



**RWE Renewables UK Dogger Bank
South (West) Limited**

**RWE Renewables UK Dogger Bank
South (East) Limited**

Dogger Bank South Offshore Wind Farms

Environmental Statement

Volume 7

**Appendix 12-5a Seasonal Peak Abundance (All)
(Revision 2)**

**Appendix 12-5b Seasonal Peak Abundance (Sitting)
(Revision 2)**

**Appendix 12-5c Seasonal Peak Abundance (Flying)
(Revision 2)**

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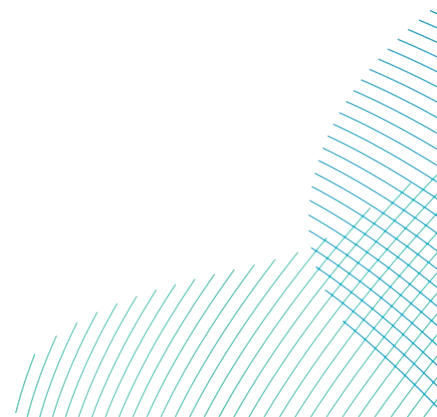
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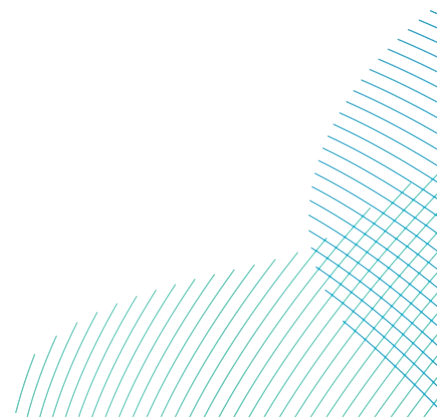
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02	Appendix 5a, 17 - 37	Appendix 5a, Section 1	Updates to the numbers presented in Table 32 to Table 69 to reflect Updated NE Guidance and Relevant Representations received post submission.
02	Appendix 5b, 17 - 37	Appendix 5b, Section 1	Updates to the numbers presented in Table 32 to Table 69 to reflect Updated NE Guidance and Relevant Representations received post submission.
02	Appendix 5c, 6 - 36	Appendix 5c, Section 1	Updates to the numbers presented in Table 9 to Table 69 to reflect Updated NE Guidance and Relevant Representations received post submission.





MacArthur
Green

Dogger Bank South Offshore Windfarm

Ornithology Technical Appendix 12-5a Seabird peak seasonal abundances: birds in flight and on the sea

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1 INTRODUCTION

This appendix provides tables of seabird peak abundance in each species-specific season, as defined in Furness (2015)¹ for each species recorded during baseline surveys for the DBS East and West Offshore Wind Farm projects (March 2021 – February 2023).

Abundances were estimated using design-based methods and are summarised as central estimate (i.e. extrapolated from the number seen in the surveyed area to the whole area) and 95% confidence range, derived from 1,000 nonparametric bootstrap samples.

This appendix (a) provides the combined peak abundance of each species-specific season on the sea and in flight.

Appendix (b) provides the peak abundance of each species-specific season on the sea.

Appendix (c) provides the peak abundance of each species-specific season in flight.

¹ Furness, R.W. 2015. Non-breeding season populations of seabirds in UK waters: Population sizes for Biologically Defined Minimum Population Scales (BDMPS). Natural England Commissioned Report Number 164. 389 pp.

Table 1. DBS - East. Seasonal peak abundance of Arctic skua recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	4.15 (7.11)	0-24.91	4.15 (7.17)	0-24.93	4.2 (6.75)	0-25.19
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	4.15 (7.11)	0-24.91	4.15 (7.17)	0-24.93	4.2 (6.75)	0-25.19

Table 2. DBS - East. Seasonal peak abundance of Arctic tern recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	37.47 (43.09)	0-124.89	54.29 (58.33)	0-158.68	83.41 (89.54)	0-241.88
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 3. DBS - East. Seasonal peak abundance of Common gull recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	20.84 (23.11)	0-83.26	20.9 (22.83)	0-83.52	25.05 (25.44)	0-83.41

Table 4. DBS - East. Seasonal peak abundance of Common tern recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	4.16 (7.05)	0-24.98	8.35 (12.03)	0-41.76	8.34 (11.81)	0-41.7
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 5. DBS - East. Seasonal peak abundance of Fulmar recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	20.45 (18.24)	0-64.85	32.76 (28.72)	0-89.62	57.21 (51.56)	0-146.71
Breeding (full)	113.15 (94.75)	16.76-368.98	138.71 (92.74)	41.78-379.31	159.58 (104.6)	41.77-412.35
Autumn migration	96.14 (69.45)	8.3-226.05	234.05 (217.39)	8.31-643.94	380.3 (358.14)	8.31-969.83
Winter	50.65 (54.38)	0-151.96	76.23 (79.83)	0-211.74	113.99 (102.54)	0-279.33
Non-breeding	96.14 (69.45)	8.3-226.05	234.05 (217.39)	8.31-643.94	380.3 (358.14)	8.31-969.83

Table 6. DBS - East. Seasonal peak abundance of Gannet recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	70.76 (97.86)	0-324.85	75.09 (103.5)	0-358.75	83.02 (103.06)	0-348.5
Breeding (full)	597.8 (136.12)	337.84-864.5	754.92 (204.58)	406.2-1218.59	1223.81 (627.26)	575.49-2835.12
Autumn migration	479.96 (172.53)	257.4-862.55	776.13 (331.94)	382.22-1471.87	971.71 (322.49)	564.84-1680.69
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 7. DBS - East. Seasonal peak abundance of Great black-backed gull recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	92.19 (54.94)	16.76-234.67	105 (50.86)	33.42-236.01	176.07 (64.81)	58.91-319.78
Breeding (full)	42.23 (48.57)	0-152.03	59.24 (65.31)	0-186.17	93.09 (100.41)	0-287.74
Autumn migration	4.22 (7.31)	0-25.33	25.09 (38.79)	0-133.81	33.29 (18.19)	0-76.18
Winter	4.24 (7.23)	0-25.43	16.47 (15.97)	0-57.03	36.98 (28.76)	0-105.96
Non-breeding	92.19 (54.94)	16.76-234.67	105 (50.86)	33.42-236.01	176.07 (64.81)	58.91-319.78

Table 8. DBS - East. Seasonal peak abundance of Great skua recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	4.2 (7.37)	0-25.21	4.2 (7.5)	0-25.19
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	4.1 (7.02)	0-24.62	4.09 (7)	0-24.55	4.09 (6.83)	0-24.55
Non-breeding	4.1 (7.02)	0-24.62	4.09 (7)	0-24.55	4.09 (6.83)	0-24.55

Table 9. DBS - East. Seasonal peak abundance of Guillemot recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	1824.7 (1259.68)	423.62-3810.1	2633.22 (1066.17)	1301.41-4380.72	3782.48 (1736.38)	1811.4-6704.74
Breeding (full)	2779.62 (1056.74)	1064.21-4540.96	3722.55 (1449.38)	1565.55-6008.17	5036.6 (591.52)	3979.17-6298.7
Post-breeding	4028.38 (3482.8)	644.9-11140.58	5340.52 (4324.9)	915.91-13313.93	7496.93 (5795.58)	1561.47-17849.17
Winter	5237.85 (622.99)	4086.33-6590.04	7360.03 (664.06)	5996.1-8698.47	9624.5 (859.87)	7846.41-11097.22
Non-breeding	5237.85 (622.99)	4086.33-6590.04	7360.03 (664.06)	5996.1-8698.47	9624.5 (859.87)	7846.41-11097.22

Table 10. DBS - East. Seasonal peak abundance of Guillemot (including unidentified auks apportioned using identified auk ratios) recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	2799.11 (995.69)	1456.81-4562.58	4071.04 (1648.33)	2012.03-6772.75	5656.15 (2596.5)	2708.68-10025.96
Breeding (full)	5221.19 (1984.95)	1998.99-8529.66	7024.49 (2734.99)	2954.21-11337.48	9225.67 (3457.35)	4126.99-14471.15
Post-breeding	4433.17 (3832.78)	709.7-12260.06	5855.71 (4742.12)	1004.26-14598.3	8384.33 (6481.59)	1746.3-19961.94
Winter	6701.46 (797.08)	5228.17-8431.48	9610.01 (867.06)	7829.12-11357.61	12642.57 (1129.51)	10306.9-14577.1
Non-breeding	6701.46 (797.08)	5228.17-8431.48	9610.01 (867.06)	7829.12-11357.61	12642.57 (1129.51)	10306.9-14577.1

Table 11. DBS - East. Seasonal peak abundance of Guillemot (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	3663.9 (1303.3)	1906.89-5972.19	5326.25 (2156.55)	2632.39-8860.96	7402.61 (3398.23)	3545.04-13121.69
Breeding (full)	6698.09 (2546.43)	2564.43-10942.41	9030.5 (3516.03)	3797.86-14575.18	11880 (4452.07)	5314.37-18634.66
Post-breeding	5812.28 (5025.11)	930.48-16074.02	7678.05 (6217.9)	1316.79-19141.4	10989.81 (8495.78)	2288.97-26165.24
Winter	8760.2 (1041.95)	6834.3-11021.7	12551.79 (1132.48)	10225.74-14834.37	16512.02 (1475.21)	13461.48-19038.64
Non-breeding	8760.2 (1041.95)	6834.3-11021.7	12551.79 (1132.48)	10225.74-14834.37	16512.02 (1475.21)	13461.48-19038.64

Table 12. DBS - East. Seasonal peak abundance of Herring gull recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	8.38 (13.85)	0-50.29	8.43 (14.31)	0-50.57	8.42 (14.66)	0-50.49
Breeding (full)	12.59 (15.84)	0-50.36	16.81 (20.02)	0-58.82	16.79 (20.89)	0-67.17
Autumn migration	4.22 (7.2)	0-25.33	8.33 (8.02)	0-25.41	16.79 (16.66)	0-59.25
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	8.38 (13.85)	0-50.29	8.43 (14.31)	0-50.57	16.79 (16.66)	0-59.25

Table 13. DBS - East. Seasonal peak abundance of Kittiwake recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	947.07 (415.83)	469.34-1961.18	1348.23 (473.46)	777.11-2537.14	2006.15 (785.1)	1094.26-3677.46
Breeding (full)	5752.29 (2377.01)	2144.46-9946.21	7590.21 (2567.25)	3545.77-12058.78	9656.32 (2487.94)	5661.35-14198.31
Autumn migration	1669.31 (1177.87)	388.35-3717.29	2451.07 (1842.96)	575.93-5818.11	4212.81 (4287.47)	84.54-11516.77
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	1669.31 (1177.87)	388.35-3717.29	2451.07 (1842.96)	575.93-5818.11	4212.81 (4287.47)	84.54-11516.77

Table 14. DBS - East. Seasonal peak abundance of Lesser black-backed gull recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	4.2 (7.23)	0-25.18	4.2 (7.08)	0-25.21	4.2 (7.26)	0-25.19
Breeding (full)	8.33 (14.4)	0-49.96	8.43 (8.31)	0-25.32	12.66 (10.96)	0-42.06
Autumn migration	0 (0)	0-0	0 (0)	0-0	4.15 (6.98)	0-24.92
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	4.2 (7.23)	0-25.18	4.2 (7.08)	0-25.21	4.2 (7.26)	0-25.19

Table 15. DBS - East. Seasonal peak abundance of Little gull recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	100.76 (157.03)	0-579.38	125.81 (171.12)	0-528.38

Table 16. DBS - East. Seasonal peak abundance of Manx shearwater recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	4.19 (7.09)	0-25.14	4.21 (7.5)	0-25.28	4.24 (7.08)	0-25.46
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	4.16 (7.05)	0-24.98	4.18 (7.25)	0-25.06	4.17 (6.75)	0-25.02

Table 17. DBS - East. Seasonal peak abundance of Puffin recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	20.98 (25.04)	0-75.54	29.41 (32.24)	0-92.43	50.38 (55.55)	0-159.53
Breeding (full)	41.67 (42.88)	0-108.34	54.3 (57.58)	0-150.36	71.11 (77.27)	0-209.15
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	95.52 (95.81)	0-282.31	133 (123.35)	0-348.98	186.98 (170.46)	8.36-473.47
Non-breeding	95.52 (95.81)	0-282.31	133 (123.35)	0-348.98	186.98 (170.46)	8.36-473.47

Table 18. DBS - East. Seasonal peak abundance of Puffin (including unidentified auks apportioned using identified auk ratios) recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	20.98 (25.04)	0-75.54	29.41 (32.24)	0-92.43	50.38 (55.55)	0-159.53
Breeding (full)	41.67 (42.88)	0-108.34	54.3 (57.58)	0-150.36	71.11 (77.27)	0-209.15
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	103.83 (104.14)	0-306.85	153.77 (142.61)	0-403.49	216.05 (196.97)	9.66-547.08
Non-breeding	103.83 (104.14)	0-306.85	153.77 (142.61)	0-403.49	216.05 (196.97)	9.66-547.08

Table 19. DBS - East. Seasonal peak abundance of Puffin (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	25.18 (30.04)	0-90.65	33.61 (36.84)	0-105.64	58.77 (64.8)	0-186.12
Breeding (full)	50 (51.46)	0-130.01	62.65 (66.44)	0-173.49	83.66 (90.91)	0-246.06
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	120.43 (120.8)	0-355.93	178.7 (165.73)	0-468.89	249.27 (227.26)	11.15-631.22
Non-breeding	120.43 (120.8)	0-355.93	178.7 (165.73)	0-468.89	249.27 (227.26)	11.15-631.22

Table 20. DBS - East. Seasonal peak abundance of Razorbill recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	1092.58 (678.53)	194.26- 2283.38	1657.83 (1040.52)	253.87- 3268.78	2199.09 (1370.13)	406.23- 4148.03
Breeding (full)	199.62 (72.84)	83.13-366.13	313.01 (119.56)	125.15- 567.74	608.42 (337.72)	233.16- 1375.7
Autumn migration	2693.5 (3034.08)	0-8908.8	3654.07 (3993.96)	42.01- 11384.68	4299.87 (4566.54)	41.98- 12552.66
Winter	1587.39 (256.62)	1080.63- 2059.58	2172.48 (308.3)	1660.04- 2782.12	2786.25 (412.94)	2099.24- 3592.03
Non-breeding	2693.5 (3034.08)	0-8908.8	3654.07 (3993.96)	42.01- 11384.68	4299.87 (4566.54)	41.98- 12552.66

Table 21. DBS - East. Seasonal peak abundance of Razorbill (including unidentified auks apportioned using identified auk ratios) recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	1975.82 (1227.05)	351.3- 4129.29	2976.45 (1868.14)	455.8- 5868.71	3967.83 (2472.13)	732.96- 7484.32
Breeding (full)	286.98 (104.71)	119.51- 526.35	463.27 (176.96)	185.22- 840.29	900.19 (499.68)	344.97- 2035.42
Autumn migration	2880.86 (3245.13)	0-9528.5	3871.29 (4231.38)	44.51- 12061.46	4566.88 (4850.1)	44.58- 13332.14
Winter	2010.53 (325.03)	1368.69- 2608.59	2789.69 (395.89)	2131.66- 3572.53	3578.96 (530.43)	2696.5- 4613.99
Non-breeding	2880.86 (3245.13)	0-9528.5	3871.29 (4231.38)	44.51- 12061.46	4566.88 (4850.1)	44.58- 13332.14

Table 22. DBS - East. Seasonal peak abundance of Razorbill (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	2379.41 (1477.69)	423.06- 4972.75	3578.51 (2246.02)	548-7055.81	4779.98 (2978.13)	882.98- 9016.24
Breeding (full)	341.06 (124.44)	142.03- 625.52	555.09 (212.03)	221.94- 1006.84	1079.4 (599.16)	413.65- 2440.64
Autumn migration	3488.69 (3929.8)	0-11538.87	4685.63 (5121.48)	53.87- 14598.65	5530.3 (5873.28)	53.99- 16144.67
Winter	2430.95 (392.99)	1654.89- 3154.07	3376.75 (479.2)	2580.25- 4324.33	4332.31 (642.08)	3264.09- 5585.2
Non-breeding	3488.69 (3929.8)	0-11538.87	4685.63 (5121.48)	53.87- 14598.65	5530.3 (5873.28)	53.99- 16144.67

Table 23. DBS - West. Seasonal peak abundance of Arctic skua recorded in flight and on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	4.25 (7.43)	0-25.52	4.25 (7.37)	0-25.51	4.26 (7.32)	0-25.56
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	4.25 (7.43)	0-25.52	4.25 (7.37)	0-25.51	4.26 (7.32)	0-25.56

Table 24. DBS - West. Seasonal peak abundance of Arctic tern recorded in flight and on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	21.27 (29.83)	0-93.58	34.01 (37.1)	0-102.04	59.64 (65.89)	0-187.45
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 25. DBS - West. Seasonal peak abundance of Common gull recorded in flight and on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	55.3 (66.55)	0-204.18	68.03 (72.08)	0-195.58	80.94 (85.69)	0-230.05

Table 26. DBS - West. Seasonal peak abundance of Common tern recorded in flight and on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	8.37 (8.68)	0-25.25	8.49 (8.29)	0-25.6	8.45 (8.41)	0-25.46
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 27. DBS - West. Seasonal peak abundance of Fulmar recorded in flight and on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	8.55 (11.39)	0-34.2	21.44 (13.5)	0-51.04	77.69 (80.99)	0-250.72
Breeding (full)	188.1 (160.69)	16.48-485.76	288.49 (230.96)	33.06-661.59	377.58 (302.07)	49.77-815.07
Autumn migration	54.95 (31.59)	8.44-126.91	88.61 (61.92)	8.43-202.57	105.66 (74.53)	8.45-219.77
Winter	37.99 (27.74)	0-98.56	91.75 (80.24)	8.55-266.34	154.66 (130.53)	17.01-383.45
Non-breeding	54.95 (31.59)	8.44-126.91	91.75 (80.24)	8.55-266.34	154.66 (130.53)	17.01-383.45

Table 28. DBS - West. Seasonal peak abundance of Gannet recorded in flight and on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	64.13 (67.6)	0-179.56	86.2 (91.44)	0-241.37	138.33 (149.69)	0-414.98
Breeding (full)	570.42 (170.68)	275.94-907.75	805.34 (253.39)	428.69-1315.57	989.93 (361.13)	515.23-1666.16
Autumn migration	617.24 (374.38)	177.18-1209.83	797.5 (491.64)	202.4-1544.63	946.7 (575.33)	270.5-1792.15
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 29. DBS - West. Seasonal peak abundance of Great black-backed gull recorded in flight and on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	16.61 (11.39)	0-41.21	50.08 (43.77)	0-167.49	62.7 (42.34)	8.4-176.46
Breeding (full)	8.51 (13.9)	0-51.05	17.09 (30)	0-102.56	17.15 (30.1)	0-102.88
Autumn migration	16.96 (23.73)	0-76.34	55.14 (75.33)	0-237.55	55.25 (74.79)	0-246.48
Winter	29.9 (27.48)	0-102.44	34.2 (28.95)	0-110.59	55.9 (35.83)	0-129.68
Non-breeding	29.9 (27.48)	0-102.44	55.14 (75.33)	0-237.55	62.7 (42.34)	8.4-176.46

Table 30. DBS - West. Seasonal peak abundance of Great northern diver recorded in flight and on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	4.25 (7.09)	0-25.51
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	4.25 (7.09)	0-25.51

Table 31. DBS - West. Seasonal peak abundance of Great skua recorded in flight and on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	8.52 (14.42)	0-51.12
Autumn migration	4.26 (7.32)	0-25.53	8.51 (8.29)	0-25.6	8.53 (8.59)	0-25.66
Winter	4.93 (8.57)	0-29.57	4.93 (8.26)	0-29.59	14.08 (13.06)	0-49.16
Non-breeding	4.93 (8.57)	0-29.57	8.51 (8.29)	0-25.6	14.08 (13.06)	0-49.16

Table 32. DBS - West. Seasonal peak abundance of Guillemot recorded in flight and on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	4334.53 (3476.58)	733.19- 9481.16	5915.55 (4550.86)	1041.33- 12226.82	7959.84 (5837.69)	1766.67- 15629.46
Breeding (full)	3192.78 (582.15)	1988.94- 4486.41	4704.51 (781.67)	3203.03- 6583.28	6218.12 (924.86)	4042.15- 7917.47
Post-breeding	6955.28 (6256.32)	763.18- 17449.93	8867.1 (7819.12)	1244.22- 22134.57	12096.46 (10558.3)	1839.23- 31411.14
Winter	2656.73 (360.13)	1971.13- 3360.78	3808.66 (437.28)	2976.7- 4679.56	5286.96 (506.2)	4277.83- 6268.04
Non-breeding	4334.53 (3476.58)	733.19- 9481.16	5915.55 (4550.86)	1041.33- 12226.82	7959.84 (5837.69)	1766.67- 15629.46

Table 33. DBS - West. Seasonal peak abundance of Guillemot (including unidentified auks apportioned using identified auk ratios) recorded in flight and on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	5461.15 (4380.2)	923.76-11945.48	7577.22 (5829.18)	1333.83-15661.31	10269.7 (7531.72)	2279.34-20164.97
Breeding (full)	4727.69 (1197.98)	2935.02-6968.23	6763.88 (1404.21)	4509.41-9448.28	8742.84 (1320.28)	6329.1-11363.83
Post-breeding	7284.85 (6552.78)	799.34-18276.78	9533.89 (8407.11)	1337.79-23799.06	13026.07 (11369.71)	1980.57-33825.07
Winter	3372.23 (457.12)	2501.99-4265.9	4880.77 (560.37)	3814.62-5996.83	6895.35 (660.2)	5579.23-8174.9
Non-breeding	5461.15 (4380.2)	923.76-11945.48	7577.22 (5829.18)	1333.83-15661.31	10269.7 (7531.72)	2279.34-20164.97

Table 34. DBS - West. Seasonal peak abundance of Guillemot (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded in flight and on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	7127.07 (5716.38)	1205.56-15589.44	9895.47 (7612.62)	1741.92-20452.88	13399.52 (9827.11)	2974-26310.5
Breeding (full)	6142.93 (1556.6)	3813.62-9054.17	8783.49 (1823.49)	5855.87-12269.43	11349.44 (1713.91)	8216.07-14751.85
Post-breeding	9547.59 (8588.12)	1047.62-23953.7	12498.37 (11021.23)	1753.76-31199.17	17079.17 (14907.42)	2596.83-44349.82
Winter	4367.91 (592.08)	3240.73-5525.44	6317.13 (725.28)	4937.22-7761.64	8944.66 (856.41)	7237.39-10604.49
Non-breeding	7127.07 (5716.38)	1205.56-15589.44	9895.47 (7612.62)	1741.92-20452.88	13399.52 (9827.11)	2974-26310.5

Table 35. DBS - West. Seasonal peak abundance of Herring gull recorded in flight and on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	4.2 (7.55)	0-25.22	4.24 (7.39)	0-25.45	8.36 (7.98)	0-25.3
Breeding (full)	8.51 (12.01)	0-42.54	8.5 (11.77)	0-34.01	17.04 (22.59)	0-68.16
Autumn migration	8.43 (11.67)	0-33.7	8.55 (12.14)	0-34.22	23.25 (18.69)	0-68.82
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	8.43 (11.67)	0-33.7	8.55 (12.14)	0-34.22	23.25 (18.69)	0-68.82

Table 36. DBS - West. Seasonal peak abundance of Kittiwake recorded in flight and on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	1299.06 (1047.58)	271.65- 3501.05	1637.83 (1217.02)	388.51- 4095.15	2011.57 (1375.94)	605.27- 4655.16
Breeding (full)	4253.42 (5464.46)	0-17216.18	5522.44 (6700.37)	8.3- 20691.75	6521.4 (7300.12)	33.29- 22294.85
Autumn migration	3477.95 (5100.72)	68.09- 17855.75	4467.43 (5829.55)	102.41- 19360.16	4752.42 (5996.18)	256.58- 19472.23
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	3477.95 (5100.72)	68.09- 17855.75	4467.43 (5829.55)	102.41- 19360.16	4752.42 (5996.18)	256.58- 19472.23

Table 37. DBS - West. Seasonal peak abundance of Lesser black-backed gull recorded in flight and on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	4.2 (7.62)	0-25.22	12.64 (21.66)	0-75.84	12.66 (21.94)	0-75.99
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 38. DBS - West. Seasonal peak abundance of Little gull recorded in flight and on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	4.24 (7.32)	0-25.45	21.31 (27.71)	0-102.41	21.35 (27.31)	0-102.63

Table 39. DBS - West. Seasonal peak abundance of Puffin recorded in flight and on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	29.97 (33.1)	0-94.18	34.65 (37.38)	0-103.94	43.17 (45.4)	0-120.86
Breeding (full)	71.07 (73.18)	0-175.6	92.46 (94.05)	0-218.55	122.47 (125.15)	0-295.62
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	84.4 (66.34)	8.46-219.36	160.27 (86.57)	25.32-320.46	228.23 (118.07)	50.72-448.02
Non-breeding	84.4 (66.34)	8.46-219.36	160.27 (86.57)	25.32-320.46	228.23 (118.07)	50.72-448.02

Table 40. DBS - West. Seasonal peak abundance of Puffin (including unidentified auks apportioned using identified auk ratios) recorded in flight and on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	29.97 (33.1)	0-94.18	34.65 (37.38)	0-103.94	43.17 (45.4)	0-120.86
Breeding (full)	71.07 (73.18)	0-175.6	92.46 (94.05)	0-218.55	122.47 (125.15)	0-295.62
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	88.62 (69.66)	8.88-230.32	168.7 (91.12)	26.65-337.32	240.91 (124.63)	53.53-472.91
Non-breeding	88.62 (69.66)	8.88-230.32	168.7 (91.12)	26.65-337.32	240.91 (124.63)	53.53-472.91

Table 41. DBS - West. Seasonal peak abundance of Puffin (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded in flight and on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	34.25 (37.83)	0-107.64	38.98 (42.06)	0-116.94	51.8 (54.48)	0-145.03
Breeding (full)	83.62 (86.1)	0-206.58	109.27 (111.15)	0-258.28	143.59 (146.73)	0-346.59
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	101.28 (79.6)	10.15-263.21	198.22 (107.07)	31.32-396.35	278.95 (144.3)	61.99-547.58
Non-breeding	101.28 (79.6)	10.15-263.21	198.22 (107.07)	31.32-396.35	278.95 (144.3)	61.99-547.58

Table 42. DBS - West. Seasonal peak abundance of Razorbill recorded in flight and on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	1951.14 (1627.53)	210.21- 4542.48	2719.29 (2047.87)	390.24- 5824.03	3723.23 (2711.97)	666.24- 7719.03
Breeding (full)	921.35 (399.5)	310.99- 1739.24	1217.68 (552.71)	385.45- 2194.08	1421.52 (623.42)	445.94- 2542.36
Autumn migration	2531.96 (3621.13)	8.51- 12519.91	3075.54 (3972.31)	25.6- 12948.34	3463.74 (4657.75)	51.32- 15188.6
Winter	2171.47 (1773.78)	256.09- 5045.1	3258.75 (2713.54)	374.29- 7387.83	4149.61 (3604.49)	366.67- 9596.73
Non-breeding	2531.96 (3621.13)	8.51- 12519.91	3258.75 (2713.54)	374.29- 7387.83	4149.61 (3604.49)	366.67- 9596.73

Table 43. DBS - West. Seasonal peak abundance of Razorbill (including unidentified auks apportioned using identified auk ratios) recorded in flight and on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	2536.55 (2115.85)	273.28- 5905.38	3681.65 (2772.61)	528.34- 7885.16	5002.64 (3643.88)	895.18- 10371.51
Breeding (full)	1406.6 (609.91)	474.78- 2655.24	1894.16 (859.76)	599.59-3413	2236.34 (980.76)	701.55- 3999.63
Autumn migration	3049.38 (4361.12)	10.25- 15078.42	4042.74 (5221.52)	33.65- 17020.35	4517.73 (6075.06)	66.93- 19810.37
Winter	2752.47 (2248.37)	324.61- 6394.98	4188.89 (3488.06)	481.12- 9496.5	5266.97 (4575.05)	465.41- 12180.81
Non-breeding	3049.38 (4361.12)	10.25- 15078.42	4188.89 (3488.06)	481.12- 9496.5	5266.97 (4575.05)	465.41- 12180.81

Table 44. DBS - West. Seasonal peak abundance of Razorbill (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded in flight and on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	3068.6 (2559.66)	330.6- 7144.05	4454.6 (3354.71)	639.26- 9540.61	6055.64 (4410.88)	1083.6- 12554.61
Breeding (full)	1687.02 (731.5)	569.43- 3184.59	2280.58 (1035.16)	721.92- 4109.28	2687.88 (1178.79)	843.2- 4807.19
Autumn migration	3689.79 (5277.01)	12.4- 18245.08	4886.92 (6311.85)	40.68- 20574.46	5461.23 (7343.8)	80.91- 23947.63
Winter	3329.46 (2719.69)	392.66- 7735.54	5066.23 (4218.61)	581.89- 11485.49	6375.55 (5538)	563.36- 14744.61
Non-breeding	3689.79 (5277.01)	12.4- 18245.08	5066.23 (4218.61)	581.89- 11485.49	6375.55 (5538)	563.36- 14744.61

Table 45. DBS - West. Seasonal peak abundance of Red-throated diver recorded in flight and on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	4.21 (7.1)	0-25.23
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 46. DBS - East & West. Seasonal peak abundance of Arctic skua recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	8.4 (14.54)	0-50.43	8.4 (14.54)	0-50.44	8.46 (14.07)	0-50.75
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	8.4 (14.54)	0-50.43	8.4 (14.54)	0-50.44	8.46 (14.07)	0-50.75

Table 47. DBS - East & West. Seasonal peak abundance of Arctic tern recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	58.74 (72.92)	0-218.47	88.3 (95.43)	0-260.72	143.05 (155.43)	0-429.33
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 48. DBS - East & West. Seasonal peak abundance of Common gull recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	76.14 (89.66)	0-287.44	88.93 (94.91)	0-279.1	105.99 (111.13)	0-313.46

Table 49. DBS - East & West. Seasonal peak abundance of Common tern recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	12.53 (15.73)	0-50.23	16.84 (20.32)	0-67.36	16.79 (20.22)	0-67.16
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 50. DBS - East & West. Seasonal peak abundance of Fulmar recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	29 (29.63)	0-99.05	54.2 (42.22)	0-140.66	134.9 (132.55)	0-397.43
Breeding (full)	301.25 (255.44)	33.24-854.74	427.2 (323.7)	74.84-1040.9	537.16 (406.67)	91.54-1227.42
Autumn migration	151.09 (101.04)	16.74-352.96	322.66 (279.31)	16.74-846.51	485.96 (432.67)	16.76-1189.6
Winter	88.64 (82.12)	0-250.52	167.98 (160.07)	8.55-478.08	268.65 (233.07)	17.01-662.78
Non-breeding	151.09 (101.04)	16.74-352.96	325.8 (297.63)	16.86-910.28	534.96 (488.67)	25.32-1353.28

Table 51. DBS - East & West. Seasonal peak abundance of Gannet recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	134.89 (165.46)	0-504.41	161.29 (194.94)	0-600.12	221.35 (252.75)	0-763.48
Breeding (full)	1168.22 (306.8)	613.78-1772.25	1560.26 (457.97)	834.89-2534.16	2213.74 (988.39)	1090.72-4501.28
Autumn migration	1097.2 (546.91)	434.58-2072.38	1573.63 (823.58)	584.62-3016.5	1918.41 (897.82)	835.34-3472.84
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 52. DBS - East & West. Seasonal peak abundance of Great black-backed gull recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	108.8 (66.33)	16.76-275.88	155.08 (94.63)	33.42-403.5	238.77 (107.15)	67.31-496.24
Breeding (full)	50.74 (62.47)	0-203.08	76.33 (95.31)	0-288.73	110.24 (130.51)	0-390.62
Autumn migration	21.18 (31.04)	0-101.67	80.23 (114.12)	0-371.36	88.54 (92.98)	0-322.66
Winter	34.14 (34.71)	0-127.87	50.67 (44.92)	0-167.62	92.88 (64.59)	0-235.64
Non-breeding	122.09 (82.42)	16.76-337.11	160.14 (126.19)	33.42-473.56	238.77 (107.15)	67.31-496.24

Table 53. DBS - East & West. Seasonal peak abundance of Great northern diver recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	4.25 (7.09)	0-25.51
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	4.25 (7.09)	0-25.51

Table 54. DBS - East & West. Seasonal peak abundance of Great skua recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	4.2 (7.37)	0-25.21	12.72 (21.92)	0-76.31
Autumn migration	4.26 (7.32)	0-25.53	8.51 (8.29)	0-25.6	8.53 (8.59)	0-25.66
Winter	9.03 (15.59)	0-54.19	9.02 (15.26)	0-54.14	18.17 (19.89)	0-73.71
Non-breeding	9.03 (15.59)	0-54.19	12.6 (15.29)	0-50.15	18.17 (19.89)	0-73.71

Table 55. DBS - East & West. Seasonal peak abundance of Guillemot recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	10790.97 (7019.68)	3112.45- 21561.63	15221.72 (9769.17)	4374.31- 29313.84	20802.13 (13225.34)	6519.04- 39432.19
Breeding (full)	12841.02 (4103.03)	6378.05- 19996.58	17813.99 (5339.52)	9653.73- 26844.61	23229.44 (6165.98)	13530.44- 33386.51
Post-breeding	15359.87 (13613.23)	1978.1- 40027.72	20176.42 (17239.13)	3070.55- 50340.57	28068.98 (23403.2)	4885.8- 70515.06
Winter	13128.11 (1634.03)	10075.03- 16547.14	18868.92 (1857.76)	15162.96- 22596.01	25456.68 (2331.62)	20698.87- 29643.13
Non-breeding	15887.27 (6758.33)	8039.86- 26611.14	22447.26 (8745.1)	11967.66- 35287.25	29911.54 (11302.32)	16435.48- 45349.14

Table 56. DBS - East & West. Seasonal peak abundance of Guillemot (including unidentified auks apportioned using identified auk ratios) recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	10790.97 (7019.68)	3112.45- 21561.63	15221.72 (9769.17)	4374.31- 29313.84	20802.13 (13225.34)	6519.04- 39432.19
Breeding (full)	12841.02 (4103.03)	6378.05- 19996.58	17813.99 (5339.52)	9653.73- 26844.61	23229.44 (6165.98)	13530.44- 33386.51
Post-breeding	15359.87 (13613.23)	1978.1- 40027.72	20176.42 (17239.13)	3070.55- 50340.57	28068.98 (23403.2)	4885.8- 70515.06
Winter	13128.11 (1634.03)	10075.03- 16547.14	18868.92 (1857.76)	15162.96- 22596.01	25456.68 (2331.62)	20698.87- 29643.13
Non-breeding	15887.27 (6758.33)	8039.86- 26611.14	22447.26 (8745.1)	11967.66- 35287.25	29911.54 (11302.32)	16435.48- 45349.14

Table 57. DBS - East & West. Seasonal peak abundance of Guillemot (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	10790.97 (7019.68)	3112.45- 21561.63	15221.72 (9769.17)	4374.31- 29313.84	20802.13 (13225.34)	6519.04- 39432.19
Breeding (full)	12841.02 (4103.03)	6378.05- 19996.58	17813.99 (5339.52)	9653.73- 26844.61	23229.44 (6165.98)	13530.44- 33386.51
Post-breeding	15359.87 (13613.23)	1978.1- 40027.72	20176.42 (17239.13)	3070.55- 50340.57	28068.98 (23403.2)	4885.8- 70515.06
Winter	13128.11 (1634.03)	10075.03- 16547.14	18868.92 (1857.76)	15162.96- 22596.01	25456.68 (2331.62)	20698.87- 29643.13
Non-breeding	15887.27 (6758.33)	8039.86- 26611.14	22447.26 (8745.1)	11967.66- 35287.25	29911.54 (11302.32)	16435.48- 45349.14

Table 58. DBS - East & West. Seasonal peak abundance of Herring gull recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	12.58 (21.4)	0-75.51	12.67 (21.7)	0-76.02	16.78 (22.64)	0-75.79
Breeding (full)	21.1 (27.85)	0-92.9	25.31 (31.79)	0-92.83	33.83 (43.48)	0-135.33
Autumn migration	12.65 (18.87)	0-59.03	16.88 (20.16)	0-59.63	40.04 (35.35)	0-128.07
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	16.81 (25.52)	0-83.99	16.98 (26.45)	0-84.79	40.04 (35.35)	0-128.07

Table 59. DBS - East & West. Seasonal peak abundance of Kittiwake recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	2246.13 (1463.41)	740.99- 5462.23	2986.06 (1690.48)	1165.62- 6632.29	4017.72 (2161.04)	1699.53- 8332.62
Breeding (full)	10005.71 (7841.47)	2144.46- 27162.39	13112.65 (9267.62)	3554.07- 32750.53	16177.72 (9788.06)	5694.64- 36493.16
Autumn migration	5147.26 (6278.59)	456.44- 21573.04	6918.5 (7672.51)	678.34- 25178.27	8965.23 (10283.65)	341.12- 30989
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	5147.26 (6278.59)	456.44- 21573.04	6918.5 (7672.51)	678.34- 25178.27	8965.23 (10283.65)	341.12- 30989

Table 60. DBS - East & West. Seasonal peak abundance of Lesser black-backed gull recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	4.2 (7.23)	0-25.18	4.2 (7.08)	0-25.21	4.2 (7.26)	0-25.19
Breeding (full)	12.53 (22.02)	0-75.18	21.07 (29.97)	0-101.16	25.32 (32.9)	0-118.05
Autumn migration	0 (0)	0-0	0 (0)	0-0	4.15 (6.98)	0-24.92
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	4.2 (7.23)	0-25.18	4.2 (7.08)	0-25.21	4.2 (7.26)	0-25.19

Table 61. DBS - East & West. Seasonal peak abundance of Little gull recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Non-breeding	4.24 (7.32)	0-25.45	122.07 (184.74)	0-681.79	147.16 (198.43)	0-631.01

Table 62. DBS - East & West. Seasonal peak abundance of Manx shearwater recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	4.19 (7.09)	0-25.14	4.21 (7.5)	0-25.28	4.24 (7.08)	0-25.46
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	4.16 (7.05)	0-24.98	4.18 (7.25)	0-25.06	4.17 (6.75)	0-25.02

Table 63. DBS - East & West. Seasonal peak abundance of Puffin recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	59.43 (67.87)	0-198.29	72.59 (78.9)	0-222.58	110.57 (119.28)	0-331.15
Breeding (full)	133.62 (137.56)	0-336.59	171.92 (177.59)	0-431.77	227.25 (237.64)	0-592.65
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	221.71 (200.4)	10.15-619.14	376.92 (272.8)	31.32-865.24	528.22 (371.56)	73.14-1178.8
Non-breeding	221.71 (200.4)	10.15-619.14	376.92 (272.8)	31.32-865.24	528.22 (371.56)	73.14-1178.8

Table 64. DBS - East & West. Seasonal peak abundance of Puffin (including unidentified auks apportioned using identified auk ratios) recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	59.43 (67.87)	0-198.29	72.59 (78.9)	0-222.58	110.57 (119.28)	0-331.15
Breeding (full)	133.62 (137.56)	0-336.59	171.92 (177.59)	0-431.77	227.25 (237.64)	0-592.65
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	221.71 (200.4)	10.15-619.14	376.92 (272.8)	31.32-865.24	528.22 (371.56)	73.14-1178.8
Non-breeding	221.71 (200.4)	10.15-619.14	376.92 (272.8)	31.32-865.24	528.22 (371.56)	73.14-1178.8

Table 65. DBS - East & West. Seasonal peak abundance of Puffin (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	59.43 (67.87)	0-198.29	72.59 (78.9)	0-222.58	110.57 (119.28)	0-331.15
Breeding (full)	133.62 (137.56)	0-336.59	171.92 (177.59)	0-431.77	227.25 (237.64)	0-592.65
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	221.71 (200.4)	10.15-619.14	376.92 (272.8)	31.32-865.24	528.22 (371.56)	73.14-1178.8
Non-breeding	221.71 (200.4)	10.15-619.14	376.92 (272.8)	31.32-865.24	528.22 (371.56)	73.14-1178.8

Table 66. DBS - East & West. Seasonal peak abundance of Razorbill recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	5448.01 (4037.35)	753.66- 12116.8	8033.11 (5600.73)	1187.26- 16596.42	10835.62 (7389.01)	1966.58- 21570.85
Breeding (full)	2028.08 (855.94)	711.46- 3810.11	2835.67 (1247.19)	943.86- 5116.12	3767.28 (1777.95)	1256.85- 7247.83
Autumn migration	7178.48 (9206.81)	12.4- 29783.95	9572.55 (11433.33)	94.55- 35173.11	10991.53 (13217.08)	134.9- 40092.3
Winter	5760.41 (3112.68)	2047.55- 10889.61	8442.98 (4697.81)	3162.14- 15809.82	10707.86 (6180.08)	3827.45- 20329.81
Non-breeding	7178.48 (9206.81)	12.4- 29783.95	9751.86 (9340.09)	635.76- 26084.14	11905.85 (11411.28)	617.35- 30889.28

Table 67. DBS - East & West. Seasonal peak abundance of Razorbill (including unidentified auks apportioned using identified auk ratios) recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	5448.01 (4037.35)	753.66- 12116.8	8033.11 (5600.73)	1187.26- 16596.42	10835.62 (7389.01)	1966.58- 21570.85
Breeding (full)	2028.08 (855.94)	711.46- 3810.11	2835.67 (1247.19)	943.86- 5116.12	3767.28 (1777.95)	1256.85- 7247.83
Autumn migration	7178.48 (9206.81)	12.4- 29783.95	9572.55 (11433.33)	94.55- 35173.11	10991.53 (13217.08)	134.9- 40092.3
Winter	5760.41 (3112.68)	2047.55- 10889.61	8442.98 (4697.81)	3162.14- 15809.82	10707.86 (6180.08)	3827.45- 20329.81
Non-breeding	7178.48 (9206.81)	12.4- 29783.95	9751.86 (9340.09)	635.76- 26084.14	11905.85 (11411.28)	617.35- 30889.28

Table 68. DBS - East & West. Seasonal peak abundance of Razorbill (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	5448.01 (4037.35)	753.66- 12116.8	8033.11 (5600.73)	1187.26- 16596.42	10835.62 (7389.01)	1966.58- 21570.85
Breeding (full)	2028.08 (855.94)	711.46- 3810.11	2835.67 (1247.19)	943.86- 5116.12	3767.28 (1777.95)	1256.85- 7247.83
Autumn migration	7178.48 (9206.81)	12.4- 29783.95	9572.55 (11433.33)	94.55- 35173.11	10991.53 (13217.08)	134.9- 40092.3
Winter	5760.41 (3112.68)	2047.55- 10889.61	8442.98 (4697.81)	3162.14- 15809.82	10707.86 (6180.08)	3827.45- 20329.81

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Non-breeding	7178.48 (9206.81)	12.4- 29783.95	9751.86 (9340.09)	635.76- 26084.14	11905.85 (11411.28)	617.35- 30889.28

Table 69. DBS - East & West. Seasonal peak abundance of Red-throated diver recorded in flight and on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	4.21 (7.1)	0-25.23
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0



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Ornithology Technical Appendix 12-5b Seabird peak seasonal abundances: birds on the sea

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1 INTRODUCTION

This appendix provides tables of seabird peak abundance in each species-specific season, as defined in Furness (2015)¹ for each species recorded during baseline surveys for the DBS East and West Offshore Wind Farm projects (March 2021 – February 2023).

Abundances were estimated using design-based methods and are summarised as central estimate (i.e. extrapolated from the number seen in the surveyed area to the whole area) and 95% confidence range, derived from 1,000 nonparametric bootstrap samples.

Appendix (a) provides the combined peak abundance of each species-specific season on the sea and in flight.

This appendix (b) provides the peak abundance of each species-specific season on the sea.

Appendix (c) provides the peak abundance of each species-specific season in flight.

¹ Furness, R.W. 2015. Non-breeding season populations of seabirds in UK waters: Population sizes for Biologically Defined Minimum Population Scales (BDMPS). Natural England Commissioned Report Number 164. 389 pp.

Table 1. DBS - East. Seasonal peak abundance of Arctic skua recorded on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 2. DBS - East. Seasonal peak abundance of Arctic tern recorded on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 3. DBS - East. Seasonal peak abundance of Common gull recorded on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	8.33 (14.42)	0-49.96	8.35 (14.29)	0-50.11	8.34 (14.72)	0-50.04

Table 4. DBS - East. Seasonal peak abundance of Common tern recorded on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 5. DBS - East. Seasonal peak abundance of Fulmar recorded on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	4.24 (7.11)	0-25.43	8.32 (7.87)	0-25.47	24.6 (19.46)	0-65.2
Breeding (full)	58.67 (63.44)	0-226.29	66.77 (64.46)	0-191.89	79.88 (80.29)	0-260.87
Autumn migration	62.9 (59.95)	0-183.61	150.48 (142.11)	0-393.06	275.85 (266.93)	0-677.21
Winter	12.66 (16.23)	0-50.65	12.7 (15.64)	0-50.82	33.72 (29.36)	0-93.11
Non-breeding	62.9 (59.95)	0-183.61	150.48 (142.11)	0-393.06	275.85 (266.93)	0-677.21

Table 6. DBS - East. Seasonal peak abundance of Gannet recorded on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	58.27 (89.54)	0-324.65	58.4 (92.76)	0-333.72	58.08 (93.61)	0-331.91
Breeding (full)	526.37 (137.87)	285.37-827.72	637.16 (231.51)	304.59-1184.74	1072.54 (696.51)	361.05-2759.16
Autumn migration	292.65 (218.87)	49.82-694.9	501.24 (362.26)	108.02-1137.56	592.76 (366.01)	174.44-1279.38
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 7. DBS - East. Seasonal peak abundance of Great black-backed gull recorded on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	71.24 (46.66)	8.38-192.77	75.61 (46.92)	16.71-193.87	138.32 (58.52)	41.56-261.03
Breeding (full)	42.23 (49.02)	0-143.58	46.54 (52.27)	0-152.32	76.17 (82.53)	0-236.96
Autumn migration	0 (0)	0-0	20.91 (37.38)	0-125.44	20.9 (37.21)	0-125.41
Winter	4.24 (7.18)	0-25.43	12.39 (13.49)	0-48.88	20.68 (15.31)	0-57.05
Non-breeding	71.24 (46.66)	8.38-192.77	75.61 (46.92)	16.71-193.87	138.32 (58.52)	41.56-261.03

Table 8. DBS - East. Seasonal peak abundance of Great skua recorded on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 9. DBS - East. Seasonal peak abundance of Guillemot recorded on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	1812.54 (1261.18)	406.88-3834.42	2612.31 (1059.08)	1335-4371.76	3749.2 (1729.95)	1786.24-6580.28
Breeding (full)	2514.94 (913.17)	1021.98-4087.51	3398.65 (1222.47)	1506.32-5352.74	4956.12 (568.84)	3904.44-6145.5
Post-breeding	4028.38 (3574.1)	644.9-11240.29	5340.52 (4520.03)	907.5-13897.72	7496.93 (5686.91)	1603.45-17540.77
Winter	5175.36 (638.7)	4053.48-6531.78	7247.55 (648.68)	5899.53-8486.53	9471.16 (895.34)	7674.58-10978.71
Non-breeding	5175.36 (638.7)	4053.48-6531.78	7247.55 (648.68)	5899.53-8486.53	9471.16 (895.34)	7674.58-10978.71

Table 10. DBS - East. Seasonal peak abundance of Guillemot (including unidentified auks apportioned using identified auk ratios) recorded on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	2778.2 (1000.53)	1459.81-4546.08	4050.13 (1642)	2069.79-6777.99	5631.26 (2598.36)	2682.91-9883.49
Breeding (full)	4843.08 (1758.51)	1968.04-7871.4	6578.56 (2366.26)	2915.69-10360.98	8670.78 (3005.27)	4048.67-13362.07
Post-breeding	4433.17 (3933.24)	709.7-12369.78	5855.71 (4956.07)	995.05-15238.4	8384.33 (6360.05)	1793.24-19617.04
Winter	6610.01 (815.75)	5177.14-8342.43	9456.19 (846.37)	7697.36-11072.73	12410.79 (1173.24)	10056.6-14386.25
Non-breeding	6610.01 (815.75)	5177.14-8342.43	9456.19 (846.37)	7697.36-11072.73	12410.79 (1173.24)	10056.6-14386.25

Table 11. DBS - East. Seasonal peak abundance of Guillemot (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	3642.99 (1311.97)	1914.22- 5961.16	5313.71 (2154.28)	2715.53- 8892.61	7381.91 (3406.13)	3516.97- 12956.08
Breeding (full)	6349.43 (2305.46)	2580.16- 10319.66	8622.51 (3101.45)	3821.59- 13580.12	11367.22 (3939.85)	5307.73- 17517.41
Post-breeding	5812.28 (5156.83)	930.48- 16217.88	7678.05 (6498.44)	1304.71- 19980.71	10989.81 (8336.48)	2350.51- 25713.16
Winter	8668.87 (1069.83)	6789.69- 10940.9	12398.26 (1109.69)	10092.21- 14517.75	16272.19 (1538.27)	13185.54- 18862.29
Non-breeding	8668.87 (1069.83)	6789.69- 10940.9	12398.26 (1109.69)	10092.21- 14517.75	16272.19 (1538.27)	13185.54- 18862.29

Table 12. DBS - East. Seasonal peak abundance of Herring gull recorded on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	4.19 (7.42)	0-25.14	4.21 (7.51)	0-25.29	4.21 (7.55)	0-25.25
Breeding (full)	12.59 (15.5)	0-50.36	16.81 (20.48)	0-58.82	16.79 (20.18)	0-58.77
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	4.19 (7.42)	0-25.14	4.21 (7.51)	0-25.29	4.21 (7.55)	0-25.25

Table 13. DBS - East. Seasonal peak abundance of Kittiwake recorded on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	502.87 (249.09)	226.29-1131.45	734.95 (261.07)	354.02-1374.15	1112.16 (460.61)	559.45-2154.3
Breeding (full)	4179.74 (1749.98)	1486.3-7394.45	5260.59 (1880.25)	2183.1-8689.16	6353.77 (1899.09)	3199.03-9513.33
Autumn migration	747.44 (738.85)	25.43-2212.99	1134.33 (1122.54)	33.96-3226.67	2728.19 (2838.79)	42.27-8191.33
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	747.44 (738.85)	25.43-2212.99	1134.33 (1122.54)	33.96-3226.67	2728.19 (2838.79)	42.27-8191.33

Table 14. DBS - East. Seasonal peak abundance of Lesser black-backed gull recorded on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	4.2 (7.52)	0-25.18	4.2 (7.14)	0-25.21	4.2 (7.23)	0-25.19
Breeding (full)	0 (0)	0-0	0 (0)	0-0	4.21 (7.56)	0-25.24
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	4.2 (7.52)	0-25.18	4.2 (7.14)	0-25.21	4.2 (7.23)	0-25.19

Table 15. DBS - East. Seasonal peak abundance of Little gull recorded on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	67.17 (112.17)	0-403.05	92.26 (134.64)	0-452.9

Table 16. DBS - East. Seasonal peak abundance of Manx shearwater recorded on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 17. DBS - East. Seasonal peak abundance of Puffin recorded on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	16.79 (20.19)	0-58.75	25.21 (26.88)	0-75.63	46.18 (50.16)	0-142.74
Breeding (full)	41.67 (43.69)	0-116.67	54.3 (58.08)	0-158.71	71.11 (75.59)	0-200.79
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	95.52 (95.87)	0-274.01	133 (123.64)	0-340.67	186.98 (167.76)	8.36-456.85
Non-breeding	95.52 (95.87)	0-274.01	133 (123.64)	0-340.67	186.98 (167.76)	8.36-456.85

Table 18. DBS - East. Seasonal peak abundance of Puffin (including unidentified auks apportioned using identified auk ratios) recorded on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	16.79 (20.19)	0-58.75	25.21 (26.88)	0-75.63	46.18 (50.16)	0-142.74
Breeding (full)	41.67 (43.69)	0-116.67	54.3 (58.08)	0-158.71	71.11 (75.59)	0-200.79
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	103.83 (104.2)	0-297.83	153.77 (142.95)	0-393.88	216.05 (193.84)	9.66-527.89
Non-breeding	103.83 (104.2)	0-297.83	153.77 (142.95)	0-393.88	216.05 (193.84)	9.66-527.89

Table 19. DBS - East. Seasonal peak abundance of Puffin (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	20.98 (25.24)	0-73.44	29.41 (31.36)	0-88.23	54.58 (59.28)	0-168.69
Breeding (full)	50 (52.43)	0-140.01	62.65 (67.01)	0-183.13	83.66 (88.93)	0-236.22
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	120.43 (120.87)	0-345.46	178.7 (166.12)	0-457.73	249.27 (223.65)	11.15-609.07
Non-breeding	120.43 (120.87)	0-345.46	178.7 (166.12)	0-457.73	249.27 (223.65)	11.15-609.07

Table 20. DBS - East. Seasonal peak abundance of Razorbill recorded on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	1059 (652.64)	177.37-2216.03	1590.61 (961.16)	236.95-3142.95	2119.32 (1287.13)	389.3-3929.72
Breeding (full)	184.5 (62.71)	84.62-325.02	292.15 (128.02)	91.77-567.74	570.93 (348.56)	166.54-1384.03
Autumn migration	2693.5 (2933.69)	0-8576.18	3654.07 (3935.53)	42.01-10865.62	4299.87 (4560.9)	33.58-12385.84
Winter	1579.18 (248.13)	1105.96-2051.71	2164.3 (307.62)	1634.63-2773.94	2761.7 (399.71)	2073.85-3575.66
Non-breeding	2693.5 (2933.69)	0-8576.18	3654.07 (3935.53)	42.01-10865.62	4299.87 (4560.9)	33.58-12385.84

Table 21. DBS - East. Seasonal peak abundance of Razorbill (including unidentified auks apportioned using identified auk ratios) recorded on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	1950.69 (1202.17)	326.71- 4081.95	2917.71 (1763.09)	434.64- 5765.22	3909.22 (2374.19)	718.09- 7248.62
Breeding (full)	266.21 (117.23)	74.25-520.21	442.42 (193.87)	138.98- 859.76	862.71 (526.69)	251.65- 2091.33
Autumn migration	2880.86 (3137.76)	0-9172.74	3871.29 (4169.48)	44.51- 11511.54	4566.88 (4844.12)	35.67- 13154.97
Winter	1990.02 (312.68)	1393.68- 2585.47	2777.56 (394.79)	2097.81- 3559.94	3542.28 (512.68)	2660.01- 4586.3
Non-breeding	2880.86 (3137.76)	0-9172.74	3871.29 (4169.48)	44.51- 11511.54	4566.88 (4844.12)	35.67- 13154.97

Table 22. DBS - East. Seasonal peak abundance of Razorbill (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded on the sea, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	2362.7 (1456.09)	395.72- 4944.1	3532.41 (2134.53)	526.21- 6979.83	4734 (2875.11)	869.59- 8777.95
Breeding (full)	324.44 (142.87)	90.49-634	534.24 (234.11)	167.82- 1038.2	1041.92 (636.1)	303.93- 2525.77
Autumn migration	3488.69 (3799.78)	0-11108.05	4685.63 (5046.55)	53.87- 13933.05	5530.3 (5866.03)	43.19- 15930.13
Winter	2406.33 (378.1)	1685.24- 3126.36	3364.77 (478.25)	2541.31- 4312.55	4291.54 (621.13)	3222.65- 5556.39
Non-breeding	3488.69 (3799.78)	0-11108.05	4685.63 (5046.55)	53.87- 13933.05	5530.3 (5866.03)	43.19- 15930.13

Table 23. DBS - West. Seasonal peak abundance of Arctic skua recorded on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 24. DBS - West. Seasonal peak abundance of Arctic tern recorded on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 25. DBS - West. Seasonal peak abundance of Common gull recorded on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	16.96 (25.91)	0-84.82	21.26 (27.22)	0-85.03	21.3 (27.96)	0-85.2

Table 26. DBS - West. Seasonal peak abundance of Common tern recorded on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 27. DBS - West. Seasonal peak abundance of Fulmar recorded on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	51.87 (64.64)	0-207.49
Breeding (full)	146.29 (126.96)	8.24-393.64	225.84 (190.51)	16.33-510.85	285.42 (247.19)	24.88-621.81
Autumn migration	33.82 (24.75)	0-84.6	37.98 (27.09)	0-92.85	42.26 (27.93)	8.45-92.98
Winter	14.78 (18.54)	0-59.13	49.32 (59.26)	0-177.56	73.74 (78.55)	0-216.3
Non-breeding	33.82 (24.75)	0-84.6	49.32 (59.26)	0-177.56	73.74 (78.55)	0-216.3

Table 28. DBS - West. Seasonal peak abundance of Gannet recorded on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	38.48 (41.93)	0-111.16	38.79 (42.08)	0-120.68	82.13 (92.72)	0-268.01
Breeding (full)	230.4 (80.97)	109.27-409.73	302.21 (81.96)	159.21-470.72	341.49 (80.07)	201.93-515.23
Autumn migration	397.46 (292.27)	59.06-913.72	510.6 (389.22)	50.6-1089.05	570.55 (433.96)	67.63-1217.16
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 29. DBS - West. Seasonal peak abundance of Great black-backed gull recorded on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	16.43 (20.16)	0-65.71	41.71 (41.46)	0-159.12	54.29 (39.76)	0-159.65
Breeding (full)	8.51 (14.19)	0-51.05	8.5 (14.6)	0-51.02	8.52 (14.28)	0-51.12
Autumn migration	12.72 (18.43)	0-59.37	42.42 (60.8)	0-203.61	42.5 (60.16)	0-195.48
Winter	29.9 (28.19)	0-102.44	34.2 (29.68)	0-110.59	38.61 (29.69)	0-110.85
Non-breeding	29.9 (28.19)	0-102.44	42.42 (60.8)	0-203.61	54.29 (39.76)	0-159.65

Table 30. DBS - West. Seasonal peak abundance of Great northern diver recorded on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	4.25 (7.52)	0-25.51
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	4.25 (7.52)	0-25.51

Table 31. DBS - West. Seasonal peak abundance of Great skua recorded on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 32. DBS - West. Seasonal peak abundance of Guillemot recorded on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	4250.92 (3370.55)	692-9279.95	5819.35 (4489.44)	1000.2- 12067.91	7787.69 (5669.06)	1791.56- 15487.03
Breeding (full)	3167.62 (582.78)	1980.62- 4452.91	4670.63 (770.58)	3118.32- 6481.92	6146.25 (887.61)	4160.01- 7900.03
Post-breeding	6955.28 (6359.04)	763.18- 17781.09	8867.1 (7907.26)	1211.25- 22050.6	12096.46 (10594.23)	1839.02- 31357.25
Winter	2504.99 (349.92)	1803.57- 3163.67	3596.79 (421.98)	2781.72- 4431.47	5032.36 (546.66)	3971.45- 6105.69
Non-breeding	4250.92 (3370.55)	692-9279.95	5819.35 (4489.44)	1000.2- 12067.91	7787.69 (5669.06)	1791.56- 15487.03

Table 33. DBS - West. Seasonal peak abundance of Guillemot (including unidentified auks apportioned using identified auk ratios) recorded on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	5352.82 (4244.25)	871.38- 11685.45	7452.04 (5749)	1280.82- 15453.7	10051.88 (7317.28)	2312.43- 19989.73
Breeding (full)	4580.77 (1334.31)	2613.39- 7039.08	6520.7 (1601.31)	3955.64- 9596.72	8422.88 (1599.54)	5450.53- 11325.51
Post-breeding	7284.85 (6660.35)	799.34- 18623.63	9533.89 (8501.87)	1302.33- 23708.78	13026.07 (11408.39)	1980.35- 33767.04
Winter	3176.22 (443.68)	2286.85- 4011.39	4633.38 (543.59)	3583.41- 5708.61	6574.97 (714.23)	5188.86- 7977.32
Non-breeding	5352.82 (4244.25)	871.38- 11685.45	7452.04 (5749)	1280.82- 15453.7	10051.88 (7317.28)	2312.43- 19989.73

Table 34. DBS - West. Seasonal peak abundance of Guillemot (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	7014.62 (5561.9)	1141.91- 15313.25	9770.33 (7537.49)	1679.28- 20261.28	13177.66 (9592.7)	3031.52- 26205.84
Breeding (full)	6004.42 (1749)	3425.6- 9226.73	8548.71 (2099.33)	5185.89- 12581.41	11042.12 (2096.95)	7145.46- 14847.37
Post-breeding	9547.59 (8729.12)	1047.62- 24408.29	12498.37 (11145.46)	1707.28- 31080.81	17079.17 (14958.14)	2596.54- 44273.74
Winter	4167.69 (582.18)	3000.7- 5263.57	6074.67 (712.68)	4698.09- 7484.37	8620.69 (936.45)	6803.31- 10459.36
Non-breeding	7014.62 (5561.9)	1141.91- 15313.25	9770.33 (7537.49)	1679.28- 20261.28	13177.66 (9592.7)	3031.52- 26205.84

Table 35. DBS - West. Seasonal peak abundance of Herring gull recorded on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	4.15 (7.15)	0-24.87
Breeding (full)	4.25 (7.07)	0-25.52	4.25 (7.24)	0-25.51	4.32 (7.48)	0-25.9
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	4.15 (7.15)	0-24.87

Table 36. DBS - West. Seasonal peak abundance of Kittiwake recorded on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	870.13 (952.93)	41.19-2981.58	970.47 (967.72)	74.4-3107.16	1186.87 (668.15)	345.77-2554.01
Breeding (full)	2598.78 (3231.79)	0-10090.34	3558.36 (4160.31)	0-13030.4	3978.68 (4590.91)	0-13636.95
Autumn migration	3253.08 (4703.06)	34.04-15749.66	4034.46 (5645.76)	25.6-18775.41	4148.47 (5663.29)	128.08-18725.14
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	3253.08 (4703.06)	34.04-15749.66	4034.46 (5645.76)	25.6-18775.41	4148.47 (5663.29)	128.08-18725.14

Table 37. DBS - West. Seasonal peak abundance of Lesser black-backed gull recorded on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	12.64 (22.58)	0-75.84	12.66 (21.59)	0-75.99
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 38. DBS - West. Seasonal peak abundance of Little gull recorded on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	4.24 (7.41)	0-25.45	4.24 (7.56)	0-25.45	4.25 (7.21)	0-25.5

Table 39. DBS - West. Seasonal peak abundance of Puffin recorded on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	29.97 (33.68)	0-94.18	34.65 (37.05)	0-103.94	43.17 (45.35)	0-120.86
Breeding (full)	71.07 (72.55)	0-175.6	92.46 (94.65)	0-218.55	122.47 (124.86)	0-295.62
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	84.4 (67.69)	8.46-219.36	160.27 (87.74)	25.32-320.46	219.78 (124.63)	42.26-439.57
Non-breeding	84.4 (67.69)	8.46-219.36	160.27 (87.74)	25.32-320.46	219.78 (124.63)	42.26-439.57

Table 40. DBS - West. Seasonal peak abundance of Puffin (including unidentified auks apportioned using identified auk ratios) recorded on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	29.97 (33.68)	0-94.18	34.65 (37.05)	0-103.94	43.17 (45.35)	0-120.86
Breeding (full)	71.07 (72.55)	0-175.6	92.46 (94.65)	0-218.55	122.47 (124.86)	0-295.62
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	88.62 (71.07)	8.88-230.32	168.7 (92.36)	26.65-337.32	232.46 (131.82)	44.7-464.93
Non-breeding	88.62 (71.07)	8.88-230.32	168.7 (92.36)	26.65-337.32	232.46 (131.82)	44.7-464.93

Table 41. DBS - West. Seasonal peak abundance of Puffin (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	34.25 (38.49)	0-107.64	38.98 (41.68)	0-116.94	51.8 (54.41)	0-145.03
Breeding (full)	83.62 (85.35)	0-206.58	109.27 (111.85)	0-258.28	143.59 (146.38)	0-346.59
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	101.28 (81.22)	10.15-263.21	198.22 (108.52)	31.32-396.35	270.5 (153.4)	52.02-541.01
Non-breeding	101.28 (81.22)	10.15-263.21	198.22 (108.52)	31.32-396.35	270.5 (153.4)	52.02-541.01

Table 42. DBS - West. Seasonal peak abundance of Razorbill recorded on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	1934.71 (1628.56)	210.21- 4526.46	2702.77 (2020.49)	390.02- 5758.35	3706.65 (2700.06)	657.81- 7760.28
Breeding (full)	858.34 (436.69)	226.94- 1739.24	1154.82 (589.82)	326.59- 2151.84	1345.78 (683.19)	353.17- 2525.67
Autumn migration	2527.72 (3643.68)	8.51- 12451.63	3041.6 (4110.5)	25.6- 13023.42	3429.74 (4506.46)	42.76- 15198.16
Winter	2158.64 (1784.49)	239.02- 5070.54	3241.51 (2715.6)	382.59- 7301.41	4132.32 (3575.8)	366.67- 9675.19
Non-breeding	2527.72 (3643.68)	8.51- 12451.63	3241.51 (2715.6)	382.59- 7301.41	4132.32 (3575.8)	366.67- 9675.19

Table 43. DBS - West. Seasonal peak abundance of Razorbill (including unidentified auks apportioned using identified auk ratios) recorded on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	2516.02 (2117.87)	273.36- 5886.48	3648.83 (2727.73)	526.55- 7773.97	4965.4 (3616.98)	881.19- 10395.62
Breeding (full)	1339.38 (681.43)	354.12- 2713.97	1822.92 (931.05)	515.53- 3396.76	2152.18 (1092.56)	564.8- 4039.07
Autumn migration	3032.42 (4371.19)	10.21- 14937.78	4000.32 (5406.14)	33.67- 17128.41	4470.98 (5874.58)	55.75- 19812.19
Winter	2739.64 (2264.79)	303.35- 6435.28	4171.65 (3494.83)	492.37- 9396.5	5254 (4546.41)	466.2- 12301.42
Non-breeding	3032.42 (4371.19)	10.21- 14937.78	4171.65 (3494.83)	492.37- 9396.5	5254 (4546.41)	466.2- 12301.42

Table 44. DBS - West. Seasonal peak abundance of Razorbill (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	3048.07 (2565.73)	331.17- 7131.27	4417.65 (3302.46)	637.49- 9411.96	6014.26 (4381)	1067.33- 12591.52
Breeding (full)	1624 (826.24)	429.37- 3290.71	2209.35 (1128.41)	624.82- 4116.8	2603.72 (1321.78)	683.29- 4886.49
Autumn migration	3672.82 (5294.33)	12.37- 18092.46	4844.5 (6546.99)	40.78- 20743.01	5414.48 (7114.28)	67.51- 23993.09
Winter	3316.63 (2741.77)	367.24- 7790.61	5048.98 (4229.83)	595.92- 11372.68	6362.58 (5505.7)	564.57- 14896.99
Non-breeding	3672.82 (5294.33)	12.37- 18092.46	5048.98 (4229.83)	595.92- 11372.68	6362.58 (5505.7)	564.57- 14896.99

Table 45. DBS - West. Seasonal peak abundance of Red-throated diver recorded on the sea, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	4.21 (7.61)	0-25.23
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 46. DBS - East & West. Seasonal peak abundance of Arctic skua recorded on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 47. DBS - East & West. Seasonal peak abundance of Arctic tern recorded on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 48. DBS - East & West. Seasonal peak abundance of Common gull recorded on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	25.29 (40.33)	0-134.78	29.61 (41.51)	0-135.14	29.64 (42.68)	0-135.24

Table 49. DBS - East & West. Seasonal peak abundance of Common tern recorded on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 50. DBS - East & West. Seasonal peak abundance of Fulmar recorded on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	4.24 (7.11)	0-25.43	8.32 (7.87)	0-25.47	76.47 (84.1)	0-272.69
Breeding (full)	204.96 (190.4)	8.24-619.93	292.61 (254.97)	16.33-702.74	365.3 (327.48)	24.88-882.68
Autumn migration	96.72 (84.7)	0-268.21	188.46 (169.2)	0-485.91	318.11 (294.86)	8.45-770.19
Winter	27.44 (34.77)	0-109.78	62.02 (74.9)	0-228.38	107.46 (107.91)	0-309.41
Non-breeding	96.72 (84.7)	0-268.21	199.8 (201.37)	0-570.62	349.59 (345.48)	0-893.51

Table 51. DBS - East & West. Seasonal peak abundance of Gannet recorded on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	96.75 (131.47)	0-435.81	97.19 (134.84)	0-454.4	140.21 (186.33)	0-599.92
Breeding (full)	756.77 (218.84)	394.64-1237.45	939.37 (313.47)	463.8-1655.46	1414.03 (776.58)	562.98-3274.39
Autumn migration	690.11 (511.14)	108.88-1608.62	1011.84 (751.48)	158.62-2226.61	1163.31 (799.97)	242.07-2496.54
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 52. DBS - East & West. Seasonal peak abundance of Great black-backed gull recorded on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	87.67 (66.82)	8.38-258.48	117.32 (88.38)	16.71-352.99	192.61 (98.28)	41.56-420.68
Breeding (full)	50.74 (63.21)	0-194.63	55.04 (66.87)	0-203.34	84.69 (96.81)	0-288.08
Autumn migration	12.72 (18.43)	0-59.37	63.33 (98.18)	0-329.05	63.4 (97.37)	0-320.89
Winter	34.14 (35.37)	0-127.87	46.59 (43.17)	0-159.47	59.29 (45)	0-167.9
Non-breeding	101.14 (74.85)	8.38-295.21	118.03 (107.72)	16.71-397.48	192.61 (98.28)	41.56-420.68

Table 53. DBS - East & West. Seasonal peak abundance of Great northern diver recorded on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	4.25 (7.52)	0-25.51
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	4.25 (7.52)	0-25.51

Table 54. DBS - East & West. Seasonal peak abundance of Great skua recorded on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 55. DBS - East & West. Seasonal peak abundance of Guillemot recorded on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	10657.61 (6873.87)	3056.13- 21274.41	15084.04 (9691.77)	4394.81- 29153.89	20559.57 (12998.83)	6548.49- 39161.92
Breeding (full)	12353.85 (4054.46)	6005.76- 19546.39	17171.22 (5200.78)	9007.48- 26161.53	22409.34 (6036.8)	12453.19- 32364.78
Post-breeding	15359.87 (13885.95)	1978.1- 40626.17	20176.42 (17643.9)	3011.99- 51061.52	28068.98 (23294.62)	4947.05- 69986.9
Winter	12836.56 (1652.01)	9790.39- 16204.47	18472.93 (1822.37)	14790.3- 22002.12	24892.88 (2474.72)	19988.85- 29321.65
Non-breeding	15683.49 (6631.73)	7931.6- 26254.15	22168.59 (8647.18)	11771.49- 34779.03	29449.85 (11130.97)	16217.06- 45068.13

Table 56. DBS - East & West. Seasonal peak abundance of Guillemot (including unidentified auks apportioned using identified auk ratios) recorded on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	10657.61 (6873.87)	3056.13- 21274.41	15084.04 (9691.77)	4394.81- 29153.89	20559.57 (12998.83)	6548.49- 39161.92
Breeding (full)	12353.85 (4054.46)	6005.76- 19546.39	17171.22 (5200.78)	9007.48- 26161.53	22409.34 (6036.8)	12453.19- 32364.78
Post-breeding	15359.87 (13885.95)	1978.1- 40626.17	20176.42 (17643.9)	3011.99- 51061.52	28068.98 (23294.62)	4947.05- 69986.9
Winter	12836.56 (1652.01)	9790.39- 16204.47	18472.93 (1822.37)	14790.3- 22002.12	24892.88 (2474.72)	19988.85- 29321.65
Non-breeding	15683.49 (6631.73)	7931.6- 26254.15	22168.59 (8647.18)	11771.49- 34779.03	29449.85 (11130.97)	16217.06- 45068.13

Table 57. DBS - East & West. Seasonal peak abundance of Guillemot (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	10657.61 (6873.87)	3056.13- 21274.41	15084.04 (9691.77)	4394.81- 29153.89	20559.57 (12998.83)	6548.49- 39161.92
Breeding (full)	12353.85 (4054.46)	6005.76- 19546.39	17171.22 (5200.78)	9007.48- 26161.53	22409.34 (6036.8)	12453.19- 32364.78
Post-breeding	15359.87 (13885.95)	1978.1- 40626.17	20176.42 (17643.9)	3011.99- 51061.52	28068.98 (23294.62)	4947.05- 69986.9
Winter	12836.56 (1652.01)	9790.39- 16204.47	18472.93 (1822.37)	14790.3- 22002.12	24892.88 (2474.72)	19988.85- 29321.65
Non-breeding	15683.49 (6631.73)	7931.6- 26254.15	22168.59 (8647.18)	11771.49- 34779.03	29449.85 (11130.97)	16217.06- 45068.13

Table 58. DBS - East & West. Seasonal peak abundance of Herring gull recorded on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	4.19 (7.42)	0-25.14	4.21 (7.51)	0-25.29	8.36 (14.7)	0-50.12
Breeding (full)	16.84 (22.57)	0-75.88	21.06 (27.72)	0-84.33	21.11 (27.66)	0-84.67
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	4.19 (7.42)	0-25.14	4.21 (7.51)	0-25.29	8.36 (14.7)	0-50.12

Table 59. DBS - East & West. Seasonal peak abundance of Kittiwake recorded on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	1373 (1202.02)	267.48- 4113.03	1705.42 (1228.79)	428.42- 4481.31	2299.03 (1128.76)	905.22- 4708.31

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Breeding (full)	6778.52 (4981.77)	1486.3- 17484.79	8818.95 (6040.56)	2183.1- 21719.56	10332.45 (6490)	3199.03- 23150.28
Autumn migration	4000.52 (5441.91)	59.47- 17962.65	5168.79 (6768.3)	59.56- 22002.08	6876.66 (8502.08)	170.35- 26916.47
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	4000.52 (5441.91)	59.47- 17962.65	5168.79 (6768.3)	59.56- 22002.08	6876.66 (8502.08)	170.35- 26916.47

Table 60. DBS - East & West. Seasonal peak abundance of Lesser black-backed gull recorded on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	4.2 (7.52)	0-25.18	4.2 (7.14)	0-25.21	4.2 (7.23)	0-25.19
Breeding (full)	0 (0)	0-0	12.64 (22.58)	0-75.84	16.87 (29.15)	0-101.23
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	4.2 (7.52)	0-25.18	4.2 (7.14)	0-25.21	4.2 (7.23)	0-25.19

Table 61. DBS - East & West. Seasonal peak abundance of Little gull recorded on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	4.24 (7.41)	0-25.45	71.41 (119.73)	0-428.5	96.51 (141.85)	0-478.4

Table 62. DBS - East & West. Seasonal peak abundance of Manx shearwater recorded on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 63. DBS - East & West. Seasonal peak abundance of Puffin recorded on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	55.23 (63.73)	0-181.08	68.39 (73.04)	0-205.17	106.38 (113.69)	0-313.72
Breeding (full)	133.62 (137.78)	0-346.59	171.92 (178.86)	0-441.41	227.25 (235.31)	0-582.81
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	221.71 (202.09)	10.15-608.67	376.92 (274.64)	31.32-854.08	519.77 (377.05)	63.17-1150.08
Non-breeding	221.71 (202.09)	10.15-608.67	376.92 (274.64)	31.32-854.08	519.77 (377.05)	63.17-1150.08

Table 64. DBS - East & West. Seasonal peak abundance of Puffin (including unidentified auks apportioned using identified auk ratios) recorded on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	55.23 (63.73)	0-181.08	68.39 (73.04)	0-205.17	106.38 (113.69)	0-313.72
Breeding (full)	133.62 (137.78)	0-346.59	171.92 (178.86)	0-441.41	227.25 (235.31)	0-582.81
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	221.71 (202.09)	10.15-608.67	376.92 (274.64)	31.32-854.08	519.77 (377.05)	63.17-1150.08
Non-breeding	221.71 (202.09)	10.15-608.67	376.92 (274.64)	31.32-854.08	519.77 (377.05)	63.17-1150.08

Table 65. DBS - East & West. Seasonal peak abundance of Puffin (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	55.23 (63.73)	0-181.08	68.39 (73.04)	0-205.17	106.38 (113.69)	0-313.72
Breeding (full)	133.62 (137.78)	0-346.59	171.92 (178.86)	0-441.41	227.25 (235.31)	0-582.81
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	221.71 (202.09)	10.15-608.67	376.92 (274.64)	31.32-854.08	519.77 (377.05)	63.17-1150.08
Non-breeding	221.71 (202.09)	10.15-608.67	376.92 (274.64)	31.32-854.08	519.77 (377.05)	63.17-1150.08

Table 66. DBS - East & West. Seasonal peak abundance of Razorbill recorded on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	5410.77 (4021.82)	726.89-12075.37	7950.06 (5436.99)	1163.7-16391.79	10748.26 (7256.11)	1936.92-21369.47
Breeding (full)	1948.44 (969.11)	519.86-3924.71	2743.59 (1362.52)	792.64-5155	3645.64 (1957.88)	987.22-7412.26
Autumn migration	7161.51 (9094.11)	12.37-29200.51	9530.13 (11593.54)	94.65-34676.06	10944.78 (12980.31)	110.7-39923.22
Winter	5722.96 (3119.87)	2052.48-10916.97	8413.75 (4708.08)	3137.23-15685.23	10654.12 (6126.83)	3787.22-20453.38
Non-breeding	7161.51 (9094.11)	12.37-29200.51	9734.61 (9276.38)	649.79-25305.73	11892.88 (11371.73)	607.76-30827.12

Table 67. DBS - East & West. Seasonal peak abundance of Razorbill (including unidentified auks apportioned using identified auk ratios) recorded on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	5410.77 (4021.82)	726.89- 12075.37	7950.06 (5436.99)	1163.7- 16391.79	10748.26 (7256.11)	1936.92- 21369.47
Breeding (full)	1948.44 (969.11)	519.86- 3924.71	2743.59 (1362.52)	792.64-5155	3645.64 (1957.88)	987.22- 7412.26
Autumn migration	7161.51 (9094.11)	12.37- 29200.51	9530.13 (11593.54)	94.65- 34676.06	10944.78 (12980.31)	110.7- 39923.22
Winter	5722.96 (3119.87)	2052.48- 10916.97	8413.75 (4708.08)	3137.23- 15685.23	10654.12 (6126.83)	3787.22- 20453.38
Non-breeding	7161.51 (9094.11)	12.37- 29200.51	9734.61 (9276.38)	649.79- 25305.73	11892.88 (11371.73)	607.76- 30827.12

Table 68. DBS - East & West. Seasonal peak abundance of Razorbill (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	5410.77 (4021.82)	726.89- 12075.37	7950.06 (5436.99)	1163.7- 16391.79	10748.26 (7256.11)	1936.92- 21369.47
Breeding (full)	1948.44 (969.11)	519.86- 3924.71	2743.59 (1362.52)	792.64-5155	3645.64 (1957.88)	987.22- 7412.26
Autumn migration	7161.51 (9094.11)	12.37- 29200.51	9530.13 (11593.54)	94.65- 34676.06	10944.78 (12980.31)	110.7- 39923.22
Winter	5722.96 (3119.87)	2052.48- 10916.97	8413.75 (4708.08)	3137.23- 15685.23	10654.12 (6126.83)	3787.22- 20453.38
Non-breeding	7161.51 (9094.11)	12.37- 29200.51	9734.61 (9276.38)	649.79- 25305.73	11892.88 (11371.73)	607.76- 30827.12

Table 69. DBS - East & West. Seasonal peak abundance of Red-throated diver recorded on the sea, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	4.21 (7.61)	0-25.23
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0



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Ornithology Technical Appendix 12-5c Seabird peak seasonal abundances: birds in flight

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1 INTRODUCTION

This appendix provides tables of seabird peak abundance in each species-specific season, as defined in Furness (2015)¹ for each species recorded during baseline surveys for the DBS East and West Offshore Wind Farm projects (March 2021 – February 2023).

Abundances were estimated using design-based methods and are summarised as central estimate (i.e. extrapolated from the number seen in the surveyed area to the whole area) and 95% confidence range, derived from 1,000 nonparametric bootstrap samples.

Appendix (a) provides the combined peak abundance of each species-specific season on the sea and in flight.

Appendix (b) provides the peak abundance of each species-specific season on the sea.

This appendix (c) provides the peak abundance of each species-specific season in flight.

¹ Furness, R.W. 2015. Non-breeding season populations of seabirds in UK waters: Population sizes for Biologically Defined Minimum Population Scales (BDMPS). Natural England Commissioned Report Number 164. 389 pp.

Table 1. DBS - East. Seasonal peak abundance of Arctic skua recorded in flight, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	4.15 (7.48)	0-24.91	4.15 (7.1)	0-24.93	4.2 (7.1)	0-25.19
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	4.15 (7.48)	0-24.91	4.15 (7.1)	0-24.93	4.2 (7.1)	0-25.19

Table 2. DBS - East. Seasonal peak abundance of Arctic tern recorded in flight, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	37.47 (42.05)	0-124.89	54.29 (57.75)	0-158.68	83.41 (87.5)	0-233.54
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 3. DBS - East. Seasonal peak abundance of Common gull recorded in flight, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	12.51 (10.59)	0-41.63	12.7 (18.54)	0-59.29	16.71 (14.25)	0-50.04

Table 4. DBS - East. Seasonal peak abundance of Common tern recorded in flight, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	4.16 (7.32)	0-24.98	8.35 (11.64)	0-33.41	8.34 (11.75)	0-41.7
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 5. DBS - East. Seasonal peak abundance of Fulmar recorded in flight, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	16.21 (19.6)	0-56.74	24.44 (28.9)	0-89.62	32.6 (37.06)	0-105.96
Breeding (full)	54.48 (30.71)	8.38-125.72	79.78 (39.09)	16.86-168.58	79.7 (39.14)	16.83-168.3
Autumn migration	33.42 (20.36)	0-75.35	83.58 (93.27)	0-326.15	104.45 (107.86)	0-351.15
Winter	37.99 (42.19)	0-118.19	63.52 (68.49)	0-186.33	80.27 (77.16)	0-211.62
Non-breeding	37.99 (42.19)	0-118.19	83.58 (93.27)	0-326.15	104.45 (107.86)	0-351.15

Table 6. DBS - East. Seasonal peak abundance of Gannet recorded in flight, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	12.49 (16.51)	0-49.95	16.69 (20.84)	0-66.74	32.6 (36.83)	0-105.96
Breeding (full)	207.91 (67.22)	108.17-349.16	325.45 (129.87)	150.28-567.33	503.96 (254.5)	200.1-940.97
Autumn migration	187.31 (80.26)	58.61-323.83	274.9 (78.62)	125.44-407.21	378.94 (99.03)	183.93-539.92
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 7. DBS - East. Seasonal peak abundance of Great black-backed gull recorded in flight, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	20.95 (19.53)	0-75.43	29.39 (21.38)	0-84.29	37.74 (22.85)	0-92.57
Breeding (full)	8.33 (11.49)	0-33.3	12.69 (18.42)	0-59.24	16.93 (22.32)	0-67.7
Autumn migration	4.22 (6.92)	0-25.33	4.49 (7.77)	0-26.92	24.97 (16.17)	0-59.25
Winter	0 (0)	0-0	4.07 (7.28)	0-24.44	16.3 (21.81)	0-65.2
Non-breeding	20.95 (19.53)	0-75.43	29.39 (21.38)	0-84.29	37.74 (22.85)	0-92.57

Table 8. DBS - East. Seasonal peak abundance of Great skua recorded in flight, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	4.2 (7.36)	0-25.21	4.2 (7.1)	0-25.19
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	4.1 (7.04)	0-24.62	4.09 (7.24)	0-24.55	4.09 (7.24)	0-24.55
Non-breeding	4.1 (7.04)	0-24.62	4.09 (7.24)	0-24.55	4.09 (7.24)	0-24.55

Table 9. DBS - East. Seasonal peak abundance of Guillemot recorded in flight, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	67.05 (32.47)	8.38-134.1	100.93 (61.2)	8.36-219.16	138.63 (89.34)	16.71-294.74
Breeding (full)	264.68 (185.04)	33.78-595.92	323.9 (229.93)	42.31-731.06	399.3 (291.49)	59.24-881.62
Post-breeding	0 (0)	0-0	4.49 (6.18)	0-17.94	4.46 (6.19)	0-17.83
Winter	66.94 (69.16)	0-217.89	112.47 (31.36)	57.28-186.33	153.35 (48.14)	67.72-245.47
Non-breeding	67.05 (32.47)	8.38-134.1	112.47 (31.36)	57.28-186.33	153.35 (48.14)	67.72-245.47

Table 10. DBS - East. Seasonal peak abundance of Guillemot (including unidentified auks apportioned using identified auk ratios) recorded in flight, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	67.05 (32.47)	8.38-134.1	105.14 (63.75)	8.7-228.31	142.84 (92.05)	17.21-303.69
Breeding (full)	357.08 (249.65)	45.58-803.97	416.43 (295.61)	54.4-939.89	508.55 (371.25)	75.45-1122.85
Post-breeding	0 (0)	0-0	4.49 (6.18)	0-17.94	4.46 (6.19)	0-17.83
Winter	95.55 (23.07)	51.63-142	153.68 (42.85)	78.26-254.59	227.55 (71.44)	100.49-364.25
Non-breeding	95.55 (23.07)	51.63-142	153.68 (42.85)	78.26-254.59	227.55 (71.44)	100.49-364.25

Table 11. DBS - East. Seasonal peak abundance of Guillemot (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded in flight, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	67.05 (32.47)	8.38-134.1	105.14 (63.75)	8.7-228.31	142.84 (92.05)	17.21-303.69
Breeding (full)	357.08 (249.65)	45.58-803.97	416.43 (295.61)	54.4-939.89	508.55 (371.25)	75.45-1122.85
Post-breeding	0 (0)	0-0	4.49 (6.18)	0-17.94	4.46 (6.19)	0-17.83
Winter	95.55 (23.07)	51.63-142	153.68 (42.85)	78.26-254.59	227.55 (71.44)	100.49-364.25
Non-breeding	95.55 (23.07)	51.63-142	153.68 (42.85)	78.26-254.59	227.55 (71.44)	100.49-364.25

Table 12. DBS - East. Seasonal peak abundance of Herring gull recorded in flight, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	4.19 (7.54)	0-25.14	4.21 (7.13)	0-25.29	4.21 (7.31)	0-25.25
Breeding (full)	0 (0)	0-0	0 (0)	0-0	4.17 (7.11)	0-25.01
Autumn migration	4.22 (7.43)	0-25.33	8.33 (8.34)	0-25.41	16.79 (16.11)	0-59.25
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	4.22 (7.43)	0-25.33	8.33 (8.34)	0-25.41	16.79 (16.11)	0-59.25

Table 13. DBS - East. Seasonal peak abundance of Kittiwake recorded in flight, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	444.2 (189.37)	209.53-921.92	613.28 (221.65)	325.89-1138.34	893.99 (365.79)	459.42-1699.88
Breeding (full)	1572.55 (663.76)	582.78-2652.27	2329.62 (666.67)	1235.52-3521.08	3302.55 (642.83)	2157.86-4483.68
Autumn migration	1229.37 (787.99)	354.58-2527.5	1807.58 (1200.72)	525.11-3936.09	2416.61 (1569.62)	744.89-5023.93
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	1229.37 (787.99)	354.58-2527.5	1807.58 (1200.72)	525.11-3936.09	2416.61 (1569.62)	744.89-5023.93

Table 14. DBS - East. Seasonal peak abundance of Lesser black-backed gull recorded in flight, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	8.33 (13.81)	0-49.96	8.43 (8.22)	0-25.32	8.45 (8.21)	0-25.46
Autumn migration	0 (0)	0-0	0 (0)	0-0	4.15 (6.82)	0-24.92
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	4.15 (6.82)	0-24.92

Table 15. DBS - East. Seasonal peak abundance of Little gull recorded in flight, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	33.59 (48.51)	0-142.75	33.55 (48.24)	0-142.58

Table 16. DBS - East. Seasonal peak abundance of Manx shearwater recorded in flight, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	4.19 (7.11)	0-25.14	4.21 (7.36)	0-25.28	4.24 (7.68)	0-25.46
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	4.16 (7.14)	0-24.98	4.18 (7.34)	0-25.06	4.17 (7.27)	0-25.02

Table 17. DBS - East. Seasonal peak abundance of Puffin recorded in flight, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	4.2 (7.11)	0-25.18	4.2 (7.43)	0-25.21	4.2 (7.13)	0-25.19
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	4.2 (7.11)	0-25.18	4.2 (7.43)	0-25.21	4.2 (7.13)	0-25.19

Table 18. DBS - East. Seasonal peak abundance of Puffin (including unidentified auks apportioned using identified auk ratios) recorded in flight, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	4.2 (7.11)	0-25.18	4.2 (7.43)	0-25.21	4.2 (7.13)	0-25.19
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	4.2 (7.11)	0-25.18	4.2 (7.43)	0-25.21	4.2 (7.13)	0-25.19

Table 19. DBS - East. Seasonal peak abundance of Puffin (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded in flight, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	4.2 (7.11)	0-25.18	4.2 (7.43)	0-25.21	4.2 (7.13)	0-25.19
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	4.2 (7.11)	0-25.18	4.2 (7.43)	0-25.21	4.2 (7.13)	0-25.19

Table 20. DBS - East. Seasonal peak abundance of Razorbill recorded in flight, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	33.57 (38.56)	0-109.11	67.22 (79.8)	0-252.09	79.77 (87.16)	0-235.1
Breeding (full)	20.78 (23.02)	0-66.51	20.86 (27.25)	0-83.43	37.48 (27.42)	8.34-99.93
Autumn migration	159.07 (172.92)	0-460.47	451.6 (509.9)	0-1488.6	627.02 (628.85)	0-1580.15
Winter	28.37 (33.39)	0-97.27	32.59 (38.67)	0-122.21	40.75 (44.88)	0-130.41
Non-breeding	159.07 (172.92)	0-460.47	451.6 (509.9)	0-1488.6	627.02 (628.85)	0-1580.15

Table 21. DBS - East. Seasonal peak abundance of Razorbill (including unidentified auks apportioned using identified auk ratios) recorded in flight, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	46.16 (53.02)	0-150.03	88.23 (104.73)	0-330.87	104.95 (114.68)	0-309.34
Breeding (full)	20.78 (23.02)	0-66.51	20.86 (27.25)	0-83.43	41.65 (30.47)	9.26-111.04
Autumn migration	175.82 (191.13)	0-508.94	480.87 (542.95)	0-1585.08	660.43 (662.36)	0-1664.36
Winter	28.37 (33.39)	0-97.27	36.66 (43.5)	0-137.48	48.9 (53.86)	0-156.49
Non-breeding	175.82 (191.13)	0-508.94	480.87 (542.95)	0-1585.08	660.43 (662.36)	0-1664.36

Table 22. DBS - East. Seasonal peak abundance of Razorbill (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded in flight, S.D. and 95% confidence intervals, in the Array Area, Array Area and 2km buffer and Array Area and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	46.16 (53.02)	0-150.03	88.23 (104.73)	0-330.87	104.95 (114.68)	0-309.34
Breeding (full)	20.78 (23.02)	0-66.51	20.86 (27.25)	0-83.43	41.65 (30.47)	9.26-111.04
Autumn migration	175.82 (191.13)	0-508.94	480.87 (542.95)	0-1585.08	660.43 (662.36)	0-1664.36
Winter	28.37 (33.39)	0-97.27	36.66 (43.5)	0-137.48	48.9 (53.86)	0-156.49
Non-breeding	175.82 (191.13)	0-508.94	480.87 (542.95)	0-1585.08	660.43 (662.36)	0-1664.36

Table 23. DBS - West. Seasonal peak abundance of Arctic skua recorded in flight, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	4.25 (7.15)	0-25.52	4.25 (7.27)	0-25.51	4.26 (7.58)	0-25.56
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	4.25 (7.15)	0-25.52	4.25 (7.27)	0-25.51	4.26 (7.58)	0-25.56

Table 24. DBS - West. Seasonal peak abundance of Arctic tern recorded in flight, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	21.27 (30.2)	0-93.58	34.01 (37.23)	0-102.04	59.64 (67.42)	0-187.66
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 25. DBS - West. Seasonal peak abundance of Common gull recorded in flight, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	42.54 (53.17)	0-170.15	46.77 (55.95)	0-178.57	59.64 (68.18)	0-204.49

Table 26. DBS - West. Seasonal peak abundance of Common tern recorded in flight, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	8.37 (8.49)	0-25.25	8.49 (8.47)	0-25.6	8.45 (8.34)	0-25.46
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 27. DBS - West. Seasonal peak abundance of Fulmar recorded in flight, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	8.55 (11.87)	0-34.2	21.44 (10.79)	0-43.1	25.82 (18.91)	0-69.16
Breeding (full)	41.81 (38)	0-117.25	62.65 (41.07)	8.27-133.99	92.16 (58.23)	8.29-201.67
Autumn migration	21.13 (13.62)	0-50.76	50.64 (39.05)	0-126.61	63.39 (52.83)	0-169.05
Winter	23.21 (15.77)	0-59.13	42.43 (23.47)	8.55-88.78	80.92 (56)	8.5-196.64
Non-breeding	23.21 (15.77)	0-59.13	50.64 (39.05)	0-126.61	80.92 (56)	8.5-196.64

Table 28. DBS - West. Seasonal peak abundance of Gannet recorded in flight, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	25.65 (28.72)	0-85.51	47.41 (52.27)	0-146.55	56.2 (60.08)	0-164.26
Breeding (full)	340.02 (205.85)	91.98-714.44	503.13 (297.92)	168.11-1064.19	648.44 (373.78)	228.05-1278.91
Autumn migration	221.36 (88.67)	68.99-379.15	328.32 (169.38)	78.92-624.51	376.15 (140.77)	169.06-608.58
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 29. DBS - West. Seasonal peak abundance of Great black-backed gull recorded in flight, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	4.19 (7.39)	0-25.13	16.97 (23.26)	0-84.83	21.08 (27.67)	0-92.77
Breeding (full)	0 (0)	0-0	17.09 (29.81)	0-102.56	17.15 (28.53)	0-102.88
Autumn migration	4.24 (7.2)	0-25.45	12.73 (16.33)	0-50.9	12.75 (16.56)	0-51
Winter	0 (0)	0-0	0 (0)	0-0	17.29 (24.43)	0-86.46
Non-breeding	4.24 (7.2)	0-25.45	16.97 (23.26)	0-84.83	21.08 (27.67)	0-92.77

Table 30. DBS - West. Seasonal peak abundance of Great northern diver recorded in flight, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 31. DBS - West. Seasonal peak abundance of Great skua recorded in flight, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	8.52 (13.91)	0-51.12
Autumn migration	4.26 (7.47)	0-25.53	8.51 (8.35)	0-25.6	8.53 (8.53)	0-25.66
Winter	4.93 (8.89)	0-29.57	4.93 (8.48)	0-29.59	14.08 (12.75)	0-39.33
Non-breeding	4.93 (8.89)	0-29.57	8.51 (8.35)	0-25.6	14.08 (12.75)	0-39.33

Table 32. DBS - West. Seasonal peak abundance of Guillemot recorded in flight, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	83.62 (78.51)	0-242.88	107.95 (73.62)	16.97-247.83	172.15 (167.26)	0-478.96
Breeding (full)	157.64 (134.44)	8.26-436.66	232.92 (191.08)	16.78-589.02	330.69 (234.25)	41.87-725.17
Post-breeding	21.21 (28.69)	0-93.3	50.9 (59.21)	0-169.68	51 (59.8)	0-169.99
Winter	151.74 (112.92)	9.86-387.57	211.87 (130.01)	39.46-453.41	254.6 (149.52)	58.99-518.78
Non-breeding	151.74 (112.92)	9.86-387.57	211.87 (130.01)	39.46-453.41	254.6 (149.52)	58.99-518.78

Table 33. DBS - West. Seasonal peak abundance of Guillemot (including unidentified auks apportioned using identified auk ratios) recorded in flight, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	104.28 (97.92)	0-302.9	157.74 (107.58)	24.79-362.14	228.64 (179.03)	25.08-554.86
Breeding (full)	191.28 (163.13)	10.02-529.85	284.34 (233.27)	20.48-719.07	381.97 (270.58)	48.36-837.63
Post-breeding	33.93 (45.91)	0-149.28	67.87 (78.94)	0-226.23	72.24 (84.71)	0-240.81
Winter	191.8 (142.73)	12.46-489.89	256.6 (157.46)	47.79-549.16	321.04 (188.53)	74.39-654.16
Non-breeding	191.8 (142.73)	12.46-489.89	256.6 (157.46)	47.79-549.16	321.04 (188.53)	74.39-654.16

Table 34. DBS - West. Seasonal peak abundance of Guillemot (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded in flight, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	104.28 (97.92)	0-302.9	157.74 (107.58)	24.79-362.14	228.64 (179.03)	25.08-554.86
Breeding (full)	191.28 (163.13)	10.02-529.85	284.34 (233.27)	20.48-719.07	381.97 (270.58)	48.36-837.63
Post-breeding	33.93 (45.91)	0-149.28	67.87 (78.94)	0-226.23	72.24 (84.71)	0-240.81
Winter	191.8 (142.73)	12.46-489.89	256.6 (157.46)	47.79-549.16	321.04 (188.53)	74.39-654.16
Non-breeding	191.8 (142.73)	12.46-489.89	256.6 (157.46)	47.79-549.16	321.04 (188.53)	74.39-654.16

Table 35. DBS - West. Seasonal peak abundance of Herring gull recorded in flight, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	4.2 (7.53)	0-25.22	4.24 (7.41)	0-25.45	4.22 (7.19)	0-25.3
Breeding (full)	4.29 (7.33)	0-25.71	8.43 (13.76)	0-50.57	12.78 (17.89)	0-59.64
Autumn migration	8.43 (11.88)	0-33.7	8.55 (12.25)	0-42.77	23.25 (19.37)	0-68.82
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	8.43 (11.88)	0-33.7	8.55 (12.25)	0-42.77	23.25 (19.37)	0-68.82

Table 36. DBS - West. Seasonal peak abundance of Kittiwake recorded in flight, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	428.92 (169.62)	181.24-770.52	667.36 (293.62)	289.32-1197.56	932.9 (336.99)	464.48-1504.11
Breeding (full)	1654.64 (2267.84)	0-7880.47	2063.52 (920.74)	882.38-4147.83	2598.76 (1175.52)	1038.9-4972.62
Autumn migration	884.35 (619.61)	187.26-1836.75	1511.48 (1217.06)	236.75-3379.63	2019.68 (1538.78)	383.45-4227.02
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	884.35 (619.61)	187.26-1836.75	1511.48 (1217.06)	236.75-3379.63	2019.68 (1538.78)	383.45-4227.02

Table 37. DBS - West. Seasonal peak abundance of Lesser black-backed gull recorded in flight, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	4.2 (7.11)	0-25.22	4.19 (6.93)	0-25.14	4.21 (7.13)	0-25.24
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 38. DBS - West. Seasonal peak abundance of Little gull recorded in flight, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	17.07 (30.5)	0-102.41	17.11 (28.45)	0-102.63

Table 39. DBS - West. Seasonal peak abundance of Puffin recorded in flight, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	8.45 (14.32)	0-50.72
Non-breeding	0 (0)	0-0	0 (0)	0-0	8.45 (14.32)	0-50.72

Table 40. DBS - West. Seasonal peak abundance of Puffin (including unidentified auks apportioned using identified auk ratios) recorded in flight, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	8.45 (14.32)	0-50.72
Non-breeding	0 (0)	0-0	0 (0)	0-0	8.45 (14.32)	0-50.72

Table 41. DBS - West. Seasonal peak abundance of Puffin (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded in flight, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	8.45 (14.32)	0-50.72
Non-breeding	0 (0)	0-0	0 (0)	0-0	8.45 (14.32)	0-50.72

Table 42. DBS - West. Seasonal peak abundance of Razorbill recorded in flight, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	62.68 (59.81)	0-201.01	66.89 (58.4)	0-184.24	97.6 (51.13)	8.63-217.73
Breeding (full)	63.02 (81.73)	0-268.96	62.86 (75.76)	0-234.62	75.74 (85.38)	0-269.24
Autumn migration	164.98 (220.64)	0-702.42	173.03 (222.15)	0-700.57	223.99 (254.22)	0-727.13
Winter	58.98 (69.3)	0-210.64	91.14 (84.84)	0-273.76	111.89 (103.46)	0-314.67
Non-breeding	164.98 (220.64)	0-702.42	173.03 (222.15)	0-700.57	223.99 (254.22)	0-727.13

Table 43. DBS - West. Seasonal peak abundance of Razorbill (including unidentified auks apportioned using identified auk ratios) recorded in flight, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	79.15 (75.53)	0-253.84	87.61 (76.48)	0-241.31	118.66 (62.16)	10.5-264.73
Breeding (full)	63.02 (81.73)	0-268.96	67.05 (80.81)	0-250.26	79.95 (90.13)	0-284.2
Autumn migration	279.19 (373.39)	0-1188.71	278.54 (357.6)	0-1127.75	333.87 (378.93)	0-1083.83
Winter	71.62 (84.15)	0-255.77	103.97 (96.79)	0-312.3	137.4 (127.06)	0-386.43
Non-breeding	279.19 (373.39)	0-1188.71	278.54 (357.6)	0-1127.75	333.87 (378.93)	0-1083.83

Table 44. DBS - West. Seasonal peak abundance of Razorbill (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded in flight, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	79.15 (75.53)	0-253.84	87.61 (76.48)	0-241.31	118.66 (62.16)	10.5-264.73
Breeding (full)	63.02 (81.73)	0-268.96	67.05 (80.81)	0-250.26	79.95 (90.13)	0-284.2
Autumn migration	279.19 (373.39)	0-1188.71	278.54 (357.6)	0-1127.75	333.87 (378.93)	0-1083.83
Winter	71.62 (84.15)	0-255.77	103.97 (96.79)	0-312.3	137.4 (127.06)	0-386.43
Non-breeding	279.19 (373.39)	0-1188.71	278.54 (357.6)	0-1127.75	333.87 (378.93)	0-1083.83

Table 45. DBS - West. Seasonal peak abundance of Red-throated diver recorded in flight, S.D. and 95% confidence intervals, in the wind farm, wind farm and 2km buffer and wind farm and 4km buffer.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 46. DBS - East & West. Seasonal peak abundance of Arctic skua recorded in flight, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	8.4 (14.63)	0-50.43	8.4 (14.37)	0-50.44	8.46 (14.68)	0-50.75
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	8.4 (14.63)	0-50.43	8.4 (14.37)	0-50.44	8.46 (14.68)	0-50.75

Table 47. DBS - East & West. Seasonal peak abundance of Arctic tern recorded in flight, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	58.74 (72.25)	0-218.47	88.3 (94.98)	0-260.72	143.05 (154.92)	0-421.2
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 48. DBS - East & West. Seasonal peak abundance of Common gull recorded in flight, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	55.05 (63.76)	0-211.78	59.47 (74.49)	0-237.86	76.35 (82.43)	0-254.53

Table 49. DBS - East & West. Seasonal peak abundance of Common tern recorded in flight, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	12.53 (15.81)	0-50.23	16.84 (20.11)	0-59.01	16.79 (20.09)	0-67.16
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 50. DBS - East & West. Seasonal peak abundance of Fulmar recorded in flight, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	24.76 (31.47)	0-90.94	45.88 (39.69)	0-132.72	58.42 (55.97)	0-175.12
Breeding (full)	96.29 (68.71)	8.38-242.97	142.43 (80.16)	25.13-302.57	171.86 (97.37)	25.12-369.97
Autumn migration	54.55 (33.98)	0-126.11	134.22 (132.32)	0-452.76	167.84 (160.69)	0-520.2
Winter	61.2 (57.96)	0-177.32	105.95 (91.96)	8.55-275.11	161.19 (133.16)	8.5-408.26
Non-breeding	61.2 (57.96)	0-177.32	134.22 (132.32)	0-452.76	185.37 (163.86)	8.5-547.79

Table 51. DBS - East & West. Seasonal peak abundance of Gannet recorded in flight, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	38.14 (45.23)	0-135.46	64.1 (73.11)	0-213.29	88.8 (96.91)	0-270.22
Breeding (full)	547.93 (273.07)	200.15-1063.6	828.58 (427.79)	318.39-1631.52	1152.4 (628.28)	428.15-2219.88
Autumn migration	408.67 (168.93)	127.6-702.98	603.22 (248)	204.36-1031.72	755.09 (239.8)	352.99-1148.5
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 52. DBS - East & West. Seasonal peak abundance of Great black-backed gull recorded in flight, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	25.14 (26.92)	0-100.56	46.36 (44.64)	0-169.12	58.82 (50.52)	0-185.34
Breeding (full)	8.33 (11.49)	0-33.3	29.78 (48.23)	0-161.8	34.08 (50.85)	0-170.58
Autumn migration	8.46 (14.12)	0-50.78	17.22 (24.1)	0-77.82	37.72 (32.73)	0-110.25
Winter	0 (0)	0-0	4.07 (7.28)	0-24.44	33.59 (46.24)	0-151.66
Non-breeding	25.19 (26.73)	0-100.88	46.36 (44.64)	0-169.12	58.82 (50.52)	0-185.34

Table 53. DBS - East & West. Seasonal peak abundance of Great northern diver recorded in flight, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Table 54. DBS - East & West. Seasonal peak abundance of Great skua recorded in flight, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	4.2 (7.36)	0-25.21	12.72 (21.01)	0-76.31
Autumn migration	4.26 (7.47)	0-25.53	8.51 (8.35)	0-25.6	8.53 (8.53)	0-25.66
Winter	9.03 (15.93)	0-54.19	9.02 (15.72)	0-54.14	18.17 (19.99)	0-63.88
Non-breeding	9.03 (15.93)	0-54.19	12.6 (15.59)	0-50.15	18.17 (19.99)	0-63.88

Table 55. DBS - East & West. Seasonal peak abundance of Guillemot recorded in flight, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	171.33 (130.39)	8.38-437	262.88 (171.33)	33.49-590.45	371.48 (271.08)	42.29-858.55
Breeding (full)	548.36 (412.78)	55.6-1333.82	700.77 (528.88)	74.88-1658.96	890.52 (641.83)	123.81-1960.48
Post-breeding	33.93 (45.91)	0-149.28	72.36 (85.12)	0-244.17	76.7 (90.9)	0-258.64
Winter	287.35 (165.8)	64.09-631.89	410.28 (200.31)	126.05-803.75	548.59 (259.97)	174.88-1018.41
Non-breeding	287.35 (165.8)	64.09-631.89	410.28 (200.31)	126.05-803.75	548.59 (259.97)	174.88-1018.41

Table 56. DBS - East & West. Seasonal peak abundance of Guillemot (including unidentified auks apportioned using identified auk ratios) recorded in flight, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	171.33 (130.39)	8.38-437	262.88 (171.33)	33.49-590.45	371.48 (271.08)	42.29-858.55
Breeding (full)	548.36 (412.78)	55.6-1333.82	700.77 (528.88)	74.88-1658.96	890.52 (641.83)	123.81-1960.48
Post-breeding	33.93 (45.91)	0-149.28	72.36 (85.12)	0-244.17	76.7 (90.9)	0-258.64
Winter	287.35 (165.8)	64.09-631.89	410.28 (200.31)	126.05-803.75	548.59 (259.97)	174.88-1018.41
Non-breeding	287.35 (165.8)	64.09-631.89	410.28 (200.31)	126.05-803.75	548.59 (259.97)	174.88-1018.41

Table 57. DBS - East & West. Seasonal peak abundance of Guillemot (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded in flight, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	171.33 (130.39)	8.38-437	262.88 (171.33)	33.49-590.45	371.48 (271.08)	42.29-858.55
Breeding (full)	548.36 (412.78)	55.6-1333.82	700.77 (528.88)	74.88-1658.96	890.52 (641.83)	123.81-1960.48
Post-breeding	33.93 (45.91)	0-149.28	72.36 (85.12)	0-244.17	76.7 (90.9)	0-258.64
Winter	287.35 (165.8)	64.09-631.89	410.28 (200.31)	126.05-803.75	548.59 (259.97)	174.88-1018.41
Non-breeding	287.35 (165.8)	64.09-631.89	410.28 (200.31)	126.05-803.75	548.59 (259.97)	174.88-1018.41

Table 58. DBS - East & West. Seasonal peak abundance of Herring gull recorded in flight, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	8.39 (15.07)	0-50.36	8.45 (14.54)	0-50.74	8.43 (14.5)	0-50.55
Breeding (full)	4.29 (7.33)	0-25.71	8.43 (13.76)	0-50.57	16.95 (25)	0-84.65
Autumn migration	12.65 (19.31)	0-59.03	16.88 (20.59)	0-68.18	40.04 (35.48)	0-128.07
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	12.65 (19.31)	0-59.03	16.88 (20.59)	0-68.18	40.04 (35.48)	0-128.07

Table 59. DBS - East & West. Seasonal peak abundance of Kittiwake recorded in flight, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	873.12 (358.99)	390.77-1692.44	1280.64 (515.27)	615.21-2335.9	1826.89 (702.78)	923.9-3203.99
Breeding (full)	3227.19 (2931.6)	582.78-10532.74	4393.14 (1587.41)	2117.9-7668.91	5901.31 (1818.35)	3196.76-9456.3

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Autumn migration	2113.72 (1407.6)	541.84-4364.25	3319.06 (2417.78)	761.86-7315.72	4436.29 (3108.4)	1128.34-9250.95
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	2113.72 (1407.6)	541.84-4364.25	3319.06 (2417.78)	761.86-7315.72	4436.29 (3108.4)	1128.34-9250.95

Table 60. DBS - East & West. Seasonal peak abundance of Lesser black-backed gull recorded in flight, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	12.53 (20.92)	0-75.18	12.62 (15.15)	0-50.46	12.66 (15.34)	0-50.7
Autumn migration	0 (0)	0-0	0 (0)	0-0	4.15 (6.82)	0-24.92
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	4.15 (6.82)	0-24.92

Table 61. DBS - East & West. Seasonal peak abundance of Little gull recorded in flight, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	50.66 (79.01)	0-245.16	50.66 (76.69)	0-245.21

Table 62. DBS - East & West. Seasonal peak abundance of Manx shearwater recorded in flight, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Breeding (full)	4.19 (7.11)	0-25.14	4.21 (7.36)	0-25.28	4.24 (7.68)	0-25.46
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	4.16 (7.14)	0-24.98	4.18 (7.34)	0-25.06	4.17 (7.27)	0-25.02

Table 63. DBS - East & West. Seasonal peak abundance of Puffin recorded in flight, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	4.2 (7.11)	0-25.18	4.2 (7.43)	0-25.21	4.2 (7.13)	0-25.19
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	8.45 (14.32)	0-50.72
Non-breeding	4.2 (7.11)	0-25.18	4.2 (7.43)	0-25.21	12.65 (21.45)	0-75.91

Table 64. DBS - East & West. Seasonal peak abundance of Puffin (including unidentified auks apportioned using identified auk ratios) recorded in flight, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	4.2 (7.11)	0-25.18	4.2 (7.43)	0-25.21	4.2 (7.13)	0-25.19
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	8.45 (14.32)	0-50.72
Non-breeding	4.2 (7.11)	0-25.18	4.2 (7.43)	0-25.21	12.65 (21.45)	0-75.91

Table 65. DBS - East & West. Seasonal peak abundance of Puffin (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded in flight, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	4.2 (7.11)	0-25.18	4.2 (7.43)	0-25.21	4.2 (7.13)	0-25.19
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	8.45 (14.32)	0-50.72
Non-breeding	4.2 (7.11)	0-25.18	4.2 (7.43)	0-25.21	12.65 (21.45)	0-75.91

Table 66. DBS - East & West. Seasonal peak abundance of Razorbill recorded in flight, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	125.31 (128.55)	0-403.87	175.84 (181.21)	0-572.18	223.61 (176.84)	10.5-574.07
Breeding (full)	83.8 (104.75)	0-335.47	87.91 (108.06)	0-333.69	121.6 (120.6)	9.26-395.24
Autumn migration	455.01 (564.52)	0-1697.65	759.41 (900.55)	0-2712.83	994.3 (1041.29)	0-2748.19
Winter	99.99 (117.54)	0-353.04	140.63 (140.29)	0-449.78	186.3 (180.92)	0-542.92
Non-breeding	455.01 (564.52)	0-1697.65	759.41 (900.55)	0-2712.83	994.3 (1041.29)	0-2748.19

Table 67. DBS - East & West. Seasonal peak abundance of Razorbill (including unidentified auks apportioned using identified auk ratios) recorded in flight, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	125.31 (128.55)	0-403.87	175.84 (181.21)	0-572.18	223.61 (176.84)	10.5-574.07
Breeding (full)	83.8 (104.75)	0-335.47	87.91 (108.06)	0-333.69	121.6 (120.6)	9.26-395.24
Autumn migration	455.01 (564.52)	0-1697.65	759.41 (900.55)	0-2712.83	994.3 (1041.29)	0-2748.19
Winter	99.99 (117.54)	0-353.04	140.63 (140.29)	0-449.78	186.3 (180.92)	0-542.92
Non-breeding	455.01 (564.52)	0-1697.65	759.41 (900.55)	0-2712.83	994.3 (1041.29)	0-2748.19

Table 68. DBS - East & West. Seasonal peak abundance of Razorbill (including unidentified auks apportioned using identified auk ratios and accounting for availability bias) recorded in flight, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	125.31 (128.55)	0-403.87	175.84 (181.21)	0-572.18	223.61 (176.84)	10.5-574.07
Breeding (full)	83.8 (104.75)	0-335.47	87.91 (108.06)	0-333.69	121.6 (120.6)	9.26-395.24
Autumn migration	455.01 (564.52)	0-1697.65	759.41 (900.55)	0-2712.83	994.3 (1041.29)	0-2748.19
Winter	99.99 (117.54)	0-353.04	140.63 (140.29)	0-449.78	186.3 (180.92)	0-542.92
Non-breeding	455.01 (564.52)	0-1697.65	759.41 (900.55)	0-2712.83	994.3 (1041.29)	0-2748.19

Table 69. DBS - East & West. Seasonal peak abundance of Red-throated diver recorded in flight, S.D. and 95% confidence intervals, in the Array Areas, Array Areas and 2km buffers and Array Areas and 4km buffers.

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0

Season	Abundance					
	Array Area		Array Area & 2km buffer		Array Area and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Breeding (full)	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0