



**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)

Appendix 12-5b Seasonal Peak Abundance (Sitting)

Appendix 12-5c Seasonal Peak Abundance (Flying)

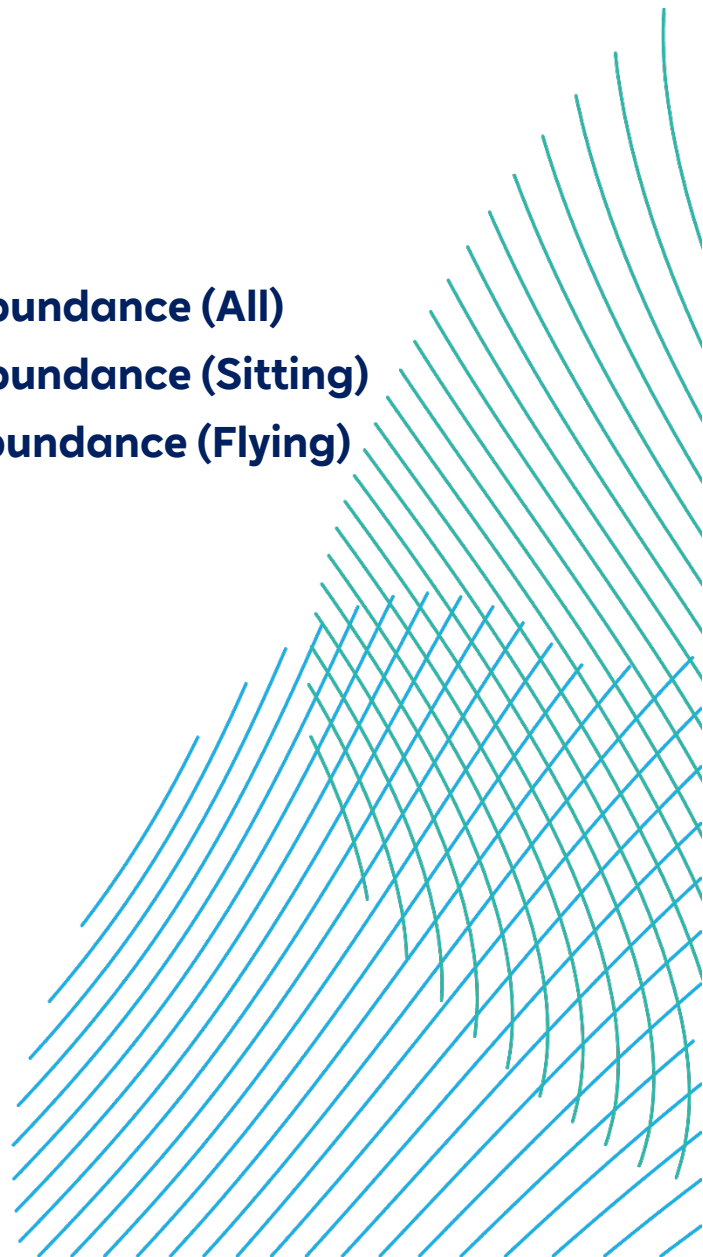
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MacArthur
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Dogger Bank South Offshore Windfarm

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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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
Autumn migration	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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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
Autumn migration	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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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
Autumn migration	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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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
Autumn migration	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	6955.28 (6256.32)	763.18- 17449.93	8867.1 (7819.12)	1244.22- 22134.57	12096.46 (10558.3)	1839.23- 31411.14

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 Areas		Array Areas & 2km buffer		Array Areas 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
Autumn migration	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	7284.85 (6552.78)	799.34-18276.78	9533.89 (8407.11)	1337.79-23799.06	13026.07 (11369.71)	1980.57-33825.07

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 Areas		Array Areas & 2km buffer		Array Areas 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
Autumn migration	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	9547.59 (8588.12)	1047.62-23953.7	12498.37 (11021.23)	1753.76-31199.17	17079.17 (14907.42)	2596.83-44349.82

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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 (7.35)	0-25.25	4.21 (7.3)	0-25.28	8.39 (7.98)	0-25.29
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	4.25 (7.35)	0-25.25	4.21 (7.3)	0-25.28	8.39 (7.98)	0-25.29

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 Areas		Array Areas & 2km buffer		Array Areas 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 (65.6)	0-193.59	88.49 (92.12)	0-235.97	143.32 (149.95)	0-379.37
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 Areas		Array Areas & 2km buffer		Array Areas 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 (79.18)	0-244.09	88.45 (85.29)	0-244.4	105.34 (102.58)	0-286.63

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 Areas		Array Areas & 2km buffer		Array Areas 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 (8.69)	0-25.19	8.44 (8.23)	0-25.33	8.43 (11.94)	0-42.15
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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	29 (26.24)	0-83.28	54.64 (35.43)	0-125.69	134.44 (122.63)	0-369.29
Breeding (full)	275.66 (208.96)	49.67-642.93	401.03 (291.6)	66.64-860.97	513.45 (372.17)	100.07-1035.66
Autumn migration	151.09 (92.14)	33.27-311.4	323.35 (270.68)	33.28-798.18	487.48 (429.55)	33.52-1160.13
Winter	88.65 (78.89)	0-228.73	167.59 (151.44)	8.37-437.77	266.27 (224.65)	25.03-619.04
Non-breeding	151.09 (92.14)	33.27-311.4	323.35 (270.68)	33.28-798.18	487.48 (429.55)	33.52-1160.13

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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	108.9 (107.8)	0-300.03	134.13 (134.27)	0-368.68	214.07 (216.68)	0-587.51
Breeding (full)	928.01 (276.1)	517.17-1446.15	1334.55 (415.22)	762.35-2073.83	1755.06 (692.1)	914.74-2854.41
Autumn migration	1097.2 (511.33)	485.47-1918.92	1573.85 (786.86)	652.95-2823.05	1919.18 (851.76)	921.79-3253.83
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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	108.62 (64.7)	25.18-265.53	142.41 (53.33)	58.4-275.33	230.3 (73.28)	100.22-386.1
Breeding (full)	42.23 (48.03)	0-150.35	58.98 (65.02)	0-185.35	109.43 (117.21)	0-319.89
Autumn migration	16.96 (24.39)	0-78.44	61.03 (80.82)	0-252.85	60.9 (79.9)	0-261
Winter	34.14 (29.07)	0-110.58	50.63 (31.32)	0-118.97	92.67 (51.41)	8.49-201.43
Non-breeding	108.62 (64.7)	25.18-265.53	142.41 (53.33)	58.4-275.33	230.3 (73.28)	100.22-386.1

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 Areas		Array Areas & 2km buffer		Array Areas 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	4.17 (6.96)	0-25.03
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	4.17 (6.96)	0-25.03

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 Areas		Array Areas & 2km buffer		Array Areas 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	4.17 (7.32)	0-25.05	12.61 (13.74)	0-50.58
Autumn migration	4.26 (7.25)	0-25.29	8.59 (8.38)	0-26.16	8.58 (8.64)	0-26.1
Winter	9.03 (8.63)	0-27.45	8.74 (8.51)	0-27.36	17.45 (12.45)	0-45.52
Non-breeding	9.03 (8.63)	0-27.45	8.74 (8.51)	0-27.36	17.45 (12.45)	0-45.52

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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	6091.29 (4036.59)	1795.44- 11890.01	8541.68 (5552.14)	2557.13- 16024.01	11716.97 (7474.71)	3794.47- 21385.4
Breeding (full)	5464 (698.57)	4150.64- 7024.71	8020.87 (881.79)	6253.49- 10012.88	11252.55 (1084.78)	8841.3- 13309.98
Autumn migration	10983.65 (9318.67)	1550.38- 26110.09	14179.01 (11731.65)	2304.03- 32683.39	19547.28 (15797.85)	3711.02- 45483.97
Winter	7894.58 (713.8)	6668.8- 9521.84	11354.22 (792.62)	9755.18- 12951.13	15133.5 (1185.56)	12737.77- 17160.13
Non-breeding	10983.65 (9318.67)	1550.38- 26110.09	14179.01 (11731.65)	2304.03- 32683.39	19547.28 (15797.85)	3711.02- 45483.97

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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	8260.26 (5473.93)	2434.75- 16123.77	11644.96 (7569.3)	3486.16- 21845.72	15897.3 (10141.51)	5148.24- 29015.19
Breeding (full)	7887.25 (3551.37)	3002.01- 13117.45	11620.78 (5411.71)	4756.39- 19141.14	17849.58 (7512.49)	7909.62- 28295.77
Autumn migration	11718.02 (9941.71)	1654.04- 27855.81	15358.79 (12707.79)	2495.74- 35402.83	21356.95 (17260.39)	4054.59- 49694.82
Winter	10073.69 (910.82)	8509.56- 12150.1	14776.72 (1031.54)	12695.69- 16854.99	19861.65 (1555.97)	16717.42- 22521.46
Non-breeding	11718.02 (9941.71)	1654.04- 27855.81	15358.79 (12707.79)	2495.74- 35402.83	21356.95 (17260.39)	4054.59- 49694.82

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 Areas		Array Areas & 2km buffer		Array Areas 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 (7150.98)	3180.69- 21063.63	15219.03 (9892.46)	4556.13- 28550.6	20763.71 (13245.99)	6724.2- 37897.2
Breeding (full)	10107.47 (4551.06)	3847.05- 16809.94	14927.69 (6951.71)	6109.91- 24588.11	23006.21 (9682.81)	10194.67- 36470.26
Autumn migration	15359.87 (13031.5)	2168.09- 36513.13	20136.03 (16660.45)	3272.02- 46414.63	27996 (22625.99)	5315- 65143.03
Winter	13128.11 (1186.99)	11089.72- 15834.11	19243.22 (1343.34)	16533.15- 21949.67	25880.08 (2027.46)	21783.1- 29345.87
Non-breeding	15359.87 (13031.5)	2168.09- 36513.13	20136.03 (16660.45)	3272.02- 46414.63	27996 (22625.99)	5315- 65143.03

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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	12.59 (13.24)	0-49.79	12.55 (13.5)	0-50.06	16.72 (16.55)	0-58.46
Breeding (full)	12.59 (16)	0-50.87	17.06 (20.32)	0-59.72	21.29 (25.22)	0-76.63
Autumn migration	12.65 (10.88)	0-36.6	17.11 (14.26)	0-50.2	39.82 (26.98)	0-109.24
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	12.65 (10.88)	0-36.6	17.11 (14.26)	0-50.2	39.82 (26.98)	0-109.24

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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	2099.46 (1512.46)	565.09- 5060.14	2756.74 (1879.07)	791.36- 6043.69	3978.35 (1327.96)	2333.17- 6531.29
Breeding (full)	7030.93 (2902.4)	2806.55- 11877.3	10386.77 (2768.04)	5450.21- 15118.46	13879.18 (2751.9)	8829.89- 18663.43
Autumn migration	3756.74 (5204.93)	345.57- 18582.1	5213.63 (5048.09)	127.47- 12267.53	8705.42 (8593.67)	186.8- 21142.44
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	3756.74 (5204.93)	345.57- 18582.1	5213.63 (5048.09)	127.47- 12267.53	8705.42 (8593.67)	186.8- 21142.44

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 Areas		Array Areas & 2km buffer		Array Areas 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 (7.3)	0-25.43	4.27 (7.19)	0-25.6	4.26 (7.37)	0-25.54
Breeding (full)	8.33 (14.56)	0-50.5	12.59 (21.57)	0-75.53	12.69 (11.01)	0-42.31
Autumn migration	0 (0)	0-0	0 (0)	0-0	4.19 (7.04)	0-25.14
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	4.2 (7.3)	0-25.43	4.27 (7.19)	0-25.6	4.26 (7.37)	0-25.54

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 Areas		Array Areas & 2km buffer		Array Areas 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 (7.52)	0-26.15	122.88 (168.09)	0-584.12	148.34 (182.27)	0-601.36

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 Areas		Array Areas & 2km buffer		Array Areas 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 (7.06)	0-25.06	4.21 (7.5)	0-25.28	4.22 (7.05)	0-25.34
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 (7.13)	0-25.25	4.21 (7.32)	0-25.28	4.22 (6.82)	0-25.29

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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	50.95 (54.47)	0-152.6	63.99 (67.23)	0-170.63	93.66 (97.77)	0-255.42
Breeding (full)	100.19 (94.41)	0-241.9	125.65 (119.52)	0-293.21	167.83 (162.29)	0-394.43
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	179.93 (153.92)	16.83-443.62	293.18 (199.98)	33.61-611.1	415.05 (276.8)	75.66-837.99
Non-breeding	179.93 (153.92)	16.83-443.62	293.18 (199.98)	33.61-611.1	415.05 (276.8)	75.66-837.99

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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	50.95 (54.47)	0-152.6	63.99 (67.23)	0-170.63	93.66 (97.77)	0-255.42
Breeding (full)	100.19 (94.41)	0-241.9	125.65 (119.52)	0-293.21	167.83 (162.29)	0-394.43
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	192.45 (164.63)	18-474.49	318.29 (217.11)	36.49-663.44	452.75 (301.95)	82.53-914.12
Non-breeding	192.45 (164.63)	18-474.49	318.29 (217.11)	36.49-663.44	452.75 (301.95)	82.53-914.12

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 Areas		Array Areas & 2km buffer		Array Areas 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 (63.54)	0-177.99	72.52 (76.2)	0-193.39	106.43 (111.1)	0-290.25
Breeding (full)	116.9 (110.15)	0-282.23	146.6 (139.44)	0-342.08	193.01 (186.63)	0-453.6
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	221.71 (189.66)	20.74-546.63	372.73 (254.24)	42.73-776.93	528.21 (352.28)	96.29-1066.48
Non-breeding	221.71 (189.66)	20.74-546.63	372.73 (254.24)	42.73-776.93	528.21 (352.28)	96.29-1066.48

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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	2718.01 (2245.48)	344.18-6131.99	3817.38 (2897.56)	623.07-7960.9	5219.29 (3831.18)	998.82-10590.38
Breeding (full)	1120.98 (425.05)	476.48-1968.57	1527.97 (632.08)	568.57-2622.37	2025.12 (878.05)	778.47-3608.81
Autumn migration	3671.68 (4011.02)	8.34-11236.9	4950.84 (5244.6)	50.09-14411.78	6317.71 (6476.28)	108.66-17199.15
Winter	2626.15 (2150.95)	280.71-5846.55	3783.7 (3167.74)	433.39-8437.83	5078.13 (4378.19)	492.47-11339.18
Non-breeding	3671.68 (4011.02)	8.34-11236.9	4950.84 (5244.6)	50.09-14411.78	6317.71 (6476.28)	108.66-17199.15

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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	3525.52 (2912.6)	446.44-7953.77	5234.5 (1833.66)	1569.8-7951.72	6993.85 (5133.79)	1338.42-14191.14
Breeding (full)	1693.58 (642.17)	719.86-2974.13	2348.8 (971.64)	874.02-4031.13	3103.25 (1345.5)	1192.92-5530.07
Autumn migration	3897.32 (4257.52)	8.85-11927.47	5241.48 (5552.48)	53.03-15257.8	6705.21 (6873.52)	115.32-18254.08
Winter	3288.96 (2693.82)	351.56-7322.13	4820.15 (4035.47)	552.11-10749.18	6485.55 (5591.61)	628.96-14481.85
Non-breeding	3897.32 (4257.52)	8.85-11927.47	5241.48 (5552.48)	53.03-15257.8	6993.85 (5133.79)	1338.42-14191.14

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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	4262.91 (3521.79)	539.82-9617.36	6302.52 (2207.79)	1890.09-9574.15	8456.97 (6207.78)	1618.42-17159.93
Breeding (full)	2028.07 (769.01)	862.04-3561.54	2826.13 (1169.1)	1051.63-4850.33	3728.14 (1616.44)	1433.13-6643.64
Autumn migration	4717.84 (5153.87)	10.71-14438.59	6349.58 (6726.33)	64.24-18483.48	8121.26 (8325.11)	139.67-22109.08
Winter	3971.7 (3253.02)	424.54-8842.11	5823.66 (4875.61)	667.05-12987.05	7843.22 (6762.15)	760.63-17513.46
Non-breeding	4717.84 (5153.87)	10.71-14438.59	6349.58 (6726.33)	64.24-18483.48	8456.97 (6207.78)	1618.42-17159.93

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 Areas		Array Areas & 2km buffer		Array Areas 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 (7.11)	0-25.26
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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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
Autumn migration	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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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
Autumn migration	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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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
Autumn migration	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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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
Autumn migration	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	6955.28 (6359.04)	763.18- 17781.09	8867.1 (7907.26)	1211.25- 22050.6	12096.46 (10594.23)	1839.02- 31357.25

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 Areas		Array Areas & 2km buffer		Array Areas 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
Autumn migration	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	7284.85 (6660.35)	799.34- 18623.63	9533.89 (8501.87)	1302.33- 23708.78	13026.07 (11408.39)	1980.35- 33767.04

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 Areas		Array Areas & 2km buffer		Array Areas 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
Autumn migration	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	9547.59 (8729.12)	1047.62- 24408.29	12498.37 (11145.46)	1707.28- 31080.81	17079.17 (14958.14)	2596.54- 44273.74

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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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	21.09 (27.47)	0-84.17	29.5 (35.79)	0-109.56	29.51 (36.73)	0-109.59

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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 (7.13)	0-25.52	8.44 (7.98)	0-25.49	75.59 (77.75)	0-251.79
Breeding (full)	196.27 (167.2)	8.31-492.63	292.48 (248.76)	16.66-651.99	359.03 (313.55)	25.02-784.94
Autumn migration	96.54 (73.79)	8.37-252.49	188.98 (163.58)	8.37-453.7	319.4 (293.05)	16.76-748.2
Winter	27.45 (31.33)	0-91.49	59.28 (66.89)	0-191.52	104.31 (100.29)	0-282.21
Non-breeding	96.54 (73.79)	8.37-252.49	188.98 (163.58)	8.37-453.7	319.4 (293.05)	16.76-748.2

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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	71.09 (71.42)	0-216.54	71.28 (71.6)	0-217.86	125.94 (129.45)	0-377.69
Breeding (full)	534.94 (134.23)	292.25-818.58	706.86 (253.92)	345.33-1297.47	1228.33 (773.25)	408.68-2988.82
Autumn migration	690.11 (492.61)	142.29-1498.1	1011.88 (733.13)	200.91-2092.29	1163.69 (777.04)	293.3-2311.85
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 Areas		Array Areas & 2km buffer		Array Areas 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 (56.79)	16.79-224.04	96.26 (54.37)	25.26-225.27	171.65 (61.35)	66.82-300.71
Breeding (full)	42.23 (48.48)	0-142	46.34 (52.04)	0-151.65	84.18 (90.92)	0-252.75
Autumn migration	12.72 (18.93)	0-61.01	43.59 (62.49)	0-209.25	43.5 (61.58)	0-200.1
Winter	34.14 (29.62)	0-110.58	46.44 (31.33)	0-118.97	59.09 (32.47)	8.49-134.33
Non-breeding	87.67 (56.79)	16.79-224.04	96.26 (54.37)	25.26-225.27	171.65 (61.35)	66.82-300.71

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 Areas		Array Areas & 2km buffer		Array Areas 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	4.17 (7.38)	0-25.03
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	4.17 (7.38)	0-25.03

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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	5990.96 (3929.37)	1737.45- 11656.22	8424.71 (5480.12)	2507.36- 15831.97	11512.4 (7299.99)	3794.47- 21093.14
Breeding (full)	5396.88 (680.09)	4198.81- 7032.44	7944.82 (868.47)	6152.36- 9810.39	11100.43 (1034.73)	8884.16- 13065.06
Autumn migration	10983.65 (9494.22)	1558.71- 26404.89	14179.01 (12002.68)	2304.24- 32547.7	19547.28 (15705.3)	3736.1- 44225.74
Winter	7680.36 (727.84)	6377.25- 9221.86	11031.44 (804.82)	9370.33- 12516.08	14727.36 (1326.15)	12237.26- 17005.37
Non-breeding	10983.65 (9494.22)	1558.71- 26404.89	14179.01 (12002.68)	2304.24- 32547.7	19547.28 (15705.3)	3736.1- 44225.74

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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	8131.02 (5332.99)	2358.09- 15819.99	11503.01 (7482.5)	3423.52- 21616.8	15655.2 (9926.93)	5159.93- 28683.61
Breeding (full)	7325.96 (3142.7)	2841.34- 12198.03	10867.48 (4799.45)	4659.63- 17585.35	16923.17 (6821.63)	7846.23- 26551.06
Autumn migration	11718.02 (10129)	1662.93- 28170.32	15358.79 (13001.37)	2495.96- 35255.86	21356.95 (17159.27)	4081.98- 48320.11
Winter	9786.23 (927.41)	8125.83- 11750.39	14372.58 (1048.59)	12208.36- 16306.88	19310.65 (1738.86)	16045.61- 22297.61
Non-breeding	11718.02 (10129)	1662.93- 28170.32	15358.79 (13001.37)	2495.96- 35255.86	21356.95 (17159.27)	4081.98- 48320.11

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 Areas		Array Areas & 2km buffer		Array Areas 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 (6990.14)	3090.84- 20735.81	15081.25 (9810.08)	4488.47- 28341.15	20521.63 (13012.72)	6763.9- 37599.92
Breeding (full)	9605 (4120.36)	3725.25- 15992.72	14246.59 (6291.78)	6108.49- 23053.29	22185.7 (8942.93)	10286.14- 34807.54
Autumn migration	15359.87 (13277)	2179.75- 36925.38	20136.03 (17045.36)	3272.32- 46221.94	27996 (22493.43)	5350.91- 63340.97
Winter	12836.56 (1216.48)	10658.62- 15412.95	18839.82 (1374.5)	16002.93- 21375.34	25317.33 (2279.74)	21036.68- 29233.39
Non-breeding	15359.87 (13277)	2179.75- 36925.38	20136.03 (17045.36)	3272.32- 46221.94	27996 (22493.43)	5350.91- 63340.97

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 Areas		Array Areas & 2km buffer		Array Areas 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 (7.34)	0-24.89	4.17 (7.43)	0-25.03	8.35 (12.05)	0-41.76
Breeding (full)	12.59 (15.66)	0-50.87	17.06 (20.8)	0-59.72	21.29 (24.86)	0-76.63
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 (7.34)	0-24.89	4.17 (7.43)	0-25.03	8.35 (12.05)	0-41.76

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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	1324.09 (1296.36)	116.38- 3925.42	1546.01 (1452.37)	133.28- 4438.99	2300.29 (1025.09)	1040.79- 4326.36
Breeding (full)	4764.16 (1996.51)	1820.71- 8291.07	6950.82 (1779.27)	3437.45- 10007.95	8778.22 (1943.08)	4991.05- 11971.31
Autumn migration	3351.77 (4821.74)	126.43- 16296.25	4314.25 (5745.7)	228.36- 19365.29	6295.65 (6321.95)	67.72- 16274.49
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	3351.77 (4821.74)	126.43- 16296.25	4314.25 (5745.7)	228.36- 19365.29	6295.65 (6321.95)	67.72- 16274.49

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 Areas		Array Areas & 2km buffer		Array Areas 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 (7.6)	0-25.43	4.27 (7.25)	0-25.6	4.26 (7.33)	0-25.54
Breeding (full)	0 (0)	0-0	12.59 (22.49)	0-75.53	12.58 (21.44)	0-75.48
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 (7.6)	0-25.43	4.27 (7.25)	0-25.6	4.26 (7.33)	0-25.54

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 Areas		Array Areas & 2km buffer		Array Areas 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 (7.62)	0-26.15	72.08 (110.82)	0-406.34	97.52 (133.22)	0-457.37

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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	46.75 (50.79)	0-135.64	59.72 (61.87)	0-153.57	89.4 (92.32)	0-238.4
Breeding (full)	100.19 (94.37)	0-241.9	125.65 (120.57)	0-293.42	167.83 (162.38)	0-394.43
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	179.93 (156.16)	16.83-435.45	293.18 (201.95)	42.01-611.1	406.64 (281.96)	67.04-829.61
Non-breeding	179.93 (156.16)	16.83-435.45	293.18 (201.95)	42.01-611.1	406.64 (281.96)	67.04-829.61

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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	46.75 (50.79)	0-135.64	59.72 (61.87)	0-153.57	89.4 (92.32)	0-238.4
Breeding (full)	100.19 (94.37)	0-241.9	125.65 (120.57)	0-293.42	167.83 (162.38)	0-394.43
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	192.45 (167.02)	18-465.76	318.29 (219.24)	45.61-663.44	444.35 (308.11)	73.26-906.54
Non-breeding	192.45 (167.02)	18-465.76	318.29 (219.24)	45.61-663.44	444.35 (308.11)	73.26-906.54

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 Areas		Array Areas & 2km buffer		Array Areas 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 (60)	0-160.24	68.25 (70.71)	0-175.51	102.17 (105.51)	0-272.45
Breeding (full)	116.9 (110.1)	0-282.23	146.6 (140.66)	0-342.33	193.01 (186.74)	0-453.6
Autumn migration	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Winter	221.71 (192.42)	20.74-536.58	372.73 (256.75)	53.41-776.93	519.81 (360.43)	85.7-1060.49
Non-breeding	221.71 (192.42)	20.74-536.58	372.73 (256.75)	53.41-776.93	519.81 (360.43)	85.7-1060.49

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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	2697.4 (2255.61)	344.18-6173.68	3796.49 (2878.56)	606.23-7926.27	5185.79 (3878.63)	940.07-10682.47
Breeding (full)	1037.18 (480.29)	326.01-1952.1	1444.35 (681.84)	501.47-2580.48	1912.08 (955.17)	602.69-3549.86
Autumn migration	3671.68 (3895.49)	8.34-10716.95	4950.84 (5171.77)	50.09-13863.78	6317.71 (6497.71)	100.3-17442.57
Winter	2584.96 (2129.09)	272.21-5855.5	3733.42 (3130.99)	450.17-8203.63	5019.38 (4308.39)	492.26-11280.43
Non-breeding	3671.68 (3895.49)	8.34-10716.95	4950.84 (5171.77)	50.09-13863.78	6317.71 (6497.71)	100.3-17442.57

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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	3513.37 (2937.94)	448.3- 8041.25	5157.82 (1809.02)	1484.62- 8052.78	6952.03 (5199.65)	1260.25- 14320.82
Breeding (full)	1605.58 (743.5)	504.67- 3021.9	2261.01 (1067.37)	785.02- 4039.54	2981.84 (1489.56)	939.88- 5535.91
Autumn migration	3897.32 (4134.88)	8.85- 11375.57	5241.48 (5475.37)	53.03- 14677.63	6705.21 (6896.26)	106.45- 18512.44
Winter	3243.71 (2671.66)	341.58- 7347.72	4765.69 (3996.69)	574.64- 10471.88	6418.4 (5509.24)	629.47- 14424.55
Non-breeding	3897.32 (4134.88)	8.85- 11375.57	5241.48 (5475.37)	53.03- 14677.63	6952.03 (5199.65)	1260.25- 14320.82

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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	4259.14 (3561.56)	543.46- 9748.13	6247.01 (2191.03)	1798.13- 9753.3	8415.17 (6293.98)	1525.48- 17334.81
Breeding (full)	1948.44 (902.26)	612.44- 3667.2	2738.33 (1292.7)	950.74- 4892.33	3610.92 (1803.81)	1138.16- 6703.81
Autumn migration	4717.84 (5005.41)	10.71- 13770.49	6349.58 (6632.92)	64.24- 17780.65	8121.26 (8352.65)	128.93- 22422
Winter	3926.45 (3234)	413.47- 8894.28	5769.19 (4838.27)	695.65- 12676.94	7776.08 (6674.6)	762.62- 17475.76
Non-breeding	4717.84 (5005.41)	10.71- 13770.49	6349.58 (6632.92)	64.24- 17780.65	8415.17 (6293.98)	1525.48- 17334.81

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 Areas		Array Areas & 2km buffer		Array Areas 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 (7.62)	0-25.26
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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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
Autumn migration	66.94 (69.16)	0-217.89	91.96 (94.78)	0-284.34	137.92 (141.77)	0-409.67
Winter	62.49 (15.09)	33.77-92.87	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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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
Autumn migration	75.32 (77.81)	0-245.14	96.15 (99.08)	0-297.27	150.44 (154.63)	0-446.84
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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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
Autumn migration	75.32 (77.81)	0-245.14	96.15 (99.08)	0-297.27	150.44 (154.63)	0-446.84
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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas, Array Areas and 2km buffer and Array Areas and 4km buffer.

Season	Abundance					
	Array Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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
Autumn migration	33.84 (40.14)	0-118.45	54.86 (58.9)	0-160.37	63.39 (73.25)	0-211.52
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 Areas		Array Areas & 2km buffer		Array Areas 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
Autumn migration	59.22 (70.25)	0-207.28	88.63 (95.14)	0-259.06	92.98 (107.43)	0-310.24
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 Areas		Array Areas & 2km buffer		Array Areas 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
Autumn migration	59.22 (70.25)	0-207.28	88.63 (95.14)	0-259.06	92.98 (107.43)	0-310.24
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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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 (7.08)	0-25.25	4.21 (7.2)	0-25.28	8.39 (8.33)	0-25.29
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	4.25 (7.08)	0-25.25	4.21 (7.2)	0-25.28	8.39 (8.33)	0-25.29

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 Areas		Array Areas & 2km buffer		Array Areas 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 (65.19)	0-185.17	88.49 (91.44)	0-235.97	143.32 (149.5)	0-379.37
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 Areas		Array Areas & 2km buffer		Array Areas 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 (56.71)	0-185.17	58.95 (59.74)	0-193.83	75.84 (75.82)	0-227.62

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 Areas		Array Areas & 2km buffer		Array Areas 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 (8.5)	0-25.19	8.44 (8.41)	0-25.33	8.43 (11.88)	0-42.15
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 Areas		Array Areas & 2km buffer		Array Areas 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 (28.55)	0-83.28	46.2 (34.52)	0-117.31	58.85 (48.23)	0-151.07
Breeding (full)	87.72 (35.9)	25.18-165.95	125.61 (46.17)	50.52-225.27	154.42 (65.72)	50.04-275.56
Autumn migration	54.55 (27.32)	8.37-109.41	134.37 (122.18)	8.37-411.69	168.08 (150.73)	8.38-470.78
Winter	61.2 (52.68)	0-164.68	108.31 (89.07)	8.37-264.48	161.96 (127.22)	16.68-373.24
Non-breeding	61.2 (52.68)	0-164.68	134.37 (122.18)	8.37-411.69	168.08 (150.73)	8.38-470.78

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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	37.81 (40.5)	0-108.27	62.84 (67.6)	0-184.34	88.13 (92.11)	0-243.4
Breeding (full)	547.92 (256.27)	233.56-986.6	828.2 (410.65)	351.86-1530.13	1151.69 (610.67)	461.57-2084.3
Autumn migration	407.09 (54.5)	309.53-513.39	561.98 (84.69)	403.26-739.37	755.49 (106.18)	578.21-992.2
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 Areas		Array Areas & 2km buffer		Array Areas 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 (19.36)	0-74.68	46.16 (28.81)	0-109.46	58.65 (33.24)	8.35-134.3
Breeding (full)	8.33 (11.62)	0-33.67	17.04 (29.71)	0-102.22	25.25 (31.19)	0-101.02
Autumn migration	4.24 (7.4)	0-26.15	17.44 (21.22)	0-61.03	26.17 (16.85)	0-63.72
Winter	0 (0)	0-0	4.19 (7.49)	0-25.14	33.57 (40.54)	0-125.9
Non-breeding	20.95 (19.36)	0-74.68	46.16 (28.81)	0-109.46	58.65 (33.24)	8.35-134.3

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 Areas		Array Areas & 2km buffer		Array Areas 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 Areas		Array Areas & 2km buffer		Array Areas 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	4.17 (7.31)	0-25.05	12.61 (13.18)	0-50.58
Autumn migration	4.26 (7.39)	0-25.29	8.59 (8.44)	0-26.16	8.58 (8.59)	0-26.1
Winter	9.03 (8.97)	0-27.45	8.74 (8.83)	0-27.36	17.45 (12.2)	0-45.52
Non-breeding	9.03 (8.97)	0-27.45	8.74 (8.83)	0-27.36	17.45 (12.2)	0-45.52

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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	124.74 (69.99)	16.79-257.23	209.01 (125.21)	42.1-425.52	292.57 (201.42)	41.97-618.05
Breeding (full)	422.32 (302.63)	66.82-941.01	557.76 (404.7)	92.68-1211.72	730.92 (512.38)	134.69-1498.49
Autumn migration	100.78 (101.13)	0-294.57	147.02 (147.06)	0-411.69	201.75 (205.24)	0-554.84
Winter	214.22 (107.84)	73.19-440.72	322.78 (124.77)	136.8-560.55	406.14 (183.15)	163.86-717.4
Non-breeding	214.22 (107.84)	73.19-440.72	322.78 (124.77)	136.8-560.55	406.14 (183.15)	163.86-717.4

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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	141.37 (79.32)	19.03-291.5	267.49 (160.24)	53.88-544.58	371.98 (256.09)	53.36-785.8
Breeding (full)	548.37 (392.96)	86.77-1221.87	710.91 (515.81)	118.12-1544.42	896.61 (628.53)	165.22-1838.18
Autumn migration	134.54 (135)	0-393.22	180.63 (180.67)	0-505.81	239.57 (243.71)	0-658.85
Winter	287.34 (144.65)	98.17-591.15	399.97 (154.6)	169.51-694.58	546.83 (246.59)	220.63-965.9
Non-breeding	287.34 (144.65)	98.17-591.15	399.97 (154.6)	169.51-694.58	546.83 (246.59)	220.63-965.9

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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	141.37 (79.32)	19.03-291.5	267.49 (160.24)	53.88-544.58	371.98 (256.09)	53.36-785.8
Breeding (full)	548.37 (392.96)	86.77-1221.87	710.91 (515.81)	118.12-1544.42	896.61 (628.53)	165.22-1838.18
Autumn migration	134.54 (135)	0-393.22	180.63 (180.67)	0-505.81	239.57 (243.71)	0-658.85
Winter	287.34 (144.65)	98.17-591.15	399.97 (154.6)	169.51-694.58	546.83 (246.59)	220.63-965.9
Non-breeding	287.34 (144.65)	98.17-591.15	399.97 (154.6)	169.51-694.58	546.83 (246.59)	220.63-965.9

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 Areas		Array Areas & 2km buffer		Array Areas 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 (8.57)	0-25.18	8.38 (8.3)	0-25.26	8.37 (8.28)	0-25.18
Breeding (full)	4.29 (7.29)	0-25.59	8.43 (13.76)	0-50.57	12.65 (17.7)	0-59.01
Autumn migration	12.65 (11.05)	0-36.6	17.11 (14.71)	0-50.2	39.82 (27.19)	0-109.24
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	12.65 (11.05)	0-36.6	17.11 (14.71)	0-50.2	39.82 (27.19)	0-109.24

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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	834.15 (238.79)	512.08-1394.01	1210.73 (476.51)	608.1-1981.27	1706.92 (589.74)	942.36-2622.03
Breeding (full)	2703.86 (3174.67)	16.67-9999.84	3435.95 (1143.96)	1811.4-5417.87	5100.96 (1001.99)	3451.18-7033.11
Autumn migration	2113.72 (1374.87)	612.99-4132.79	3335.51 (2358.18)	848.18-6768.6	4456.32 (3049.82)	1238.08-8784.37
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	2113.72 (1374.87)	612.99-4132.79	3335.51 (2358.18)	848.18-6768.6	4456.32 (3049.82)	1238.08-8784.37

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 Areas		Array Areas & 2km buffer		Array Areas 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 (13.97)	0-50.5	8.45 (8.24)	0-25.43	8.45 (8.21)	0-25.39
Autumn migration	0 (0)	0-0	0 (0)	0-0	4.19 (6.88)	0-25.14
Winter	0 (0)	0-0	0 (0)	0-0	0 (0)	0-0
Non-breeding	0 (0)	0-0	0 (0)	0-0	4.19 (6.88)	0-25.14

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 Areas		Array Areas & 2km buffer		Array Areas 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	50.79 (66.94)	0-203.17	50.82 (65.12)	0-211.75

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 Areas		Array Areas & 2km buffer		Array Areas 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)	0-25.06	4.21 (7.36)	0-25.28	4.22 (7.64)	0-25.34
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 (7.22)	0-25.25	4.21 (7.41)	0-25.28	4.22 (7.35)	0-25.29

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 Areas		Array Areas & 2km buffer		Array Areas 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 (7.19)	0-25.43	4.27 (7.54)	0-25.6	4.26 (7.23)	0-25.54
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	8.41 (14.24)	0-50.44
Non-breeding	4.2 (7.19)	0-25.43	4.27 (7.54)	0-25.6	8.41 (14.24)	0-50.44

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 Areas		Array Areas & 2km buffer		Array Areas 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 (7.19)	0-25.43	4.27 (7.54)	0-25.6	4.26 (7.23)	0-25.54
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	8.41 (14.24)	0-50.44
Non-breeding	4.2 (7.19)	0-25.43	4.27 (7.54)	0-25.6	8.41 (14.24)	0-50.44

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 Areas		Array Areas & 2km buffer		Array Areas 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 (7.19)	0-25.43	4.27 (7.54)	0-25.6	4.26 (7.23)	0-25.54
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	8.41 (14.24)	0-50.44
Non-breeding	4.2 (7.19)	0-25.43	4.27 (7.54)	0-25.6	8.41 (14.24)	0-50.44

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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	75.16 (71.58)	0-225.44	93.58 (70.39)	0-264.48	178.17 (92.34)	16.84-340.57
Breeding (full)	83.8 (97.15)	0-309.29	83.62 (93.6)	0-284.29	113.04 (104.4)	8.39-334.83
Autumn migration	324.05 (361.69)	0-1052.04	625.94 (682.19)	0-1890.64	853.27 (858.47)	0-2143.93
Winter	67.18 (75.87)	0-224.52	96.97 (90.99)	0-284.67	134.23 (126.04)	0-367.04
Non-breeding	324.05 (361.69)	0-1052.04	625.94 (682.19)	0-1890.64	853.27 (858.47)	0-2143.93

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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	91.64 (87.27)	0-274.86	119.07 (89.56)	0-336.52	220.55 (114.3)	20.84-421.57
Breeding (full)	83.8 (97.15)	0-309.29	91.98 (102.96)	0-312.71	121.42 (112.14)	9.01-359.65
Autumn migration	455.01 (507.87)	0-1477.2	764.57 (833.28)	0-2309.38	1000.37 (1006.47)	0-2513.54
Winter	88.03 (99.41)	0-294.17	122.07 (114.54)	0-358.35	175.94 (165.21)	0-481.09
Non-breeding	455.01 (507.87)	0-1477.2	764.57 (833.28)	0-2309.38	1000.37 (1006.47)	0-2513.54

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 Areas		Array Areas & 2km buffer		Array Areas and 4km buffer	
	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.	Estimate (S.D.)	95% c.i.
Spring migration	91.64 (87.27)	0-274.86	119.07 (89.56)	0-336.52	220.55 (114.3)	20.84-421.57
Breeding (full)	83.8 (97.15)	0-309.29	91.98 (102.96)	0-312.71	121.42 (112.14)	9.01-359.65
Autumn migration	455.01 (507.87)	0-1477.2	764.57 (833.28)	0-2309.38	1000.37 (1006.47)	0-2513.54
Winter	88.03 (99.41)	0-294.17	122.07 (114.54)	0-358.35	175.94 (165.21)	0-481.09
Non-breeding	455.01 (507.87)	0-1477.2	764.57 (833.28)	0-2309.38	1000.37 (1006.47)	0-2513.54

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 Areas		Array Areas & 2km buffer		Array Areas 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