



Dalfad Wind Farm

Ornithological Survey Results

Technical Appendix 7.1 Annex B

SLR Project No.: 413.057968.00001

Brockwell Energy

7 September 2026

Revision: V1

Annex B Ornithological Survey Results

B.1 Flight Activity Records: Target Species

All flights of target species (refer to **Section 2** of **Technical Appendix 7.1** which defines target species) within the turbine area and the surrounding area were mapped and are detailed in **Table B-1**.

Table B-1: Details of Target Species Recorded During Flight Activity Surveys (Sorted Chronologically)

Date	VP	Observer	Flight start time	Species	No. of birds	Duration (s)	Inside CRAA (seconds)						Outside CRAA (seconds)					
							0-20m	21-40m	41-100m	101-150m	151-200m	>200m	0-20m	21-40m	41-100m	101-150m	151-200m	>200m
13/04/2023	1	TH	1203	Greylag goose	2	20	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
13/04/2023	3	JB	1017	Curlew	2	8	0.00	0.18	0.00	0.00	0.00	0.00	0.00	7.82	0.00	0.00	0.00	0.00
13/04/2023	3	JB	1258	Curlew	2	25	0.00	0.00	18.51	0.00	0.00	0.00	0.00	0.00	6.49	0.00	0.00	0.00
13/04/2023	3	JB	1334	Curlew	2	19	0.00	0.54	2.01	0.00	0.00	0.00	0.00	3.46	12.99	0.00	0.00	0.00
13/04/2023	3	JB	1503	Curlew	2	79	0.00	2.72	50.92	0.00	0.00	0.00	0.00	1.28	24.08	0.00	0.00	0.00
13/04/2023	4	ENS	1208	Curlew	2	18	3.00	0.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13/04/2023	4	ENS	1302	Curlew	2	28	28.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13/04/2023	4	ENS	1308	Curlew	2	11	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13/04/2023	4	ENS	1324	Curlew	1	10	7.97	0.00	0.00	0.00	0.00	0.00	2.03	0.00	0.00	0.00	0.00	0.00
13/04/2023	4	ENS	1328	Curlew	1	3	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13/04/2023	4	ENS	1406	Curlew	2	28	13.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13/04/2023	4	ENS	1406	Curlew	2	7	0.00	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13/04/2023	4	ENS	1412	Curlew	2	28	9.78	0.00	0.00	11.28	0.00	0.00	3.22	0.00	0.00	3.72	0.00	0.00
13/04/2023	4	ENS	1446	Curlew	2	39	9.00	0.00	30.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13/04/2023	4	ENS	1502	Red kite	1	38	0.00	0.00	30.62	0.00	0.00	0.00	0.00	0.00	7.38	0.00	0.00	0.00
13/04/2023	4	ENS	1518	Curlew	2	42	12.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19/04/2023	1	HEC	1449	Peregrine falcon	1	46	20.91	10.12	0.00	0.00	0.00	0.00	10.09	4.88	0.00	0.00	0.00	0.00
19/04/2023	4	EB	1059	Curlew	2	26	9.62	13.11	0.00	0.00	0.00	0.00	1.38	1.89	0.00	0.00	0.00	0.00
19/04/2023	4	EB	1518	Curlew	1	42	27.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27/04/2023	2	JRM	1115	Pink-footed goose	28	40	0.00	0.00	2.17	3.61	0.00	0.00	0.00	0.00	12.83	21.39	0.00	0.00
27/04/2023	2	JRM	1210	Lapwing	1	20	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01/05/2023	1	ENS	0938	Curlew	1	14	0.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01/05/2023	1	ENS	1051	Curlew	1	15	0.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01/05/2023	1	ENS	1058	Curlew	1	33	0.00	3.00	30.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01/05/2023	1	ENS	1219	Lapwing	1	13	8.90	0.00	0.00	0.00	0.00	0.00	4.10	0.00	0.00	0.00	0.00	0.00
01/05/2023	1	ENS	1311	Greylag goose	1	40	0.00	13.16	21.94	0.00	0.00	0.00	0.00	1.84	3.06	0.00	0.00	0.00
01/05/2023	1	ENS	1354	Peregrine falcon	1	71	0.00	0.00	25.75	35.19	0.00	0.00	0.00	0.00	4.25	5.81	0.00	0.00
01/05/2023	3	JB	0948	Greylag goose	2	8	0.00	4.42	0.00	0.00	0.00	0.00	0.00	3.58	0.00	0.00	0.00	0.00
01/05/2023	3	JB	0952	Greylag goose	4	19	0.00	11.11	0.00	0.00	0.00	0.00	0.00	7.89	0.00	0.00	0.00	0.00
01/05/2023	3	JB	1014	Greylag goose	2	8	0.00	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01/05/2023	3	JB	1053	Herring gull	1	23	0.00	7.71	0.00	0.00	0.00	0.00	0.00	15.29	0.00	0.00	0.00	0.00
01/05/2023	3	JB	1147	Herring gull	1	83	0.00	6.94	12.26	0.00	0.00	0.00	0.00	23.06	40.74	0.00	0.00	0.00
01/05/2023	3	JB	1154	Herring gull	3	37	0.00	25.77	0.00	0.00	0.00	0.00	0.00	11.23	0.00	0.00	0.00	0.00
01/05/2023	3	JB	1206	Herring gull	1	67	0.00	26.53	7.65	0.00	0.00	0.00	0.00	25.47	7.35	0.00	0.00	0.00
01/05/2023	3	JB	1312	Herring gull	1	27	0.00	13.36	0.00	0.00	0.00	0.00	0.00	13.64	0.00	0.00	0.00	0.00
01/05/2023	4	HEC	1142	Curlew	1	56	11.00	45.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



Date	VP	Observer	Flight start time	Species	No. of birds	Duration (s)	Inside CRAA (seconds)						Outside CRAA (seconds)					
							0-20m	21-40m	41-100m	101-150m	151-200m	>200m	0-20m	21-40m	41-100m	101-150m	151-200m	>200m
01/05/2023	4	HEC	1150	Peregrine falcon	1	180	60.00	120.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01/05/2023	4	HEC	1154	Curlew	2	23	23.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12/05/2023	1	HEC	0658	Peregrine falcon	1	28	0.00	0.00	16.76	0.00	0.00	0.00	0.00	0.00	11.24	0.00	0.00	0.00
12/05/2023	1	HEC	0934	Peregrine falcon	1	64	0.00	0.00	47.95	0.00	0.00	0.00	0.00	0.00	16.05	0.00	0.00	0.00
12/05/2023	3	JB	0727	Herring gull	1	37	0.00	0.00	10.34	0.00	0.00	0.00	0.00	0.00	26.66	0.00	0.00	0.00
12/05/2023	3	JB	0729	Curlew	1	9	0.00	6.54	0.00	0.00	0.00	0.00	0.00	2.46	0.00	0.00	0.00	0.00
12/05/2023	3	JB	0819	Curlew	1	7	0.00	5.49	0.00	0.00	0.00	0.00	0.00	1.51	0.00	0.00	0.00	0.00
12/05/2023	4	EB	0728	Curlew	1	45	40.37	0.00	0.00	0.00	0.00	0.00	4.63	0.00	0.00	0.00	0.00	0.00
01/06/2023	2	TH	0954	Greylag goose	2	30	0.00	0.00	0.00	8.34	0.00	0.00	0.00	0.00	0.00	21.66	0.00	0.00
01/06/2023	2	TH	1322	Peregrine falcon	2	45	0.00	45.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01/06/2023	3	ENS	0956	Peregrine falcon	2	43	0.00	0.00	7.94	14.82	0.00	0.00	0.00	0.00	7.06	13.18	0.00	0.00
01/06/2023	3	ENS	1120	Herring gull	1	27	0.00	0.00	12.67	0.00	0.00	0.00	0.00	0.00	14.33	0.00	0.00	0.00
01/06/2023	3	ENS	1237	Peregrine falcon	2	41	0.00	0.00	0.00	32.11	0.00	0.00	0.00	0.00	0.00	8.89	0.00	0.00
01/06/2023	3	ENS	1405	Peregrine falcon	2	143	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.00	75.00	0.00	0.00
16/06/2023	2	ENS	1100	Peregrine falcon	1	159	0.00	0.00	0.00	42.59	79.50	28.39	0.00	0.00	0.00	2.41	4.50	1.61
16/06/2023	2	ENS	1100	Red kite	1	172	0.00	0.00	0.00	45.00	112.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00
16/06/2023	2	ENS	1132	Peregrine falcon	1	146	0.00	0.00	0.00	0.00	39.77	101.86	0.00	0.00	0.00	0.00	1.23	3.14
16/06/2023	2	ENS	1206	Peregrine falcon	1	149	0.00	0.00	0.00	48.74	72.30	0.00	0.00	0.00	0.00	11.26	16.70	0.00
16/06/2023	2	ENS	1242	Peregrine falcon	1	222	0.00	0.00	0.00	60.00	120.00	42.00	0.00	0.00	0.00	0.00	0.00	0.00
19/07/2023	2	JB	1351	Red kite	1	99	0.00	13.14	41.07	0.00	0.00	0.00	0.00	10.86	33.93	0.00	0.00	0.00
19/07/2023	4	HEC	0946	Curlew	1	12	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19/07/2023	4	HEC	1017	Curlew	1	46	31.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20/07/2023	3	HEC	1457	Peregrine falcon	1	285	0.00	92.56	27.77	27.77	27.77	0.00	0.00	57.44	17.23	17.23	17.23	0.00
02/08/2023	4	JR	0855	Greylag goose	32	41	0.00	0.00	31.24	0.00	0.00	0.00	0.00	0.00	9.76	0.00	0.00	0.00
02/08/2023	4	JR	1158	Herring gull	1	21	0.00	0.00	0.00	0.00	0.00	0.00	21.00	0.00	0.00	0.00	0.00	0.00
02/08/2023	4	JR	1227	Herring gull	1	47	0.00	0.00	0.00	0.00	0.00	0.00	32.00	15.00	0.00	0.00	0.00	0.00
21/08/2023	1	JRM	1604	Hen harrier	1	200	159.49	0.00	0.00	0.00	0.00	0.00	40.51	0.00	0.00	0.00	0.00	0.00
21/08/2023	1	JRM	1657	Hen harrier	1	66	51.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21/08/2023	1	JRM	1710	Hen harrier	1	650	389.04	0.00	0.00	0.00	0.00	0.00	260.96	0.00	0.00	0.00	0.00	0.00
23/08/2023	2	JR	0921	Herring gull	1	121	0.00	0.00	45.25	44.51	0.00	0.00	0.00	0.00	15.75	15.49	0.00	0.00
23/08/2023	2	JR	1033	Herring gull	1	33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.00	0.00	0.00
23/08/2023	2	JR	1057	Herring gull	1	97	0.00	6.06	64.93	12.99	0.00	0.00	0.00	0.94	10.07	2.01	0.00	0.00
23/08/2023	2	JR	1204	Herring gull	1	99	0.00	31.38	37.66	0.00	0.00	0.00	0.00	13.62	16.34	0.00	0.00	0.00
23/08/2023	3	HEC	0752	Curlew	1	28	0.00	22.88	0.00	0.00	0.00	0.00	0.00	5.12	0.00	0.00	0.00	0.00
23/08/2023	3	HEC	1257	Peregrine falcon	1	25	4.83	7.24	0.00	0.00	0.00	0.00	5.17	7.76	0.00	0.00	0.00	0.00
24/08/2023	3	JR	0825	Herring gull	2	31	0.00	11.98	12.77	0.00	0.00	0.00	0.00	3.02	3.23	0.00	0.00	0.00
24/08/2023	3	JR	0851	Osprey	1	19	0.00	15.16	0.00	0.00	0.00	0.00	0.00	3.84	0.00	0.00	0.00	0.00
24/08/2023	3	JR	1008	Herring gull	1	12	4.24	0.00	0.00	0.00	0.00	0.00	7.76	0.00	0.00	0.00	0.00	0.00
24/08/2023	4	JR	1158	Red kite	1	114	0.00	0.00	7.60	15.20	34.95	0.00	0.00	0.00	7.40	14.80	34.05	0.00
24/08/2023	4	JR	1209	Red kite	1	79	0.00	0.00	36.92	1.97	0.00	0.00	0.00	0.00	38.08	2.03	0.00	0.00
24/08/2023	4	JR	1328	Herring gull	1	105	3.84	19.21	3.84	0.00	0.00	0.00	11.16	55.79	11.16	0.00	0.00	0.00
25/09/2023	3	AM	1342	Herring gull	1	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00



Date	VP	Observer	Flight start time	Species	No. of birds	Duration (s)	Inside CRAA (seconds)						Outside CRAA (seconds)					
							0-20m	21-40m	41-100m	101-150m	151-200m	>200m	0-20m	21-40m	41-100m	101-150m	151-200m	>200m
26/09/2023	1	AM	1559	Hen harrier	1	68	53.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26/09/2023	1	AM	1617	Hen harrier	1	65	44.69	0.00	0.00	0.00	0.00	0.00	20.31	0.00	0.00	0.00	0.00	0.00
26/09/2023	1	AM	1701	Hen harrier	1	62	24.11	0.00	0.00	0.00	0.00	0.00	37.89	0.00	0.00	0.00	0.00	0.00
03/10/2023	1	JRM	1012	Hen harrier	1	140	140.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
03/10/2023	1	JRM	1103	Merlin	1	30	15.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
03/10/2023	1	JRM	1200	Hen harrier	1	210	94.60	15.77	0.00	0.00	0.00	0.00	85.40	14.23	0.00	0.00	0.00	0.00
03/10/2023	1	JRM	1230	Hen harrier	1	275	99.85	19.54	0.00	0.00	0.00	0.00	130.15	25.46	0.00	0.00	0.00	0.00
03/10/2023	1	JRM	1330	Hen harrier	1	30	30.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
03/10/2023	1	JRM	1424	Hen harrier	2	40	0.00	0.00	0.00	0.00	0.00	0.00	25.00	15.00	0.00	0.00	0.00	0.00
03/10/2023	1	JRM	1435	Hen harrier	1	16	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
03/10/2023	1	JRM	1445	Hen harrier	1	360	356.16	0.00	0.00	0.00	0.00	0.00	3.84	0.00	0.00	0.00	0.00	0.00
03/10/2023	1	JRM	1453	Hen harrier	1	20	8.68	0.00	0.00	0.00	0.00	0.00	11.32	0.00	0.00	0.00	0.00	0.00
03/10/2023	1	JRM	1515	Hen harrier	1	50	15.32	6.57	0.00	0.00	0.00	0.00	19.68	8.43	0.00	0.00	0.00	0.00
03/10/2023	1	JRM	1516	Hen harrier	1	20	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
03/10/2023	1	JRM	1530	Hen harrier	2	150	64.49	0.00	0.00	0.00	0.00	0.00	85.51	0.00	0.00	0.00	0.00	0.00
03/10/2023	1	JRM	1536	Hen harrier	1	70	37.22	0.00	0.00	0.00	0.00	0.00	32.78	0.00	0.00	0.00	0.00	0.00
03/10/2023	1	JRM	1557	Hen harrier	1	200	196.93	0.00	0.00	0.00	0.00	0.00	3.07	0.00	0.00	0.00	0.00	0.00
18/10/2023	3	JRM	1210	Red kite	1	120	0.00	0.00	0.00	0.00	0.00	0.00	30.00	75.00	15.00	0.00	0.00	0.00
18/10/2023	3	JRM	1400	Red kite	1	107	0.00	0.00	0.00	0.00	0.00	0.00	77.00	30.00	0.00	0.00	0.00	0.00
24/10/2023	2	JRM	1220	Hen harrier	1	600	582.08	0.00	0.00	0.00	0.00	0.00	17.92	0.00	0.00	0.00	0.00	0.00
24/10/2023	2	JRM	1240	Hen harrier	1	470	232.56	99.67	85.43	28.48	0.00	0.00	12.44	5.33	4.57	1.52	0.00	0.00
02/11/2023	1	JRM	0814	Whooper swan	6	60	0.00	0.00	23.08	0.00	0.00	0.00	0.00	0.00	36.92	0.00	0.00	0.00
02/11/2023	1	JRM	0855	Hen harrier	1	35	25.41	0.00	0.00	0.00	0.00	0.00	9.59	0.00	0.00	0.00	0.00	0.00
02/11/2023	1	JRM	0935	Hen harrier	1	28	28.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
02/11/2023	1	JRM	0950	Hen harrier	1	140	121.69	0.00	0.00	0.00	0.00	0.00	18.31	0.00	0.00	0.00	0.00	0.00
02/11/2023	1	JRM	1052	Hen harrier	1	40	34.59	0.00	0.00	0.00	0.00	0.00	5.41	0.00	0.00	0.00	0.00	0.00
02/11/2023	1	JRM	1110	Hen harrier	1	22	22.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
02/11/2023	4	JB	0952	Herring gull	1	202	0.00	34.66	57.77	63.16	0.00	0.00	0.00	10.34	17.23	18.84	0.00	0.00
02/11/2023	4	JB	0953	Herring gull	11	129	0.00	0.00	0.00	107.75	0.00	0.00	0.00	0.00	0.00	21.25	0.00	0.00
15/11/2023	3	MW	1023	Peregrine falcon	1	20	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
15/11/2023	3	MW	1144	Hen harrier	1	180	72.94	0.00	0.00	0.00	0.00	0.00	107.06	0.00	0.00	0.00	0.00	0.00
05/12/2023	1	JRM	1025	Hen harrier	1	200	159.94	0.00	0.00	0.00	0.00	0.00	40.06	0.00	0.00	0.00	0.00	0.00
05/12/2023	1	JRM	1025	Hen harrier	1	170	44.41	24.98	24.98	0.00	0.00	0.00	35.59	20.02	20.02	0.00	0.00	0.00
05/12/2023	1	JRM	1050	Hen harrier	1	235	102.27	0.00	0.00	0.00	0.00	0.00	132.73	0.00	0.00	0.00	0.00	0.00
05/12/2023	1	JRM	1230	Merlin	1	17	0.00	0.00	0.00	0.00	0.00	0.00	17.00	0.00	0.00	0.00	0.00	0.00
05/12/2023	1	JRM	1233	Merlin	1	93	4.30	4.04	0.00	0.00	0.00	0.00	43.70	40.96	0.00	0.00	0.00	0.00
05/12/2023	1	JRM	1309	Short-eared owl	2	60	0.00	0.00	0.00	0.00	0.00	0.00	60.00	0.00	0.00	0.00	0.00	0.00
05/12/2023	1	JRM	1325	Hen harrier	1	70	20.90	0.00	0.00	0.00	0.00	0.00	49.10	0.00	0.00	0.00	0.00	0.00
05/12/2023	1	JRM	1400	Short-eared owl	3	1200	104.97	0.00	0.00	0.00	0.00	0.00	1095.03	0.00	0.00	0.00	0.00	0.00
05/12/2023	1	JRM	1435	Hen harrier	1	120	3.73	11.19	0.00	0.00	0.00	0.00	26.27	78.81	0.00	0.00	0.00	0.00
12/12/2023	4	EB	0932	Herring gull	5	65	0.00	1.19	2.68	0.00	0.00	0.00	0.00	18.81	42.32	0.00	0.00	0.00
12/12/2023	4	EB	1045	Greylag goose	11	80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.00	0.00	0.00	0.00



Date	VP	Observer	Flight start time	Species	No. of birds	Duration (s)	Inside CRAA (seconds)						Outside CRAA (seconds)					
							0-20m	21-40m	41-100m	101-150m	151-200m	>200m	0-20m	21-40m	41-100m	101-150m	151-200m	>200m
12/12/2023	4	EB	1332	Herring gull	38	125	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	125.00	0.00	0.00	0.00
17/01/2024	2	JB	1105	Peregrine falcon	1	35	0.00	0.00	8.78	11.71	0.00	0.00	0.00	0.00	6.22	8.29	0.00	0.00
17/01/2024	3	JRM	0920	Hen harrier	1	195	56.30	0.00	0.00	0.00	0.00	0.00	138.70	0.00	0.00	0.00	0.00	0.00
17/01/2024	3	JRM	0920	Merlin	1	15	0.29	0.00	0.00	0.00	0.00	0.00	14.71	0.00	0.00	0.00	0.00	0.00
24/01/2024	1	JRM	1135	Hen harrier	1	23	23.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24/01/2024	1	JRM	1141	Hen harrier	1	30	5.68	0.00	0.00	0.00	0.00	0.00	24.32	0.00	0.00	0.00	0.00	0.00
24/01/2024	1	JRM	1150	Hen harrier	1	582	435.72	11.53	0.00	0.00	0.00	0.00	131.28	3.47	0.00	0.00	0.00	0.00
24/01/2024	1	JRM	1210	Hen harrier	1	120	92.27	0.00	0.00	0.00	0.00	0.00	27.73	0.00	0.00	0.00	0.00	0.00
24/01/2024	1	JRM	1223	Hen harrier	1	452	264.13	0.00	0.00	0.00	0.00	0.00	187.87	0.00	0.00	0.00	0.00	0.00
24/01/2024	1	JRM	1230	Hen harrier	1	200	5.76	0.00	0.00	0.00	0.00	0.00	194.24	0.00	0.00	0.00	0.00	0.00
24/01/2024	1	JRM	1320	Hen harrier	1	330	10.43	0.00	0.00	0.00	0.00	0.00	319.57	0.00	0.00	0.00	0.00	0.00
24/01/2024	1	JRM	1345	Hen harrier	1	160	122.06	0.00	0.00	0.00	0.00	0.00	37.94	0.00	0.00	0.00	0.00	0.00
24/01/2024	1	JRM	1420	Hen harrier	1	500	385.64	0.00	0.00	0.00	0.00	0.00	114.36	0.00	0.00	0.00	0.00	0.00
25/01/2024	2	JRM	1409	Peregrine falcon	1	10	6.44	0.00	0.00	0.00	0.00	0.00	3.56	0.00	0.00	0.00	0.00	0.00
12/02/2024	1	JRM	0902	Hen harrier	1	300	278.50	0.00	0.00	0.00	0.00	0.00	21.50	0.00	0.00	0.00	0.00	0.00
12/02/2024	1	JRM	1005	Hen harrier	2	105	0.00	0.00	0.00	0.00	0.00	0.00	105.00	0.00	0.00	0.00	0.00	0.00
12/02/2024	1	JRM	1010	Hen harrier	1	83	0.00	0.00	0.00	0.00	0.00	0.00	83.00	0.00	0.00	0.00	0.00	0.00
12/02/2024	1	JRM	1050	Hen harrier	1	100	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00
12/02/2024	1	JRM	1146	Hen harrier	1	500	345.91	0.00	0.00	0.00	0.00	0.00	154.09	0.00	0.00	0.00	0.00	0.00
12/02/2024	1	JRM	1148	Hen harrier	2	300	283.45	0.00	0.00	0.00	0.00	0.00	16.55	0.00	0.00	0.00	0.00	0.00
12/02/2024	1	JRM	1230	Hen harrier	1	20	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12/02/2024	1	JRM	1330	Hen harrier	2	100	80.83	0.00	0.00	0.00	0.00	0.00	19.17	0.00	0.00	0.00	0.00	0.00
12/02/2024	1	JRM	1355	Hen harrier	1	250	0.00	0.00	0.00	0.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00
26/02/2024	4	JRM	1235	Peregrine falcon	1	292	0.00	0.00	51.86	56.92	75.90	0.00	0.00	0.00	30.14	33.08	44.10	0.00
15/04/2024	4	LS	0859	Curlew	1	44	28.69	14.84	0.00	0.00	0.00	0.00	0.31	0.16	0.00	0.00	0.00	0.00
15/04/2024	4	LS	0903	Curlew	1	50	20.00	30.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15/04/2024	4	LS	1047	Golden plover	150	78	2.49	12.46	49.83	0.00	0.00	0.00	0.51	2.54	10.17	0.00	0.00	0.00
15/04/2024	4	LS	1056	Golden plover	80	85	9.70	0.00	72.77	0.00	0.00	0.00	0.30	0.00	2.23	0.00	0.00	0.00
15/04/2024	4	LS	1253	Peregrine falcon	1	55	0.00	51.96	0.00	0.00	0.00	0.00	0.00	3.04	0.00	0.00	0.00	0.00
15/04/2024	4	LS	1325	Curlew	2	62	25.77	24.16	0.00	0.00	0.00	0.00	6.23	5.84	0.00	0.00	0.00	0.00
18/04/2024	1	JRM	0900	Pink-footed goose	66	60	0.00	0.00	0.00	14.31	0.00	0.00	0.00	0.00	0.00	45.69	0.00	0.00
18/04/2024	1	JRM	0940	Pink-footed goose	120	210	0.00	0.00	10.44	6.96	31.32	0.00	0.00	0.00	34.56	23.04	103.68	0.00
18/04/2024	1	JRM	1000	Pink-footed goose	54	70	0.00	0.00	0.00	47.22	0.00	0.00	0.00	0.00	0.00	22.78	0.00	0.00
18/04/2024	1	JRM	1003	Pink-footed goose	200	210	0.00	0.00	10.44	38.28	0.00	0.00	0.00	0.00	34.56	126.72	0.00	0.00
18/04/2024	1	JRM	1035	Curlew	1	180	7.60	68.41	15.20	0.00	0.00	0.00	7.40	66.59	14.80	0.00	0.00	0.00
19/04/2024	1	JRM	0701	Hen harrier	2	500	16.25	48.76	0.00	0.00	0.00	0.00	108.75	326.24	0.00	0.00	0.00	0.00
19/04/2024	1	JRM	0709	Short-eared owl	1	3610	1478.80	0.00	0.00	0.00	0.00	0.00	2131.20	0.00	0.00	0.00	0.00	0.00
19/04/2024	1	JRM	0835	Pink-footed goose	60	360	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	180.00	180.00	0.00	0.00
19/04/2024	1	JRM	0903	Short-eared owl	1	180	0.42	1.70	2.97	0.00	0.00	0.00	14.58	58.30	102.03	0.00	0.00	0.00
19/04/2024	1	JRM	0919	Curlew	2	75	0.00	0.00	0.00	0.00	0.00	0.00	15.00	30.00	30.00	0.00	0.00	0.00
19/04/2024	1	JRM	0930	Pink-footed goose	120	45	0.00	0.00	0.00	10.75	0.00	0.00	0.00	0.00	0.00	34.25	0.00	0.00
19/04/2024	1	JRM	0950	Curlew	1	110	2.68	32.16	24.12	0.00	0.00	0.00	2.32	27.84	20.88	0.00	0.00	0.00



Date	VP	Observer	Flight start time	Species	No. of birds	Duration (s)	Inside CRAA (seconds)						Outside CRAA (seconds)					
							0-20m	21-40m	41-100m	101-150m	151-200m	>200m	0-20m	21-40m	41-100m	101-150m	151-200m	>200m
24/04/2024	2	EB	1023	Curlew	1	35	0.00	35.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24/04/2024	2	EB	1229	Curlew	2	68	0.00	19.06	37.30	0.00	0.00	0.00	0.00	3.94	7.70	0.00	0.00	0.00
24/04/2024	2	EB	1330	Pink-footed goose	32	65	0.00	0.00	0.00	0.00	0.00	9.57	0.00	0.00	0.00	0.00	0.00	55.43
24/04/2024	3	LS	1454	Peregrine falcon	1	124	0.00	105.99	0.00	0.00	0.00	0.00	0.00	18.01	0.00	0.00	0.00	0.00
10/05/2024	1	JRM	0830	Curlew	2	22	0.00	0.00	0.00	0.00	0.00	0.00	15.00	7.00	0.00	0.00	0.00	0.00
10/05/2024	1	JRM	0925	Curlew	2	30	0.00	0.00	0.00	0.00	0.00	0.00	15.00	15.00	0.00	0.00	0.00	0.00
17/05/2024	1	JRM	0840	Lapwing	1	15	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08/06/2024	3	AM	1202	Peregrine falcon	1	51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.00	15.00	0.00	15.00
08/06/2024	3	AM	1258	Ringed plover	1	5	0.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22/06/2024	4	AM	1002	Red kite	1	244	10.19	20.38	20.38	40.75	0.00	74.04	4.81	9.62	9.62	19.25	0.00	34.96
22/06/2024	4	AM	1018	Red kite	1	64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.00	30.00	0.00
22/06/2024	4	AM	1317	Red kite	1	140	0.00	0.00	12.96	29.15	19.44	29.15	0.00	0.00	7.04	15.85	10.56	15.85
22/06/2024	4	AM	1457	Curlew	1	52	7.00	0.00	45.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13/07/2024	1	AM	1130	Hen harrier	1	13	0.00	0.00	0.00	0.00	0.00	0.00	13.00	0.00	0.00	0.00	0.00	0.00
14/07/2024	3	AM	1602	Peregrine falcon	1	96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.00	6.00	30.00	30.00
22/07/2024	4	AM	1126	Herring gull	1	110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.00	35.00	30.00	0.00
22/07/2024	4	AM	1151	Peregrine falcon	2	54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.00	24.00
22/07/2024	4	AM	1429	Red kite	1	34	0.00	0.00	0.00	12.98	10.25	0.00	0.00	0.00	0.00	6.02	4.75	0.00
22/07/2024	4	AM	1652	Red kite	1	15	0.00	0.00	11.68	0.00	0.00	0.00	0.00	0.00	3.32	0.00	0.00	0.00
24/07/2024	4	AM	1321	Red kite	1	490	0.00	0.00	42.29	192.68	140.98	84.59	0.00	0.00	2.71	12.32	9.02	5.41
27/07/2024	3	AM	1107	Herring gull	1	16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	15.00	0.00	0.00	0.00
27/07/2024	3	AM	1246	Peregrine falcon	2	51	0.39	0.00	0.27	0.00	0.00	0.00	29.61	0.00	20.73	0.00	0.00	0.00
11/08/2024	3	AM	1613	Red kite	1	153	0.00	0.00	6.45	26.89	21.51	0.00	0.00	0.00	11.55	48.11	38.49	0.00
12/08/2024	4	AM	1204	Red kite	1	32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
12/08/2024	4	AM	1225	Red kite	1	238	0.00	0.00	54.27	52.46	108.55	0.00	0.00	0.00	5.73	5.54	11.45	0.00
12/08/2024	4	AM	1228	Red kite	1	55	0.00	0.00	0.00	37.44	8.32	0.00	0.00	0.00	0.00	7.56	1.68	0.00
12/08/2024	4	AM	1233	Red kite	1	17	4.66	0.00	0.00	0.00	0.00	0.00	12.34	0.00	0.00	0.00	0.00	0.00
12/08/2024	4	AM	1302	Red kite	1	33	0.00	0.00	2.64	26.40	0.00	0.00	0.00	0.00	0.36	3.60	0.00	0.00
12/08/2024	4	AM	1335	Peregrine falcon	1	328	0.00	0.00	0.00	11.37	65.58	209.85	0.00	0.00	0.00	1.63	9.42	30.15
12/08/2024	4	AM	1515	Red kite	1	17	0.00	0.00	17.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12/08/2024	4	AM	1556	Red kite	1	315	0.00	0.00	83.07	69.22	138.44	0.00	0.00	0.00	6.93	5.78	11.56	0.00
22/08/2024	1	AM	1419	Hen harrier	1	35	35.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26/08/2024	4	AM	0831	Red kite	2	155	0.00	0.00	42.83	40.15	0.00	0.00	0.00	0.00	37.17	34.85	0.00	0.00
26/08/2024	4	AM	0832	Red kite	1	15	0.00	0.00	7.10	0.00	0.00	0.00	0.00	0.00	7.90	0.00	0.00	0.00
26/08/2024	4	AM	0852	Red kite	1	57	0.00	27.00	30.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26/08/2024	4	AM	1215	Red kite	1	170	0.00	0.00	43.56	14.52	32.67	32.67	0.00	0.00	16.44	5.48	12.33	12.33
20/09/2024	4	JRM	1259	Red kite	1	144	22.48	16.06	0.00	0.00	0.00	0.00	61.52	43.94	0.00	0.00	0.00	0.00
20/09/2024	4	JRM	1315	Red kite	1	360	0.00	0.00	0.00	0.00	0.00	0.00	0.00	300.00	60.00	0.00	0.00	0.00
20/09/2024	4	JRM	1316	Peregrine falcon	1	360	0.00	0.00	0.00	0.00	0.00	0.00	120.00	135.00	105.00	0.00	0.00	0.00
20/09/2024	4	JRM	1340	Red kite	1	250	18.74	48.18	0.00	0.00	0.00	0.00	51.26	131.82	0.00	0.00	0.00	0.00
20/09/2024	4	JRM	1400	Red kite	1	70	2.68	8.03	8.03	0.00	0.00	0.00	7.32	21.97	21.97	0.00	0.00	0.00
20/09/2024	4	JRM	1411	Red kite	3	360	0.00	0.00	0.00	0.00	0.00	0.00	120.00	165.00	75.00	0.00	0.00	0.00



Date	VP	Observer	Flight start time	Species	No. of birds	Duration (s)	Inside CRAA (seconds)						Outside CRAA (seconds)					
							0-20m	21-40m	41-100m	101-150m	151-200m	>200m	0-20m	21-40m	41-100m	101-150m	151-200m	>200m
20/09/2024	4	JRM	1420	Red kite	1	90	4.01	12.04	8.03	0.00	0.00	0.00	10.99	32.96	21.97	0.00	0.00	0.00
25/09/2024	2	JRM	0839	Pink-footed goose	150	180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	180.00	0.00	0.00
25/09/2024	2	JRM	0850	Golden plover	6	90	0.00	0.00	0.00	75.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
07/10/2024	5	JRM	1047	Golden plover	17	360	4.58	22.92	20.63	6.88	0.00	0.00	25.42	127.08	114.37	38.12	0.00	0.00
07/10/2024	5	JRM	1125	Golden plover	17	180	10.84	8.67	6.50	0.00	0.00	0.00	64.16	51.33	38.50	0.00	0.00	0.00
07/10/2024	5	JRM	1140	Golden plover	6	25	0.00	8.08	12.13	0.00	0.00	0.00	0.00	1.92	2.87	0.00	0.00	0.00
15/10/2024	1	JRM	1405	Red kite	1	300	0.00	0.00	0.00	0.00	0.00	0.00	120.00	180.00	0.00	0.00	0.00	0.00
15/10/2024	1	JRM	1453	Hen harrier	1	60	0.00	0.00	0.00	0.00	0.00	0.00	60.00	0.00	0.00	0.00	0.00	0.00
15/10/2024	1	JRM	1453	Hen harrier	1	35	1.37	0.00	0.00	0.00	0.00	0.00	33.63	0.00	0.00	0.00	0.00	0.00
15/10/2024	1	JRM	1720	Hen harrier	1	63	11.09	0.00	0.00	0.00	0.00	0.00	51.91	0.00	0.00	0.00	0.00	0.00
15/10/2024	1	JRM	1740	Hen harrier	1	81	6.56	18.75	0.00	0.00	0.00	0.00	14.44	41.25	0.00	0.00	0.00	0.00
18/10/2024	4	JRM	1158	Red kite	1	650	67.38	336.89	33.69	0.00	0.00	0.00	32.62	163.11	16.31	0.00	0.00	0.00
18/10/2024	4	JRM	1220	Golden plover	25	60	0.00	13.61	13.61	27.22	0.00	0.00	0.00	1.39	1.39	2.78	0.00	0.00
18/10/2024	4	JRM	1230	Red kite	1	180	153.18	0.00	0.00	0.00	0.00	0.00	26.82	0.00	0.00	0.00	0.00	0.00
18/10/2024	4	JRM	1435	Red kite	1	720	148.23	336.89	0.00	0.00	0.00	0.00	71.77	163.11	0.00	0.00	0.00	0.00
05/11/2024	2	JRM	1220	Peregrine falcon	1	15	0.00	0.00	13.16	0.00	0.00	0.00	0.00	0.00	1.84	0.00	0.00	0.00
05/11/2024	2	JRM	1225	Peregrine falcon	1	250	0.00	0.00	36.56	13.71	13.71	164.53	0.00	0.00	3.44	1.29	1.29	15.47
12/11/2024	1	JRM	1230	Red kite	1	520	0.00	0.00	0.00	0.00	0.00	0.00	55.00	90.00	375.00	0.00	0.00	0.00
12/11/2024	1	JRM	1526	Hen harrier	1	142	69.33	0.00	0.00	0.00	0.00	0.00	72.67	0.00	0.00	0.00	0.00	0.00
14/11/2024	4	JRM	1130	Golden plover	150	140	0.00	0.00	53.97	40.48	0.00	0.00	0.00	0.00	26.03	19.52	0.00	0.00
14/11/2024	4	JRM	1140	Golden plover	150	120	0.00	10.12	0.00	70.84	0.00	0.00	0.00	4.88	0.00	34.16	0.00	0.00
14/11/2024	4	JRM	1145	Golden plover	100	300	0.00	0.00	69.14	77.78	25.93	0.00	0.00	0.00	50.86	57.22	19.07	0.00
14/11/2024	4	JRM	1150	Golden plover	80	600	0.00	202.40	202.40	0.00	0.00	0.00	0.00	97.60	97.60	0.00	0.00	0.00
14/11/2024	4	JRM	1200	Golden plover	80	600	0.00	269.86	134.93	0.00	0.00	0.00	0.00	130.14	65.07	0.00	0.00	0.00
15/11/2024	5	JRM	1230	Hen harrier	1	20	0.65	0.00	0.00	0.00	0.00	0.00	19.35	0.00	0.00	0.00	0.00	0.00
15/11/2024	5	JRM	1530	Golden plover	20	7	0.00	0.00	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00
19/11/2024	1	JRM	1518	Hen harrier	1	55	0.00	0.00	0.00	0.00	0.00	0.00	55.00	0.00	0.00	0.00	0.00	0.00
19/11/2024	1	JRM	1519	Merlin	1	20	0.35	0.00	0.00	0.00	0.00	0.00	19.65	0.00	0.00	0.00	0.00	0.00
19/11/2024	2	JRM	1059	Red kite	1	210	0.00	0.00	0.00	145.89	0.00	0.00	0.00	0.00	0.00	64.11	0.00	0.00
21/11/2024	5	JB	1044	Herring gull	1	47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.00	30.00	0.00	0.00	0.00
22/11/2024	4	JB	1137	Red kite	1	185	0.00	24.14	84.49	40.23	0.00	0.00	0.00	5.86	20.51	9.77	0.00	0.00
22/11/2024	4	JB	1144	Red kite	1	349	0.00	56.25	74.76	117.49	0.00	0.00	0.00	22.75	30.24	47.51	0.00	0.00
03/12/2024	1	JRM	1309	Hen harrier	1	123	111.16	0.00	0.00	0.00	0.00	0.00	11.84	0.00	0.00	0.00	0.00	0.00
03/12/2024	1	JRM	1355	Hen harrier	1	300	168.82	0.00	0.00	0.00	0.00	0.00	131.18	0.00	0.00	0.00	0.00	0.00
15/01/2025	4	ENS	0830	Red kite	2	101	0.00	7.17	19.56	39.12	0.00	0.00	0.00	3.83	10.44	20.88	0.00	0.00
15/01/2025	4	ENS	0844	Red kite	1	23	0.00	0.00	18.58	0.00	0.00	0.00	0.00	0.00	4.42	0.00	0.00	0.00
15/01/2025	4	ENS	0921	Herring gull	1	51	0.00	0.00	0.00	37.14	0.00	0.00	0.00	0.00	0.00	13.86	0.00	0.00
15/01/2025	4	ENS	1018	Merlin	1	63	39.59	0.00	13.20	2.64	0.00	0.00	5.41	0.00	1.80	0.36	0.00	0.00
15/01/2025	4	ENS	1028	Herring gull	2	59	0.00	0.00	0.00	22.49	0.00	0.00	0.00	0.00	0.00	36.51	0.00	0.00
15/01/2025	4	ENS	1044	Red kite	1	61	0.00	0.00	0.00	21.81	22.54	0.00	0.00	0.00	0.00	8.19	8.46	0.00
15/01/2025	4	ENS	1201	Herring gull	2	45	15.00	30.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15/01/2025	4	ENS	1306	Herring gull	2	82	0.00	0.00	38.57	31.71	0.00	0.00	0.00	0.00	6.43	5.29	0.00	0.00



Date	VP	Observer	Flight start time	Species	No. of birds	Duration (s)	Inside CRAA (seconds)						Outside CRAA (seconds)					
							0-20m	21-40m	41-100m	101-150m	151-200m	>200m	0-20m	21-40m	41-100m	101-150m	151-200m	>200m
31/01/2025	2	TL	1254	Hen harrier	1	12	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/02/2025	1	JRM	1529	Hen harrier	1	25	22.11	0.00	0.00	0.00	0.00	0.00	2.89	0.00	0.00	0.00	0.00	0.00
11/02/2025	2	JRM	1409	Red kite	1	150	0.00	59.62	59.62	0.00	0.00	0.00	0.00	15.38	15.38	0.00	0.00	0.00
13/02/2025	5	JRM	1310	Peregrine falcon	1	360	0.72	0.72	6.51	2.90	6.51	0.00	14.28	14.28	128.49	57.10	128.49	0.00
18/02/2025	4	LW	0849	Herring gull	3	45	0.00	12.47	24.93	0.00	0.00	0.00	0.00	2.53	5.07	0.00	0.00	0.00
18/02/2025	4	LW	0932	Herring gull	2	100	8.84	53.04	26.52	0.00	0.00	0.00	1.16	6.96	3.48	0.00	0.00	0.00
18/02/2025	4	LW	1327	Herring gull	1	75	26.81	40.22	0.00	0.00	0.00	0.00	3.19	4.78	0.00	0.00	0.00	0.00

B.2 Raptors and Owls

Table B- details all records of target raptors and owls recorded during the breeding and non-breeding seasons. Refer to **Confidential Technical Appendix 7.2** for confidential data relating to barn owl, hen harrier, peregrine falcon and red kite.

Table B-2: Target Raptor and Owl Records

Date	Survey type	Survey visit	Species	Number recorded	Sex	Age	Nest/roost ID	Notes
24/04/2023	SBBS	1	Goshawk	1	-	-	-	Tentative ID based on a poor view of a low-flying accipiter. Goshawk could not be ruled out.
25/04/2023	BK	1	Barn owl	1	-	Adult	-	Briefly observed hunting by the roadside whilst driving off site (Just within 2 kilometre survey area).
19/05/2023	SBBS	2	Peregrine falcon	2	Male/female	Adult	PE_1	
19/05/2023	SBBS	2	Peregrine falcon	1	Male	Adult	PE_1	
26/05/2023	SBBS	2	Peregrine falcon	1	-	-	-	Flying high over opencast workings south of 2km survey area. Potential breeding area.
01/06/2023	SBBS	2	Peregrine falcon	2	Male/female	Adult	PE_1	
15/06/2023	SBBS	3	Hen harrier	1	Male	Adult	-	Hunting.
15/06/2023	SBBS	3	Peregrine falcon	1	-	Adult	PE_1	
16/06/2023	VP 2	-	Peregrine falcon	2	-	-	-	Aggressive interaction between 2 birds observed whilst returning to vehicle after survey; not mapped.
19/06/2023	SBBS	3	Red kite	1	-	-	-	
17/07/2023	BBS	4	Osprey	1	-	Adult	-	Aggressive interaction with a buzzard.
17/07/2023	BBS	4	Peregrine falcon	1	-	-	-	
04/08/2023	SBBS	5	Peregrine falcon	1	-	Adult	PE_1	
04/08/2023	SBBS	5	Peregrine falcon	1	-	Juvenile	PE_1	
16/11/2023	WWO	1	Hen harrier	1	Ringtail	-	-	Took off from fence post; hunting.
16/11/2023	WWO	1	Hen harrier	1	Ringtail	-	-	Took off from the ground; hunting.
16/11/2023	WWO	1	Hen harrier	1	Ringtail	-	-	Hunting alongside and interacting with short-eared owls for over an hour. Present up to 10 minutes before dusk, though last observed outside the site boundary and heading away from the area so not suspected to be roosting within the site.
16/11/2023	WWO	1	Short-eared owl	3	-	-	-	Minimum count of birds hunting in the Boghead Burn area.
22/01/2024	VP 3	-	Merlin	1	Female/juvenile	-	-	Flushed from a boulder; observed whilst travelling to survey location.
25/01/2024	WWO	2	Hen harrier	1	Male	Adult	-	
25/01/2024	WWO	2	Hen harrier	1	Male	Adult	-	Hunting.
13/02/2024	WWO	3	Hen harrier	1	Ringtail	-	-	Hunting.
13/02/2024	WWO	3	Merlin	1	-	-	-	Perched on tree then took flight.
13/02/2024	WWO	3	Short-eared owl	3	-	-	-	Hunting and interacting.
11/04/2024	SBBS	6	Peregrine falcon	1	Male	Adult	PE_1	Heading off to hunt.
12/04/2024	SBBS	6	Red kite	1	-	Adult	-	Mobbed by corvids.
18/04/2024	BK	3	Short-eared owl	2	-	-	-	Hunting; brief aggressive interaction between the birds; suggesting they were not a pair.



Date	Survey type	Survey visit	Species	Number recorded	Sex	Age	Nest/roost ID	Notes
23/05/2024	BBS	6	Peregrine falcon	1	-	-	-	
23/05/2024	BBS	6	Peregrine falcon	1	-	-	-	Briefly perched.
06/06/2024	SBBS	8	Hen harrier	1	Male	Adult	-	Hunting.
06/06/2024	SBBS	8	Peregrine falcon	2	Male/Female	Adult	PE_1	
06/06/2024	SBBS	8	Peregrine falcon	2	Male/Female	Adult	PE_1	
25/06/2024	BBS	7	Peregrine falcon	1	Female	Adult	-	
25/06/2024	BBS	7	Peregrine falcon	1	Male	Adult	-	
22/07/2024	BBS	8	Peregrine falcon	1	-	Adult	-	Mobbing a buzzard.
02/08/2024	SBBS	10	Hen harrier	1	Male	Immature	-	Hunting; second calendar year bird.
02/08/2024	SBBS	10	Peregrine falcon	1	-	Juvenile	PE_1	Juvenile; chasing a hare and then a kestrel. Mapped flight is a simplification of activity observed.
05/09/2024	WWO	4	Red kite	2	-	-	-	Flushed from wood.
14/10/2024	WWO	5	Hen harrier	1	Ringtail	-	HH_R1	Purposeful, direct flight to a potential roost site; 10 minutes prior to sunset.
04/12/2024	WWO	7	Hen harrier	1	Female	Adult	-	Soaring high away from the survey area during mid-afternoon.
31/01/2025	VP 5	-	Hen harrier	1	Male	Adult	-	Flushed from perch; observed whilst travelling to the survey location.
12/02/2025	WWO	9	Hen harrier	1	Male	Adult	-	
12/02/2025	WWO	9	Hen harrier	1	Male	Adult	-	Hunting; probably the same bird as Ref_ID 303.
12/02/2025	WWO	9	Hen harrier	1	Female	Adult	-	
12/02/2025	WWO	9	Red kite	1	-	-	-	Hunting.

B.3 Breeding Waders

Table B- details all target breeding wader activity recorded.

Table B-3: Wader Activity Records

Date	Survey type	Survey visit	Observer	Species	Number recorded	Notes
18/04/2023	BBS	1	HEC	Curlew	2	
18/04/2023	BBS	1	HEC	Curlew	2	
19/04/2023	BBS	1	HEC	Curlew	2	
19/04/2023	BBS	1	HEC	Ringed plover	1	Calling.
24/04/2023	SBBS	1	JRM	Curlew	1	Landed.
24/04/2023	SBBS	1	JRM	Curlew	1	Singing and displaying.
24/04/2023	SBBS	1	JRM	Lapwing	1	
24/04/2023	SBBS	1	JRM	Ringed plover	4	2 pairs.
25/04/2023	BK	1	JRM	Curlew	2	
25/04/2023	BK	1	JRM	Curlew	2	
26/04/2023	SBBS	1	JRM	Curlew	1	Singing.
26/04/2023	SBBS	1	JRM	Curlew	1	Singing.
26/04/2023	SBBS	1	JRM	Lapwing	2	Pair; male performing a display to the female.
26/04/2023	SBBS	1	JRM	Ringed plover	1	Flushed.
28/04/2023	BK	1	JRM	Lapwing	3	
28/04/2023	BK	1	JRM	Lapwing	1	In flight, Boghead Lane; not mapped.
04/05/2023	BBS	2	TH	Curlew	1	
04/05/2023	BBS	2	TH	Curlew	1	Calling.



Date	Survey type	Survey visit	Observer	Species	Number recorded	Notes
19/05/2023	SBBS	2	JRM	Curlew	2	Pair; mobbing crow then landed.
19/05/2023	SBBS	2	JRM	Curlew	1	Heard only; singing.
19/05/2023	SBBS	2	JRM	Ringed plover	2	Pair; alarm calling and distraction display.
19/05/2023	SBBS	2	JRM	Ringed plover	1	Alarm calling and distraction display
19/05/2023	SBBS	2	JRM	Ringed plover	2	Pair; alarm calling and distraction display
19/05/2023	SBBS	2	JRM	Ringed plover	2	Pair; alarm calling and distraction display
19/05/2023	SBBS	2	JRM	Ringed plover	5	Family; adult pair with minimum of 3 recently hatched young.
25/05/2023	SBBS	2	JRM	Curlew	1	In flight; alarm calling.
25/05/2023	SBBS	2	JRM	Curlew	2	Pair; landed and began feeding in field.
25/05/2023	SBBS	2	JRM	Ringed plover	5	
25/05/2023	SBBS	2	JRM	Ringed plover	1	Alarm calling.
25/05/2023	SBBS	2	JRM	Ringed plover	1	Alarm calling.
25/05/2023	SBBS	2	JRM	Ringed plover	1	
01/06/2023	SBBS	2	JRM	Curlew	1	In flight; singing.
01/06/2023	SBBS	2	JRM	Ringed plover	2	Pair.
01/06/2023	SBBS	2	JRM	Ringed plover	7	3 adults with a minimum of 4 juveniles.
01/06/2023	SBBS	2	JRM	Ringed plover	1	Alarm calling.
01/06/2023	SBBS	-	TH	Curlew	-	Heard only; west of survey location.
15/06/2023	SBBS	3	JRM	Curlew	1	Singing.
15/06/2023	SBBS	3	JRM	Ringed plover	1	Alarm calling.
15/06/2023	SBBS	3	JRM	Ringed plover	6	2 adults with 4 juveniles.
15/06/2023	SBBS	3	JRM	Ringed plover	2	
16/06/2023	SBBS	3	JRM	Curlew	2	Pair; singing and landed.
16/06/2023	SBBS	3	JRM	Curlew	1	Heard only; singing.
16/06/2023	SBBS	3	JRM	Ringed plover	1	Alarm calling
16/06/2023	SBBS	3	JRM	Ringed plover	1	
16/06/2023	VP 1	3	JRM	Ringed plover	2	
16/06/2023	SBBS	-	NW	Curlew	-	Heard only.
19/06/2023	SBBS	3	JRM	Curlew	1	In flight; singing.
19/06/2023	SBBS	3	JRM	Ringed plover	1	Flushed.
28/06/2023	BBS	3	TH	Curlew	1	Calling.
28/06/2023	BBS	3	TH	Ringed plover	2	Calling.
28/06/2023	BBS	3	TH	Ringed plover	1	
28/06/2023	BBS	3	TH	Ringed plover	2	Calling.
28/06/2023	BBS	3	TH	Ringed plover	1	Calling.
29/06/2023	BBS	3	TH	Curlew	2	
06/07/2023	SBBS	4	JRM	Ringed plover	1	Calling.
07/07/2023	SBBS	4	JRM	Ringed plover	1	
17/07/2023	BBS	4	EB	Curlew	2	Calling.
17/07/2023	BBS	4	EB	Curlew	1	Calling.
17/07/2023	BBS	4	EB	Ringed plover	3	Calling.
17/07/2023	BBS	4	HEC	Curlew	1	Calling.
19/07/2023	VP 2	-	JB	Curlew	-	Heard only.
21/07/2023	BBS	4	TH	Ringed plover	3	Family; adult pair with 1 juvenile.



Date	Survey type	Survey visit	Observer	Species	Number recorded	Notes
04/08/2023	SBBS	5	JRM	Ringed plover	2	Family; 1 adult with 1 juvenile; alarm calling.
11/04/2024	SBBS	6	JRM	Curlew	2	Pair; singing.
11/04/2024	SBBS	6	JRM	Ringed plover	2	Pair.
11/04/2024	SBBS	6	JRM	Ringed plover	2	Pair.
11/04/2024	SBBS	6	JRM	Ringed plover	2	Pair.
12/04/2024	SBBS	6	JRM	Curlew	1	Singing; heard only; location estimated.
12/04/2024	SBBS	6	JRM	Curlew	1	Singing; heard only; location estimated.
12/04/2024	SBBS	6	JRM	Ringed plover	2	Pair
12/04/2024	SBBS	6	JRM	Ringed plover	4	2 pairs; singing
12/04/2024	SBBS	6	JRM	Ringed plover	2	Pair.
16/04/2024	BBS	5	EB	Curlew	1	In flight; calling.
16/04/2024	BBS	5	EB	Curlew	2	Pair; singing.
16/04/2024	BBS	5	EB	Lapwing	3	
16/04/2024	BBS	5	EB	Lapwing	1	
16/04/2024	BBS	5	EB	Ringed plover	2	Pair.
16/04/2024	BBS	5	EB	Ringed plover	2	Pair.
17/04/2024	BBS	5	EB	Curlew	1	Singing.
17/04/2024	BBS	5	EB	Curlew	1	In flight; calling.
17/04/2024	BBS	5	EB	Ringed plover	2	Pair
17/04/2024	BBS	5	EB	Ringed plover	2	Pair;
17/04/2024	BBS	5	EB	Ringed plover	2	Pair
17/04/2024	BBS	5	EB	Ringed plover	2	Pair
17/04/2024	BBS	5	EB	Ringed plover	2	Pair
18/04/2024	BK	3	JRM	Lapwing	1	
10/05/2024	BK	4	JRM	Lapwing	1	Alarm calling.
10/05/2024	BK	4	JRM	Lapwing	2	Pair; displaying and mobbing a buzzard; first record of lapwing at this location.
10/05/2024	BK	4	JRM	Ringed plover	1	Male; alarm calling.
10/05/2024	BK	4	JRM	Ringed plover	2	Pair; alarm calling.
13/05/2024	SBBS	7	JRM	Curlew	2	Pair; singing and suspected to be nesting nearby.
13/05/2024	SBBS	7	JRM	Lapwing	2	Displaying.
13/05/2024	SBBS	7	JRM	Lapwing	1	
13/05/2024	SBBS	7	JRM	Lapwing	2	Displaying then left the area entirely.
13/05/2024	SBBS	7	JRM	Ringed plover	1	Alarm calling.
13/05/2024	SBBS	7	JRM	Ringed plover	4	2 pairs; alarm calling.
15/05/2024	SBBS	7	JRM	Curlew	1	Singing; heard only
15/05/2024	SBBS	7	JRM	Curlew	1	Singing; heard only
15/05/2024	SBBS	7	JRM	Ringed plover	2	Pair; alert/alarm calling
15/05/2024	SBBS	7	JRM	Ringed plover	2	Pair; alert/alarm calling
15/05/2024	SBBS	7	JRM	Ringed plover	2	Pair; alert/alarm calling
15/05/2024	SBBS	7	JRM	Ringed plover	2	Pair; alert/alarm calling
15/05/2024	SBBS	7	JRM	Ringed plover	2	Pair; alert/alarm calling
15/05/2024	SBBS	7	JRM	Ringed plover	2	Pair; alert/alarm calling
23/05/2024	BBS	6	IH	Curlew	1	Calling.
23/05/2024	BBS	6	IH	Ringed plover	2	



Date	Survey type	Survey visit	Observer	Species	Number recorded	Notes
23/05/2024	BBS	6	IH	Ringed plover	1	Calling.
23/05/2024	BBS	6	IH	Ringed plover	1	
23/05/2024	BBS	6	IH	Ringed plover	1	Calling.
23/05/2024	BBS	6	LS	Curlew	1	In flight.
23/05/2024	BBS	6	LS	Curlew	1	Calling; heard only; location estimated.
23/05/2024	BBS	6	LS	Curlew	2	Calling.
23/05/2024	BBS	6	LS	Ringed plover	1	Calling; heard only; location estimated.
23/05/2024	BBS	6	LS	Ringed plover	3	Calling.
06/06/2024	SBBS	8	JRM	Lapwing	2	Pair; displaying.
06/06/2024	SBBS	8	JRM	Ringed plover	3	3 adults; minimum count; 2 of the 3 birds were a copulating pair.
24/06/2024	BBS	7	JRM	Lapwing	2	Pair; displaying.
24/06/2024	BBS	7	JRM	Ringed plover	1	Calling.
25/06/2024	BBS	7	JRM	Curlew	2	Pair; singing and landed.
25/06/2024	BBS	7	JRM	Ringed plover	2	Pair; alarm calling; different birds from Ref_ID 277.
25/06/2024	BBS	7	JRM	Ringed plover	2	Pair; alarm calling; different birds from Ref_ID 276.
25/06/2024	BBS	7	JRM	Ringed plover	1	Feeding; probably one of the birds from Ref_ID 277.
25/06/2024	BBS	7	JRM	Ringed plover	2	Pair; alarm calling; different birds from Ref_ID 281.
25/06/2024	BBS	7	JRM	Ringed plover	4	2 pairs; alarm calling; different birds from Ref_ID 280.
11/07/2024	SBBS	9	JRM	Ringed plover	2	Pair; alarm calling.
11/07/2024	SBBS	9	JRM	Ringed plover	2	Heard only; minimum count.
12/07/2024	SBBS	9	JRM	Ringed plover	10	5 pairs; all alert/alarm calling; minimum count.
14/07/2024	VP 3	-	AM	Ringed plover	2	Family; adult with a juvenile.
22/07/2024	BBS	8	JRM	Ringed plover	2	Pair; alarm calling.
22/07/2024	BBS	8	JRM	Ringed plover	4	2 pairs; alarm calling.
27/07/2024	VP 3	-	AM	Ringed plover	2	Pair; alarm calling.
31/07/2024	VP 2	-	AM	Ringed plover	1	Heard only.

B.4 Non-Breeding Waterfowl and Waders

Table B- details all target non-breeding wader and waterfowl activity recorded.

Table B-4: Non-Breeding Season Waterfowl and Wader Activity

Date	Survey type	Survey visit	Observer	Species	Number recorded	Notes
24/04/2023	SBBS	1	JRM	Golden plover	2	Pair.
07/07/2023	SBBS	4	JRM	Green sandpiper	1	Flushed from pool and left the area; heading west.
04/08/2023	SBBS	5	JRM	Green sandpiper	1	Flushed from pool (same pool where a green sandpiper was present in July). Left the area after flying a few circuits of the pool.
18/10/2023	VP 3	-	JRM	Golden plover	3	Feeding adjacent to track; observed whilst returning to vehicle after survey.
16/11/2023	WWO	1	JRM	Golden plover	2	Calling; likely flushed by observer.
16/11/2023	WWO	1	JRM	Golden plover	85	Not seen to take off or land; circled continuously for over 20 minutes.
04/12/2023	VP 3	-	JRM	Greylag goose	9	Feeding in field near Sunnyside (not mapped).
25/01/2024	WWO	2	JRM	Golden plover	1	Heard only; flight call.
13/02/2024	WWO	3	JRM	Golden plover	45	Feeding, then disturbed by a dog-walker.
13/02/2024	WWO	3	JRM	Ringed plover	4	Two pairs; displaying.



Date	Survey type	Survey visit	Observer	Species	Number recorded	Notes
13/02/2024	WWO	3	JRM	Ringed plover	2	Pair.
11/04/2024	SBBS	6	JRM	Golden plover	20	
12/04/2024	SBBS	6	JRM	Golden plover	220	Minimum count; non-breeding birds.
17/04/2024	BBS	5	EB	Golden plover	1	
07/10/2024	VP 5	-	JRM	Golden plover	50	Roosting/loafing.
14/10/2024	WWO	5	JRM	Golden plover	80	Roosting/loafing.
13/11/2024	WWO	6	JRM	Golden plover	80	At usual roost site; briefly flushed by a passing buzzard but returned within a minute.
04/12/2024	WWO	7	JRM	Golden plover	20	Flushed from usual roost site; minimum count.
16/01/2025	WWO	8	JRM	Golden plover	15	Roosting.
31/01/2025	VP 5	-	TH	Greylag goose	18	Outside the survey area; took flight from the lagoon.
31/01/2025	VP 5	-	TH	Ringed plover	2	Observed whilst leaving the survey area.
12/02/2025	WWO	9	JRM	Golden plover	25	Roosting.
12/02/2025	WWO	9	JRM	Pink-footed goose	42	
12/02/2025	WWO	9	JRM	Ringed plover	3	





Making Sustainability Happen