0-0.03	0.59
Jul-2021	0.02 (0.02)	0.02	0-0.06	0.65	0.05 (0.02)	0.05	0.02-0.1	0.40	0.05 (0.02)	0.05	0.01-0.09	0.38
Aug-2021	0.25 (0.06)	0.24	0.13-0.38	0.25	0.26 (0.05)	0.26	0.16-0.36	0.19	0.23 (0.04)	0.23	0.16-0.31	0.17
Sep-2021	0.18 (0.06)	0.18	0.08-0.3	0.32	0.16 (0.04)	0.17	0.09-0.26	0.26	0.17 (0.04)	0.16	0.09-0.25	0.26
Oct-2021	0.05 (0.02)	0.05	0.01-0.09	0.47	0.09 (0.03)	0.09	0.03-0.15	0.33	0.08 (0.02)	0.08	0.04-0.13	0.28
Nov-2021	0.11 (0.03)	0.11	0.05-0.18	0.32	0.1 (0.03)	0.11	0.05-0.17	0.30	0.08 (0.02)	0.08	0.04-0.13	0.30
Dec-2021	0.08 (0.03)	0.08	0.04-0.15	0.38	0.09 (0.03)	0.09	0.04-0.14	0.31	0.07 (0.02)	0.07	0.03-0.11	0.29
Feb-2022	0.01 (0.01)	0.01	0-0.04	0.97	0.01 (0.01)	0.01	0-0.03	0.93	0.01 (0.01)	0.01	0-0.02	0.95
Feb-2022	0.02 (0.01)	0.02	0-0.06	0.63	0.02 (0.01)	0.02	0-0.04	0.64	0.01 (0.01)	0.01	0-0.03	0.63
Mar-2022	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	0.96
Apr-2022	0.09 (0.04)	0.10	0.04-0.18	0.39	0.08 (0.03)	0.08	0.03-0.14	0.35	0.06 (0.02)	0.06	0.02-0.11	0.35
May-2022	0.07 (0.03)	0.07	0.01-0.14	0.48	0.1 (0.04)	0.11	0.04-0.18	0.35	0.13 (0.03)	0.14	0.07-0.2	0.25
Jun-2022	0.11 (0.05)	0.11	0.02-0.2	0.44	0.1 (0.04)	0.11	0.04-0.18	0.34	0.13 (0.03)	0.13	0.07-0.19	0.23
Jul-2022	0.39 (0.1)	0.37	0.21-0.58	0.25	0.35 (0.08)	0.35	0.21-0.51	0.22	0.38 (0.07)	0.37	0.25-0.51	0.19
Aug-2022	0.05 (0.03)	0.05	0-0.11	0.55	0.04 (0.02)	0.04	0.01-0.09	0.48	0.04 (0.02)	0.04	0.01-0.08	0.44
Sep-2022	0.17 (0.04)	0.17	0.1-0.26	0.25	0.18 (0.04)	0.18	0.11-0.27	0.23	0.15 (0.03)	0.15	0.09-0.22	0.22

## 1.4 Black-headed Gull

**Table 4. Density of black-headed gull recorded in flight and 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	0.01(0.01)	0.01	0-0.04	0.94	0.01(0.01)	0.01	0-0.03	0.96	0.01(0.01)	0.01	0-0.02	0.9
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 Black Guillemot

**Table 5. Density of black guillemot recorded in flight and 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	0.91	0.01 (0.01)	0.01	0-0.03	0.90	0.01 (0.01)	0.01	0-0.02	0.94
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	0.95	0.01 (0.01)	0.01	0-0.03	0.91	0.01 (0.01)	0.01	0-0.02	0.94
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	

## 1.6 Common Gull

**Table 6. Density of common gull recorded in flight and 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	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2020	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2020	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2020	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Nov-2020	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2020	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jan-2021	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2021	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2021	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2021	0 (0)	0	0-0		0.01(0.01)	0.01	0-0.03	0.92	0.01(0.01)	0.01	0-0.02	0.95
May-2021	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jun-2021	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2021	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2021	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2021	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2021	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Nov-2021	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2021	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2022	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2022	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2022	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jun-2022	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2022	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2022	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2022	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	

## 1.7 Common Tern

**Table 7. Density of common tern recorded in flight and 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	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2020	0 (0)	0	0-0		0.01 (0.01)	0.01	0-0.03	0.82	0.01 (0.01)	0.01	0-0.03	0.53
Sep-2020	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2020	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Nov-2020	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2020	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jan-2021	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2021	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2021	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2021	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2021	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jun-2021	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2021	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2021	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2021	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Oct-2021	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Nov-2021	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Dec-2021	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Mar-2022	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Apr-2022	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
May-2022	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jun-2022	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2022	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2022	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2022	0 (0)	0	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	

## 1.8 Cory's Shearwater

**Table 8. Density of Cory's shearwater recorded in flight and 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	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Aug-2020	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Sep-2020	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Oct-2020	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Nov-2020	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Dec-2020	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Jan-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Feb-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Mar-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Apr-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
May-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Jun-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Jul-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Aug-2021	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	0.92
Sep-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Oct-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Nov-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Dec-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Feb-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Feb-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Mar-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Apr-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
May-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Jun-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Jul-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Aug-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Sep-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	

## 1.9 European Storm-petrel

**Table 9. Density of European storm-petrel recorded in flight and 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		0.01 (0.01)	0.01	0-0.02	0.88
Sep-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0.07 (0.07)	0.08	0-0.22	0.94
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	0.31 (0.11)	0.31	0.11-0.55	0.37	0.25 (0.09)	0.25	0.1-0.43	0.34	0.24 (0.07)	0.24	0.12-0.39	0.29
Sep-2021	0.05 (0.02)	0.05	0.01-0.09	0.46	0.04 (0.02)	0.04	0.02-0.08	0.40	0.03 (0.01)	0.03	0.01-0.06	0.41
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	

## 1.10 Fulmar

**Table 10. Density of fulmar recorded in flight and 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	0.72 (0.17)	0.72	0.42-1.1	0.23	0.89 (0.14)	0.90	0.63-1.18	0.16	1.2 (0.17)	1.19	0.88-1.53	0.14
Aug-2020	2.29 (1.17)	2.29	0.41-4.78	0.51	1.79 (0.84)	1.78	0.42-3.58	0.47	1.53 (0.67)	1.52	0.43-2.99	0.44
Sep-2020	4.18 (2.14)	4.27	1.03-8.95	0.51	3.57 (1.5)	3.57	1.2-6.68	0.42	2.91 (1.23)	2.88	1-5.54	0.42
Oct-2020	1.77 (0.44)	1.75	1-2.73	0.25	1.96 (0.33)	1.95	1.39-2.68	0.17	3.12 (0.68)	3.12	1.92-4.44	0.22
Nov-2020	1.38 (0.47)	1.40	0.67-2.46	0.34	1.21 (0.33)	1.22	0.69-1.89	0.27	1.66 (0.38)	1.65	0.9-2.39	0.23
Dec-2020	2.36 (0.52)	2.35	1.44-3.48	0.22	3.87 (1.11)	3.87	1.94-6.2	0.29	3.92 (0.93)	3.93	2.31-5.79	0.24
Jan-2021	1.91 (0.34)	1.90	1.33-2.62	0.18	2.15 (0.34)	2.16	1.56-2.85	0.16	2.42 (0.28)	2.42	1.92-2.99	0.11
Feb-2021	0.27 (0.07)	0.27	0.14-0.42	0.26	0.34 (0.06)	0.34	0.23-0.45	0.17	0.36 (0.05)	0.36	0.27-0.47	0.15
Mar-2021	1.22 (0.32)	1.21	0.71-1.92	0.26	1.23 (0.25)	1.23	0.81-1.74	0.20	1.2 (0.19)	1.19	0.84-1.59	0.16
Apr-2021	0.45 (0.29)	0.45	0.09-1.08	0.65	0.4 (0.21)	0.39	0.13-0.88	0.53	0.4 (0.17)	0.40	0.17-0.76	0.42
May-2021	0.07 (0.03)	0.07	0.02-0.13	0.39	0.27 (0.08)	0.27	0.13-0.42	0.28	0.21 (0.06)	0.22	0.11-0.35	0.29
Jun-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2021	0.25 (0.05)	0.25	0.15-0.34	0.20	0.23 (0.04)	0.23	0.15-0.3	0.18	0.29 (0.04)	0.30	0.22-0.38	0.13
Aug-2021	1.46 (0.18)	1.46	1.12-1.81	0.12	1.42 (0.13)	1.42	1.15-1.7	0.09	1.43 (0.1)	1.43	1.24-1.65	0.07
Sep-2021	0.9 (0.14)	0.90	0.64-1.18	0.16	0.85 (0.1)	0.85	0.66-1.06	0.12	0.9 (0.09)	0.89	0.72-1.07	0.10
Oct-2021	2.17 (0.98)	2.18	0.51-4.34	0.45	1.89 (0.68)	1.90	0.72-3.29	0.36	2.01 (0.57)	1.98	1.02-3.24	0.28
Nov-2021	0.54 (0.09)	0.54	0.38-0.72	0.16	0.61 (0.07)	0.61	0.46-0.74	0.12	1.75 (0.52)	1.76	0.86-2.83	0.29
Dec-2021	2.62 (0.57)	2.61	1.61-3.8	0.22	2.33 (0.43)	2.33	1.58-3.18	0.18	2.02 (0.33)	2.01	1.41-2.72	0.16
Feb-2022	1.15 (0.14)	1.15	0.9-1.42	0.12	1.24 (0.12)	1.25	1.01-1.49	0.10	1.36 (0.11)	1.36	1.15-1.59	0.08
Feb-2022	1.55 (0.29)	1.55	1-2.15	0.19	1.7 (0.32)	1.72	1.13-2.37	0.19	1.79 (0.24)	1.80	1.36-2.3	0.14
Mar-2022	2.41 (0.27)	2.43	1.9-2.98	0.11	2.53 (0.24)	2.53	2.07-2.98	0.09	2.44 (0.19)	2.44	2.08-2.85	0.08
Apr-2022	0.68 (0.1)	0.69	0.5-0.9	0.15	0.61 (0.08)	0.60	0.44-0.77	0.14	0.58 (0.07)	0.58	0.45-0.72	0.11
May-2022	0.19 (0.04)	0.19	0.11-0.27	0.22	0.24 (0.04)	0.24	0.16-0.32	0.17	0.25 (0.04)	0.25	0.18-0.32	0.14
Jun-2022	0.19 (0.05)	0.19	0.11-0.28	0.24	0.19 (0.04)	0.19	0.12-0.27	0.20	0.18 (0.03)	0.18	0.12-0.24	0.16
Jul-2022	0.59 (0.13)	0.59	0.35-0.86	0.23	0.51 (0.1)	0.52	0.34-0.73	0.19	0.47 (0.08)	0.48	0.33-0.66	0.18
Aug-2022	0.5 (0.07)	0.50	0.38-0.63	0.13	0.5 (0.05)	0.50	0.39-0.61	0.11	0.55 (0.05)	0.55	0.45-0.65	0.10
Sep-2022	2.08 (0.22)	2.10	1.67-2.57	0.11	2.02 (0.17)	2.01	1.67-2.36	0.09	1.91 (0.13)	1.91	1.65-2.17	0.07

## 1.11 Gannet

**Table 11. Density of gannet recorded in flight and 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	0.55 (0.28)	0.54	0.16-1.21	0.51	0.48 (0.22)	0.47	0.17-1	0.45	0.87 (0.39)	0.89	0.26-1.73	0.45
Aug-2020	2.94 (2.03)	2.93	0.4-7.61	0.69	2.21 (1.49)	2.23	0.35-5.49	0.67	1.82 (1.13)	1.88	0.39-4.53	0.62
Sep-2020	1.52 (0.23)	1.51	1.07-1.94	0.15	1.43 (0.18)	1.42	1.1-1.82	0.12	1.33 (0.15)	1.32	1.04-1.65	0.12
Oct-2020	1.16 (0.21)	1.16	0.79-1.58	0.18	0.99 (0.15)	0.98	0.7-1.29	0.15	0.92 (0.12)	0.93	0.71-1.17	0.13
Nov-2020	0.01 (0.01)	0.01	0-0.04	0.97	0.03 (0.02)	0.03	0-0.07	0.68	0.03 (0.01)	0.03	0.01-0.06	0.54
Dec-2020	0.08 (0.03)	0.08	0.02-0.15	0.41	0.08 (0.03)	0.08	0.03-0.14	0.37	0.06 (0.02)	0.06	0.02-0.11	0.38
Jan-2021	0.04 (0.02)	0.03	0-0.08	0.62	0.03 (0.02)	0.03	0.01-0.08	0.51	0.03 (0.01)	0.03	0.01-0.05	0.52
Feb-2021	0.09 (0.03)	0.09	0.05-0.15	0.31	0.09 (0.02)	0.09	0.04-0.13	0.27	0.08 (0.02)	0.08	0.04-0.12	0.26
Mar-2021	0.04 (0.02)	0.04	0-0.07	0.52	0.06 (0.02)	0.06	0.03-0.1	0.33	0.08 (0.02)	0.08	0.04-0.13	0.29
Apr-2021	0.4 (0.09)	0.40	0.25-0.59	0.23	0.44 (0.08)	0.45	0.3-0.6	0.18	0.44 (0.07)	0.44	0.32-0.58	0.15
May-2021	0.53 (0.12)	0.53	0.31-0.79	0.23	0.55 (0.11)	0.56	0.35-0.78	0.20	0.55 (0.1)	0.55	0.36-0.75	0.18
Jun-2021	0.26 (0.06)	0.26	0.17-0.39	0.22	0.27 (0.05)	0.27	0.17-0.36	0.19	0.25 (0.04)	0.25	0.18-0.34	0.16
Jul-2021	0.35 (0.07)	0.35	0.21-0.51	0.21	0.38 (0.08)	0.38	0.25-0.54	0.20	0.39 (0.07)	0.39	0.25-0.54	0.18
Aug-2021	0.76 (0.12)	0.76	0.53-1	0.16	0.77 (0.11)	0.77	0.56-1	0.15	1.06 (0.33)	1.06	0.6-1.77	0.31
Sep-2021	1.04 (0.15)	1.04	0.77-1.33	0.14	1 (0.12)	1.00	0.77-1.26	0.12	1.26 (0.2)	1.26	0.92-1.69	0.16
Oct-2021	1.7 (0.24)	1.71	1.28-2.21	0.14	1.63 (0.16)	1.64	1.34-1.97	0.10	1.5 (0.14)	1.50	1.23-1.76	0.09
Nov-2021	0.02 (0.02)	0.02	0-0.06	0.64	0.05 (0.02)	0.05	0.02-0.09	0.36	0.05 (0.02)	0.05	0.02-0.09	0.31
Dec-2021	0.01 (0.01)	0.01	0-0.04	0.95	0.02 (0.01)	0.02	0-0.04	0.66	0.02 (0.01)	0.02	0-0.04	0.54
Feb-2022	0.02 (0.02)	0.02	0-0.07	0.94	0.03 (0.02)	0.03	0-0.07	0.71	0.07 (0.03)	0.07	0.02-0.14	0.43
Feb-2022	0.11 (0.03)	0.11	0.05-0.18	0.33	0.09 (0.03)	0.09	0.03-0.15	0.31	0.08 (0.02)	0.08	0.04-0.12	0.27
Mar-2022	0.22 (0.05)	0.23	0.13-0.33	0.24	0.23 (0.04)	0.22	0.15-0.31	0.19	0.21 (0.04)	0.21	0.13-0.28	0.17
Apr-2022	0.95 (0.16)	0.95	0.64-1.28	0.17	0.91 (0.12)	0.91	0.68-1.16	0.14	0.84 (0.1)	0.84	0.65-1.04	0.12
May-2022	0.24 (0.05)	0.24	0.14-0.34	0.23	0.29 (0.06)	0.29	0.18-0.4	0.19	0.4 (0.08)	0.39	0.24-0.55	0.21
Jun-2022	0.54 (0.14)	0.54	0.29-0.84	0.26	0.48 (0.11)	0.48	0.29-0.7	0.22	0.45 (0.08)	0.45	0.29-0.62	0.19
Jul-2022	0.53 (0.1)	0.53	0.34-0.73	0.19	0.48 (0.07)	0.48	0.34-0.63	0.16	0.44 (0.06)	0.44	0.32-0.56	0.14
Aug-2022	0.2 (0.05)	0.20	0.12-0.3	0.22	0.24 (0.04)	0.24	0.16-0.33	0.19	0.3 (0.05)	0.30	0.22-0.39	0.15
Sep-2022	0.52 (0.09)	0.51	0.35-0.69	0.17	0.6 (0.1)	0.61	0.44-0.8	0.16	0.74 (0.11)	0.75	0.55-0.96	0.14

## 1.12 Great Black-backed Gull

**Table 12. Density of gannet recorded in flight and 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	0.98	0.02 (0.01)	0.02	0-0.04	0.66	0.03 (0.02)	0.03	0-0.07	0.67
Nov-2020	0.17 (0.05)	0.17	0.07-0.26	0.29	0.14 (0.04)	0.14	0.07-0.22	0.29	0.11 (0.03)	0.11	0.05-0.17	0.29
Dec-2020	0.02 (0.02)	0.02	0-0.06	0.68	0.07 (0.03)	0.07	0.02-0.13	0.43	0.07 (0.02)	0.07	0.03-0.13	0.33
Jan-2021	0.09 (0.03)	0.09	0.04-0.17	0.34	0.07 (0.03)	0.07	0.03-0.12	0.36	0.07 (0.02)	0.07	0.04-0.12	0.27
Feb-2021	0.06 (0.03)	0.06	0.01-0.12	0.44	0.17 (0.11)	0.17	0.03-0.42	0.64	0.2 (0.12)	0.20	0.03-0.47	0.59
Mar-2021	0.02 (0.02)	0.02	0-0.06	0.65	0.03 (0.01)	0.03	0-0.05	0.52	0.03 (0.01)	0.03	0.01-0.05	0.43
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	0.02 (0.02)	0.02	0-0.07	0.92	0.02 (0.02)	0.02	0-0.05	0.90	0.01 (0.01)	0.01	0-0.04	0.89
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	0.19 (0.05)	0.19	0.09-0.3	0.28	0.23 (0.05)	0.23	0.14-0.31	0.20	0.21 (0.04)	0.21	0.14-0.28	0.18
Dec-2021	0.4 (0.09)	0.40	0.25-0.59	0.22	0.42 (0.07)	0.43	0.29-0.56	0.16	0.4 (0.06)	0.40	0.29-0.52	0.15
Feb-2022	0.07 (0.03)	0.07	0.01-0.14	0.47	0.05 (0.02)	0.05	0.02-0.1	0.43	0.09 (0.03)	0.10	0.04-0.15	0.29
Feb-2022	0.2 (0.05)	0.20	0.11-0.31	0.27	0.16 (0.04)	0.16	0.09-0.24	0.24	0.15 (0.03)	0.15	0.09-0.21	0.22
Mar-2022	0.01 (0.01)	0.01	0-0.04	0.89	0.03 (0.01)	0.03	0-0.05	0.52	0.03 (0.01)	0.03	0.01-0.06	0.38
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	

### 1.13 Great Northern Diver

**Table 13. Density of great northern diver recorded in flight and 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	0.90	0.01 (0.01)	0.01	0-0.03	0.91	0.01 (0.01)	0.01	0-0.02	0.90
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	0.92	0.01 (0.01)	0.01	0-0.03	0.90	0.01 (0.01)	0.01	0-0.02	0.93
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	0.91	0.01 (0.01)	0.01	0-0.03	0.87	0.01 (0.01)	0.01	0-0.02	0.89
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	

## 1.14 Great Shearwater

**Table 14. Density of great shearwater recorded in flight and 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	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
Aug-2020	0 (0)	0	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
Sep-2020	0 (0)	0	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
Oct-2020	0 (0)	0	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
Nov-2020	0 (0)	0	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
Dec-2020	0 (0)	0	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
Jan-2021	0 (0)	0	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
Feb-2021	0 (0)	0	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
Mar-2021	0 (0)	0	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
Apr-2021	0 (0)	0	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
May-2021	0 (0)	0	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
Jun-2021	0 (0)	0	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
Jul-2021	0 (0)	0	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
Aug-2021	0 (0)	0	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
Sep-2021	0 (0)	0	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
Oct-2021	0 (0)	0	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
Nov-2021	0 (0)	0	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
Dec-2021	0 (0)	0	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
Feb-2022	0 (0)	0	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
Mar-2022	0 (0)	0	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
Apr-2022	0 (0)	0	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
May-2022	0 (0)	0	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
Jun-2022	0 (0)	0	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
Jul-2022	0 (0)	0	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
Aug-2022	0 (0)	0	0-0		0 (0)	0	0-0		0 (0)	0.00	0-0	
Sep-2022	0 (0)	0	0-0		0 (0)	0	0-0		0.01 (0.01)	0.01	0-0.02	0.88

## 1.15 Great Skua

**Table 15. Density of great skua recorded in flight and 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)	0.02	0-0.06	0.64	0.03 (0.01)	0.03	0.01-0.05	0.47	0.02 (0.01)	0.02	0.01-0.04	0.49
Aug-2020	0.46 (0.35)	0.44	0.01-1.27	0.77	0.34 (0.26)	0.33	0.01-0.93	0.76	0.26 (0.2)	0.27	0.01-0.7	0.75
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	0.89	0.01 (0.01)	0.01	0-0.03	0.90	0.01 (0.01)	0.01	0-0.02	0.97
Nov-2020	0.01 (0.01)	0.01	0-0.04	0.83	0.01 (0.01)	0.01	0-0.03	0.87	0.01 (0.01)	0.01	0-0.02	0.89
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	0.07 (0.03)	0.07	0.02-0.12	0.37	0.06 (0.02)	0.06	0.03-0.1	0.33	0.06 (0.02)	0.06	0.03-0.09	0.28
May-2021	0.01 (0.01)	0.01	0-0.04	0.92	0.02 (0.01)	0.02	0-0.04	0.66	0.02 (0.01)	0.02	0-0.04	0.50
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	0.87	0.03 (0.01)	0.03	0.01-0.07	0.43	0.03 (0.01)	0.03	0.01-0.05	0.44
Aug-2021	0.04 (0.03)	0.04	0-0.11	0.90	0.03 (0.02)	0.03	0-0.08	0.92	0.02 (0.02)	0.02	0-0.06	0.94
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	0.93	0.01 (0.01)	0.01	0-0.03	0.91	0.01 (0.01)	0.01	0-0.02	0.92
May-2022	0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.03	0.87	0.01 (0.01)	0.01	0-0.03	0.59
Jun-2022	0.05 (0.02)	0.05	0.01-0.09	0.47	0.03 (0.02)	0.03	0.01-0.07	0.47	0.04 (0.01)	0.04	0.01-0.07	0.37
Jul-2022	0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.03	0.96	0.02 (0.01)	0.02	0-0.04	0.53
Aug-2022	0.02 (0.02)	0.02	0-0.06	0.66	0.02 (0.01)	0.02	0-0.04	0.65	0.01 (0.01)	0.01	0-0.03	0.67
Sep-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.01	0.76

## 1.16      Guillemot

**Table 16. Density of guillemot recorded in flight and 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	3.12 (0.59)	3.13	2.03-4.24	0.19	3.22 (0.43)	3.24	2.46-4.09	0.13	3.06 (0.33)	3.05	2.4-3.7	0.11
Aug-2020	0.9 (0.15)	0.89	0.62-1.21	0.17	1.08 (0.15)	1.08	0.77-1.39	0.14	1.16 (0.13)	1.16	0.89-1.42	0.12
Sep-2020	3.53 (0.46)	3.53	2.63-4.45	0.13	3.79 (0.37)	3.77	3.04-4.51	0.10	3.57 (0.29)	3.58	3.01-4.11	0.08
Oct-2020	2.86 (0.46)	2.86	1.98-3.78	0.16	3.44 (0.42)	3.46	2.7-4.3	0.12	3.28 (0.32)	3.29	2.73-3.99	0.10
Nov-2020	0.31 (0.06)	0.31	0.2-0.43	0.19	0.43 (0.07)	0.43	0.29-0.58	0.17	0.43 (0.06)	0.43	0.33-0.55	0.13
Dec-2020	0.48 (0.09)	0.48	0.32-0.67	0.19	0.68 (0.1)	0.68	0.49-0.88	0.15	0.74 (0.08)	0.74	0.59-0.9	0.11
Jan-2021	0.93 (0.15)	0.92	0.64-1.22	0.16	1.16 (0.14)	1.16	0.9-1.45	0.12	1.19 (0.13)	1.18	0.94-1.43	0.11
Feb-2021	2.42 (0.63)	2.45	1.42-3.78	0.26	2.12 (0.44)	2.09	1.39-3.08	0.21	2.1 (0.37)	2.09	1.5-2.91	0.18
Mar-2021	2.17 (0.26)	2.17	1.68-2.7	0.12	2.28 (0.23)	2.28	1.85-2.76	0.10	2.6 (0.31)	2.60	2.02-3.25	0.12
Apr-2021	5.14 (0.64)	5.17	3.95-6.51	0.12	5.51 (0.52)	5.47	4.57-6.61	0.10	6.06 (0.42)	6.05	5.23-6.86	0.07
May-2021	0.28 (0.08)	0.28	0.14-0.47	0.30	0.34 (0.11)	0.34	0.16-0.59	0.33	0.52 (0.15)	0.51	0.26-0.83	0.29
Jun-2021	0.93 (0.24)	0.93	0.51-1.45	0.26	0.87 (0.19)	0.87	0.53-1.25	0.22	0.93 (0.16)	0.95	0.67-1.28	0.17
Jul-2021	1.02 (0.18)	1.02	0.67-1.41	0.18	1.27 (0.22)	1.27	0.87-1.73	0.18	1.45 (0.18)	1.44	1.09-1.81	0.12
Aug-2021	2.47 (0.27)	2.44	1.96-3	0.11	2.73 (0.29)	2.72	2.14-3.33	0.11	2.86 (0.22)	2.85	2.41-3.28	0.08
Sep-2021	3.61 (0.37)	3.61	2.93-4.37	0.10	3.47 (0.3)	3.47	2.91-4.09	0.09	3.62 (0.25)	3.65	3.17-4.13	0.07
Oct-2021	2.49 (0.3)	2.48	1.94-3.06	0.12	2.72 (0.3)	2.72	2.18-3.31	0.11	2.89 (0.25)	2.89	2.43-3.39	0.09
Nov-2021	0.94 (0.15)	0.94	0.65-1.24	0.16	0.87 (0.11)	0.87	0.66-1.08	0.13	0.95 (0.1)	0.95	0.76-1.14	0.10
Dec-2021	1.06 (0.14)	1.07	0.79-1.36	0.13	1.29 (0.15)	1.29	1.01-1.58	0.12	1.4 (0.13)	1.40	1.17-1.66	0.09
Feb-2022	0.11 (0.03)	0.11	0.05-0.18	0.30	0.16 (0.03)	0.16	0.1-0.23	0.21	0.25 (0.04)	0.25	0.18-0.33	0.15
Feb-2022	0.42 (0.08)	0.43	0.27-0.6	0.19	0.46 (0.07)	0.46	0.32-0.61	0.16	0.46 (0.06)	0.46	0.35-0.6	0.14
Mar-2022	0.2 (0.07)	0.20	0.08-0.34	0.34	0.27 (0.06)	0.27	0.16-0.38	0.21	0.28 (0.05)	0.28	0.19-0.38	0.17
Apr-2022	1.45 (0.21)	1.45	1.05-1.9	0.14	1.44 (0.15)	1.44	1.16-1.74	0.10	1.52 (0.14)	1.53	1.27-1.83	0.09
May-2022	1.64 (0.25)	1.64	1.17-2.18	0.15	1.69 (0.24)	1.69	1.26-2.17	0.14	2.25 (0.33)	2.26	1.62-2.94	0.15
Jun-2022	2.43 (0.61)	2.44	1.43-3.72	0.25	2.1 (0.48)	2.09	1.26-3.11	0.23	1.94 (0.37)	1.96	1.3-2.76	0.19
Jul-2022	6.49 (1.06)	6.49	4.6-8.76	0.16	7.47 (1.12)	7.43	5.38-9.6	0.15	6.64 (0.78)	6.65	5.17-8.12	0.12
Aug-2022	3 (0.65)	2.99	1.82-4.36	0.22	3.67 (0.62)	3.69	2.46-4.98	0.17	4.86 (0.61)	4.84	3.66-6.06	0.12
Sep-2022	2.91 (0.5)	2.95	2.02-4.04	0.17	3.24 (0.48)	3.23	2.36-4.23	0.15	3.86 (0.53)	3.86	2.91-4.88	0.14

**Table 17. Density of guillemot (including unidentified auks apportioned using identified auk ratios) recorded in flight and 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	3.41 (0.64)	3.42	2.22-4.64	0.19	3.52 (0.46)	3.53	2.68-4.47	0.13	3.33 (0.36)	3.33	2.62-4.04	0.11
Aug-2020	0.97 (0.17)	0.97	0.67-1.31	0.17	1.15 (0.16)	1.15	0.82-1.48	0.14	1.24 (0.14)	1.24	0.96-1.52	0.12
Sep-2020	3.62 (0.47)	3.63	2.7-4.57	0.13	3.87 (0.38)	3.85	3.11-4.61	0.10	3.65 (0.3)	3.66	3.07-4.2	0.08
Oct-2020	3.01 (0.49)	3.02	2.09-3.98	0.16	3.62 (0.44)	3.64	2.84-4.53	0.12	3.42 (0.33)	3.43	2.85-4.17	0.10
Nov-2020	0.39 (0.07)	0.39	0.25-0.54	0.19	0.54 (0.09)	0.54	0.37-0.72	0.17	0.52 (0.07)	0.52	0.4-0.67	0.13
Dec-2020	0.53 (0.1)	0.53	0.35-0.74	0.19	0.75 (0.11)	0.76	0.55-0.99	0.15	0.81 (0.09)	0.81	0.65-0.99	0.11
Jan-2021	1.09 (0.18)	1.08	0.74-1.42	0.16	1.33 (0.16)	1.33	1.04-1.66	0.12	1.37 (0.14)	1.35	1.08-1.64	0.11
Feb-2021	2.54 (0.66)	2.57	1.49-3.96	0.26	2.22 (0.46)	2.19	1.46-3.22	0.21	2.18 (0.39)	2.17	1.56-3.03	0.18
Mar-2021	2.32 (0.28)	2.32	1.79-2.89	0.12	2.43 (0.25)	2.43	1.97-2.94	0.10	2.74 (0.33)	2.73	2.13-3.42	0.12
Apr-2021	5.54 (0.69)	5.58	4.26-7.02	0.12	5.9 (0.56)	5.85	4.89-7.08	0.10	6.48 (0.45)	6.46	5.59-7.33	0.07
May-2021	0.3 (0.09)	0.30	0.15-0.49	0.30	0.35 (0.11)	0.34	0.17-0.6	0.33	0.53 (0.15)	0.52	0.27-0.85	0.29
Jun-2021	0.94 (0.24)	0.94	0.51-1.47	0.26	0.88 (0.19)	0.87	0.53-1.26	0.22	0.94 (0.16)	0.95	0.67-1.29	0.17
Jul-2021	1.03 (0.18)	1.03	0.68-1.42	0.18	1.29 (0.23)	1.28	0.88-1.76	0.18	1.47 (0.18)	1.47	1.11-1.84	0.12
Aug-2021	2.63 (0.29)	2.61	2.09-3.2	0.11	2.9 (0.31)	2.90	2.27-3.54	0.11	3.01 (0.23)	3.00	2.53-3.45	0.08
Sep-2021	3.82 (0.39)	3.82	3.1-4.62	0.10	3.65 (0.32)	3.65	3.06-4.3	0.09	3.8 (0.26)	3.82	3.32-4.33	0.07
Oct-2021	2.67 (0.32)	2.66	2.08-3.28	0.12	2.92 (0.32)	2.92	2.34-3.56	0.11	3.1 (0.27)	3.10	2.61-3.64	0.09
Nov-2021	1.11 (0.18)	1.11	0.76-1.45	0.16	1.03 (0.13)	1.04	0.78-1.29	0.13	1.08 (0.11)	1.09	0.87-1.31	0.10
Dec-2021	1.28 (0.17)	1.28	0.95-1.63	0.13	1.53 (0.18)	1.52	1.2-1.86	0.12	1.6 (0.15)	1.60	1.33-1.9	0.09
Feb-2022	0.12 (0.04)	0.12	0.05-0.2	0.30	0.18 (0.04)	0.18	0.11-0.26	0.21	0.29 (0.05)	0.29	0.22-0.39	0.15
Feb-2022	0.5 (0.1)	0.50	0.32-0.7	0.19	0.55 (0.09)	0.56	0.39-0.73	0.16	0.54 (0.08)	0.54	0.41-0.7	0.14
Mar-2022	0.25 (0.08)	0.25	0.1-0.42	0.34	0.32 (0.07)	0.32	0.2-0.46	0.21	0.34 (0.06)	0.34	0.24-0.46	0.17
Apr-2022	1.51 (0.21)	1.51	1.09-1.97	0.14	1.51 (0.16)	1.50	1.21-1.81	0.10	1.58 (0.14)	1.59	1.32-1.89	0.09
May-2022	1.69 (0.26)	1.69	1.2-2.24	0.15	1.74 (0.24)	1.74	1.29-2.23	0.14	2.33 (0.35)	2.34	1.68-3.04	0.15
Jun-2022	2.49 (0.63)	2.50	1.46-3.81	0.25	2.15 (0.49)	2.13	1.29-3.17	0.23	1.99 (0.38)	2.01	1.33-2.83	0.19
Jul-2022	6.79 (1.11)	6.79	4.82-9.17	0.16	7.79 (1.16)	7.75	5.61-10.01	0.15	6.97 (0.82)	6.99	5.43-8.54	0.12
Aug-2022	3.02 (0.65)	3.01	1.83-4.4	0.22	3.7 (0.62)	3.72	2.48-5.02	0.17	4.91 (0.61)	4.89	3.69-6.12	0.12

**Table 18. Density of guillemot (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded in flight and 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	4.45 (0.84)	4.47	2.9-6.05	0.19	4.59 (0.61)	4.62	3.5-5.83	0.13	4.35 (0.47)	4.34	3.41-5.26	0.11
Aug-2020	1.26 (0.22)	1.26	0.87-1.71	0.17	1.5 (0.21)	1.49	1.06-1.93	0.14	1.61 (0.19)	1.61	1.25-1.97	0.12
Sep-2020	4.73 (0.62)	4.74	3.53-5.97	0.13	5.05 (0.49)	5.03	4.06-6.01	0.10	4.76 (0.39)	4.78	4.01-5.49	0.08
Oct-2020	3.92 (0.64)	3.93	2.72-5.19	0.16	4.71 (0.58)	4.73	3.69-5.88	0.12	4.45 (0.43)	4.46	3.7-5.42	0.10
Nov-2020	0.5 (0.09)	0.50	0.32-0.69	0.19	0.69 (0.11)	0.69	0.47-0.93	0.17	0.67 (0.09)	0.67	0.51-0.86	0.13
Dec-2020	0.67 (0.13)	0.67	0.44-0.94	0.19	0.96 (0.14)	0.97	0.71-1.26	0.15	1.04 (0.11)	1.04	0.83-1.26	0.11
Jan-2021	1.38 (0.23)	1.37	0.94-1.8	0.16	1.72 (0.21)	1.72	1.34-2.15	0.12	1.77 (0.19)	1.75	1.4-2.12	0.11
Feb-2021	3.26 (0.85)	3.30	1.91-5.08	0.26	2.84 (0.59)	2.80	1.87-4.13	0.21	2.77 (0.49)	2.76	1.98-3.84	0.18
Mar-2021	2.97 (0.36)	2.97	2.29-3.7	0.12	3.1 (0.31)	3.10	2.52-3.76	0.10	3.52 (0.42)	3.52	2.73-4.4	0.12
Apr-2021	7.26 (0.9)	7.30	5.57-9.19	0.12	7.7 (0.73)	7.64	6.39-9.24	0.10	8.46 (0.59)	8.44	7.3-9.57	0.07
May-2021	0.38 (0.11)	0.38	0.19-0.63	0.30	0.44 (0.14)	0.44	0.22-0.77	0.33	0.68 (0.2)	0.68	0.35-1.1	0.29
Jun-2021	1.22 (0.31)	1.21	0.66-1.89	0.26	1.12 (0.24)	1.12	0.68-1.61	0.22	1.21 (0.21)	1.22	0.87-1.66	0.17
Jul-2021	1.26 (0.23)	1.26	0.84-1.75	0.18	1.59 (0.28)	1.58	1.08-2.16	0.18	1.83 (0.23)	1.82	1.38-2.29	0.12
Aug-2021	3.44 (0.38)	3.41	2.74-4.19	0.11	3.8 (0.41)	3.80	2.98-4.63	0.11	3.95 (0.31)	3.93	3.32-4.52	0.08
Sep-2021	5.01 (0.51)	5.01	4.06-6.05	0.10	4.77 (0.41)	4.78	4.01-5.63	0.09	4.97 (0.34)	5.00	4.34-5.67	0.07
Oct-2021	3.36 (0.4)	3.34	2.61-4.12	0.12	3.63 (0.39)	3.63	2.9-4.42	0.11	3.82 (0.33)	3.82	3.21-4.48	0.09
Nov-2021	1.43 (0.23)	1.43	0.98-1.87	0.16	1.33 (0.17)	1.34	1.01-1.67	0.13	1.39 (0.14)	1.39	1.12-1.68	0.10
Dec-2021	1.66 (0.22)	1.68	1.24-2.13	0.13	1.99 (0.23)	1.99	1.57-2.43	0.12	2.09 (0.19)	2.09	1.74-2.48	0.09
Feb-2022	0.15 (0.05)	0.16	0.07-0.26	0.30	0.24 (0.05)	0.24	0.14-0.34	0.21	0.39 (0.06)	0.39	0.28-0.51	0.15
Feb-2022	0.65 (0.13)	0.65	0.41-0.92	0.19	0.73 (0.11)	0.73	0.51-0.96	0.16	0.71 (0.1)	0.71	0.53-0.92	0.14
Mar-2022	0.33 (0.11)	0.33	0.14-0.56	0.34	0.42 (0.09)	0.42	0.26-0.6	0.21	0.45 (0.08)	0.45	0.31-0.61	0.17
Apr-2022	1.94 (0.28)	1.95	1.41-2.55	0.14	1.93 (0.2)	1.93	1.55-2.32	0.10	2.02 (0.18)	2.03	1.68-2.42	0.09
May-2022	2.02 (0.31)	2.02	1.44-2.68	0.15	2.09 (0.29)	2.09	1.56-2.68	0.14	2.86 (0.43)	2.88	2.06-3.74	0.15
Jun-2022	3.22 (0.81)	3.23	1.89-4.93	0.25	2.75 (0.63)	2.74	1.65-4.07	0.23	2.54 (0.48)	2.57	1.7-3.62	0.19
Jul-2022	8.82 (1.44)	8.82	6.26-11.91	0.16	10.13 (1.51)	10.08	7.3-13.02	0.15	9.06 (1.06)	9.07	7.05-11.09	0.12
Aug-2022	3.96 (0.86)	3.95	2.4-5.77	0.22	4.85 (0.82)	4.88	3.25-6.58	0.17	6.43 (0.8)	6.41	4.84-8.01	0.12
Sep-2022	4.02 (0.69)	4.07	2.79-5.57	0.17	4.52 (0.67)	4.50	3.29-5.9	0.15	5.31 (0.72)	5.30	4-6.71	0.14

## 1.17 Herring Gull

**Table 19. Density of herring gull recorded in flight and 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	0.04 (0.02)	0.04	0-0.07	0.54	0.03 (0.01)	0.03	0-0.06	0.55	0.03 (0.01)	0.03	0.01-0.05	0.49
Dec-2020	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jan-2021	0.01 (0.01)	0.01	0-0.04	0.91	0.01 (0.01)	0.01	0-0.03	0.96	0.01 (0.01)	0.01	0-0.03	0.64
Feb-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.02	0.93
Mar-2021	0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.03	0.90	0.01 (0.01)	0.01	0-0.02	0.92
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	0.86	0.01 (0.01)	0.01	0-0.04	0.88
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	0.01 (0.01)	0.01	0-0.03	0.92	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	0.02 (0.02)	0.02	0-0.06	0.65	0.02 (0.01)	0.02	0-0.04	0.64	0.01 (0.01)	0.01	0-0.03	0.64
Mar-2022	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	0.93
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	

## 1.18 Kitiwake

**Table 20. Density of kittiwake recorded in flight and 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	0.28 (0.18)	0.28	0.04-0.68	0.62	0.27 (0.13)	0.28	0.07-0.57	0.50	0.26 (0.1)	0.26	0.1-0.49	0.40
Aug-2020	0.28 (0.07)	0.28	0.16-0.42	0.25	0.26 (0.05)	0.26	0.15-0.37	0.21	0.27 (0.05)	0.27	0.18-0.36	0.17
Sep-2020	0.01 (0.01)	0.01	0-0.04	0.95	0.02 (0.01)	0.02	0-0.04	0.64	0.01 (0.01)	0.01	0-0.03	0.64
Oct-2020	1.02 (0.25)	1.01	0.57-1.56	0.25	1.12 (0.21)	1.12	0.76-1.57	0.19	1.25 (0.22)	1.27	0.9-1.75	0.17
Nov-2020	0.3 (0.07)	0.29	0.15-0.44	0.24	0.26 (0.05)	0.26	0.16-0.37	0.20	0.2 (0.04)	0.20	0.13-0.29	0.21
Dec-2020	0.11 (0.05)	0.11	0.02-0.2	0.44	0.11 (0.04)	0.11	0.03-0.2	0.36	0.11 (0.03)	0.11	0.05-0.17	0.31
Jan-2021	0.07 (0.03)	0.07	0.02-0.12	0.35	0.1 (0.03)	0.10	0.05-0.16	0.27	0.1 (0.02)	0.10	0.05-0.15	0.23
Feb-2021	0.33 (0.08)	0.33	0.18-0.51	0.26	0.26 (0.06)	0.26	0.15-0.38	0.25	0.22 (0.05)	0.22	0.13-0.31	0.22
Mar-2021	1.29 (0.28)	1.28	0.77-1.85	0.22	1.33 (0.22)	1.34	0.93-1.78	0.17	1.37 (0.16)	1.38	1.06-1.69	0.12
Apr-2021	0.46 (0.09)	0.47	0.3-0.65	0.19	0.56 (0.09)	0.56	0.38-0.75	0.17	0.54 (0.08)	0.54	0.4-0.7	0.14
May-2021	0.06 (0.06)	0.06	0-0.18	0.96	0.08 (0.06)	0.08	0-0.22	0.78	0.07 (0.05)	0.07	0-0.17	0.71
Jun-2021	0.2 (0.12)	0.20	0.02-0.48	0.62	0.16 (0.09)	0.15	0.03-0.36	0.61	0.14 (0.08)	0.14	0.03-0.31	0.54
Jul-2021	0.12 (0.04)	0.12	0.05-0.19	0.30	0.11 (0.03)	0.11	0.05-0.17	0.28	0.11 (0.03)	0.11	0.07-0.17	0.23
Aug-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Sep-2021	0.24 (0.08)	0.24	0.09-0.42	0.35	0.17 (0.06)	0.17	0.07-0.3	0.34	0.13 (0.05)	0.13	0.05-0.23	0.34
Oct-2021	0.77 (0.15)	0.77	0.48-1.08	0.20	0.67 (0.11)	0.67	0.47-0.88	0.16	0.72 (0.1)	0.72	0.52-0.92	0.14
Nov-2021	0.13 (0.04)	0.13	0.06-0.22	0.32	0.12 (0.03)	0.12	0.06-0.19	0.28	0.11 (0.03)	0.11	0.05-0.16	0.25
Dec-2021	0.05 (0.02)	0.05	0.01-0.09	0.46	0.04 (0.02)	0.04	0.02-0.08	0.38	0.05 (0.02)	0.05	0.02-0.07	0.33
Feb-2022	0.08 (0.03)	0.08	0.04-0.14	0.34	0.1 (0.03)	0.10	0.05-0.15	0.27	0.11 (0.03)	0.11	0.05-0.16	0.25
Feb-2022	0.47 (0.1)	0.47	0.28-0.68	0.21	0.44 (0.08)	0.43	0.29-0.6	0.18	0.44 (0.07)	0.44	0.31-0.58	0.16
Mar-2022	1.52 (0.33)	1.53	0.92-2.22	0.22	1.4 (0.24)	1.40	0.94-1.9	0.17	1.55 (0.21)	1.54	1.17-1.98	0.14
Apr-2022	0.14 (0.05)	0.14	0.06-0.24	0.33	0.16 (0.04)	0.16	0.08-0.23	0.25	0.17 (0.03)	0.17	0.11-0.24	0.20
May-2022	0.09 (0.04)	0.09	0.04-0.17	0.37	0.1 (0.03)	0.10	0.05-0.16	0.28	0.11 (0.03)	0.11	0.06-0.17	0.26
Jun-2022	0.12 (0.07)	0.12	0.02-0.27	0.59	0.09 (0.05)	0.09	0.01-0.21	0.60	0.07 (0.04)	0.08	0.02-0.17	0.54
Jul-2022	2.13 (0.9)	2.16	0.58-4.06	0.42	1.93 (0.68)	1.89	0.68-3.22	0.35	1.62 (0.55)	1.62	0.68-2.8	0.34
Aug-2022	0.02 (0.02)	0.02	0-0.06	0.67	0.03 (0.01)	0.03	0-0.05	0.53	0.05 (0.02)	0.05	0.01-0.09	0.47
Sep-2022	0.02 (0.02)	0.02	0-0.06	0.68	0.03 (0.01)	0.03	0-0.05	0.51	0.04 (0.01)	0.04	0.01-0.07	0.36

### 1.19 Large Auk sp.

**Table 21. Density of large auk sp. recorded in flight and 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	0.62	0.03 (0.02)	0.03	0-0.06	0.67	0.03 (0.02)	0.03	0.01-0.07	0.47
Sep-2020	0.06 (0.02)	0.06	0.02-0.11	0.38	0.05 (0.02)	0.05	0.02-0.09	0.35	0.05 (0.02)	0.05	0.02-0.08	0.33
Oct-2020	0.07 (0.03)	0.07	0.02-0.13	0.38	0.1 (0.03)	0.10	0.04-0.17	0.32	0.08 (0.02)	0.08	0.03-0.13	0.30
Nov-2020	0.02 (0.02)	0.02	0-0.06	0.65	0.03 (0.02)	0.04	0.01-0.07	0.47	0.03 (0.01)	0.03	0.01-0.06	0.40
Dec-2020	0.04 (0.02)	0.04	0-0.08	0.66	0.07 (0.03)	0.07	0.03-0.12	0.37	0.07 (0.02)	0.07	0.03-0.11	0.31
Jan-2021	0.04 (0.02)	0.04	0-0.07	0.54	0.03 (0.02)	0.03	0.01-0.07	0.45	0.07 (0.02)	0.07	0.03-0.11	0.33
Feb-2021	0.09 (0.04)	0.10	0.02-0.18	0.41	0.08 (0.03)	0.08	0.03-0.14	0.36	0.06 (0.02)	0.06	0.02-0.11	0.36
Mar-2021	0.11 (0.04)	0.11	0.04-0.19	0.37	0.1 (0.03)	0.10	0.04-0.17	0.32	0.09 (0.03)	0.09	0.05-0.15	0.28
Apr-2021	0.15 (0.04)	0.15	0.07-0.25	0.29	0.15 (0.03)	0.15	0.09-0.22	0.23	0.14 (0.03)	0.14	0.09-0.2	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	0.94
Jun-2021	0.01 (0.01)	0.01	0-0.04	0.94	0.01 (0.01)	0.01	0-0.03	0.98	0.01 (0.01)	0.01	0-0.02	0.96
Jul-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0.01 (0)	0.01	0-0.01	0.74
Aug-2021	0.02 (0.02)	0.02	0-0.06	0.66	0.02 (0.01)	0.02	0-0.04	0.65	0.01 (0.01)	0.01	0-0.03	0.65
Sep-2021	0.12 (0.07)	0.12	0.01-0.28	0.59	0.09 (0.05)	0.09	0.01-0.21	0.60	0.07 (0.04)	0.07	0.01-0.16	0.54
Oct-2021	0.13 (0.04)	0.13	0.06-0.2	0.29	0.12 (0.03)	0.12	0.07-0.18	0.25	0.14 (0.03)	0.14	0.09-0.19	0.19
Nov-2021	0.06 (0.02)	0.06	0.01-0.11	0.41	0.06 (0.02)	0.06	0.03-0.1	0.34	0.05 (0.02)	0.05	0.02-0.09	0.32
Dec-2021	0.13 (0.04)	0.13	0.06-0.22	0.34	0.15 (0.04)	0.15	0.07-0.23	0.30	0.13 (0.04)	0.13	0.06-0.2	0.28
Feb-2022	0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.03	0.82	0.04 (0.02)	0.04	0.01-0.08	0.44
Feb-2022	0.06 (0.03)	0.06	0.01-0.12	0.48	0.09 (0.03)	0.09	0.04-0.14	0.31	0.07 (0.02)	0.07	0.03-0.12	0.30
Mar-2022	0.07 (0.03)	0.07	0.02-0.13	0.41	0.07 (0.03)	0.07	0.03-0.12	0.37	0.08 (0.03)	0.08	0.03-0.14	0.34
Apr-2022	0.01 (0.01)	0.01	0-0.04	0.95	0.02 (0.01)	0.02	0-0.04	0.67	0.02 (0.01)	0.02	0-0.04	0.56
May-2022	0.02 (0.02)	0.02	0-0.07	0.95	0.02 (0.02)	0.02	0-0.05	0.93	0.04 (0.02)	0.04	0-0.08	0.56
Jun-2022	0.02 (0.02)	0.02	0-0.07	0.97	0.02 (0.02)	0.02	0-0.05	0.91	0.01 (0.01)	0.01	0-0.04	0.90
Jul-2022	0.07 (0.04)	0.07	0.01-0.16	0.54	0.11 (0.04)	0.11	0.04-0.19	0.35	0.12 (0.04)	0.13	0.05-0.2	0.30
Aug-2022	0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.03	0.92	0.03 (0.01)	0.03	0.01-0.05	0.44
Sep-2022	0.04 (0.03)	0.04	0-0.1	0.69	0.08 (0.04)	0.08	0.01-0.18	0.56	0.08 (0.04)	0.08	0.03-0.16	0.44

## 1.20 Lesser Black-backed Gull

**Table 22. Density of lesser black-backed gull recorded in flight and 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	0.93	0.01(0.01)	0.01	0-0.03	0.92	0.01(0.01)	0.01	0-0.03	0.68
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	

## 1.21 Little Auk

**Table 23. Density of little auk recorded in flight and 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	0.98	0.01(0.01)	0.01	0-0.03	0.92	0.01(0.01)	0.01	0-0.02	0.90
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	0.92	0.03(0.01)	0.03	0-0.05	0.53	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	0.91	0.01(0.01)	0.01	0-0.03	0.64
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	

## 1.22 Little Gull

**Table 24. Density of little gull recorded in flight and 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	0.01 (0.01)	0.01	0-0.04	0.92	0.01 (0.01)	0.01	0-0.03	0.97	0.01 (0.01)	0.01	0-0.02	0.93
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 (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	

## 1.23 Manx Shearwater

**Table 25. Density of Manx shearwater recorded in flight and 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		0.01 (0.01)	0.01	0-0.02	0.92
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	0.01 (0.01)	0.01	0-0.04	0.96	0.02 (0.01)	0.02	0-0.04	0.66	0.01 (0.01)	0.01	0-0.03	0.65
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		0.01 (0.01)	0.01	0-0.02	0.82
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		0.01 (0.01)	0.01	0-0.02	0.94
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	0.01 (0.01)	0.01	0-0.03	0.91	0.02 (0.01)	0.02	0-0.04	0.52
Aug-2022	0.01 (0.01)	0.01	0-0.04	0.79	0.01 (0.01)	0.01	0-0.03	0.81	0.01 (0.01)	0.01	0-0.03	0.60
Sep-2022	0.01 (0.01)	0.01	0-0.04	0.93	0.01 (0.01)	0.01	0-0.03	0.94	0.01 (0.01)	0.01	0-0.03	0.64

## 1.24 Puffin

**Table 26. Density of puffin recorded in flight and 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)	1.10	0.81-1.44	0.14	1.41 (0.19)	1.40	1.06-1.79	0.13	2.23 (0.6)	2.22	1.33-3.58	0.27
Aug-2020	1.13 (0.19)	1.12	0.78-1.5	0.17	1.43 (0.22)	1.43	1.04-1.85	0.15	1.95 (0.3)	1.94	1.38-2.57	0.16
Sep-2020	0.17 (0.05)	0.16	0.08-0.27	0.29	0.16 (0.04)	0.16	0.09-0.23	0.24	0.17 (0.03)	0.17	0.11-0.24	0.19
Oct-2020	0.12 (0.04)	0.12	0.06-0.2	0.32	0.11 (0.03)	0.11	0.06-0.17	0.26	0.11 (0.02)	0.11	0.06-0.16	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	0.93
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	0.94	0.01 (0.01)	0.01	0-0.02	0.96
Feb-2021	0.01 (0.01)	0.01	0-0.04	0.91	0.01 (0.01)	0.01	0-0.03	0.89	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	1.28 (0.21)	1.29	0.92-1.69	0.16	1.21 (0.15)	1.20	0.91-1.51	0.12	1.17 (0.12)	1.16	0.93-1.4	0.10
May-2021	0.15 (0.05)	0.16	0.07-0.27	0.35	0.23 (0.05)	0.22	0.13-0.34	0.24	0.35 (0.08)	0.35	0.21-0.51	0.23
Jun-2021	5.24 (0.81)	5.23	3.77-6.89	0.15	4.79 (0.61)	4.83	3.71-6.11	0.13	4.78 (0.55)	4.80	3.77-5.9	0.12
Jul-2021	1.8 (0.27)	1.80	1.31-2.37	0.15	2.1 (0.25)	2.09	1.65-2.59	0.12	2.33 (0.24)	2.33	1.88-2.79	0.10
Aug-2021	1.69 (0.24)	1.66	1.22-2.15	0.14	1.84 (0.2)	1.83	1.43-2.22	0.11	1.98 (0.19)	1.97	1.62-2.38	0.10
Sep-2021	2.75 (0.4)	2.76	2.01-3.58	0.15	2.55 (0.29)	2.56	2.03-3.16	0.11	2.39 (0.22)	2.40	1.99-2.87	0.09
Oct-2021	0.24 (0.06)	0.24	0.13-0.34	0.24	0.21 (0.04)	0.21	0.13-0.3	0.22	0.18 (0.04)	0.18	0.12-0.25	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	0.94	0.01 (0.01)	0.01	0-0.03	0.94	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	1.47 (0.2)	1.47	1.11-1.89	0.14	1.36 (0.15)	1.36	1.06-1.67	0.11	1.17 (0.12)	1.17	0.95-1.4	0.10
May-2022	3.89 (0.69)	3.87	2.69-5.36	0.18	4.5 (0.6)	4.50	3.36-5.7	0.13	5.11 (0.51)	5.13	4.23-6.15	0.10
Jun-2022	5.75 (1.28)	5.74	3.48-8.49	0.22	5.33 (0.93)	5.33	3.69-7.32	0.17	5.28 (0.74)	5.26	3.99-6.84	0.14
Jul-2022	4.34 (0.62)	4.28	3.07-5.52	0.14	4.71 (0.6)	4.73	3.63-5.98	0.13	4.83 (0.59)	4.82	3.68-6.03	0.12
Aug-2022	2.72 (0.58)	2.70	1.65-3.97	0.21	4.22 (0.83)	4.21	2.7-5.85	0.20	4.59 (0.75)	4.55	3.19-6.1	0.16
Sep-2022	0.7 (0.13)	0.69	0.45-0.93	0.18	0.59 (0.11)	0.59	0.4-0.8	0.18	0.59 (0.08)	0.59	0.44-0.77	0.14

**Table 27. Density of puffin (including unidentified auks apportioned using identified auk ratios) recorded in flight and 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 (0.17)	1.19	0.88-1.57	0.14	1.54 (0.21)	1.53	1.16-1.97	0.13	2.43 (0.65)	2.42	1.45-3.91	0.27
Aug-2020	1.16 (0.2)	1.15	0.8-1.55	0.17	1.5 (0.23)	1.50	1.09-1.93	0.15	2.04 (0.32)	2.03	1.45-2.68	0.16
Sep-2020	0.17 (0.05)	0.16	0.08-0.27	0.29	0.16 (0.04)	0.16	0.09-0.23	0.24	0.17 (0.03)	0.17	0.11-0.24	0.19
Oct-2020	0.12 (0.04)	0.12	0.06-0.2	0.32	0.11 (0.03)	0.11	0.06-0.17	0.26	0.11 (0.02)	0.11	0.06-0.16	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	0.93
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	0.94	0.01 (0.01)	0.01	0-0.02	0.96
Feb-2021	0.01 (0.01)	0.01	0-0.04	0.91	0.01 (0.01)	0.01	0-0.03	0.89	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	1.34 (0.22)	1.35	0.96-1.77	0.16	1.27 (0.16)	1.25	0.95-1.57	0.12	1.22 (0.12)	1.21	0.97-1.47	0.10
May-2021	0.15 (0.05)	0.16	0.07-0.27	0.35	0.23 (0.05)	0.22	0.13-0.34	0.24	0.36 (0.08)	0.35	0.21-0.52	0.23
Jun-2021	5.26 (0.81)	5.25	3.78-6.9	0.15	4.79 (0.61)	4.84	3.72-6.12	0.13	4.79 (0.55)	4.81	3.78-5.91	0.12
Jul-2021	1.81 (0.27)	1.81	1.32-2.39	0.15	2.13 (0.25)	2.12	1.67-2.63	0.12	2.36 (0.24)	2.36	1.9-2.82	0.10
Aug-2021	1.78 (0.25)	1.75	1.28-2.27	0.14	1.94 (0.21)	1.93	1.51-2.34	0.11	2.07 (0.2)	2.07	1.7-2.49	0.10
Sep-2021	2.82 (0.41)	2.83	2.06-3.67	0.15	2.62 (0.3)	2.63	2.08-3.25	0.11	2.46 (0.23)	2.47	2.04-2.95	0.09
Oct-2021	0.24 (0.06)	0.24	0.13-0.34	0.24	0.22 (0.05)	0.22	0.14-0.31	0.22	0.19 (0.04)	0.19	0.13-0.26	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	0.94	0.01 (0.01)	0.01	0-0.03	0.94	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	1.52 (0.21)	1.52	1.14-1.95	0.14	1.39 (0.16)	1.40	1.09-1.71	0.11	1.2 (0.12)	1.20	0.97-1.44	0.10
May-2022	3.94 (0.7)	3.92	2.72-5.42	0.18	4.58 (0.61)	4.58	3.42-5.8	0.13	5.21 (0.52)	5.23	4.31-6.27	0.10
Jun-2022	5.82 (1.3)	5.81	3.52-8.6	0.22	5.4 (0.94)	5.41	3.74-7.42	0.17	5.38 (0.76)	5.36	4.06-6.97	0.14
Jul-2022	4.5 (0.64)	4.43	3.18-5.72	0.14	4.84 (0.62)	4.86	3.73-6.15	0.13	4.99 (0.61)	4.98	3.8-6.22	0.12
Aug-2022	2.75 (0.59)	2.72	1.67-4.01	0.21	4.25 (0.83)	4.23	2.71-5.88	0.20	4.61 (0.75)	4.57	3.2-6.12	0.16
Sep-2022	0.73 (0.13)	0.72	0.47-0.98	0.18	0.62 (0.11)	0.61	0.42-0.83	0.18	0.61 (0.09)	0.61	0.45-0.8	0.14

**Table 28. Density of puffin (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded in flight and 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 (0.2)	1.39	1.02-1.83	0.14	1.79 (0.24)	1.78	1.35-2.29	0.13	2.84 (0.76)	2.83	1.69-4.55	0.27
Aug-2020	1.36 (0.23)	1.35	0.93-1.81	0.17	1.73 (0.26)	1.73	1.25-2.23	0.15	2.35 (0.37)	2.33	1.67-3.09	0.16
Sep-2020	0.19 (0.05)	0.19	0.09-0.31	0.29	0.18 (0.04)	0.18	0.1-0.27	0.24	0.2 (0.04)	0.20	0.13-0.28	0.19
Oct-2020	0.14 (0.04)	0.14	0.07-0.24	0.32	0.13 (0.03)	0.13	0.07-0.2	0.26	0.13 (0.03)	0.13	0.07-0.19	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	0.93
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	0.94	0.01 (0.01)	0.01	0-0.02	0.96
Feb-2021	0.01 (0.01)	0.01	0-0.04	0.91	0.01 (0.01)	0.01	0-0.03	0.89	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	1.55 (0.25)	1.56	1.12-2.05	0.16	1.47 (0.18)	1.45	1.11-1.83	0.12	1.42 (0.14)	1.41	1.14-1.71	0.10
May-2021	0.18 (0.06)	0.18	0.08-0.31	0.35	0.26 (0.06)	0.26	0.15-0.39	0.24	0.42 (0.09)	0.41	0.25-0.61	0.23
Jun-2021	6.06 (0.93)	6.05	4.35-7.96	0.15	5.51 (0.7)	5.56	4.27-7.04	0.13	5.5 (0.64)	5.53	4.34-6.79	0.12
Jul-2021	2.08 (0.31)	2.09	1.52-2.75	0.15	2.46 (0.29)	2.45	1.93-3.04	0.12	2.71 (0.28)	2.71	2.19-3.24	0.10
Aug-2021	2.08 (0.3)	2.05	1.5-2.64	0.14	2.26 (0.24)	2.25	1.76-2.73	0.11	2.42 (0.24)	2.41	1.98-2.9	0.10
Sep-2021	3.28 (0.48)	3.29	2.39-4.27	0.15	3.05 (0.35)	3.06	2.43-3.79	0.11	2.86 (0.27)	2.87	2.38-3.43	0.09
Oct-2021	0.27 (0.07)	0.27	0.15-0.39	0.24	0.25 (0.05)	0.25	0.16-0.36	0.22	0.21 (0.04)	0.21	0.14-0.3	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	0.94	0.01 (0.01)	0.01	0-0.03	0.94	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	1.7 (0.23)	1.70	1.28-2.17	0.14	1.56 (0.18)	1.56	1.22-1.91	0.11	1.34 (0.13)	1.35	1.09-1.61	0.10
May-2022	4.52 (0.8)	4.49	3.12-6.22	0.18	5.24 (0.7)	5.25	3.92-6.65	0.13	5.96 (0.6)	5.98	4.93-7.17	0.10
Jun-2022	6.77 (1.51)	6.76	4.1-10.01	0.22	6.28 (1.09)	6.29	4.35-8.63	0.17	6.24 (0.88)	6.22	4.72-8.09	0.14
Jul-2022	5.22 (0.75)	5.15	3.69-6.65	0.14	5.61 (0.71)	5.63	4.32-7.13	0.13	5.77 (0.71)	5.75	4.39-7.19	0.12
Aug-2022	3.19 (0.68)	3.16	1.93-4.65	0.21	4.95 (0.97)	4.93	3.16-6.85	0.20	5.37 (0.88)	5.31	3.73-7.13	0.16
Sep-2022	0.86 (0.16)	0.84	0.55-1.14	0.18	0.72 (0.13)	0.71	0.48-0.96	0.18	0.7 (0.1)	0.71	0.52-0.92	0.14

## 1.25 Razorbill

**Table 29. Density of razorbill recorded in flight and 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)	0.02	0-0.07	0.93	0.02 (0.02)	0.02	0-0.05	0.89	0.01 (0.01)	0.01	0-0.04	0.90
Aug-2020	0.02 (0.02)	0.02	0-0.07	0.86	0.02 (0.02)	0.02	0-0.05	0.90	0.01 (0.01)	0.01	0-0.04	0.88
Sep-2020	0.09 (0.04)	0.09	0.02-0.19	0.47	0.09 (0.03)	0.09	0.03-0.16	0.38	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	0.92
Nov-2020	0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.03	0.90	0.01 (0.01)	0.01	0-0.02	0.93
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	0.01-0.17	0.48	0.09 (0.03)	0.09	0.03-0.16	0.38	0.07 (0.02)	0.07	0.02-0.12	0.37
Mar-2021	0.01 (0.01)	0.01	0-0.04	0.99	0.03 (0.01)	0.03	0-0.05	0.51	0.06 (0.02)	0.06	0.01-0.11	0.41
Apr-2021	0.08 (0.03)	0.08	0.04-0.14	0.33	0.12 (0.03)	0.12	0.06-0.19	0.28	0.14 (0.03)	0.14	0.08-0.2	0.22
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	0.06 (0.02)	0.06	0.02-0.11	0.40	0.04 (0.02)	0.04	0.01-0.08	0.40	0.08 (0.03)	0.08	0.03-0.15	0.39
Jul-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2021	0.14 (0.07)	0.14	0.04-0.28	0.47	0.11 (0.05)	0.11	0.03-0.21	0.41	0.11 (0.04)	0.11	0.04-0.19	0.36
Sep-2021	0.08 (0.05)	0.08	0-0.2	0.66	0.06 (0.04)	0.06	0-0.15	0.66	0.07 (0.03)	0.07	0.01-0.13	0.51
Oct-2021	0.02 (0.01)	0.02	0-0.06	0.62	0.03 (0.01)	0.03	0-0.05	0.53	0.02 (0.01)	0.02	0-0.04	0.54
Nov-2021	0.01 (0.01)	0.01	0-0.04	0.92	0.01 (0.01)	0.01	0-0.03	0.94	0.01 (0.01)	0.01	0-0.02	0.94
Dec-2021	0.02 (0.01)	0.02	0-0.06	0.63	0.03 (0.01)	0.03	0-0.05	0.55	0.02 (0.01)	0.02	0-0.04	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	0.56	0.04 (0.02)	0.04	0-0.1	0.57	0.03 (0.02)	0.03	0-0.08	0.58
Mar-2022	0.11 (0.05)	0.11	0.04-0.2	0.42	0.13 (0.05)	0.13	0.04-0.23	0.37	0.12 (0.04)	0.12	0.05-0.2	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	0.84	0.01 (0.01)	0.01	0-0.03	0.83	0.01 (0.01)	0.01	0-0.02	0.81
Jun-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2022	0.12 (0.07)	0.12	0.01-0.28	0.60	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)	0.05	0-0.1	0.57	0.03 (0.02)	0.03	0-0.07	0.56
Sep-2022	0.12 (0.05)	0.12	0.04-0.22	0.38	0.24 (0.11)	0.24	0.05-0.47	0.45	0.3 (0.11)	0.30	0.1-0.54	0.38

**Table 30. Density of razorbill (including unidentified auks apportioned using identified auk ratios) recorded in flight and 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)	0.02	0-0.07	0.93	0.02 (0.02)	0.02	0-0.05	0.89	0.01 (0.01)	0.01	0-0.04	0.90
Aug-2020	0.02 (0.02)	0.02	0-0.07	0.86	0.02 (0.02)	0.02	0-0.05	0.90	0.01 (0.01)	0.01	0-0.04	0.88
Sep-2020	0.09 (0.04)	0.09	0.02-0.19	0.47	0.09 (0.03)	0.09	0.03-0.16	0.38	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	0.92
Nov-2020	0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.03	0.90	0.01 (0.01)	0.01	0-0.02	0.93
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	0.01-0.17	0.48	0.09 (0.03)	0.09	0.03-0.16	0.38	0.07 (0.02)	0.07	0.02-0.12	0.37
Mar-2021	0.01 (0.01)	0.01	0-0.04	0.99	0.03 (0.01)	0.03	0-0.05	0.51	0.06 (0.02)	0.06	0.01-0.11	0.41
Apr-2021	0.08 (0.03)	0.08	0.04-0.14	0.33	0.13 (0.04)	0.13	0.07-0.2	0.28	0.15 (0.03)	0.15	0.08-0.21	0.22
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	0.06 (0.02)	0.06	0.02-0.11	0.40	0.04 (0.02)	0.04	0.01-0.08	0.40	0.08 (0.03)	0.08	0.03-0.15	0.39
Jul-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2021	0.15 (0.07)	0.15	0.04-0.31	0.47	0.12 (0.05)	0.12	0.04-0.22	0.41	0.11 (0.04)	0.12	0.04-0.2	0.36
Sep-2021	0.08 (0.05)	0.08	0-0.2	0.66	0.06 (0.04)	0.06	0-0.15	0.66	0.07 (0.03)	0.07	0.01-0.13	0.51
Oct-2021	0.02 (0.01)	0.02	0-0.06	0.62	0.03 (0.01)	0.03	0-0.05	0.53	0.02 (0.01)	0.02	0-0.04	0.54
Nov-2021	0.01 (0.01)	0.01	0-0.04	0.92	0.01 (0.01)	0.01	0-0.03	0.94	0.01 (0.01)	0.01	0-0.02	0.94
Dec-2021	0.02 (0.01)	0.02	0-0.06	0.63	0.03 (0.01)	0.03	0-0.05	0.55	0.02 (0.01)	0.02	0-0.04	0.54
Feb-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Feb-2022	0.07 (0.04)	0.07	0-0.16	0.56	0.05 (0.03)	0.05	0-0.11	0.57	0.04 (0.02)	0.04	0-0.1	0.58
Mar-2022	0.13 (0.06)	0.13	0.04-0.25	0.42	0.16 (0.06)	0.15	0.05-0.27	0.37	0.15 (0.05)	0.15	0.07-0.25	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	0.84	0.01 (0.01)	0.01	0-0.03	0.83	0.01 (0.01)	0.01	0-0.02	0.81
Jun-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2022	0.12 (0.07)	0.12	0.01-0.28	0.60	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)	0.05	0-0.1	0.57	0.03 (0.02)	0.03	0-0.07	0.56
Sep-2022	0.12 (0.05)	0.12	0.04-0.22	0.38	0.26 (0.12)	0.25	0.06-0.5	0.45	0.31 (0.12)	0.32	0.11-0.56	0.38

**Table 31. Density of razorbill (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded in flight and 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)	0.02	0-0.07	0.93	0.02 (0.02)	0.02	0-0.05	0.89	0.01 (0.01)	0.01	0-0.04	0.90
Aug-2020	0.02 (0.02)	0.02	0-0.07	0.86	0.02 (0.02)	0.02	0-0.05	0.90	0.01 (0.01)	0.01	0-0.04	0.88
Sep-2020	0.12 (0.06)	0.12	0.03-0.24	0.47	0.1 (0.04)	0.10	0.04-0.19	0.38	0.1 (0.03)	0.10	0.04-0.18	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	0.92
Nov-2020	0 (0)	0.00	0-0		0.01 (0.01)	0.01	0-0.03	0.90	0.01 (0.01)	0.01	0-0.02	0.93
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	0.09 (0.05)	0.09	0.01-0.19	0.48	0.1 (0.04)	0.11	0.04-0.19	0.38	0.08 (0.03)	0.08	0.02-0.14	0.37
Mar-2021	0.01 (0.01)	0.01	0-0.04	0.99	0.03 (0.01)	0.03	0-0.05	0.51	0.07 (0.03)	0.07	0.02-0.14	0.41
Apr-2021	0.09 (0.03)	0.09	0.04-0.16	0.33	0.16 (0.04)	0.16	0.08-0.25	0.28	0.17 (0.04)	0.17	0.1-0.25	0.22
May-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0.03 (0.02)	0.03	0-0.05	0.56
Jun-2021	0.07 (0.03)	0.07	0.03-0.13	0.40	0.05 (0.02)	0.05	0.01-0.09	0.40	0.09 (0.04)	0.10	0.03-0.17	0.39
Jul-2021	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Aug-2021	0.19 (0.09)	0.19	0.05-0.38	0.47	0.15 (0.06)	0.15	0.05-0.27	0.41	0.13 (0.05)	0.14	0.05-0.23	0.36
Sep-2021	0.09 (0.06)	0.09	0-0.23	0.66	0.07 (0.05)	0.07	0-0.17	0.66	0.08 (0.04)	0.08	0.01-0.16	0.51
Oct-2021	0.02 (0.01)	0.02	0-0.06	0.62	0.03 (0.01)	0.03	0-0.05	0.53	0.02 (0.01)	0.02	0-0.04	0.54
Nov-2021	0.01 (0.01)	0.01	0-0.04	0.92	0.01 (0.01)	0.01	0-0.03	0.94	0.01 (0.01)	0.01	0-0.02	0.94
Dec-2021	0.02 (0.01)	0.02	0-0.06	0.63	0.03 (0.02)	0.03	0-0.07	0.55	0.03 (0.01)	0.03	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	0.08 (0.05)	0.08	0-0.18	0.56	0.06 (0.03)	0.06	0-0.13	0.57	0.05 (0.03)	0.05	0-0.11	0.58
Mar-2022	0.15 (0.07)	0.15	0.05-0.29	0.42	0.19 (0.07)	0.19	0.06-0.33	0.37	0.17 (0.06)	0.17	0.08-0.29	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	0.84	0.01 (0.01)	0.01	0-0.03	0.83	0.01 (0.01)	0.01	0-0.02	0.81
Jun-2022	0 (0)	0.00	0-0		0 (0)	0.00	0-0		0 (0)	0.00	0-0	
Jul-2022	0.15 (0.09)	0.15	0.01-0.33	0.60	0.16 (0.07)	0.16	0.03-0.32	0.47	0.2 (0.07)	0.20	0.08-0.35	0.35
Aug-2022	0.01 (0.01)	0.01	0-0.04	0.87	0.05 (0.03)	0.05	0-0.12	0.57	0.04 (0.02)	0.04	0-0.09	0.56
Sep-2022	0.14 (0.06)	0.14	0.04-0.26	0.38	0.31 (0.14)	0.31	0.07-0.61	0.45	0.38 (0.14)	0.39	0.13-0.69	0.38

## 1.26 Red-throated Diver

**Table 32. Density of red-throated diver recorded in flight and 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	0.97	0.01(0.01)	0.01	0-0.03	0.93	0.01(0.01)	0.01	0-0.02	0.96
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	0.84	0.01(0.01)	0.01	0-0.02	0.90
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	0.80	0.01(0.01)	0.01	0-0.02	0.83
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	

## 1.27 Shag

**Table 33. Density of shag recorded in flight and 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	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Aug-2020	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Sep-2020	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Oct-2020	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Nov-2020	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Dec-2020	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Jan-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Feb-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Mar-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	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	0.67	0.02 (0.01)	0.02	0-0.05	0.55
May-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Jun-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Jul-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Aug-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Sep-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Oct-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Nov-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Dec-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Feb-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		0.01 (0.01)	0.01	0-0.02	0.96
Feb-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Mar-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Apr-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
May-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Jun-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Jul-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Aug-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Sep-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	

## 1.28 Sooty Shearwater

**Table 34. Density of sooty shearwater recorded in flight and 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	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Aug-2020	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Sep-2020	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Oct-2020	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Nov-2020	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Dec-2020	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Jan-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Feb-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Mar-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Apr-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
May-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Jun-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Jul-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Aug-2021	0.01(0.01)	0.01	0-0.04	0.89	0.02(0.01)	0.02	0-0.04	0.64	0.01(0.01)	0.01	0-0.03	0.70
Sep-2021	o (o)	0.00	0-0		0.01(0.01)	0.01	0-0.03	0.87	0.01(0.01)	0.01	0-0.02	0.88
Oct-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Nov-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Dec-2021	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Feb-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Feb-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Mar-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Apr-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
May-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Jun-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Jul-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Aug-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	
Sep-2022	o (o)	0.00	0-0		o (o)	0.00	0-0		o (o)	0.00	0-0	