

Volume 2: Appendices

Appendix A6

Wintering Waterbird Survey Effort and Result

Appendix A6 Wintering waterbird surveys - Survey effort 2023-24, including tide times

Season	Date	Tide Type	Tide time	Subsite	Start time	End time	Duration (h)	Surveyor	Wind Force	Wind Dir	Cloud (oktas)	Temp. (C)	Rain
Non breeding season 2023-24	21/11/2023	Low	11:41	Balbriggan Landfall	825	1025	2.00	CS	3	NW	2	8	No
Non breeding season 2023-24	21/11/2023	Low	11:41	Swords Estuary	1138	1338	2.00	CS	2	W	4	9	No
Non breeding season 2023-24	21/11/2023	Low	11:41	M1 Junction	1350	1420	0.5	CS	2	NW	6	9	No
Non breeding season 2023-24	21/11/2023	Low	11:41	Blakes Cross South	1422	1507	0.75	CS	2	W	8	9	No
Non breeding season 2023-24	21/11/2023	Low	11:41	Blakes Cross North	1510	1550	0.66	CS	2	W	8	9	No
Non breeding season 2023-24	12/12/2023	High	10:49	Landfall site	900	1115	2.25	SC	2	NW	8	7	No
Non breeding season 2023-24	12/12/2023	High	10:49	Grid facility	1130	1150	0.33	SC	2	NW	8	8	Very light
Non breeding season 2023-24	12/12/2023	High	10:49	Blakes Cross North	1215	1250	0.58	SC	3	NW	8	8	-
Non breeding season 2023-24	12/12/2023	High	10:49	Blakes Cross South	1305	1355	0.83	SC	2	NW	7	8	-
Non breeding season 2023-24	12/12/2023	High	10:49	M1 Junction	1410	1435	0.42	SC	3	NW	7	8	-
Non breeding season 2023-24	12/12/2023	High	10:49	Malahide Estuary	1450	1600	0.16	SC	2	NW	7	7	-
Non breeding season 2023-24	05/01/2024	Low	11:58	Landfall site	920	1220	3.00	SC	5	NW	2	4	No
Non breeding season 2023-24	05/01/2024	Low	11:58	Grid Facility	1300	1320	0.33	SC	5	NW	1	5	No
Non breeding season 2023-24	05/01/2024	Low	11:58	Blakes Cross North	1345	1410	0.42	SC	4	NW	1	5	-
Non breeding season 2023-24	05/01/2024	Low	11:58	Blakes Cross South	1420	1440	0.33	SC	4	NW	1	6	No
Non breeding season 2023-24	06/01/2024	Low	12:59	Malahide Estuary	940	1200	2.33	SC	3	W	0	3	No

Season	Date	Tide Type	Tide time	Subsite	Start time	End time	Duration (h)	Surveyor	Wind Force	Wind Dir	Cloud (oktas)	Temp. (C)	Rain
Non breeding season 2023-24	06/01/2024	Low	12:59	M1 Junction	1220	1235	0.25	SC	3	W	0	6	No
Non breeding season 2023-24	22/02/2024	High	10:46	Malahide Estuary	820	1005	1.75	SC	4	W	5	4	No
Non breeding season 2023-24	22/02/2024	High	10:46	Landfall site	1120	1320	2.00	SC	5	W	6	6	No
Non breeding season 2023-24	22/02/2024	High	10:46	M1 Junction	1030	1040	0.16	SC			8	5	No
Non breeding season 2023-24	22/02/2024	High	10:46	Grid facility	1340	1355	0.25	SC	5	W	6	7	No
Non breeding season 2023-24	22/02/2024	High	10:46	Blakes Cross North	1425	1440	0.25	SC	5	W	5	7	No
Non breeding season 2023-24	22/02/2024	High	10:46	Blakes Cross South	1450	1500	0.16	SC	5	W	5	7	No
Non breeding season 2023-24	18/03/2024	Low	11:54	Landfall site	840	1040	2.00	SC	4	S	4	12	No
Non breeding season 2023-24	18/03/2024	Low	11:54	Grid facility	1100	1115	0.25	SC	4	S	6	12	No
Non breeding season 2023-24	19/03/2024	Low	13:30	Malahide Estuary	1030	1230	2.00	SC	3	W	4	12	No
Non breeding season 2023-24	19/03/2024	Low	13:30	M1 Junction	1250	1300	0.16	SC	3	W	7	13	No
Non breeding season 2023-24	19/03/2024	Low	13:30	Blakes Cross South	1305	1320	0.25	SC	2	W	7	13	No
Non breeding season 2023-24	19/03/2024	Low	13:30	Blakes Cross North	1330	1355	0.41	SC	2	SW	8	13	No

Appendix A6 Wintering Waterbird Survey Results 2023-24

Table 1 - Monthly high and low tide wintering waterbird counts undertaken at Malahide Estuary in winter 2023-24

Common name	BoCCI 2020-2026	EU	High tide counts			Low tide counts				
			30 Oct 2023	12 Dec 2023	22 Feb 2024	21 Nov 2023	05 Jan 2024	06 Jan 2024	18 Mar 2024	19 Mar 2024
Bar-tailed godwit	Red ^{Win.}	I			38					
Black-tailed godwit	Red ^{Win.}		18		98			73		
Curlew	Red ^{Br. & Win.}				1					16
Dunlin	Red ^{Br. & Win.}	I			226			15		
Golden plover	Red ^{Br. & Win.}	I								78
Goldeneye	Red ^{Win.}		3			25		26		
Lapwing	Red ^{Br. & Win.}		376		134					
Oystercatcher	Red ^{Br. & Win.}		13	38	17			53		5
Redshank	Red ^{Br. & Win.}		6		90			9		1
Scaup (Greater)	Red ^{Win.}					1		1		
Teal	Amber ^{Br. & Win.}		22		78					
Turnstone	Amber ^{Win.}		1	2	1			2		
Black-headed gull	Amber ^{Br. & Win.}			7	399			45		
Brent goose	Amber ^{Win.}		55	343	512	250		182		79
Common gull	Amber ^{Br. & Win.}		29	1	23			7		
Cormorant	Amber ^{Br. & Win.}		55	8		42		40		
Great crested grebe	Amber ^{Br. & Win.}					39		8		
Herring gull	Amber ^{Br. & Win.}		80	101	187			2		42
Mallard	Amber ^{Br. & Win.}		59		99			22		1

Common name	BoCCI 2020-2026	EU	High tide counts			Low tide counts				
			30 Oct 2023	12 Dec 2023	22 Feb 2024	21 Nov 2023	05 Jan 2024	06 Jan 2024	18 Mar 2024	19 Mar 2024
Mute swan	Amber ^{Br. & Win}		31		22			16		
Red-breasted merganser	Amber ^{Br. & Win}		2		1	34		19		
Shag	Amber ^{Br.}			4						
Mediterranean gull	Amber ^{Br.}	I		2						
Great black-backed gull	Green		11		21			5		36
Greenshank	Green							3		
Grey heron	Green		7	1	6			4		5
Little egret	Green	I	6	1	7			1		
Little grebe	Green					42		38		
Moorhen	Green			2						

Table 2 - Monthly high and low tide wintering waterbird counts undertaken at Blake's Cross North and South in winter 2023-24

Common name	BoCCI 2020-2026	EU	High tide counts			Low tide counts				
			30 Oct 2023	12 Dec 2023	22 Feb 2024	21 Nov 2023	05 Jan 2024	06 Jan 2024	18 Mar 2024	19 Mar 2024
Black-tailed godwit	Red ^{Win.}					13	1			
Grey plover	Red ^{Win.}									9
Oystercatcher	Red ^{Br. & Win.}					81				6
Redshank	Red ^{Br. & Win.}					10				7
Turnstone	Amber ^{Win.}					2				
Black-headed gull	Amber ^{Br. & Win}						2			

Common name	BoCCI 2020-2026	EU	High tide counts			Low tide counts				
			30 Oct 2023	12 Dec 2023	22 Feb 2024	21 Nov 2023	05 Jan 2024	06 Jan 2024	18 Mar 2024	19 Mar 2024
Redshank	Red ^{Br. & Win.}		20	28	20		15		17	
Snipe	Red ^{Br. & Win.}						11			
Kittiwake	Red ^{Br.}				118		2			
Teal	Amber ^{Br. & Win}		22	96						
Turnstone	Amber ^{Win.}		23	48	2		1		54	
Black guillemot (Tystie)	Amber ^{Br.}						811			1
Black-headed gull	Amber ^{Br. & Win}		93	374			52		15	
Brent goose	Amber ^{Win.}		91	179	64					
Common gull	Amber ^{Br. & Win.}		11	91	95	7	195		5	
Cormorant	Amber ^{Br. & Win.}						19		18	
Great crested grebe	Amber ^{Br. & Win.}		23		64		15			
Guillemot (Common)	Amber ^{Br.}				3					
Herring gull	Amber ^{Br. & Win}		49	265	740	41	11		15	
Mallard	Amber ^{Br. & Win}		15	52		39				
Mute swan	Amber ^{Br. & Win}		82			12				
Red-breasted merganser	Amber ^{Br. & Win}		22		1					
Red-throated diver	Amber ^{Br. & Win}	I			30		18			
Ringed plover	Amber ^{Br. & Win}						9			
Shag	Amber ^{Br.}				3		2			5
Great black-backed gull	Green		4	71	5	4	4		1	

Common name	BoCCI 2020-2026	EU	High tide counts			Low tide counts				
			30 Oct 2023	12 Dec 2023	22 Feb 2024	21 Nov 2023	05 Jan 2024	06 Jan 2024	18 Mar 2024	19 Mar 2024
Greenshank	Green		4	3	2		4		13	
Grey heron	Green		2	3	3		2		26	
Little egret	Green	I	5				1			
Little grebe	Green		12							
Moorhen	Green		2							

Table 4 - Monthly wintering waterbird peak counts at the Landfall site and Malahide Estuary at high tide (HT) and low tide (LT)

Common name	BoCCI 2020-2026	EU ¹	Oct-23	Nov-23	Dec-23	Jan-24	Feb-23	Mar-24	Oct-23	Nov-23	Dec-23	Jan-24	Feb-23	Mar-24
			Landfall						Malahide Estuary					
Bar-tailed godwit	Red ^{Win.}	I	-	-	-	-	-	3 (LT)	-	-	-	-	38 (HT)	-
Black-tailed godwit	Red ^{Win.}		-	-	-	533 (LT)	-	-	-	-	-	-	98 (HT)	-
Curlew	Red ^{Br. & Win.}		-	-	-	-	-	91 (LT)	-	-	-	-	-	16 (LT)
Dunlin	Red ^{Br. & Win.}	I	-	-	-	-	-	30 (LT)	-	-	-	-	226 (HT)	-
Golden plover	Red ^{Br. & Win.}	I	-	-	119 (HT)	-	-	-	-	-	-	-	-	78 (LT)
Goldeneye	Red ^{Win.}		-	-	-	-	-	-	-	-	-	26 (LT)	-	-
Lapwing	Red ^{Br. & Win.}		-	-	130 (HT)	-	-	-	376 (HT)	-	-	-	-	-
Grey plover	Red ^{Win.}		-	-	-	-	-	16 (LT)	-	-	-	-	-	-

Common name	BoCCI 2020-2026	EU ¹	Oct-23	Nov-23	Dec-23	Jan-24	Feb-23	Mar-24	Oct-23	Nov-23	Dec-23	Jan-24	Feb-23	Mar-24
			Landfall						Malahide Estuary					
Oystercatcher	Red ^{Br. & Win.}		136 (HT)	-	-	-	-	-	-	-	-	53 (LT)	-	-
Snipe	Red ^{Br. & Win.}		-	-	-	11 (LT)	-	-	-	-	-	-	-	-
Kittiwake	Red ^{Br.}		-	-	-	-	118 (HT)	-	-	-	-	-	-	-
Purple Sandpiper	Red ^{Win.}		-	-	-	-	-	3 (LT)	-	-	-	-	-	-
Redshank	Red ^{Br. & Win.}		-	-	28 (HT)	-	-	-	-	-	-	-	90 (HT)	-
Scaup (Greater)	Red ^{Win.}		-	-	-	-	-	-	-	1 (LT)	-	1 (HT)	-	-
Teal	Amber ^{Br. & Win.}		-	-	96 (HT)	-	-	-	-	-	-	-	78 (HT)	-
Black guillemot (Tystie)	Amber ^{Br.}		-	-	-	811 (LT)	-	-	-	-	-	-	-	-
Turnstone	Amber ^{Win.}		-	-	-	-	-	54 (LT)	-	-	2 (HT)	2 (LT)	-	-
Black-headed gull	Amber ^{Br. & Win.}		-	-	374 (HT)	-	-	-	-	-	-	-	399 (HT)	-
Brent goose	Amber ^{Win.}		-	-	179 (HT)	-	-	-	-	-	-	-	512 (HT)	-
Common gull	Amber ^{Br. & Win.}		-	-	-	195 (LT)	-	-	29 (HT)	-	-	-	-	-
Cormorant	Amber ^{Br. & Win.}		-	-	-	19 (LT)	-	-	55 (HT)	-	-	-	-	-
Great crested grebe	Amber ^{Br. & Win.}		-	-	-	-	64 (HT)	-	-	39 (LT)	-	-	-	-

Common name	BoCCI 2020-2026	EU ¹	Oct-23	Nov-23	Dec-23	Jan-24	Feb-23	Mar-24	Oct-23	Nov-23	Dec-23	Jan-24	Feb-23	Mar-24
			Landfall						Malahide Estuary					
Guillemot (Common)	Amber ^{Br.}		-	-	-	-	3 (HT)	-	-	-	-	-	-	-
Herring gull	Amber ^{Br. & Win}		-	-	-	-	740 (HT)	-	-	-	-	-	187 (HT)	-
Mallard	Amber ^{Br. & Win}		-	-	52 (HT)	-	-	-	-	-	-	-	99 (HT)	-
Mute swan	Amber ^{Br. & Win}		82 (HT)	-	-	-	-	-	31 (HT)	-	-	-	-	-
Red-breasted merganser	Amber ^{Br. & Win}		22 (HT)	-	-	-	-	-	-	34 (LT)	-	-	-	-
Red-throated diver	Amber ^{Br. & Win}	I	-	-	-	-	30 (HT)	-	-	-	-	-	-	-
Ringed plover	Amber ^{Br.}		-	-	-	9 (LT)	-	-	-	-	-	-	-	-
Shag	Amber ^{Br.}		-	-	-	-	-	5 (LT)	-	-	4 (HT)	-	-	-
Mediterranean gull	Amber ^{Br.}	I	-	-	-	-	-	-	-	-	2 (HT)	-	-	-
Great black-backed gull	Green		-	-	71 (HT)	-	-	-	-	-	-	-	-	36 (LT)
Greenshank	Green		-	-	-	-	-	13 (LT)	-	-	-	3 (LT)	-	-
Grey heron	Green		-	-	-	-	-	26 (LT)	7 (HT)	-	-	-	-	-
Little egret	Green	I	5 (HT)	-	-	-	-	-	-	-	-	7 (HT)	-	-
Little grebe	Green		12 (HT)	-	-	-	-	-	-	42 (LT)	-	-	-	-
Moorhen	Green		2 (HT)	-	-	-	-	-	-	-	2 (HT)	-	-	-