

ANNEX D. FLIGHT ACTIVITY DATA (2015-2017)

Table D-1 Summary of flight activity surveys undertaken at Cairnmore Hill Wind Farm, 2015 to 2017 (sorted chronologically)

Date	Observer	Season	VP	Start	Finish	Hours
19/10/2015	TW	NBR 2015/2016	1	1600	1900	3.00
20/10/2015	TW	NBR 2015/2016	1	0700	1000	3.00
29/10/2015	TW	NBR 2015/2016	1	1435	1735	3.00
30/10/2015	TW	NBR 2015/2016	1	0625	0925	3.00
16/11/2015	SJ	NBR 2015/2016	1	1353	1653	3.00
17/11/2015	SJ	NBR 2015/2016	1	0706	1006	3.00
19/11/2015	JS	NBR 2015/2016	1	0715	1015	3.00
19/11/2015	JS	NBR 2015/2016	1	1045	1345	3.00
23/11/2015	JS	NBR 2015/2016	1	1015	1315	3.00
23/11/2015	JS	NBR 2015/2016	1	1345	1645	3.00
28/11/2015	JS	NBR 2015/2016	1	0730	1030	3.00
28/11/2015	JS	NBR 2015/2016	1	1100	1400	3.00
30/11/2015	TW	NBR 2015/2016	1	1330	1630	3.00
01/12/2015	GN	NBR 2015/2016	1	0736	1036	3.00
17/12/2015	SJ	NBR 2015/2016	1	1320	1620	3.00
18/12/2015	SJ	NBR 2015/2016	1	0800	1100	3.00
24/01/2016	JS	NBR 2015/2016	1	1415	1715	3.00
28/01/2016	SJ	NBR 2015/2016	1	0731	1031	3.00
28/01/2016	SJ	NBR 2015/2016	1	1115	1415	3.00
29/01/2016	SJ	NBR 2015/2016	1	0728	1028	3.00
09/02/2016	LC	NBR 2015/2016	1	1455	1755	3.00
11/02/2016	LC	NBR 2015/2016	1	0700	1000	3.00
24/02/2016	JS	NBR 2015/2016	1	0945	1245	3.00
25/02/2016	JS	NBR 2015/2016	1	1530	1830	3.00
10/03/2016	SJ, JES	NBR 2015/2016	1	1604	1904	3.00
11/03/2016	SJ	NBR 2015/2016	1	0544	0844	3.00
18/03/2016	JS	BR 2016	1	1000	1300	3.00
19/03/2016	JS	BR 2016	1	0500	0800	3.00
22/03/2016	JS	BR 2016	1	1100	1400	3.00
24/03/2016	JS	BR 2016	1	1240	1540	3.00
24/03/2016	JS	BR 2016	1	1610	1910	3.00
07/04/2016	JS	BR 2016	1	1630	1930	3.00
17/04/2016	JS	BR 2016	1	1830	2130	3.00

Date	Observer	Season	VP	Start	Finish	Hours
20/04/2016	JS	BR 2016	1	0445	0745	3.00
20/04/2016	JS	BR 2016	1	0815	1115	3.00
25/04/2016	JS	BR 2016	1	1515	1815	3.00
25/04/2016	JS	BR 2016	1	1845	2145	3.00
10/05/2016	JS	BR 2016	1	0400	0700	3.00
10/05/2016	JS	BR 2016	1	1045	1345	3.00
14/05/2016	JS	BR 2016	1	1600	1900	3.00
14/05/2016	JS	BR 2016	1	1930	2230	3.00
26/05/2016	JS	BR 2016	1	0330	0630	3.00
26/05/2016	JS	BR 2016	1	0700	1000	3.00
07/06/2016	JS	BR 2016	1	1645	1945	3.00
07/06/2016	JS	BR 2016	1	2015	2315	3.00
23/06/2016	JS	BR 2016	1	0300	0600	3.00
26/06/2016	JS	BR 2016	1	1500	1800	3.00
19/07/2016	SJ	BR 2016	1	2005	2305	3.00
20/07/2016	SJ	BR 2016	1	0335	0635	3.00
09/08/2016	SJ	BR 2016	1	1920	2220	3.00
10/08/2016	SJ	BR 2016	1	0900	1200	3.00
12/08/2016	SJ	BR 2016	1	0900	1200	3.00
30/09/2016	AM	NBR 2016/2017	2	1300	1600	3.00
30/09/2016	AM	NBR 2016/2017	3	1650	1950	3.00
01/10/2016	AM	NBR 2016/2017	3	1120	1420	3.00
03/10/2016	JES	NBR 2016/2017	2	1646	1846	2.00
03/10/2016	SJ	NBR 2016/2017	3	1646	1946	3.00
05/10/2016	JES	NBR 2016/2017	2	0930	1230	3.00
05/10/2016	SJ	NBR 2016/2017	2	1340	1640	3.00
05/10/2016	SJ	NBR 2016/2017	3	0950	1250	3.00
11/10/2016	SJ	NBR 2016/2017	3	1723	1923	2.00
12/10/2016	SJ	NBR 2016/2017	3	1305	1505	2.00
12/10/2016	SJ	NBR 2016/2017	3	1535	1735	2.00
13/10/2016	SJ	NBR 2016/2017	2	0643	0943	3.00
13/10/2016	SJ	NBR 2016/2017	2	1015	1315	3.00
24/10/2016	SJ	NBR 2016/2017	2	1548	1848	3.00
25/10/2016	SJ	NBR 2016/2017	2	1400	1700	3.00
26/10/2016	SJ	NBR 2016/2017	3	0714	1014	3.00
26/10/2016	SJ	NBR 2016/2017	3	1105	1405	3.00

Date	Observer	Season	VP	Start	Finish	Hours
07/11/2016	NC	NBR 2016/2017	2	1511	1711	2.00
08/11/2016	NC	NBR 2016/2017	2	0647	0847	2.00
08/11/2016	NC	NBR 2016/2017	2	0917	1117	2.00
08/11/2016	SJ	NBR 2016/2017	3	0647	0947	3.00
08/11/2016	SJ	NBR 2016/2017	3	1017	1317	3.00
21/11/2016	SJ	NBR 2016/2017	2	1441	1641	2.00
21/11/2016	NC	NBR 2016/2017	3	1443	1643	2.00
22/11/2016	SJ	NBR 2016/2017	2	0719	0919	2.00
22/11/2016	SJ	NBR 2016/2017	2	0949	1149	2.00
22/11/2016	NC	NBR 2016/2017	3	0719	0919	2.00
22/11/2016	NC	NBR 2016/2017	3	0949	1149	2.00
05/12/2016	JS	NBR 2016/2017	2	1424	1624	2.00
05/12/2016	SJ	NBR 2016/2017	3	1424	1624	2.00
06/12/2016	JS	NBR 2016/2017	2	0746	0946	2.00
06/12/2016	JS	NBR 2016/2017	2	1015	1215	2.00
06/12/2016	SJ	NBR 2016/2017	3	0746	0946	2.00
06/12/2016	SJ	NBR 2016/2017	3	1016	1216	2.00
20/12/2016	JS	NBR 2016/2017	2	0802	1102	3.00
20/12/2016	JS	NBR 2016/2017	2	1132	1432	3.00
20/12/2016	SJ	NBR 2016/2017	3	0802	1102	3.00
21/12/2016	JS	NBR 2016/2017	3	1000	1300	3.00
05/01/2017	LC	NBR 2016/2017	2	1337	1637	3.00
05/01/2017	JS	NBR 2016/2017	3	1337	1637	3.00
06/01/2017	LC	NBR 2016/2017	2	0800	1100	3.00
06/01/2017	JS	NBR 2016/2017	3	0800	1100	3.00
18/01/2017	SJ	NBR 2016/2017	2	1020	1320	3.00
18/01/2017	SJ	NBR 2016/2017	2	1402	1702	3.00
18/01/2017	NC	NBR 2016/2017	3	1402	1702	3.00
19/01/2017	NC	NBR 2016/2017	3	0745	1045	3.00
01/02/2017	SJ	NBR 2016/2017	2	1434	1734	3.00
01/02/2017	NC	NBR 2016/2017	3	1104	1404	3.00
01/02/2017	NC	NBR 2016/2017	3	1434	1734	3.00
02/02/2017	SJ	NBR 2016/2017	3	0719	1019	3.00
15/02/2017	NC	NBR 2016/2017	2	1509	1809	3.00
15/02/2017	SJ	NBR 2016/2017	3	1509	1809	3.00
16/02/2017	SJ	NBR 2016/2017	2	0645	0945	3.00

Date	Observer	Season	VP	Start	Finish	Hours
01/03/2017	NC	NBR 2016/2017	2	1225	1525	3.00
13/03/2017	LC	NBR 2016/2017	2	1611	1911	3.00
13/03/2017	NC	NBR 2016/2017	3	1611	1911	3.00
14/03/2017	LC	NBR 2016/2017	2	0533	0833	3.00
14/03/2017	NC	NBR 2016/2017	3	0533	0833	3.00
27/03/2017	LC	BR 2017	2	1741	2041	3.00
27/03/2017	NC	BR 2017	3	1741	2041	3.00
28/03/2017	NC	BR 2017	2	0556	0856	3.00
28/03/2017	LC	BR 2017	3	0556	0856	3.00
10/04/2017	LC	BR 2017	2	1530	1830	3.00
10/04/2017	NC	BR 2017	3	1532	1832	3.00
11/04/2017	NC	BR 2017	2	1645	1845	2.00
11/04/2017	NC	BR 2017	2	1915	2115	2.00
11/04/2017	LC	BR 2017	3	1645	1845	2.00
11/04/2017	LC	BR 2017	3	1915	2115	2.00
12/04/2017	LC	BR 2017	2	0513	0813	3.00
12/04/2017	LC	BR 2017	2	0843	1043	2.00
12/04/2017	NC	BR 2017	3	0516	0816	3.00
12/04/2017	NC	BR 2017	3	0846	1046	2.00
24/04/2017	NC	BR 2017	2	1852	2152	3.00
25/04/2017	JES	BR 2017	2	1250	1550	3.00
26/04/2017	NC	BR 2017	2	0434	0734	3.00
26/04/2017	JES	BR 2017	2	1235	1535	3.00
01/05/2017	LC	BR 2017	2	1901	2201	3.00
01/05/2017	NC	BR 2017	3	1901	2201	3.00
02/05/2017	NC	BR 2017	2	0930	1230	3.00
02/05/2017	NC	BR 2017	2	1300	1600	3.00
02/05/2017	LC	BR 2017	3	0915	1215	3.00
02/05/2017	LC	BR 2017	3	1245	1545	3.00
03/05/2017	LC	BR 2017	2	0416	0716	3.00
03/05/2017	NC	BR 2017	3	0416	0716	3.00
08/05/2017	NC	BR 2017	2	1917	2217	3.00
08/05/2017	LC	BR 2017	3	1917	2217	3.00
09/05/2017	NC	BR 2017	2	0402	0702	3.00
09/05/2017	LC	BR 2017	3	0402	0702	3.00
11/05/2017	NC	BR 2017	3	1924	2224	3.00

Date	Observer	Season	VP	Start	Finish	Hours
12/05/2017	LC	BR 2017	3	0354	0654	3.00
06/06/2017	SJ	BR 2017	2	1230	1530	3.00
06/06/2017	NC	BR 2017	3	1233	1533	3.00
07/06/2017	SJ	BR 2017	3	1500	1800	3.00
07/06/2017	NC	BR 2017	3	1914	2214	3.00
13/07/2017	LC	BR 2017	2	0325	0625	3.00
13/07/2017	LC	BR 2017	2	0655	0955	3.00
13/07/2017	SJ	BR 2017	3	0325	0625	3.00
13/07/2017	SJ	BR 2017	3	0655	0955	3.00
14/07/2017	LC	BR 2017	2	0825	1125	3.00
14/07/2017	SJ	BR 2017	3	0830	1130	3.00
07/08/2017	SJ	BR 2017	2	1925	2225	3.00
07/08/2017	NC	BR 2017	3	1926	2226	3.00
08/08/2017	NC	BR 2017	2	1006	1306	3.00
08/08/2017	SJ	BR 2017	2	1010	1310	3.00

Table D-2 Details of target species recorded during flight activity surveys, 2015-2017

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
07/08/2014	1	11:06	Golden plover	1	30	30	0	
19/10/2015	1	16:17	Greylag goose	12	75	0	75	
17/11/2015	1	07:51	Golden plover	70	60	30	30	
19/10/2015	1	17:01	Greylag goose	19	135	0	135	
20/10/2015	1	08:27	Greylag goose	1	60	0	60	
20/10/2015	1	08:43	Greylag goose	17	195	0	195	
20/10/2015	1	08:49	Greylag goose	19	90	0	90	
29/10/2015	1	13:34	Hen harrier	1	30	30	0	
30/10/2015	1	07:37	Greylag goose	1	45	45	0	
30/10/2015	1	07:37	Greylag goose	3	45	45	0	
30/10/2015	1	07:50	Greylag goose	23	60	60	0	
17/11/2015	1	08:00	Golden plover	60	135	0	135	
30/10/2015	1	08:40	Hen harrier	1	45	45	0	
30/10/2015	1	08:48	Greylag goose	10	60	60	0	
16/11/2015	1	14:31	Whooper swan	11	75	30	45	
16/11/2015	1	15:15	Greylag goose	200	75	75	0	
16/11/2015	1	15:15	Whooper swan	60	75	75	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
16/11/2015	1	16:01	Whooper swan	5	30	30	0	
16/11/2015	1	16:27	Whooper swan	3	60	60	0	
16/11/2015	1	16:34	Peregrine	1	45	45	0	
30/10/2015	1	08:22	Golden plover	4	15	15	0	
19/10/2015	1	16:25	Golden plover	3	60	60	0	
17/11/2015	1	08:31	Greylag goose	15	75	0	75	
19/11/2015	1	07:38	Whooper swan	8	135	15	120	
01/12/2015	1	07:47	Golden plover	15	30	30	0	
19/11/2015	1	07:47	Greylag goose	560	165	150	15	
19/11/2015	1	07:55	Greylag goose	21	105	105	0	
01/12/2015	1	08:29	Golden plover	15	45	45	0	
01/12/2015	1	08:55	Golden plover	3	15	15	0	
19/11/2015	1	08:08	Greylag goose	275	195	195	0	
19/11/2015	1	08:16	Greylag goose	290	105	105	0	
19/11/2015	1	08:23	Greylag goose	130	105	105	0	
19/11/2015	1	08:40	Greylag goose	30	105	105	0	
19/11/2015	1	08:52	Greylag goose	22	225	225	0	
19/11/2015	1	08:59	Greylag goose	40	105	105	0	
01/12/2015	1	09:09	Golden plover	15	90	90	0	
19/11/2015	1	10:53	Hen harrier	1	75	75	0	
19/11/2015	1	11:48	Greylag goose	22	105	105	0	
19/11/2015	1	12:03	Greylag goose	83	225	210	15	
19/11/2015	1	12:27	Greylag goose	27	165	165	0	
19/11/2015	1	12:37	Greenland white-fronted goose	170	1035	1020	15	
19/11/2015	1	13:20	Whooper swan	6	60	0	60	
19/11/2015	1	13:22	Whooper swan	4	45	45	0	
28/11/2015	1	08:19	Greylag goose	115	45	0	45	
28/11/2015	1	08:50	Greylag goose	65	105	105	0	
28/11/2015	1	10:24	Greylag goose	45	75	75	0	
30/11/2015	1	14:37	Greylag goose	50	195	0	195	
30/11/2015	1	15:18	Golden plover	6	15	15	0	
17/12/2015	1	15:01	Golden plover	31	75	0	75	
29/01/2016	1	09:09	Golden plover	34	90	15	75	
01/12/2015	1	08:34	Short-eared owl	1	15	15	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
01/12/2015	1	08:39	Greylag goose	75	60	60	0	
19/11/2015	1	07:45	Golden plover	1	15	15	0	
01/12/2015	1	08:59	Greylag goose	50	60	60	0	
19/11/2015	1	07:56	Golden plover	1	15	0	15	
01/12/2015	1	09:24	Greylag goose	6	75	0	75	
01/12/2015	1	09:33	Hen harrier	1	45	45	0	
01/12/2015	1	09:46	Greylag goose	88	90	15	75	
01/12/2015	1	09:47	Greylag goose	200	90	0	90	
01/12/2015	1	09:47	Greylag goose	70	75	0	75	
01/12/2015	1	10:10	Whooper swan	10	105	105	0	
01/12/2015	1	10:26	Greylag goose	9	90	90	0	
19/11/2015	1	07:57	Golden plover	1	15	15	0	
17/12/2015	1	15:13	Greylag goose	23	75	75	0	
18/12/2015	1	08:47	Whooper swan	5	105	105	0	
18/12/2015	1	09:16	Greylag goose	70	210	150	60	
18/12/2015	1	09:21	Whooper swan	5	45	45	0	
18/12/2015	1	09:27	Greylag goose	60	165	105	60	
18/12/2015	1	09:38	Greylag goose	130	135	105	30	
18/12/2015	1	09:42	Whooper swan	14	120	90	30	
18/12/2015	1	10:08	Greylag goose	40	135	60	75	
18/12/2015	1	10:09	Greylag goose	10	150	120	30	
28/01/2016	1	08:09	Whooper swan	2	75	75	0	
28/01/2016	1	08:37	Greylag goose	3	45	45	0	
28/01/2016	1	08:47	Whooper swan	2	90	90	0	
28/01/2016	1	08:57	Lapwing	30	120	90	30	
28/01/2016	1	09:16	Greylag goose	1	60	0	60	
28/01/2016	1	09:44	Pink-footed goose	75	105	15	90	
28/01/2016	1	09:52	Greylag goose	14	135	0	135	
28/01/2016	1	09:54	Greylag goose	28	60	0	60	
28/01/2016	1	10:01	Whooper swan	4	75	75	0	
19/11/2015	1	10:13	Golden plover	1	15	15	0	
29/01/2016	1	09:38	Pink-footed goose	1	120	15	105	
09/02/2016	1	18:31	Golden plover	12	15	15	0	
11/02/2016	1	08:26	Greylag goose	77	300	255	45	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
11/02/2016	1	08:46	Hen harrier	1	45	45	0	
10/03/2016	1	16:05	Lapwing	2	30	30	0	
10/03/2016	1	16:23	Pink-footed goose	30	90	0	90	
10/03/2016	1	16:35	Greylag goose	23	105	0	105	
10/03/2016	1	16:39	Lapwing	1	30	30	0	
10/03/2016	1	16:44	Lapwing	1	15	15	0	
10/03/2016	1	16:57	Greylag goose	7	435	15	420	
10/03/2016	1	17:41	Lapwing	4	75	45	30	
10/03/2016	1	17:46	Lapwing	1	45	30	15	
10/03/2016	1	17:47	Lapwing	1	30	0	30	
10/03/2016	1	18:13	Pink-footed goose	100	135	0	135	
10/03/2016	1	18:49	Pink-footed goose	40	45	0	45	
10/03/2016	1	18:57	Pink-footed goose	60	75	0	75	
10/03/2016	1	19:00	Pink-footed goose	10	45	0	45	
11/03/2016	1	06:36	Greylag goose	1	105	0	105	
11/03/2016	1	07:21	Lapwing	1	30	30	0	
18/03/2016	1	10:30	Lapwing	3	150	105	45	
18/03/2016	1	10:40	Lapwing	2	30	15	15	
18/03/2016	1	11:30	Lapwing	5	60	30	30	
18/03/2016	1	11:38	Curlew	3	60	15	45	
18/03/2016	1	12:06	Curlew	1	60	60	0	
18/03/2016	1	12:08	Curlew	1	30	30	0	
18/03/2016	1	12:31	Lapwing	2	30	0	30	
18/03/2016	1	12:32	Curlew	1	30	30	0	
18/03/2016	1	12:47	Lapwing	2	75	30	45	
19/03/2016	1	06:27	Pink-footed goose	97	75	0	75	
19/03/2016	1	06:29	Pink-footed goose	230	105	0	105	
19/03/2016	1	06:32	Pink-footed goose	2	90	45	45	
19/03/2016	1	07:01	Lapwing	2	45	30	15	
19/03/2016	1	07:07	Lapwing	2	30	15	15	
19/03/2016	1	07:20	Lapwing	3	30	15	15	
19/03/2016	1	07:51	Curlew	2	30	15	15	
22/03/2016	1	11:01	Curlew	1	105	45	60	
22/03/2016	1	11:01	Lapwing	1	75	75	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
22/03/2016	1	11:17	Curlew	1	75	45	30	
22/03/2016	1	11:33	Lapwing	1	60	60	0	
22/03/2016	1	11:37	Curlew	1	45	0	45	
22/03/2016	1	12:29	Curlew	1	270	15	255	
22/03/2016	1	12:34	Curlew	1	30	30	0	
22/03/2016	1	12:36	Lapwing	2	30	15	15	
22/03/2016	1	13:01	Lapwing	1	45	30	15	
22/03/2016	1	13:07	Lapwing	2	45	45	0	
22/03/2016	1	13:12	Lapwing	1	45	0	45	
22/03/2016	1	13:12	Lapwing	1	75	15	60	
22/03/2016	1	13:23	Lapwing	2	30	15	15	
22/03/2016	1	13:33	Golden plover	35	45	0	45	
22/03/2016	1	13:33	Lapwing	3	45	15	30	
22/03/2016	1	13:35	Curlew	1	30	15	15	
24/03/2016	1	13:11	Lapwing	4	330	255	75	
24/03/2016	1	13:12	Lapwing	2	60	15	45	
24/03/2016	1	13:25	Lapwing	3	30	30	0	
24/03/2016	1	13:25	Lapwing	4	105	105	0	
24/03/2016	1	13:35	Lapwing	5	135	90	45	
24/03/2016	1	13:44	Lapwing	1	30	30	0	
24/03/2016	1	13:55	Lapwing	2	30	15	15	
24/03/2016	1	14:27	Lapwing	6	270	60	210	
24/03/2016	1	14:31	Curlew	1	45	30	15	
24/03/2016	1	14:37	Lapwing	5	135	75	60	
24/03/2016	1	14:40	Oystercatcher	2	30	30	0	
24/03/2016	1	14:58	Lapwing	8	105	30	75	
24/03/2016	1	15:08	Lapwing	5	90	30	60	
24/03/2016	1	15:20	Curlew	1	30	15	15	
24/03/2016	1	15:27	Lapwing	6	135	60	75	
24/03/2016	1	15:30	Curlew	2	45	15	30	
24/03/2016	1	15:34	Curlew	1	45	30	15	
24/03/2016	1	15:39	Lapwing	3	150	90	60	
24/03/2016	1	15:40	Curlew	1	30	30	0	
24/03/2016	1	16:22	Lapwing	5	195	135	60	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
24/03/2016	1	17:49	Curlew	1	45	15	30	
24/03/2016	1	17:49	Lapwing	2	30	15	15	
24/03/2016	1	18:16	Curlew	1	45	30	15	
07/04/2016	1	16:31	Lapwing	1	30	15	15	
07/04/2016	1	16:31	Lapwing	2	30	15	15	
07/04/2016	1	16:32	Curlew	1	30	30	0	
07/04/2016	1	16:44	Lapwing	1	30	15	15	
07/04/2016	1	16:56	Curlew	1	45	0	45	
07/04/2016	1	17:02	Curlew	1	60	30	30	
07/04/2016	1	17:05	Curlew	1	45	30	15	
07/04/2016	1	17:07	Lapwing	2	30	15	15	
07/04/2016	1	17:13	Curlew	2	30	30	0	
07/04/2016	1	17:26	Lapwing	1	30	15	15	
07/04/2016	1	17:26	Lapwing	1	45	15	30	
07/04/2016	1	17:31	Lapwing	1	60	30	30	
07/04/2016	1	17:32	Lapwing	1	30	0	30	
07/04/2016	1	17:32	Lapwing	1	30	15	15	
07/04/2016	1	17:34	Curlew	1	45	0	45	
07/04/2016	1	17:35	Curlew	1	30	15	15	
07/04/2016	1	17:40	Curlew	1	135	60	75	
07/04/2016	1	17:41	Curlew	1	30	15	15	
07/04/2016	1	17:50	Lapwing	5	135	60	75	
07/04/2016	1	18:15	Curlew	1	30	15	15	
07/04/2016	1	18:15	Teal	2	30	30	0	
07/04/2016	1	19:00	Curlew	1	120	60	60	
07/04/2016	1	19:01	Curlew	1	30	15	15	
07/04/2016	1	19:07	Curlew	1	30	0	30	
17/04/2016	1	18:35	Lapwing	1	30	30	0	
17/04/2016	1	18:40	Lapwing	2	45	30	15	
17/04/2016	1	18:40	Lapwing	2	30	30	0	
17/04/2016	1	19:00	Curlew	1	60	30	30	
17/04/2016	1	19:03	Snipe	1	30	30	0	
17/04/2016	1	19:11	Lapwing	1	30	30	0	
17/04/2016	1	19:12	Curlew	1	45	15	30	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
17/04/2016	1	19:16	Lapwing	1	30	15	15	
17/04/2016	1	19:37	Lapwing	2	45	30	15	
17/04/2016	1	19:38	Curlew	1	30	30	0	
17/04/2016	1	19:40	Golden plover	25	30	15	15	
17/04/2016	1	19:45	Lapwing	1	30	30	0	
17/04/2016	1	19:45	Lapwing	1	30	30	0	
17/04/2016	1	19:53	Greylag goose	1	75	30	45	
17/04/2016	1	19:54	Golden plover	6	195	180	15	
17/04/2016	1	20:01	Redshank	1	30	30	0	
17/04/2016	1	20:10	Lapwing	2	75	15	60	
17/04/2016	1	20:24	Golden plover	50	255	240	15	
20/04/2016	1	05:14	Pink-footed goose	2	90	0	90	
20/04/2016	1	05:20	Pink-footed goose	350	75	0	75	
20/04/2016	1	05:22	Greylag goose	70	75	0	75	
20/04/2016	1	05:33	Pink-footed goose	20	105	15	90	
20/04/2016	1	05:37	Pink-footed goose	60	105	45	60	
20/04/2016	1	05:38	Pink-footed goose	110	135	60	75	
20/04/2016	1	05:40	Greylag goose	18	60	15	45	
20/04/2016	1	05:44	Curlew	1	45	30	15	
20/04/2016	1	05:46	Pink-footed goose	190	75	75	0	
20/04/2016	1	05:53	Curlew	1	30	15	15	
20/04/2016	1	05:55	Lapwing	1	30	30	0	
20/04/2016	1	06:09	Pink-footed goose	120	135	60	75	
20/04/2016	1	06:14	Lapwing	1	30	30	0	
20/04/2016	1	06:17	Pink-footed goose	20	60	30	30	
20/04/2016	1	06:26	Lapwing	1	45	30	15	
20/04/2016	1	06:28	Lapwing	1	30	30	0	
20/04/2016	1	06:28	Lapwing	1	30	30	0	
20/04/2016	1	06:32	Curlew	1	60	30	30	
20/04/2016	1	06:35	Curlew	1	45	0	45	
20/04/2016	1	06:42	Lapwing	4	105	30	75	
20/04/2016	1	06:45	Lapwing	2	30	15	15	
20/04/2016	1	06:52	Lapwing	1	30	30	0	
20/04/2016	1	06:58	Lapwing	1	45	15	30	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
20/04/2016	1	06:58	Lapwing	1	45	15	30	
20/04/2016	1	06:58	Lapwing	1	45	30	15	
20/04/2016	1	06:58	Lapwing	1	45	30	15	
20/04/2016	1	07:03	Oystercatcher	1	45	15	30	
20/04/2016	1	07:04	Curlew	1	45	0	45	
20/04/2016	1	07:12	Lapwing	1	45	30	15	
20/04/2016	1	07:12	Lapwing	1	45	30	15	
20/04/2016	1	07:13	Lapwing	1	30	30	0	
20/04/2016	1	07:13	Lapwing	1	30	30	0	
20/04/2016	1	07:22	Redshank	1	15	15	0	
20/04/2016	1	07:29	Lapwing	5	45	15	30	
20/04/2016	1	07:30	Pink-footed goose	82	75	30	45	
20/04/2016	1	07:35	Lapwing	1	60	0	60	
20/04/2016	1	07:37	Curlew	1	135	90	45	
20/04/2016	1	07:39	Curlew	1	30	30	0	
20/04/2016	1	08:20	Curlew	1	255	120	135	
20/04/2016	1	08:24	Pink-footed goose	18	45	0	45	
20/04/2016	1	08:26	Lapwing	1	30	30	0	
20/04/2016	1	08:56	Pink-footed goose	1	45	15	30	
20/04/2016	1	09:04	Lapwing	1	30	30	0	
20/04/2016	1	09:11	Lapwing	2	90	30	60	
20/04/2016	1	09:12	Curlew	1	135	45	90	
20/04/2016	1	09:21	Curlew	1	165	60	105	
20/04/2016	1	09:23	Pink-footed goose	250	60	0	60	
20/04/2016	1	09:23	Pink-footed goose	6	75	15	60	
20/04/2016	1	09:39	Pink-footed goose	6	45	15	30	
20/04/2016	1	09:44	Pink-footed goose	120	75	30	45	
20/04/2016	1	09:44	Pink-footed goose	90	165	60	105	
20/04/2016	1	10:00	Golden plover	48	60	30	30	
20/04/2016	1	10:20	Golden plover	7	30	0	30	
20/04/2016	1	10:24	Lapwing	1	30	15	15	
20/04/2016	1	10:29	Greylag goose	26	60	15	45	
20/04/2016	1	10:57	Pink-footed goose	130	165	165	0	
20/04/2016	1	11:00	Lapwing	1	30	15	15	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
20/04/2016	1	11:07	Lapwing	4	30	15	15	
20/04/2016	1	11:08	Pink-footed goose	70	60	30	30	
20/04/2016	1	16:53	Lapwing	1	30	15	15	
25/04/2016	1	15:15	Lapwing	1	30	30	0	
25/04/2016	1	15:17	Snipe	1	15	15	0	
25/04/2016	1	15:18	Golden plover	40	30	15	15	
25/04/2016	1	15:20	Lapwing	1	30	30	0	
25/04/2016	1	15:39	Lapwing	1	30	15	15	
25/04/2016	1	16:02	Lapwing	2	30	15	15	
25/04/2016	1	16:43	Lapwing	1	45	30	15	
25/04/2016	1	17:37	Oystercatcher	1	60	30	30	
25/04/2016	1	18:05	Lapwing	1	45	30	15	
25/04/2016	1	18:13	Lapwing	1	30	15	15	
25/04/2016	1	19:02	Lapwing	1	30	30	0	
25/04/2016	1	19:24	Oystercatcher	1	30	30	0	
25/04/2016	1	20:35	Lapwing	4	105	60	45	
25/04/2016	1	20:36	Curlew	2	45	45	0	
25/04/2016	1	21:30	Pink-footed goose	350	135	0	135	
25/04/2016	1	21:42	Pink-footed goose	3000	210	0	210	
10/05/2016	1	04:50	Curlew	1	15	15	0	
10/05/2016	1	05:55	Curlew	1	30	30	0	
10/05/2016	1	05:56	Curlew	1	45	45	0	
10/05/2016	1	06:00	Lapwing	1	15	15	0	
10/05/2016	1	06:23	Lapwing	1	75	45	30	
10/05/2016	1	06:24	Lapwing	1	30	30	0	
10/05/2016	1	06:24	Lapwing	1	60	45	15	
10/05/2016	1	06:25	Lapwing	1	30	15	15	
10/05/2016	1	06:31	Snipe	1	30	15	15	
10/05/2016	1	06:38	Lapwing	1	30	15	15	
10/05/2016	1	06:54	Lapwing	1	30	30	0	
10/05/2016	1	10:48	Lapwing	1	45	30	15	
10/05/2016	1	10:55	Lapwing	1	30	30	0	
10/05/2016	1	11:00	Lapwing	1	45	15	30	
10/05/2016	1	11:04	Curlew	1	30	30	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
10/05/2016	1	11:19	Lapwing	1	30	15	15	
10/05/2016	1	11:24	Lapwing	1	75	15	60	
10/05/2016	1	11:59	Lapwing	4	75	15	60	
10/05/2016	1	12:00	Lapwing	2	75	30	45	
10/05/2016	1	12:07	Lapwing	1	30	30	0	
10/05/2016	1	12:18	Lapwing	2	30	15	15	
10/05/2016	1	12:25	Lapwing	1	90	15	75	
10/05/2016	1	12:29	Lapwing	1	30	30	0	
10/05/2016	1	12:36	Lapwing	1	30	30	0	
10/05/2016	1	12:49	Lapwing	2	30	15	15	
10/05/2016	1	13:06	Lapwing	1	60	30	30	
10/05/2016	1	13:23	Lapwing	1	30	30	0	
10/05/2016	1	13:23	Lapwing	2	45	0	45	
14/05/2016	1	16:09	Curlew	1	30	30	0	
14/05/2016	1	16:11	Lapwing	1	30	30	0	
14/05/2016	1	16:13	Curlew	1	30	30	0	
14/05/2016	1	16:18	Curlew	1	30	15	15	
14/05/2016	1	16:24	Lapwing	1	30	30	0	
14/05/2016	1	16:24	Lapwing	1	30	15	15	
14/05/2016	1	16:26	Lapwing	1	30	30	0	
14/05/2016	1	16:30	Lapwing	1	30	30	0	
14/05/2016	1	16:43	Lapwing	1	30	30	0	
14/05/2016	1	16:51	Lapwing	2	30	15	15	
14/05/2016	1	16:58	Oystercatcher	1	30	30	0	
14/05/2016	1	17:15	Lapwing	2	75	45	30	
14/05/2016	1	17:20	Lapwing	2	45	30	15	
14/05/2016	1	17:22	Curlew	1	45	30	15	
14/05/2016	1	17:29	Curlew	1	30	15	15	
14/05/2016	1	17:31	Lapwing	1	45	45	0	
14/05/2016	1	17:46	Curlew	1	30	30	0	
14/05/2016	1	17:59	Lapwing	4	45	45	0	
14/05/2016	1	18:10	Oystercatcher	1	45	45	0	
14/05/2016	1	18:15	Lapwing	1	30	30	0	
14/05/2016	1	18:22	Lapwing	2	345	120	225	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
14/05/2016	1	18:40	Lapwing	1	210	90	120	
14/05/2016	1	18:57	Lapwing	2	30	15	15	
14/05/2016	1	18:57	Lapwing	1	45	15	30	
14/05/2016	1	18:59	Curlew	3	45	0	45	
14/05/2016	1	19:34	Lapwing	2	75	75	0	
14/05/2016	1	19:37	Lapwing	2	120	75	45	
14/05/2016	1	19:52	Lapwing	2	45	30	15	
14/05/2016	1	19:53	Lapwing	2	45	30	15	
14/05/2016	1	19:58	Lapwing	2	195	105	90	
14/05/2016	1	19:59	Golden plover	9	15	15	0	
14/05/2016	1	20:08	Lapwing	5	75	30	45	
14/05/2016	1	20:17	Lapwing	1	75	60	15	
14/05/2016	1	20:19	Lapwing	1	45	45	0	
14/05/2016	1	20:21	Lapwing	2	165	45	120	
14/05/2016	1	20:31	Lapwing	2	90	45	45	
14/05/2016	1	20:33	Lapwing	1	45	30	15	
14/05/2016	1	20:35	Lapwing	2	45	15	30	
14/05/2016	1	20:41	Lapwing	3	45	30	15	
14/05/2016	1	20:43	Lapwing	1	15	15	0	
14/05/2016	1	20:51	Lapwing	1	15	15	0	
14/05/2016	1	20:56	Lapwing	1	15	15	0	
14/05/2016	1	21:39	Curlew	1	30	30	0	
14/05/2016	1	21:45	Curlew	1	30	15	15	
26/05/2016	1	03:58	Curlew	1	45	15	30	
26/05/2016	1	04:46	Lapwing	3	60	45	15	
26/05/2016	1	04:46	Lapwing	4	60	60	0	
26/05/2016	1	04:47	Curlew	1	45	15	30	
26/05/2016	1	04:47	Oystercatcher	1	60	0	60	
26/05/2016	1	05:20	Oystercatcher	1	30	30	0	
26/05/2016	1	06:20	Lapwing	1	30	30	0	
26/05/2016	1	07:15	Curlew	1	45	0	45	
26/05/2016	1	07:20	Lapwing	1	135	45	90	
26/05/2016	1	07:21	Lapwing	1	30	0	30	
26/05/2016	1	07:21	Lapwing	1	30	0	30	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
26/05/2016	1	07:21	Lapwing	1	45	0	45	
26/05/2016	1	07:21	Lapwing	1	105	45	60	
26/05/2016	1	07:35	Lapwing	1	105	45	60	
26/05/2016	1	07:46	Lapwing	1	45	15	30	
26/05/2016	1	07:51	Lapwing	1	30	0	30	
26/05/2016	1	07:51	Lapwing	1	30	0	30	
26/05/2016	1	08:49	Lapwing	6	60	0	60	
26/05/2016	1	08:49	Lapwing	2	105	30	75	
26/05/2016	1	09:02	Curlew	1	60	0	60	
26/05/2016	1	09:02	Curlew	1	135	15	120	
26/05/2016	1	09:11	Oystercatcher	2	30	30	0	
26/05/2016	1	09:33	Curlew	1	15	15	0	
26/05/2016	1	09:42	Lapwing	4	45	0	45	
26/05/2016	1	09:45	Lapwing	2	60	0	60	
07/06/2016	1	16:46	Curlew	2	30	30	0	
07/06/2016	1	16:47	Lapwing	1	135	30	105	
07/06/2016	1	16:50	Lapwing	1	30	30	0	
07/06/2016	1	16:56	Lapwing	5	105	75	30	
07/06/2016	1	16:56	Lapwing	20	150	0	150	
07/06/2016	1	16:58	Lapwing	1	30	15	15	
07/06/2016	1	17:04	Lapwing	1	30	30	0	
07/06/2016	1	18:07	Lapwing	3	120	90	30	
07/06/2016	1	18:12	Lapwing	1	45	30	15	
07/06/2016	1	18:22	Lapwing	4	90	75	15	
07/06/2016	1	18:30	Lapwing	3	150	105	45	
07/06/2016	1	18:39	Oystercatcher	1	30	30	0	
07/06/2016	1	18:42	Lapwing	1	45	15	30	
07/06/2016	1	18:50	Oystercatcher	1	45	45	0	
07/06/2016	1	18:54	Curlew	1	45	0	45	
07/06/2016	1	18:55	Lapwing	1	30	30	0	
07/06/2016	1	19:06	Lapwing	5	30	30	0	
07/06/2016	1	19:14	Lapwing	9	45	15	30	
07/06/2016	1	19:15	Snipe	1	15	15	0	
07/06/2016	1	19:20	Snipe	1	15	15	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
07/06/2016	1	19:24	Lapwing	1	45	15	30	
07/06/2016	1	19:26	Snipe	2	30	15	15	
07/06/2016	1	19:28	Snipe	4	135	0	135	
07/06/2016	1	20:20	Snipe	1	15	15	0	
07/06/2016	1	20:35	Lapwing	1	30	30	0	
07/06/2016	1	20:47	Snipe	1	15	0	15	
07/06/2016	1	20:56	Lapwing	1	30	15	15	
07/06/2016	1	20:58	Lapwing	1	30	30	0	
07/06/2016	1	20:59	Snipe	1	1200	0	1200	
07/06/2016	1	21:10	Curlew	1	30	0	30	
07/06/2016	1	21:10	Lapwing	2	30	0	30	
07/06/2016	1	21:18	Snipe	3	30	0	30	
07/06/2016	1	21:25	Lapwing	3	30	0	30	
07/06/2016	1	21:40	Lapwing	1	45	0	45	
07/06/2016	1	21:59	Oystercatcher	1	30	30	0	
23/06/2016	1	03:30	Lapwing	1	30	30	0	
26/06/2016	1	15:22	Lapwing	1	30	30	0	
26/06/2016	1	16:13	Lapwing	3	75	75	0	
26/06/2016	1	16:52	Lapwing	1	30	15	15	
26/06/2016	1	17:40	Lapwing	3	30	30	0	
10/08/2016	1	09:26	Hen harrier	1	45	45	0	
10/08/2016	1	09:31	Hen harrier	1	75	75	0	
10/08/2016	1	09:45	Hen harrier	1	30	30	0	
12/08/2016	1	10:07	Hen harrier	1	150	150	0	
12/08/2016	1	11:18	Greylag goose	4	60	60	0	
30/09/2016	2	13:06	Hen harrier	1	45	45	0	
30/09/2016	2	13:13	Golden plover	450	60	60	0	
30/09/2016	2	13:22	Golden plover	70	75	45	30	
30/09/2016	2	14:44	Hen harrier	1	105	105	0	
30/09/2016	2	14:50	Golden plover	85	105	0	105	
30/09/2016	2	15:48	Golden plover	150	135	30	105	
30/09/2016	3	16:55	Greylag goose	8	75	30	45	
30/09/2016	3	17:16	Greylag goose	28	150	60	90	
30/09/2016	3	17:34	Peregrine	1	30	0	30	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
30/09/2016	3	17:40	Greylag goose	10	30	15	15	
30/09/2016	3	19:27	Greylag goose	55	165	0	165	
01/10/2016	3	12:07	Hen harrier	1	120	90	30	
01/10/2016	3	13:20	Golden plover	70	135	0	135	
03/10/2016	2	16:45	Golden plover	7	30	30	0	
03/10/2016	2	17:23	Whooper swan	6	60	15	45	
03/10/2016	2	17:34	Golden plover	20	30	30	0	
03/10/2016	2	18:40	Merlin	1	30	30	0	
05/10/2016	2	09:32	Hen harrier	1	30	15	15	
05/10/2016	2	09:50	Hen harrier	1	30	30	0	
05/10/2016	2	10:09	Greylag goose	15	60	45	15	
05/10/2016	2	10:25	Greylag goose	10	30	0	30	
05/10/2016	2	10:35	Hen harrier	1	45	45	0	
05/10/2016	2	11:15	Greylag goose	6	45	0	45	
05/10/2016	2	11:40	Greylag goose	5	60	30	30	
05/10/2016	2	14:53	Hen harrier	1	210	210	0	
05/10/2016	2	15:07	Hen harrier	1	45	45	0	
05/10/2016	2	16:04	Hen harrier	1	165	135	30	
05/10/2016	2	16:38	Hen harrier	1	30	30	0	
11/10/2016	3	17:33	Hen harrier	1	45	45	0	
11/10/2016	3	17:51	Snipe	1	75	15	60	
11/10/2016	3	19:11	Barn owl	1	30	0	30	
12/10/2016	3	15:53	Greylag goose	18	30	15	15	
12/10/2016	3	15:55	Greylag goose	57	45	15	30	
12/10/2016	3	16:10	Lapwing	14	225	0	225	
12/10/2016	3	17:09	Greylag goose	21	30	15	15	
13/10/2016	2	06:53	Snipe	1	15	0	15	
13/10/2016	2	06:59	Barn owl	1	30	30	0	
13/10/2016	2	09:04	Golden plover	50	45	45	0	
13/10/2016	2	09:28	Golden plover	35	30	15	15	
13/10/2016	2	09:28	Golden plover	14	45	30	15	
13/10/2016	2	09:32	Golden plover	14	105	15	90	
13/10/2016	2	09:42	Golden plover	19	15	15	0	
13/10/2016	2	10:18	Golden plover	36	30	30	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
13/10/2016	2	11:52	Greylag goose	39	75	0	75	
13/10/2016	2	13:09	Golden plover	4	45	0	45	
24/10/2016	2	15:56	Hen harrier	1	30	30	0	
24/10/2016	2	16:49	Greylag goose	70	105	15	90	
24/10/2016	2	17:28	Pink-footed goose	11	180	15	165	
24/10/2016	2	18:06	Hen harrier	1	45	45	0	
25/10/2016	2	14:12	Greylag goose	35	105	0	105	
25/10/2016	2	14:13	Greylag goose	4	135	0	135	
25/10/2016	2	14:13	Greylag goose	18	150	0	150	
25/10/2016	2	14:46	Golden plover	28	90	0	90	
25/10/2016	2	15:17	Golden plover	17	45	15	30	
25/10/2016	2	16:21	Greylag goose	19	195	0	195	
25/10/2016	2	16:26	Golden plover	30	75	30	45	
25/10/2016	2	16:52	Greylag goose	13	75	15	60	
25/10/2016	2	16:53	Greylag goose	2	195	0	195	
25/10/2016	2	16:56	Greylag goose	4	90	0	90	
25/10/2016	2	16:57	Snipe	1	60	0	60	
26/10/2016	3	08:06	Greylag goose	25	120	0	120	
26/10/2016	3	08:16	Golden plover	1	75	0	75	
26/10/2016	3	08:25	Greylag goose	18	75	0	75	
26/10/2016	3	08:44	Greylag goose	300	135	0	135	
26/10/2016	3	08:51	Greylag goose	13	45	0	45	
26/10/2016	3	09:32	Greylag goose	15	45	0	45	
26/10/2016	3	09:33	Pink-footed goose	35	225	0	225	
26/10/2016	3	09:34	Greylag goose	28	60	0	60	
26/10/2016	3	10:06	Pink-footed goose	23	210	45	165	
26/10/2016	3	10:13	Golden plover	1	30	30	0	
26/10/2016	3	11:11	Golden plover	40	45	45	0	
26/10/2016	3	11:21	Greylag goose	7	135	0	135	
26/10/2016	3	11:54	Greylag goose	8	270	15	255	
07/11/2016	2	15:36	Greylag goose	28	120	120	0	
07/11/2016	2	15:50	Greylag goose	1	105	105	0	
07/11/2016	2	16:03	Hen harrier	1	75	0	75	
07/11/2016	2	16:29	Greylag goose	37	105	105	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
08/11/2016	2	07:16	Greylag goose	10	60	0	60	
08/11/2016	2	07:18	Greylag goose	1	45	0	45	
08/11/2016	2	07:39	Greylag goose	18	90	0	90	
08/11/2016	2	07:51	Pink-footed goose	16	60	60	0	
08/11/2016	2	07:51	Pink-footed goose	49	60	60	0	
08/11/2016	2	07:52	Greylag goose	25	90	90	0	
08/11/2016	2	08:03	Greylag goose	32	45	45	0	
08/11/2016	2	08:05	Greylag goose	7	45	0	45	
08/11/2016	2	08:07	Pink-footed goose	9	75	75	0	
08/11/2016	2	08:14	Pink-footed goose	7	45	45	0	
08/11/2016	2	08:14	Pink-footed goose	19	60	60	0	
08/11/2016	2	08:15	Greylag goose	36	75	0	75	
08/11/2016	2	08:19	Greylag goose	10	75	0	75	
08/11/2016	2	08:21	Greylag goose	83	195	120	75	
08/11/2016	2	08:32	Greylag goose	14	60	0	60	
08/11/2016	2	08:34	Greylag goose	10	45	45	0	
08/11/2016	2	08:37	Greylag goose	67	135	135	0	
08/11/2016	2	08:37	Pink-footed goose	67	135	135	0	
08/11/2016	2	08:38	Greylag goose	25	90	90	0	
08/11/2016	2	08:38	Pink-footed goose	25	90	90	0	
08/11/2016	2	08:39	Greylag goose	15	60	0	60	
08/11/2016	2	09:27	Pink-footed goose	38	105	15	90	
08/11/2016	2	09:34	Greylag goose	24	90	0	90	
08/11/2016	2	09:51	Greylag goose	3	75	0	75	
08/11/2016	2	09:59	Golden plover	6	45	0	45	
08/11/2016	2	10:08	Greylag goose	57	120	120	0	
08/11/2016	2	10:15	Greylag goose	62	195	30	165	
08/11/2016	2	10:16	Greylag goose	38	75	30	45	
08/11/2016	2	10:28	Greylag goose	14	75	0	75	
08/11/2016	2	10:45	Greylag goose	28	165	0	165	
08/11/2016	2	10:45	Pink-footed goose	24	75	0	75	
08/11/2016	2	10:49	Greylag goose	1	45	0	45	
08/11/2016	2	10:53	Greylag goose	12	75	0	75	
08/11/2016	2	10:54	Greylag goose	47	60	60	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
08/11/2016	2	10:59	Greylag goose	27	255	0	255	
08/11/2016	3	07:01	Greylag goose	4	75	0	75	
08/11/2016	3	07:43	Greylag goose	19	165	0	165	
08/11/2016	3	07:54	Greylag goose	44	90	90	0	
08/11/2016	3	08:04	Greylag goose	22	135	0	135	
08/11/2016	3	08:12	Greylag goose	4	75	0	75	
08/11/2016	3	08:23	Greylag goose	70	255	0	255	
08/11/2016	3	08:37	Pink-footed goose	19	210	0	210	
08/11/2016	3	08:41	Greylag goose	10	90	0	90	
08/11/2016	3	09:02	Greylag goose	25	120	0	120	
08/11/2016	3	09:16	Greylag goose	24	75	75	0	
08/11/2016	3	09:38	Greylag goose	26	75	0	75	
08/11/2016	3	09:38	Pink-footed goose	26	75	0	75	
08/11/2016	3	10:19	Greylag goose	48	135	0	135	
08/11/2016	3	10:28	Greylag goose	50	105	30	75	
08/11/2016	3	10:42	Greylag goose	18	135	0	135	
08/11/2016	3	10:45	Greylag goose	5	45	45	0	
08/11/2016	3	10:46	Greylag goose	65	60	30	30	
08/11/2016	3	12:37	Greylag goose	20	75	0	75	
08/11/2016	3	12:39	Greylag goose	2	105	15	90	
08/11/2016	3	12:55	Greylag goose	24	45	45	0	
21/11/2016	2	14:53	Peregrine	1	45	30	15	
21/11/2016	2	14:55	Golden plover	13	60	45	15	
21/11/2016	2	15:01	Hen harrier	1	45	45	0	
21/11/2016	2	15:08	Golden plover	18	165	135	30	
21/11/2016	2	16:01	Golden plover	20	45	45	0	
21/11/2016	3	16:27	Greylag goose	10	60	0	60	
22/11/2016	2	07:38	Greylag goose	14	75	0	75	
22/11/2016	2	08:13	Greylag goose	5	135	0	135	
22/11/2016	2	08:46	Golden plover	2	75	30	45	
22/11/2016	2	09:49	Golden plover	30	120	105	15	
22/11/2016	2	10:51	Merlin	1	30	30	0	
22/11/2016	2	10:52	Greylag goose	50	90	0	90	
22/11/2016	2	10:57	Greylag goose	55	105	0	105	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
22/11/2016	2	11:11	Golden plover	35	240	105	135	
22/11/2016	2	11:26	Golden plover	20	60	60	0	
22/11/2016	2	11:39	Golden plover	1	75	75	0	
22/11/2016	3	07:39	Greylag goose	1	75	0	75	
22/11/2016	3	07:48	Greylag goose	5	30	30	0	
22/11/2016	3	08:34	Greylag goose	2	45	45	0	
22/11/2016	3	09:57	Greylag goose	1	45	0	45	
22/11/2016	3	10:21	Greylag goose	3	45	30	15	
22/11/2016	3	10:46	Greylag goose	1	60	60	0	
22/11/2016	3	10:52	Greylag goose	15	60	45	15	
22/11/2016	3	10:58	Greylag goose	52	60	45	15	
05/12/2016	2	16:05	Merlin	1	15	15	0	
06/12/2016	2	07:59	Greenland white-fronted goose	16	105	30	75	
06/12/2016	2	08:16	Greenland white-fronted goose	50	90	30	60	
06/12/2016	2	08:16	Greenland white-fronted goose	17	90	30	60	
06/12/2016	2	08:51	Hen harrier	1	75	75	0	
06/12/2016	2	09:39	Golden plover	15	30	30	0	
20/12/2016	2	08:30	Greenland white-fronted goose	16	60	15	45	
20/12/2016	2	08:45	Greenland white-fronted goose	14	45	30	15	
20/12/2016	2	09:00	Greenland white-fronted goose	24	45	15	30	
20/12/2016	2	09:09	Greenland white-fronted goose	8	30	30	0	
20/12/2016	2	09:21	Greenland white-fronted goose	10	15	15	0	
20/12/2016	2	09:35	Greenland white-fronted goose	10	15	15	0	
20/12/2016	2	10:00	Greenland white-fronted goose	10	15	15	0	
20/12/2016	2	10:00	Greenland white-fronted goose	6	15	15	0	
20/12/2016	2	10:20	Greenland white-fronted goose	27	210	90	120	
20/12/2016	2	11:35	Golden plover	16	60	60	0	
20/12/2016	2	11:38	Golden plover	24	45	15	30	
20/12/2016	2	13:56	Lapwing	1	30	30	0	
05/01/2017	2	13:47	Greylag goose	70	45	30	15	
05/01/2017	2	15:29	Greylag goose	4	30	0	30	
05/01/2017	2	15:53	Whooper swan	2	120	0	120	
05/01/2017	3	13:47	Greylag goose	13	165	75	90	
06/01/2017	2	08:14	Greylag goose	4	30	30	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
06/01/2017	2	08:15	Greylag goose	30	60	15	45	
06/01/2017	2	08:17	Greylag goose	2	45	30	15	
06/01/2017	2	08:18	Greylag goose	20	75	15	60	
06/01/2017	2	08:19	Greylag goose	10	30	30	0	
06/01/2017	2	08:20	Greylag goose	70	45	15	30	
06/01/2017	2	08:21	Greylag goose	5	30	15	15	
06/01/2017	2	08:22	Greylag goose	15	45	15	30	
06/01/2017	2	08:22	Greylag goose	16	30	30	0	
06/01/2017	2	08:23	Greylag goose	6	45	15	30	
06/01/2017	2	08:23	Greylag goose	7	45	15	30	
06/01/2017	2	08:23	Greylag goose	2	30	30	0	
06/01/2017	2	09:02	Greylag goose	6	120	15	105	
06/01/2017	2	09:05	Greylag goose	2	75	15	60	
06/01/2017	2	09:06	Greylag goose	150	105	0	105	
06/01/2017	2	09:22	Greylag goose	2	30	15	15	
06/01/2017	2	09:27	Greylag goose	8	30	30	0	
06/01/2017	2	10:16	Greylag goose	140	105	15	90	
06/01/2017	2	10:26	Greylag goose	200	135	30	105	
06/01/2017	2	10:26	Greylag goose	30	75	15	60	
06/01/2017	2	10:27	Greylag goose	6	45	45	0	
06/01/2017	2	10:28	Greylag goose	20	45	15	30	
06/01/2017	3	08:35	Greenland white-fronted goose	2	90	45	45	
06/01/2017	3	08:36	Greenland white-fronted goose	16	75	75	0	
06/01/2017	3	09:03	Greylag goose	13	60	15	45	
06/01/2017	3	09:10	Greylag goose	9	45	45	0	
06/01/2017	3	09:21	Greylag goose	1	30	0	30	
06/01/2017	3	09:43	Greylag goose	1	75	45	30	
18/01/2017	2	12:23	Hen harrier	1	105	105	0	
18/01/2017	2	12:37	Merlin	1	90	75	15	
19/01/2017	3	09:18	Greylag goose	3	60	60	0	
01/02/2017	2	17:01	Greylag goose	20	30	15	15	
01/02/2017	3	11:46	Greylag goose	13	105	0	105	
01/02/2017	3	12:21	Hen harrier	1	30	30	0	
01/02/2017	3	15:06	Golden plover	19	60	30	30	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
15/02/2017	2	15:36	Greylag goose	34	135	105	30	
15/02/2017	2	15:38	Whooper swan	13	90	75	15	
15/02/2017	2	15:38	Whooper swan	3	30	0	30	
15/02/2017	2	16:13	Hen harrier	1	30	30	0	
15/02/2017	2	18:04	Pink-footed goose	120	60	0	60	
15/02/2017	2	18:09	Greylag goose	12	45	0	45	
15/02/2017	3	16:01	Peregrine	1	15	15	0	
15/02/2017	3	17:17	Greylag goose	3	75	0	75	
16/02/2017	2	07:04	Pink-footed goose	1	75	0	75	
16/02/2017	2	07:12	Greylag goose	3	90	0	90	
16/02/2017	2	07:54	Greylag goose	5	135	0	135	
16/02/2017	2	08:31	Lapwing	9	150	0	150	
16/02/2017	2	08:36	Greylag goose	1	120	0	120	
01/03/2017	2	12:46	Greylag goose	12	30	0	30	
01/03/2017	2	12:46	Greylag goose	38	30	15	15	
13/03/2017	2	16:26	Greylag goose	140	135	0	135	
13/03/2017	2	16:29	Greylag goose	3	75	0	75	
13/03/2017	2	17:10	Greylag goose	5	150	0	150	
13/03/2017	2	18:32	Whooper swan	8	135	90	45	
13/03/2017	3	16:17	Greylag goose	1	255	105	150	
13/03/2017	3	16:26	Greylag goose	107	90	90	0	
14/03/2017	2	06:37	Greylag goose	1	75	75	0	
14/03/2017	2	06:38	Greylag goose	30	45	0	45	
14/03/2017	2	06:38	Greylag goose	10	120	0	120	
14/03/2017	2	07:10	Greylag goose	4	45	45	0	
14/03/2017	2	07:29	Greylag goose	1	300	165	135	
14/03/2017	2	07:41	Greylag goose	30	30	30	0	
14/03/2017	2	07:43	Greylag goose	17	45	15	30	
14/03/2017	2	07:46	Lapwing	1	30	15	15	
14/03/2017	2	07:47	Lapwing	2	30	15	15	
14/03/2017	2	07:47	Lapwing	2	30	30	0	
14/03/2017	2	07:47	Lapwing	1	30	30	0	
14/03/2017	2	07:50	Greylag goose	13	60	15	45	
14/03/2017	2	07:59	Greylag goose	13	45	15	30	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
14/03/2017	2	08:01	Greylag goose	8	45	15	30	
14/03/2017	2	08:05	Whooper swan	9	75	0	75	
14/03/2017	2	08:05	Whooper swan	3	90	0	90	
14/03/2017	2	08:09	Greylag goose	3	75	15	60	
14/03/2017	2	08:12	Greylag goose	10	45	45	0	
14/03/2017	2	08:25	Greylag goose	10	45	45	0	
14/03/2017	2	08:25	Greylag goose	5	120	15	105	
14/03/2017	2	08:31	Greylag goose	1	60	30	30	
14/03/2017	3	06:26	Greylag goose	6	60	60	0	
14/03/2017	3	06:40	Greylag goose	166	180	0	180	
14/03/2017	3	06:41	Greylag goose	1	45	0	45	
14/03/2017	3	07:52	Greylag goose	52	90	90	0	
27/03/2017	2	17:46	Lapwing	1	15	15	0	
27/03/2017	2	17:46	Lapwing	1	15	15	0	
27/03/2017	2	17:46	Lapwing	1	15	15	0	
27/03/2017	2	17:48	Lapwing	1	45	0	45	
27/03/2017	2	17:49	Greylag goose	5	150	135	15	
27/03/2017	2	18:01	Greylag goose	20	195	135	60	
27/03/2017	2	18:20	Lapwing	1	15	15	0	
27/03/2017	2	18:29	Curlew	1	15	15	0	
27/03/2017	2	18:31	Greylag goose	85	225	225	0	
27/03/2017	2	18:45	Lapwing	1	45	45	0	
27/03/2017	2	18:53	Lapwing	2	105	90	15	
27/03/2017	2	18:57	Curlew	1	45	45	0	
27/03/2017	3	18:08	Greylag goose	27	75	75	0	
27/03/2017	3	18:18	Greylag goose	4	45	0	45	
27/03/2017	3	18:34	Greylag goose	60	75	75	0	
27/03/2017	3	18:58	Greylag goose	16	60	60	0	
27/03/2017	3	20:23	Greylag goose	14	30	0	30	
27/03/2017	3	20:23	Greylag goose	90	30	0	30	
27/03/2017	3	20:23	Greylag goose	50	30	0	30	
27/03/2017	3	20:28	Greylag goose	4	30	0	30	
28/03/2017	2	06:28	Greylag goose	24	45	45	0	
28/03/2017	2	06:42	Greylag goose	6	75	0	75	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
28/03/2017	2	06:42	Greylag goose	18	75	75	0	
28/03/2017	2	06:42	Pink-footed goose	43	150	150	0	
28/03/2017	2	06:48	Greylag goose	1	45	0	45	
28/03/2017	2	06:48	Greylag goose	30	135	0	135	
28/03/2017	2	06:48	Pink-footed goose	150	135	0	135	
28/03/2017	2	06:49	Greylag goose	5	105	0	105	
28/03/2017	2	06:52	Greylag goose	9	135	0	135	
28/03/2017	2	06:59	Greylag goose	1	60	0	60	
28/03/2017	2	07:04	Greylag goose	2	75	0	75	
28/03/2017	2	07:07	Curlew	1	15	15	0	
28/03/2017	2	07:08	Curlew	1	60	45	15	
28/03/2017	2	07:09	Greylag goose	10	45	0	45	
28/03/2017	2	07:09	Pink-footed goose	60	150	0	150	
28/03/2017	2	07:11	Pink-footed goose	40	75	0	75	
28/03/2017	2	07:16	Pink-footed goose	3	60	0	60	
28/03/2017	2	07:16	Pink-footed goose	71	150	0	150	
28/03/2017	2	07:18	Greylag goose	34	75	75	0	
28/03/2017	2	07:18	Pink-footed goose	34	75	75	0	
28/03/2017	2	07:19	Greylag goose	170	105	105	0	
28/03/2017	2	07:22	Lapwing	1	60	15	45	
28/03/2017	2	07:34	Greylag goose	13	120	120	0	
28/03/2017	2	07:38	Greylag goose	6	45	0	45	
28/03/2017	2	07:40	Lapwing	1	45	15	30	
28/03/2017	2	07:45	Lapwing	1	90	90	0	
28/03/2017	2	07:50	Lapwing	5	15	0	15	
28/03/2017	2	07:56	Greylag goose	2	45	45	0	
28/03/2017	2	08:00	Lapwing	1	15	15	0	
28/03/2017	2	08:03	Greylag goose	1	75	0	75	
28/03/2017	2	08:05	Greylag goose	1	60	0	60	
28/03/2017	2	08:53	Greylag goose	2	45	0	45	
28/03/2017	3	06:18	Pink-footed goose	27	225	180	45	
28/03/2017	3	06:20	Pink-footed goose	50	390	285	105	
28/03/2017	3	06:38	Greylag goose	2	60	0	60	
28/03/2017	3	06:40	Greylag goose	27	255	255	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
28/03/2017	3	06:47	Greylag goose	14	60	60	0	
28/03/2017	3	06:48	Greylag goose	5	45	45	0	
28/03/2017	3	06:58	Greylag goose	17	165	165	0	
28/03/2017	3	07:01	Greylag goose	1	60	45	15	
28/03/2017	3	07:13	Pink-footed goose	150	210	180	30	
28/03/2017	3	07:28	Pink-footed goose	13	75	75	0	
28/03/2017	3	07:29	Greylag goose	1	90	90	0	
28/03/2017	3	07:54	Pink-footed goose	45	120	75	45	
28/03/2017	3	07:54	Pink-footed goose	1	60	60	0	
28/03/2017	3	08:15	Pink-footed goose	9	255	255	0	
10/04/2017	2	15:40	Pink-footed goose	7	240	0	240	
11/04/2017	2	18:25	Golden plover	16	15	0	15	
10/04/2017	2	15:54	Golden plover	60	75	45	30	
10/04/2017	2	16:17	Lapwing	1	30	30	0	
10/04/2017	2	16:18	Lapwing	1	60	60	0	
10/04/2017	2	16:20	Lapwing	2	495	375	120	
10/04/2017	2	15:59	Golden plover	30	30	30	0	
10/04/2017	2	16:30	Golden plover	200	45	45	0	
10/04/2017	2	17:03	Lapwing	1	60	45	15	
10/04/2017	2	16:50	Golden plover	200	105	60	45	
10/04/2017	2	17:10	Pink-footed goose	7	30	30	0	
10/04/2017	2	17:10	Golden plover	40	105	75	30	
10/04/2017	2	17:21	Lapwing	2	30	30	0	
10/04/2017	2	17:15	Golden plover	40	30	30	0	
10/04/2017	2	17:25	Lapwing	1	15	15	0	
10/04/2017	2	17:38	Lapwing	1	15	15	0	
10/04/2017	2	17:39	Lapwing	1	30	15	15	
10/04/2017	2	17:39	Lapwing	1	15	15	0	
10/04/2017	2	17:23	Golden plover	50	30	30	0	
10/04/2017	2	17:51	Lapwing	1	30	15	15	
10/04/2017	2	17:47	Golden plover	120	30	15	15	
10/04/2017	2	17:55	Golden plover	120	15	0	15	
10/04/2017	2	18:12	Golden plover	30	45	30	15	
10/04/2017	2	18:19	Golden plover	120	360	255	105	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
10/04/2017	3	16:00	Pink-footed goose	2	75	0	75	
10/04/2017	3	16:15	Curlew	1	30	0	30	
10/04/2017	3	16:15	Curlew	1	45	0	45	
10/04/2017	3	16:40	Curlew	1	15	15	0	
10/04/2017	3	16:47	Curlew	1	15	15	0	
10/04/2017	3	17:04	Curlew	1	30	30	0	
10/04/2017	3	17:04	Curlew	1	135	60	75	
10/04/2017	3	17:42	Peregrine	1	15	15	0	
11/04/2017	2	16:45	Lapwing	1	15	15	0	
11/04/2017	2	16:48	Lapwing	1	15	15	0	
11/04/2017	2	16:53	Lapwing	1	15	15	0	
11/04/2017	2	16:55	Lapwing	4	15	15	0	
11/04/2017	2	17:17	Lapwing	2	45	45	0	
11/04/2017	2	17:31	Pink-footed goose	43	45	0	45	
11/04/2017	2	17:42	Lapwing	1	15	15	0	
11/04/2017	2	17:53	Lapwing	2	15	15	0	
11/04/2017	2	18:01	Lapwing	1	15	15	0	
11/04/2017	2	18:11	Lapwing	5	60	30	30	
11/04/2017	2	18:15	Lapwing	1	15	0	15	
11/04/2017	2	18:18	Pink-footed goose	8	15	0	15	
10/04/2017	2	18:24	Golden plover	120	60	60	0	
11/04/2017	2	19:19	Pink-footed goose	130	60	0	60	
11/04/2017	2	20:35	Pink-footed goose	1	75	0	75	
11/04/2017	2	20:52	Golden plover	7	15	15	0	
11/04/2017	2	21:02	Pink-footed goose	200	75	0	75	
11/04/2017	2	21:04	Pink-footed goose	250	75	0	75	
11/04/2017	2	21:09	Pink-footed goose	50	45	0	45	
11/04/2017	3	17:29	Pink-footed goose	200	135	0	135	
11/04/2017	3	17:29	Pink-footed goose	42	165	15	150	
12/04/2017	2	06:07	Pink-footed goose	30	135	0	135	
12/04/2017	2	06:07	Pink-footed goose	70	105	60	45	
12/04/2017	2	06:07	Pink-footed goose	40	45	0	45	
12/04/2017	2	06:08	Greylag goose	25	45	45	0	
12/04/2017	2	06:08	Pink-footed goose	25	45	45	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
12/04/2017	2	06:09	Pink-footed goose	28	45	15	30	
12/04/2017	2	06:09	Pink-footed goose	70	75	45	30	
12/04/2017	2	06:10	Pink-footed goose	45	75	45	30	
12/04/2017	2	06:11	Greylag goose	25	45	45	0	
12/04/2017	2	06:11	Pink-footed goose	25	45	45	0	
12/04/2017	2	06:11	Pink-footed goose	15	75	0	75	
12/04/2017	2	06:19	Pink-footed goose	45	105	60	45	
12/04/2017	2	06:19	Pink-footed goose	17	90	60	30	
12/04/2017	2	06:20	Pink-footed goose	12	90	30	60	
12/04/2017	2	06:34	Pink-footed goose	46	90	90	0	
12/04/2017	2	06:59	Lapwing	2	15	15	0	
12/04/2017	2	07:08	Greylag goose	30	255	30	225	
12/04/2017	2	07:08	Pink-footed goose	30	255	30	225	
12/04/2017	2	07:10	Lapwing	2	15	15	0	
12/04/2017	2	07:13	Pink-footed goose	12	45	30	15	
12/04/2017	2	07:13	Pink-footed goose	5	45	0	45	
12/04/2017	2	07:16	Pink-footed goose	1	60	60	0	
12/04/2017	2	07:27	Pink-footed goose	13	105	0	105	
12/04/2017	2	07:27	Pink-footed goose	47	165	0	165	
12/04/2017	2	07:29	Curlew	1	15	15	0	
12/04/2017	2	07:44	Pink-footed goose	13	180	60	120	
12/04/2017	2	07:53	Pink-footed goose	5	60	0	60	
12/04/2017	2	08:11	Lapwing	1	15	15	0	
12/04/2017	2	09:01	Pink-footed goose	140	75	30	45	
12/04/2017	2	09:22	Lapwing	1	30	30	0	
12/04/2017	2	09:33	Lapwing	2	30	30	0	
12/04/2017	2	09:37	Lapwing	3	45	45	0	
12/04/2017	2	09:42	Lapwing	1	15	15	0	
12/04/2017	2	09:49	Pink-footed goose	2	45	0	45	
12/04/2017	2	09:50	Pink-footed goose	30	180	165	15	
12/04/2017	2	10:05	Pink-footed goose	25	75	0	75	
12/04/2017	2	10:07	Pink-footed goose	105	60	45	15	
12/04/2017	2	10:07	Pink-footed goose	150	315	300	15	
12/04/2017	2	10:26	Curlew	1	30	30	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
12/04/2017	2	10:33	Greylag goose	1	90	30	60	
12/04/2017	3	06:05	Pink-footed goose	24	90	0	90	
12/04/2017	3	06:09	Greylag goose	49	60	0	60	
12/04/2017	3	06:09	Pink-footed goose	49	60	0	60	
12/04/2017	3	06:18	Pink-footed goose	36	75	0	75	
12/04/2017	3	06:20	Pink-footed goose	48	60	0	60	
12/04/2017	3	06:22	Pink-footed goose	13	75	0	75	
12/04/2017	3	06:26	Pink-footed goose	80	90	0	90	
12/04/2017	3	06:39	Greylag goose	13	45	0	45	
12/04/2017	3	06:39	Pink-footed goose	13	45	0	45	
12/04/2017	3	06:45	Pink-footed goose	1	30	0	30	
12/04/2017	3	06:51	Curlew	1	120	0	120	
12/04/2017	3	06:55	Curlew	1	90	60	30	
12/04/2017	3	06:58	Curlew	1	60	60	0	
12/04/2017	3	07:10	Pink-footed goose	34	60	0	60	
12/04/2017	3	07:18	Pink-footed goose	42	45	15	30	
12/04/2017	3	07:30	Curlew	1	30	0	30	
12/04/2017	3	07:31	Pink-footed goose	2	45	0	45	
12/04/2017	3	07:38	Pink-footed goose	200	30	0	30	
12/04/2017	3	07:42	Greylag goose	50	60	0	60	
12/04/2017	3	07:42	Pink-footed goose	50	60	0	60	
12/04/2017	3	07:50	Pink-footed goose	10	45	0	45	
12/04/2017	3	07:52	Greylag goose	2	60	0	60	
12/04/2017	3	07:52	Pink-footed goose	2	60	0	60	
12/04/2017	3	07:58	Curlew	1	30	30	0	
12/04/2017	3	08:14	Curlew	1	15	15	0	
12/04/2017	3	08:49	Curlew	1	45	45	0	
12/04/2017	3	09:02	Pink-footed goose	120	105	0	105	
12/04/2017	3	09:02	Pink-footed goose	27	135	0	135	
12/04/2017	3	09:03	Curlew	1	30	0	30	
12/04/2017	3	09:10	Curlew	1	15	15	0	
12/04/2017	3	09:21	Pink-footed goose	9	60	0	60	
12/04/2017	3	09:24	Curlew	1	15	15	0	
12/04/2017	3	09:44	Curlew	1	15	15	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
12/04/2017	3	09:50	Greylag goose	26	90	30	60	
12/04/2017	3	10:14	Pink-footed goose	46	45	15	30	
12/04/2017	3	10:20	Pink-footed goose	37	75	0	75	
12/04/2017	3	10:23	Pink-footed goose	120	105	105	0	
24/04/2017	2	19:04	Pink-footed goose	500	60	0	60	
24/04/2017	2	19:05	Pink-footed goose	12	30	0	30	
24/04/2017	2	19:09	Pink-footed goose	31	90	0	90	
24/04/2017	2	19:21	Lapwing	3	15	15	0	
24/04/2017	2	19:25	Pink-footed goose	1	45	0	45	
24/04/2017	2	19:27	Lapwing	2	30	30	0	
24/04/2017	2	19:42	Lapwing	2	30	30	0	
24/04/2017	2	19:47	Pink-footed goose	65	45	45	0	
24/04/2017	2	19:53	Pink-footed goose	1	15	0	15	
24/04/2017	2	20:04	Lapwing	2	30	15	15	
24/04/2017	2	20:37	Pink-footed goose	48	60	0	60	
24/04/2017	2	20:54	Lapwing	1	15	0	15	
26/04/2017	2	05:54	Golden plover	45	45	30	15	
25/04/2017	2	13:05	Lapwing	4	15	15	0	
25/04/2017	2	13:10	Lapwing	2	15	15	0	
25/04/2017	2	13:20	Lapwing	3	15	15	0	
25/04/2017	2	13:23	Lapwing	2	30	30	0	
25/04/2017	2	13:30	Lapwing	1	30	30	0	
25/04/2017	2	13:32	Lapwing	1	15	15	0	
25/04/2017	2	13:46	Lapwing	1	30	15	15	
25/04/2017	2	13:47	Lapwing	2	15	15	0	
25/04/2017	2	13:49	Lapwing	2	15	15	0	
25/04/2017	2	13:49	Lapwing	1	15	15	0	
25/04/2017	2	13:50	Lapwing	1	15	15	0	
25/04/2017	2	14:05	Lapwing	2	45	30	15	
26/04/2017	2	07:15	Golden plover	27	30	30	0	
25/04/2017	2	14:58	Lapwing	2	255	225	30	
25/04/2017	2	15:14	Lapwing	1	75	60	15	
25/04/2017	2	15:22	Lapwing	1	30	30	0	
25/04/2017	2	15:35	Lapwing	1	135	135	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
26/04/2017	2	05:06	Pink-footed goose	8	45	0	45	
26/04/2017	2	05:09	Curlew	1	15	15	0	
26/04/2017	2	05:37	Pink-footed goose	30	75	0	75	
26/04/2017	2	05:37	Pink-footed goose	65	45	0	45	
26/04/2017	2	05:38	Pink-footed goose	45	60	0	60	
26/04/2017	2	05:38	Pink-footed goose	50	60	0	60	
26/04/2017	2	05:38	Pink-footed goose	62	60	0	60	
26/04/2017	2	05:39	Pink-footed goose	160	75	75	0	
26/04/2017	2	05:39	Pink-footed goose	76	60	0	60	
26/04/2017	2	05:40	Pink-footed goose	27	60	0	60	
26/04/2017	2	05:42	Curlew	2	15	15	0	
26/04/2017	2	05:42	Pink-footed goose	48	60	0	60	
26/04/2017	2	05:45	Pink-footed goose	39	90	0	90	
26/04/2017	2	05:48	Curlew	1	15	0	15	
26/04/2017	2	05:48	Lapwing	1	15	15	0	
26/04/2017	2	05:51	Curlew	3	60	0	60	
26/04/2017	2	07:25	Golden plover	2	30	30	0	
26/04/2017	2	05:56	Lapwing	3	15	0	15	
26/04/2017	2	06:13	Lapwing	2	30	30	0	
26/04/2017	2	06:27	Pink-footed goose	20	30	0	30	
26/04/2017	2	06:36	Pink-footed goose	10	150	150	0	
26/04/2017	2	06:45	Lapwing	1	15	15	0	
26/04/2017	2	06:49	Lapwing	5	15	0	15	
26/04/2017	2	06:55	Lapwing	1	15	15	0	
26/04/2017	2	06:58	Lapwing	1	15	15	0	
26/04/2017	2	07:00	Lapwing	2	15	15	0	
26/04/2017	2	07:04	Lapwing	3	30	0	30	
26/04/2017	2	07:11	Pink-footed goose	17	75	75	0	
25/04/2017	2	13:00	Golden plover	48	75	30	45	
26/04/2017	2	07:16	Pink-footed goose	20	45	0	45	
26/04/2017	2	07:19	Pink-footed goose	78	75	75	0	
26/04/2017	2	07:23	Lapwing	3	45	30	15	
25/04/2017	2	14:07	Golden plover	45	165	105	60	
26/04/2017	2	07:30	Lapwing	2	30	0	30	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
26/04/2017	2	07:32	Pink-footed goose	1	60	60	0	
26/04/2017	2	12:35	Lapwing	2	15	15	0	
26/04/2017	2	12:37	Lapwing	2	45	45	0	
26/04/2017	2	12:44	Lapwing	1	30	30	0	
26/04/2017	2	12:53	Lapwing	2	15	15	0	
26/04/2017	2	12:59	Lapwing	2	45	45	0	
26/04/2017	2	13:07	Lapwing	2	30	30	0	
26/04/2017	2	13:18	Lapwing	2	45	45	0	
26/04/2017	2	13:30	Golden plover	15	30	0	30	
26/04/2017	2	13:34	Lapwing	2	75	45	30	
26/04/2017	2	13:46	Lapwing	3	60	30	30	
26/04/2017	2	13:51	Golden plover	10	30	0	30	
26/04/2017	2	14:00	Lapwing	1	15	15	0	
26/04/2017	2	14:04	Lapwing	2	45	45	0	
26/04/2017	2	14:05	Lapwing	2	15	15	0	
26/04/2017	2	14:48	Golden plover	62	150	75	75	
26/04/2017	2	15:02	Lapwing	2	15	15	0	
26/04/2017	2	15:11	Lapwing	1	45	45	0	
26/04/2017	2	15:19	Curlew	1	15	15	0	
26/04/2017	2	15:35	Curlew	1	15	15	0	
01/05/2017	2	19:11	Lapwing	1	45	15	30	
01/05/2017	2	19:15	Golden plover	4	30	0	30	
01/05/2017	2	19:51	Golden plover	34	90	30	60	
02/05/2017	2	09:42	Lapwing	1	15	15	0	
02/05/2017	2	09:51	Lapwing	4	30	0	30	
02/05/2017	2	10:09	Lapwing	5	15	0	15	
02/05/2017	2	10:11	Lapwing	1	15	0	15	
02/05/2017	2	10:18	Lapwing	1	15	15	0	
02/05/2017	2	10:23	Lapwing	1	15	15	0	
02/05/2017	2	10:30	Lapwing	1	15	0	15	
02/05/2017	2	10:43	Lapwing	2	15	15	0	
02/05/2017	2	10:45	Lapwing	2	15	15	0	
02/05/2017	2	10:49	Lapwing	1	60	0	60	
02/05/2017	2	10:50	Lapwing	2	15	0	15	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
02/05/2017	2	10:53	Lapwing	3	15	15	0	
02/05/2017	2	10:56	Lapwing	3	45	0	45	
02/05/2017	2	11:02	Lapwing	1	15	0	15	
02/05/2017	2	11:03	Lapwing	1	15	15	0	
02/05/2017	2	11:07	Lapwing	1	30	0	30	
02/05/2017	2	11:14	Lapwing	3	15	0	15	
02/05/2017	2	11:28	Lapwing	3	15	0	15	
02/05/2017	2	11:35	Lapwing	4	30	0	30	
02/05/2017	2	11:51	Lapwing	2	15	15	0	
02/05/2017	2	11:52	Lapwing	2	75	0	75	
02/05/2017	2	12:09	Lapwing	2	30	0	30	
02/05/2017	2	12:12	Lapwing	3	30	15	15	
02/05/2017	2	12:15	Lapwing	4	30	0	30	
02/05/2017	2	12:23	Lapwing	2	15	0	15	
02/05/2017	2	13:05	Lapwing	1	90	15	75	
02/05/2017	2	13:10	Lapwing	1	30	30	0	
02/05/2017	2	13:30	Lapwing	1	30	0	30	
02/05/2017	2	13:33	Lapwing	1	15	0	15	
02/05/2017	2	14:07	Lapwing	1	15	0	15	
02/05/2017	2	14:15	Lapwing	1	15	0	15	
02/05/2017	2	14:26	Lapwing	1	15	15	0	
02/05/2017	2	14:32	Lapwing	2	15	0	15	
02/05/2017	2	14:35	Lapwing	1	15	15	0	
02/05/2017	2	14:44	Lapwing	1	30	30	0	
02/05/2017	2	14:51	Lapwing	1	30	0	30	
02/05/2017	2	14:57	Lapwing	1	15	0	15	
02/05/2017	2	14:59	Peregrine	1	45	0	45	
02/05/2017	2	15:15	Lapwing	2	15	0	15	
02/05/2017	2	15:19	Lapwing	2	60	30	30	
02/05/2017	2	15:21	Lapwing	1	30	30	0	
02/05/2017	2	15:24	Lapwing	2	30	15	15	
02/05/2017	2	15:33	Lapwing	1	30	15	15	
02/05/2017	2	15:43	Lapwing	1	45	0	45	
02/05/2017	2	15:49	Lapwing	1	15	0	15	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
02/05/2017	2	15:50	Curlew	1	30	0	30	
02/05/2017	3	09:55	Curlew	1	45	15	30	
02/05/2017	3	10:25	Curlew	1	45	45	0	
02/05/2017	3	10:34	Curlew	1	15	15	0	
02/05/2017	3	10:57	Curlew	2	60	60	0	
02/05/2017	3	11:10	Curlew	1	45	15	30	
02/05/2017	3	11:35	Lapwing	1	30	15	15	
02/05/2017	3	11:35	Lapwing	1	60	30	30	
02/05/2017	3	11:42	Lapwing	1	15	15	0	
02/05/2017	3	13:20	Lapwing	3	60	30	30	
02/05/2017	3	13:24	Lapwing	1	15	15	0	
02/05/2017	3	13:24	Lapwing	2	30	30	0	
02/05/2017	3	13:39	Lapwing	2	15	15	0	
02/05/2017	3	13:56	Lapwing	1	45	0	45	
02/05/2017	3	14:29	Curlew	1	30	0	30	
02/05/2017	3	14:32	Lapwing	2	30	30	0	
02/05/2017	3	14:41	Lapwing	1	15	15	0	
02/05/2017	3	14:47	Lapwing	1	30	30	0	
02/05/2017	3	14:47	Lapwing	1	30	30	0	
02/05/2017	3	14:52	Lapwing	1	15	15	0	
02/05/2017	3	14:55	Lapwing	1	15	0	15	
02/05/2017	3	15:27	Lapwing	2	135	105	30	
02/05/2017	3	15:36	Lapwing	2	30	30	0	
02/05/2017	3	15:39	Lapwing	2	30	30	0	
02/05/2017	3	15:43	Lapwing	2	30	30	0	
03/05/2017	2	04:58	Curlew	2	60	60	0	
03/05/2017	2	05:06	Curlew	1	30	30	0	
03/05/2017	2	05:12	Curlew	1	30	30	0	
03/05/2017	2	05:20	Curlew	1	60	60	0	
03/05/2017	2	05:21	Curlew	1	45	45	0	
03/05/2017	2	05:24	Curlew	1	60	30	30	
03/05/2017	2	05:33	Lapwing	1	30	15	15	
03/05/2017	2	05:33	Lapwing	1	15	15	0	
03/05/2017	2	05:35	Lapwing	1	15	15	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
03/05/2017	2	05:38	Lapwing	2	45	45	0	
03/05/2017	2	05:45	Lapwing	1	15	15	0	
03/05/2017	2	05:50	Lapwing	1	15	15	0	
03/05/2017	2	06:00	Pink-footed goose	300	135	0	135	
03/05/2017	2	06:24	Lapwing	2	30	30	0	
03/05/2017	2	06:25	Lapwing	2	30	0	30	
03/05/2017	2	06:37	Curlew	1	45	45	0	
03/05/2017	2	06:37	Curlew	1	30	30	0	
03/05/2017	2	06:43	Lapwing	2	45	30	15	
03/05/2017	2	06:48	Curlew	2	30	30	0	
03/05/2017	2	06:48	Pink-footed goose	5	105	0	105	
03/05/2017	2	06:49	Curlew	1	30	30	0	
03/05/2017	2	06:58	Lapwing	1	15	15	0	
03/05/2017	2	07:14	Lapwing	1	15	15	0	
03/05/2017	3	05:52	Curlew	1	45	30	15	
03/05/2017	3	05:53	Curlew	1	30	30	0	
03/05/2017	3	06:03	Pink-footed goose	150	75	45	30	
03/05/2017	3	06:15	Pink-footed goose	2	75	30	45	
03/05/2017	3	06:36	Curlew	1	15	15	0	
08/05/2017	2	19:26	Lapwing	1	120	15	105	
08/05/2017	2	19:31	Lapwing	1	45	15	30	
08/05/2017	2	19:34	Lapwing	3	30	30	0	
08/05/2017	2	19:37	Lapwing	1	15	15	0	
08/05/2017	2	19:53	Lapwing	1	15	15	0	
08/05/2017	2	20:04	Lapwing	2	15	15	0	
08/05/2017	2	20:08	Lapwing	1	45	45	0	
08/05/2017	2	20:08	Lapwing	2	30	30	0	
08/05/2017	2	20:38	Lapwing	1	15	0	15	
08/05/2017	2	20:44	Lapwing	2	15	0	15	
08/05/2017	2	20:44	Lapwing	2	45	0	45	
08/05/2017	2	20:49	Curlew	1	30	30	0	
08/05/2017	2	20:53	Curlew	2	30	0	30	
08/05/2017	2	20:56	Lapwing	1	15	15	0	
08/05/2017	2	20:58	Lapwing	2	15	0	15	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
08/05/2017	2	21:12	Curlew	1	15	15	0	
08/05/2017	2	21:23	Curlew	1	15	0	15	
08/05/2017	2	21:27	Curlew	2	15	0	15	
08/05/2017	2	21:30	Golden plover	1	15	15	0	
08/05/2017	2	21:54	Short-eared owl	1	30	30	0	
08/05/2017	2	21:58	Short-eared owl	1	15	15	0	
08/05/2017	3	19:36	Curlew	1	75	75	0	
08/05/2017	3	20:12	Lapwing	2	30	15	15	
08/05/2017	3	20:13	Curlew	1	60	15	45	
08/05/2017	3	20:35	Snipe	1	30	15	15	
08/05/2017	3	21:18	Curlew	1	30	15	15	
08/05/2017	3	21:18	Curlew	1	75	30	45	
09/05/2017	2	04:56	Curlew	2	15	0	15	
09/05/2017	2	04:56	Curlew	1	15	15	0	
09/05/2017	2	04:57	Curlew	1	15	15	0	
09/05/2017	2	05:16	Curlew	1	30	30	0	
09/05/2017	2	05:39	Curlew	1	15	15	0	
09/05/2017	2	05:42	Lapwing	4	15	15	0	
09/05/2017	2	05:42	Lapwing	1	45	0	45	
09/05/2017	2	05:46	Curlew	1	15	0	15	
09/05/2017	2	05:46	Lapwing	4	75	15	60	
09/05/2017	2	05:57	Curlew	1	60	0	60	
09/05/2017	2	06:02	Lapwing	1	30	0	30	
09/05/2017	2	06:07	Lapwing	1	60	15	45	
09/05/2017	2	06:08	Lapwing	2	15	15	0	
09/05/2017	2	06:21	Lapwing	2	15	0	15	
09/05/2017	2	06:24	Curlew	1	45	0	45	
09/05/2017	2	06:29	Lapwing	2	30	30	0	
09/05/2017	2	06:37	Lapwing	1	15	15	0	
09/05/2017	2	06:39	Lapwing	2	30	30	0	
09/05/2017	2	06:50	Lapwing	2	15	0	15	
09/05/2017	2	06:55	Lapwing	1	15	0	15	
09/05/2017	2	06:57	Lapwing	1	15	15	0	
09/05/2017	3	06:39	Curlew	1	45	45	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
09/05/2017	3	06:47	Lapwing	2	30	30	0	
09/05/2017	3	06:59	Lapwing	1	45	30	15	
12/05/2017	3	05:16	Lapwing	1	15	15	0	
12/05/2017	3	05:16	Lapwing	1	30	30	0	
12/05/2017	3	05:24	Lapwing	1	135	105	30	
12/05/2017	3	05:29	Lapwing	1	240	180	60	
12/05/2017	3	05:32	Lapwing	1	60	45	15	
12/05/2017	3	05:36	Lapwing	1	15	0	15	
12/05/2017	3	05:37	Lapwing	1	45	45	0	
12/05/2017	3	05:37	Lapwing	1	30	30	0	
12/05/2017	3	05:44	Lapwing	3	30	15	15	
12/05/2017	3	05:44	Lapwing	3	30	15	15	
12/05/2017	3	05:47	Lapwing	1	105	75	30	
12/05/2017	3	05:58	Lapwing	3	30	15	15	
12/05/2017	3	05:58	Lapwing	2	30	30	0	
12/05/2017	3	05:59	Lapwing	1	30	30	0	
12/05/2017	3	06:02	Lapwing	1	30	15	15	
12/05/2017	3	06:06	Lapwing	1	75	45	30	
12/05/2017	3	06:14	Lapwing	2	30	30	0	
12/05/2017	3	06:14	Lapwing	1	75	60	15	
12/05/2017	3	06:22	Lapwing	1	75	60	15	
12/05/2017	3	06:23	Lapwing	1	45	30	15	
12/05/2017	3	06:31	Lapwing	1	30	30	0	
12/05/2017	3	06:34	Golden plover	12	30	30	0	
12/05/2017	3	06:43	Lapwing	1	30	30	0	
12/05/2017	3	06:43	Lapwing	1	15	15	0	
12/05/2017	3	06:47	Lapwing	1	30	30	0	
12/05/2017	3	06:47	Lapwing	1	15	15	0	
06/06/2017	2	12:31	Snipe	1	105	30	75	
06/06/2017	3	12:38	Curlew	1	15	15	0	
07/06/2017	3	16:22	Lapwing	1	15	15	0	
07/06/2017	3	17:13	Curlew	1	90	75	15	
07/06/2017	3	17:54	Lapwing	1	60	30	30	
07/06/2017	3	17:55	Lapwing	4	75	45	30	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
07/06/2017	3	17:57	Snipe	1	195	60	135	
07/06/2017	3	19:35	Curlew	1	15	15	0	
07/06/2017	3	20:14	Lapwing	2	15	15	0	
07/06/2017	3	20:37	Lapwing	2	15	15	0	
07/06/2017	3	20:48	Curlew	1	15	0	15	
07/06/2017	3	20:53	Curlew	1	30	0	30	
07/06/2017	3	22:10	Lapwing	2	15	15	0	
13/07/2017	2	04:33	Lapwing	2	90	90	0	
13/07/2017	2	05:06	Curlew	1	30	30	0	
13/07/2017	2	05:12	Lapwing	19	90	90	0	
13/07/2017	2	05:44	Curlew	1	45	45	0	
13/07/2017	2	07:35	Lapwing	1	45	45	0	
13/07/2017	2	09:15	Curlew	1	30	30	0	
13/07/2017	2	09:16	Curlew	1	30	30	0	
13/07/2017	2	09:41	Curlew	3	45	45	0	
13/07/2017	2	09:45	Curlew	1	30	30	0	
14/07/2017	2	08:25	Oystercatcher	1	75	75	0	
14/07/2017	2	09:04	Curlew	1	15	0	15	
14/07/2017	2	09:04	Lapwing	2	75	75	0	
14/07/2017	2	09:05	Curlew	1	15	15	0	
14/07/2017	2	09:14	Golden plover	1	75	0	75	
14/07/2017	2	10:32	Hen harrier	1	105	105	0	
14/07/2017	2	10:42	Curlew	1	30	30	0	
14/07/2017	3	10:36	Hen harrier	1	75	75	0	
07/08/2017	2	19:52	Hen harrier	1	195	195	0	
07/08/2017	2	19:54	Lapwing	1	15	15	0	
08/08/2017	2	10:10	Lapwing	13	30	0	30	
08/08/2017	2	10:46	Lapwing	1	45	15	30	
08/08/2017	2	11:15	Hen harrier	1	105	105	0	
08/08/2017	2	12:31	Hen harrier	1	180	180	0	

ANNEX E. ROYAL SOCIETY FOR THE PROTECTION OF BIRDS RESPONSE AND MACARTHUR GREEN REPLY

Detailed on the pages below is the response provided by the RSPB to the previous Cairnmore Hill Environmental Statement application and the response provided by MacArthur Green.

FAO Mark Fitzpatrick

Planning, The Highland Council

Email: mark.fitzpatrick@highland.gov.uk; eplanning@highland.gov.uk

Date: 27th November 2020

Dear Mark,

20/03833/FUL | Cairnmore Hill Wind Farm - Erection and Operation of a Wind Farm for a period of 35 years, comprising of 8 Wind Turbines with a maximum blade tip height 138.5m with an indicative generating capacity of 33.6MW, access tracks, borrow pits, substation, control building, battery energy storage and ancillary infrastructure. | Land 1580M SE Of Schoolhouse Forss Thurso

RSPB Scotland would like to comment on the above planning application and EIA report (EIAR). RSPB Scotland is supportive of renewable energy deployment due to the urgent need to tackle climate change. However, wind farms must be carefully sited to avoid negative impacts on sites and species of conservation importance.

Due to the nature and location of the proposed development there would be likely significant effects on Greenland white-fronted goose, whooper swan and greylag goose, as qualifying features of the Caithness Lochs SPA. Consequently, the Council is required by the Conservation (Natural Habitats, &c.) Regulations 1994 to undertake an Appropriate Assessment of the effects of the proposal on the SPA and its species in light of the SPA's conservation objectives.

We are concerned that the assessment presented may have underestimated the potential impacts on the SPA species listed above as well as a number of red and amber-listed Birds of Conservation Concern, many of which are also priority species on the Scottish Biodiversity List¹. Details are provided in Annex 1 below.

In summary, we believe that the additional information is needed to fully inform an accurate assessment of ecological effects and we would be pleased to review the case once the issues have been addressed.

For the Caithness Lochs SPA qualifying species, the following is required:

- The raw survey data collected in 2016-2017, including vantage point data, to enable full appraisal of the collision risk linked to SPA species.
- An assessment of the predicted barrier effects of the development for Caithness Lochs SPA qualifying species.

For curlew and lapwing, the following is required:

- Further territory analysis and data presentation on maps.
- Further information for mitigation proposals presented in a (outline) Habitat Management Plan.

¹ <https://www.nature.scot/scottish-biodiversity-list>

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The RSPB is part of BirdLife International,
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Patron: Her Majesty the Queen Chairman of Council: Professor Steve Ormerod, FIEEM President: Miranda Krestovnikoff
Chairman, Committee for Scotland: Professor Colin Galbraith Director, RSPB Scotland: Anne McCall Regional Director: George Campbell

The RSPB is a registered charity in England and Wales 207076, in Scotland SCO37654

For all bird species scoped into the assessment:

- a revised cumulative assessment of impacts should be provided.

We also have concerns regarding:

- The high predicted impact on hen harrier, wading birds and pink-footed geese, for a development of this size.
- The fact that no outline Habitat Management Plan (HMP) has been provided.
- The fact that some infrastructure is located on deep peat >0.5m.

We hope you find these comments helpful. Should you wish to discuss any of the above please do not hesitate to contact me. We would also be pleased to meet with the applicant to discuss the points raised in our response.

Yours sincerely,

A handwritten signature in cursive script that reads "BAyling".

Bea Ayling
Conservation Officer
bea.ayling@rspb.org.uk

ANNEX 1

1. Caithness Lochs Special Protection Area (SPA)

The Caithness Lochs SPA consists of six lochs and a mire within Caithness, each of which is notified as SSSIs. The closest of these, Broubster Leans SSSI and Loch Calder SSSI, lie approximately 5.5km from the proposed development. The notified interests of Loch Calder SSSI include wintering Greenland white-fronted goose, whooper swan and greylag goose. Broubster Leans SSSI, which is also an RSPB Reserve, qualifies on account of its fen, marsh and swamp communities and its ornithological interest. Wintering wildfowl, in particular, Greenland white-fronted geese, are cited as principal factors influencing the management of the RSPB site.

The Broubster/Westfield flock of Greenland white-fronted geese averages 150 individuals² and are faithful to traditional feeding and roosting areas in the Westfield and Brims areas adjacent to the proposal. The SPA citation is for 440 birds and the latest assessed condition in 2016 was favourable but declining³.

While the collision risk associated with the proposed turbines has been calculated to be small for Greenland white-fronted geese, the tendency for geese to fly in groups means that if a collision does occur, the event is likely to kill more than one bird. A population viability modelling study commissioned by Scottish Natural Heritage (Trinder 2015⁴) showed that any additional mortality within the Caithness population could have a catastrophic effect on the future of this species in Caithness.

Caithness constitutes a major staging/wintering area for greylag geese with the total aggregation of flocks sometimes surpassing 10,000 individuals. However, this has been decreasing in recent years since 2015 according to the WWT Icelandic-breeding Goose Census reports⁵ and as of 2018, there were just over 2000 wintering birds in Caithness. The citation for the Caithness Lochs SPA states the SPA holds 7,190 birds representing 7% of the GB and Icelandic populations² which was last deemed 'favourable maintained' in 2015.

Greenland white-fronted goose, whooper swan and greylag goose (as well as pink-footed geese) use the SPA lochs to roost at night over the winter and leave at dawn to commute to feeding areas and return to the roost lochs at dusk. Survey results show that the Proposed Development does not lie on a regular migratory route and is itself not regularly used for foraging, however, it is clear that these species do use surrounding fields in large numbers and frequently overfly the site.

We are pleased that collision risk modelling was undertaken for these SPA species and that the results show that the in-isolation risk is generally low for Greenland white-fronted goose and whooper swan. Wintering greylag geese, however, have a relatively high collision risk at 0.6071 or 21 over 35 years but would only affect 0.3% of the SPA population per year.

Nevertheless, we are concerned that the potential collision risk has been underestimated. Nocturnal flights have not been taken into account in the collision risk models. SNH/NatureScot guidance⁶ states "For species which are active at dawn and dusk or at night, other methods of recording or assessing activity need to be employed" and "It has been estimated for geese species that adding on 28% extra activity to observed VP data should account for regular nocturnal feeding activity movements based on a study in Kintyre of Greenland white-fronted geese (Walls et al., 2006)." Although including this 'nocturnal activity factor' does not significantly increase the calculated model outputs in this case, it would have been best practice to include it.

Presentation of raw data

² <https://monitoring.wwt.org.uk/wp-content/uploads/2019/12/Greenland-White-fronted-Goose-Study-report-2018-19.pdf>

³ Reference SNH: <https://sitelink.nature.scot/site/8477> (accessed 13/11/20)

⁴ Trinder, MN 2015. Population modelling of Greenland white-fronted geese: potential impacts of additional mortality on the Scottish population and the Caithness and Kintyre subpopulations. Scottish Natural Heritage Commissioned Report No. 632. http://www.snh.org.uk/pdfs/publications/commissioned_reports/632.pdf

⁵ Reference WWT: <https://monitoring.wwt.org.uk/our-work/goose-swan-monitoring-programme/reports-newsletter/> (accessed 8/4/20)

⁶ NatureScot 2017: <https://www.nature.scot/sites/default/files/2018-06/Guidance%20Note%20-%20Recommended%20bird%20survey%20methods%20to%20inform%20impact%20assessment%20of%20onshore%20windfarms.pdf>

The raw data has not been provided from the surveys undertaken between October 2015 and August 2017 in Appendix 6.1. **This should be provided to ensure complete transparency and to enable understanding of the use of VPs.** Since timings of these surveys are unknown, therefore, full appraisal of the collision risk linked to SPA species commuting to and from roost sites at dusk and dawn is not possible.

Barrier effects

Section 6.4.1 does not list barrier effects as an impact during operation that should be assessed. However, section 6.4.68 recognises that the turbines and operational activities (e.g. turbine maintenance) may displace birds flying between established foraging and roosting areas or disturb birds from foraging areas located near to the proposed infrastructure. We agree that the foraging areas identified during surveys will not be significantly affected from the development but the macro-avoidance of turbines when commuting between these areas and roost sites are not discussed in the assessment, despite recognising that it happens in section 6.4.65. **Since the proposed development is located between some feeding areas and known roost sites, the barrier effects of the development should be assessed for Caithness Lochs SPA qualifying species.**

2. Further information required for curlew and lapwing

Territory analysis and data presentation

Figure 6.20 (Breeding wader activity) does not seem to reflect the numbers reported in Table 6.13: Breeding Wader Activity, 2013 to 2017. For example, Figure 6.20 shows 9 curlew map registrations in 2016 and 6 in 2017; compared to Table 6.13 which reports 3-5 in 2016 and 2-3 in 2017. Crucially, neither map nor table specify whether numbers refer to territories or numbers of birds observed during surveys. Therefore, it is not clear if territory analysis has been undertaken as per the Brown and Shepherd methodology.

There are also discrepancies in reported figures in Section 6.3.42 of the EIAR, which states that the “breeding bird surveys recorded breeding curlew within the 500 m study area during each of the survey years with an estimated minimum of two and a maximum of five territories in any one year.” However, section 6.3.43 suggests the presence of up to six breeding pairs within 500 m of the proposed development. In addition, the table does not produce a definitive number of territories for 2016 (3-5) and 2017 (2-3) and this should be explained.

As with curlew, it is unclear exactly how many lapwing pairs bred on this site in 2016 and 2017. Table 6.13 and Section 6.3.48 indicate between 2 and 8 territories were found each survey period within the 500m study area. However, Figure 6.20 shows 23 lapwing map registrations in 2016 and 8 in 2017. The EIAR does not attempt to explain this variation, particularly the high figure of 23 in 2016. Also, Table 6.13 does not produce a definitive number of territories for 2016 (4-8) and 2017 (3-5).

Therefore, this data should be re-visited to undertake a territory analysis and to produce new territory maps for curlew and lapwing to inform a more accurate appraisal of effects for these species. We would welcome discussions with the applicant on these issues.

Impacts on curlew and mitigation

Policy 57 of the Highland Wide Local Development Plan (HWLDP) seeks to protect natural heritage from unacceptable development impacts. Policy 58 of HWLDP gives a general presumption against development that would have an adverse impact on protected bird species, including those listed in Annex 1 of the EC Birds Directive, Regularly occurring migratory species listed in Annex II of the Birds Directive, Species listed in Schedule 1 of the Wildlife and Countryside Act 1981 as amended and birds of conservation concern. The Highland Council has a duty under the Nature Conservation (Scotland) Act 2004 to further the conservation of biodiversity.

Curlew was identified as a high conservation priority in a paper authored by RSPB and statutory agencies in 2015⁷ which highlighted that the UK supports 19-27% of the global population and the long-term trend

⁷ Brown, D., Wilson, J., Douglas, D., Thompson, P., Foster, S., McCulloch, N., Phillips, J., Stroud, D., Whitehead, S., Crockford, N., & Sheldon, R. 2015. The Eurasian Curlew – the most pressing bird conservation priority in the UK? *Brit. Birds* 108: 660–668.

shows a 64% decline from 1970 to 2014 (from BTO Breeding Bird Survey data⁸). This, combined with the bird's global status of Near Threatened, indicates that the curlew is one of the most pressing bird conservation priorities in the UK. This was emphasised by its classification as a red listed species of conservation concern in December 2015⁹.

Curlews are territorial and habitually return to breed in the same areas of open ground dominated by rough damp grassland or heath, which are abundant on this site. The data presented in Figure 6.20 and Table 6.13 indicates the likely displacement of between 2 and 9 curlew pairs within 500m of this site. However, further pairs are likely to be displaced as curlew show behavioural avoidance up to 800m from turbines¹⁰ and Figure 6.20 shows additional curlew registrations up to 800m from infrastructure. Breeding densities may be reduced by up to 42% within a 500m buffer and there is currently no evidence of recovery to pre-construction levels during operation^{9,11}.

However, Section 6.4.64 disputes the potential impacts as set out in the Pearce-Higgins *et al.* 2009 paper and references a technical review paper by Whitfield *et al.* (2010)¹². It should be noted that this paper is not peer-reviewed, has no statistical analysis or data presentation and therefore is not reliable evidence. Since the review attempts to dismiss the findings in an unpublished report, we believe it should carry little or no weight. This is supported in section 2.6 of the Rebuttal Proof of Evidence of Curlew in relation to Llandinam Wind Farm by James Pearce-Higgins¹³.

The EIAR also argues that curlews are unlikely to be displaced during operation as there is additional suitable breeding habitat surrounding the site and it is more likely that any curlew that may have bred near the site would be displaced to adjacent habitat (section 6.4.21). Curlew breeding territories will cover a significant area around the points where they are recorded on survey visits. However, given the conservation status of curlew, speed of population decline, reduction in distribution, and site-faithfulness of the species, it would be prudent to assume that any pairs displaced by a proposal will be lost from the population. This would therefore amount to an increased loss of up to 0.3% from the NHZ curlew population (if the maximum reported figure of 9 pairs are affected).

It should be noted that the NHZ2 includes the breeding curlew population in Orkney, which has much higher breeding densities according to the BTO 2007-11 Atlas, and therefore the impact on the Caithness population would be much higher. In the context of their population decline, and for such a small development (8 turbines), this level of impact appears significant.

The cumulative loss via displacement during operation is calculated to be 27-44 pairs of curlew (up to 1.36% of the NHZ 2 population). However, no breakdown of these figures has been provided, although section 6.4.101 alludes to there being 6 developments with a risk of displacement for this species. It seems that the proposed development could make up a large proportion this risk as reported figures for this site vary between 2 and 9.

We are also concerned that the population impact of the calculated collision risk has been underestimated for the same reasons outlined above. The annual rate is 0.3493 or 12 over the 35-year lifetime of the development, equating to 0.4% of the NHZ2 population. The cumulative risk is 0.429 for curlew or 15 over the 35 year lifetime of the development which equates to 80% of the risk originating from the proposed development, and 20% from Slickly Wind Farm (the only other development included in the analysis, which is larger at 11 turbines).

In summary, until further information is provided on territory analyses to provide more accurate figures for the assessment, we do not have confidence that impacts on this species will be mitigated. We also suggest

⁸ <https://www.bto.org/volunteer-surveys/bbs/latest-results/population-trends>

⁹ Eaton MA, Aebischer NJ, Brown AF, Hearn RD, Lock L, Musgrove AJ, Noble DG, Stroud DA and Gregory RD (2015) Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and Isle of Man. *British Birds* 108, 708–746.

¹⁰ Pearce-Higgins, J.W., S.L., Langston, R.H.W., Bainbridge, I.P. and Bullman, R. (2009), The distribution of breeding birds around upland wind farms, *Journal of Applied Ecology*, 46: 1323-1331.

¹¹ Pearce-Higgins, J.W., Stephen, L., Douse, A. and Langston, R.H.W (2012) Greater impacts of wind farms on bird populations during construction than subsequent operation: results of a multi-site and multi-species analysis. *Journal of Applied Ecology*, 49:386-394.

¹² <http://www.bsg-ecology.com/wp-content/uploads/2015/03/Are-Curlew-Displaced-by-Wind-Energy-Developments.pdf>

¹³ <http://banksolutions.co.uk/powys/wp-content/uploads/2013/08/CON003NRWREBUTTAL-CURLEW-HIGGINS-SSA-C.pdf>

habitat management actions in the Habitat Management Plan section of this letter to ensure further suitable breeding habitat is provided away from turbines.

Impacts on lapwing and mitigation

Lapwing have suffered severe declines and are a red-listed Bird of Conservation Concern. We note the high level of lapwing activity across the site over all survey years, particularly in the breeding season.

Section 6.4.78 recognises that loss of eight lapwing territories would result in a loss of up to 0.16 % of the breeding population in Caithness. If, however, the 23 pairs noted in 2016 on Figure 6.20, were lost, this would increase to 0.46%. The cumulative loss of lapwing from displacement is calculated to be 21-30 pairs. However, no breakdown of these figures has been provided, although section 6.4.101 alludes to there being 6 developments with a risk of displacement for this species. It seems that the proposed development makes up a large proportion of this risk as reported figures for this site vary between 2 and 8. We agree this is a small population effect but in the context of their population decline, and for such a small development (8 turbines), this level of impact is significant.

The EIAR argues that birds may continue to nest successfully in proximity to turbines and "it is unlikely that all breeding lapwing activity would be entirely lost from the population during construction as there is additional suitable breeding habitat surrounding the site and it is more likely that any lapwing that may have bred near the site would be displaced to adjacent habitat." As with curlew, this would likely extend to operation and they would be displaced from the site. However, Figure 6.20 shows there is already a high density of lapwing breeding to the south of the site on Lythmore Moss. RSPB surveys have also been undertaken along the Forss Water to the west of the site and show lapwing also breed there. Therefore, much of the suitable habitat surrounding the site is already occupied. In addition, it should be recognised that lapwings are extremely site faithful. 95% of lapwings return to breed in the same or adjacent field¹⁴.

We are also concerned that the calculated collision risk is high. The annual rate is 1.8599 or 65 over the 35-year lifetime of the development, equating to 1.3% of the NHZ2 population. Lapwing territorial display flights in particular increase the risk of collision. The cumulative risk is 3.14, which equates to 60% of the risk originating from the proposed development, and 40% from Slickly Wind Farm (the only other development included in the analysis, which is larger at 11 turbines).

In summary, until further information is provided on territory analyses to provide more accurate figures for the assessment, we do not have confidence that impacts on this species will be mitigated. We, therefore, also suggest some habitat management actions in the Habitat Management Plan section of this letter to ensure further suitable breeding habitat is provided away from turbines. Consideration should also be given to moving or removing the closest turbines to the lapwing breeding areas. This could reduce this potential impact on this species.

3. Cumulative impacts on bird species

RSPB Scotland has become increasingly concerned about the cumulative impacts on birds as a result of the high number of operational, consented and planned wind farm developments across Caithness and Sutherland. In this instance, we are particularly concerned over cumulative impacts on the Caithness Lochs SPA, and other species of conservation concern.

We note that information was not always available for some developments included in the cumulative assessment. This missing data results in underestimated impacts. A particular difficulty may be that for many development proposals no quantification is made of displacement or collisions; it is not acceptable to assume zero-values. **We recommend that either an estimate (with justification) should be made or it is expressly noted that an unquantified, but positive, figure be set against each potential impact.**

The applicant has only considered the wind energy projects whereas NatureScot guidance¹⁵ indicates that in combination effects should also be considered for other types of project and pressures. This omission should also be addressed; and justification is required as to why the 'cumulative sites' considered has been

¹⁴ Thompson, Patrick & Baines, David & COULSON, JOHN & LONGRIGG, GEOFF. (2008). Age at first breeding, philopatry and breeding site-fidelity in the Lapwing *Vanellus vanellus*. *Ibis*. 136. 474 - 484

¹⁵ Reference: SNH, 2018 ([https://www.nature.scot/sites/default/files/2018-08/Guidance%20-](https://www.nature.scot/sites/default/files/2018-08/Guidance%20-%20Assessing%20the%20cumulative%20impacts%20of%20onshore%20wind%20farms%20on%20birds.pdf)

[%20Assessing%20the%20cumulative%20impacts%20of%20onshore%20wind%20farms%20on%20birds.pdf](https://www.nature.scot/sites/default/files/2018-08/Guidance%20-%20Assessing%20the%20cumulative%20impacts%20of%20onshore%20wind%20farms%20on%20birds.pdf))

limited. **A revised cumulative assessment is needed to consider all projects that could impact on the qualifying interests of the SPA and NHZ** such as the Limekiln grid connection overhead line.

We also disagree with a number of species that were scoped out of the assessment due to the negligible effects of the addition of less than one collision across the 35-year lifespan of the proposed development or the negligible effects of the additional mortality as a result of the predicted collisions as this undermines the point of a cumulative assessment. Any species for which an in-isolation collision risk was calculated should have been included in the cumulative assessment i.e. hen harrier, herring gull and golden plover.

Cumulative collision impacts on pink-footed geese were not assessed despite high in-isolation impacts. This is justified in section 6.4.95 which states that the cumulative impacts resulting from wind farms are trivial in comparison to the estimated shooting bag numbers. It must be recognised that mortality from wind farms is additional to mortality from hunting and should not be dismissed in this way.

Finally, the cumulative assessment does not examine barrier effects for species such as geese and gulls when commuting between roosts/breeding sites and foraging areas, which is a key potential impact identified in NatureScot guidance². Therefore, the reason this was not included should be justified.

4. Other Birds of Conservation Concern

Hen harrier

We are concerned that hen harrier was scoped out of the assessment. Section 6.3.30 explains that this was due to the species' low on-site activity, no recorded breeding activity and negligible predicted risk of collision. However, Figures 6.15 and 16 show frequent usage of the site, particularly during the non-breeding season, indicating the site is important for foraging birds. We note the majority of these flights were recorded to be below collision-risk height (21.5m), which is likely why the calculated collision risk is small at 0.0005 predicted collisions per year.

Displacement of hen harrier has not been assessed. It is possible that hen harriers could be deterred from using the site in future, particularly if prey species numbers are not maintained. We suggest some actions in the Habitat Management Plan section of this letter to ensure harrier prey species are promoted away from turbines.

Redshank, oystercatcher and snipe

We note that the EIA does not mention the presence or potential impacts on redshank, oystercatcher and snipe, all amber-listed Birds of Conservation Concern. The habitats described in Chapter 5 are very suitable for these species and in fact Annex C of Appendix 6.1 (Hill of Forss Wind Farm: Baseline Ornithology 2012 – 2014) does confirm that the surveys recorded one oystercatcher, one redshank and three snipe breeding on the site. With regard to the impacts, the report predicts the displacement of the redshank territory, and includes these species in the collision impact assessment.

The EIA does not justify why these species were not included in the updated assessment for Cairnmore wind farm and justification should be provided.

Golden plover

The calculated collision risk for golden plover is high at 2.8 birds per year. Although this level of mortality is low on the population level, the potential loss of 98 birds over 35 years appears extremely high for such a small wind development. Mitigation for this impact should be provided in the Habitat Management Plan.

Ringed plover

This red-listed species was found to be breeding within 500m of the proposed infrastructure during 2016 surveys. It will be necessary to ensure that pre-construction surveys are undertaken to check for nests and appropriate safe working buffers put in place during the breeding season.

Pink-footed goose

The calculated collision risk for pink-footed goose is high at 3.4818 birds per year. This affects 0.6% of the NHZ2 population. Although this level of mortality for the NHZ2 population is low, the potential loss of 122 birds over 35 years is high for such a small wind development. In addition, as with other goose species as mentioned above, barrier effects could be an issue for this species and should be considered in the assessment as it is priority species for assessment for onshore wind farms.

5. Habitat Management Plan

We are concerned that no outline Habitat Management Plan (HMP) has been included in the EIAR despite Section 6.5.2 (Mitigation) and Table 6.22 suggesting that habitat improvement for waders will be undertaken and agreed prior to commencement of construction. An outline HMP at this stage would allow the proposed mitigation to be better understood and an assessment made as to whether this could satisfactorily address the predicted impacts.

We strongly support the aim outlined in Section 6.5.2 to maintain/improve habitat suitability for breeding and wintering waders within the site boundary, particularly in areas away from the turbines. We support habitat management measures to improved degraded habitat and support the aim to enhance the quality of wet heath habitat, retain boggy ground and create new wet areas by drain blocking and scrape provision in selected areas as outlined in 5.5.2. These measures would benefit habitats and wading birds, as well as aid carbon storage in peat. It will also help to offset the loss of 8.46ha of wet heath, an Annex 1 habitat and priority habitat on the Scottish Biodiversity List, and of rough and acid grassland.

We would also support controlled grazing to create a variable sward length for foraging and nesting wading birds as outlined in 6.5.2. To ensure that this proposed mitigation is carried out, a condition must be attached to any consent requiring the submission and approval of a habitat management plan prior to any works commencing. The HMP should include the objectives outlined in the application and must include maps to show where such management will be undertaken, away from turbine locations and sources of disturbance.

In addition to the above, foraging habitat for hen harrier should be provided or maintained away from turbine areas, such as rough grassland, which would support good numbers of voles.

The HMP must include a comprehensive monitoring programme for the above-mentioned habitat improvements, breeding birds on the site and SPA-featured species of wintering geese and swans. As mentioned above, remote sensing using radar or infra-red cameras should be considered, to help inform future development and decision making within the industry.

Appropriate protocols should also be included for reporting bird collisions.

6. Peatland

We note that there are no chapters in the EIAR to assess impacts to hydrology and peat, yet a draft Peat Management Plan (PMP) is included in Technical Appendix 2.2. The Figure 2.2.1 within the PMP shows that although most of the site is covered by shallow peat, turbines 5 and 7 seem to be located on deep peat >0.5m. In addition, the track to turbine 8 is through deep peat >0.5m and turbine 8 has no peat depth data. The decision to locate infrastructure in deep peat should be justified as to why it was not able to be avoided.

Technical Appendix 2.6 states that the proposed development would pay back the carbon emissions associated with its construction, operation and subsequent decommissioning in 0.9 years. This could be improved by micro-siting turbines as above and including peatland restoration within a Habitat Management Plan.

Email: mark.fitzpatrick@highland.gov.uk, cc: paula.batchelor@res-group.com

Dear Mark,

20/03833/FUL Cairnmore Hill Wind Farm – RSPB Scotland Consultation Response

Additional information has been provided in Annex A of this letter, in response to comments presented by RSPB Scotland (letter dated 27th November 2020) on the ornithological assessment within the Cairnmore Hill Wind Farm EIA Report. This relates primarily to the following topics:

- Further information and assessment relating to qualifying features of the Caithness Lochs Special Protection Area (SPA);
- Further information and assessment of breeding curlew and lapwing;
- Responses to concerns relating to other species;
- Further information on the assessment of cumulative effects; and
- Further information on proposed habitat management.

Additionally, comment has been provided on RSPB Scotland's query regarding potential effects on peat.

Yours sincerely,



Rafe Dewar

Principal Ornithologist

MacArthur Green is helping to combat the climate crisis through working within a carbon negative business model. Read more at www.macarthurgreen.com.



ANNEX A. RESPONSE TO RSPB SCOTLAND COMMENTS

The following text provides a response to comments within the RSPB Scotland consultation letter (27th November 2020) in relation to the ornithological assessment within the Cairnmore Hill EIA Report. It follows the layout of RSPB Scotland's letter, with RSPB Scotland's comments in **italics and bold**, and MacArthur Green's response in normal text.

1 CAITHNESS LOCHS SPA

We are pleased that collision risk modelling was undertaken for these SPA species and that the results show that the in-isolation risk is generally low for Greenland white-fronted goose and whooper swan. Wintering greylag geese, however, have a relatively high collision risk at 0.6071 or 21 over 35 years but would only affect 0.3% of the SPA population per year.

It should be noted that when using the standard method for determining significance of effect due to additional collision mortality, the predicted mean greylag goose annual collision rate would result in an increase over the baseline annual mortality rate by 0.1%, if the estimated current Caithness population of 2,000 individuals is considered to be SPA-connected. This would not adversely affect the SPA population.

Nevertheless, we are concerned that the potential collision risk has been underestimated. Nocturnal flights have not been taken into account in the collision risk models. SNH/NatureScot guidance states "For species which are active at dawn and dusk or at night, other methods of recording or assessing activity need to be employed" and "It has been estimated for geese species that adding on 28% extra activity to observed VP data should account for regular nocturnal feeding activity movements based on a study in Kintyre of Greenland white-fronted geese (Walls et al., 2006)." Although including this 'nocturnal activity factor' does not significantly increase the calculated model outputs in this case, it would have been best practice to include it.

It is acknowledged that goose flight activity may occur during periods before dawn and after dusk, and that there is the possibility that overall flight activity duration per season may be underestimated. However, as stated by RSPB, the mean annual collision rate would not be significantly different for any species if this is added to the collision model, and overall conclusions of significance would be unchanged. Flights occurring in periods around dawn and dusk are more likely to be associated with roost sites, and with no roosting activity recorded within the vicinity of the site during baseline surveys, feeding and associated flight activity is likely to occur during daylight hours, which are incorporated into the model.

1.1 Presentation of Raw Data

The raw data has not been provided from the surveys undertaken between October 2015 and August 2017 in Appendix 6.1. This should be provided to ensure complete transparency and to enable understanding of the use of VPs. Since timings of these surveys are unknown, therefore, full appraisal of the collision risk linked to SPA species commuting to and from roost sites at dusk and dawn is not possible.

Survey effort and results from 2015 to 2017 flight activity surveys are presented in Annex B. Survey times stretched from an earliest 3.00am start, to a latest 11.15pm finish during this period to adequately cover any dawn and dusk roost movements.

1.2 Barrier Effects

Section 6.4.1 does not list barrier effects as an impact during operation that should be assessed. However, section 6.4.68 recognises that the turbines and operational activities (e.g. turbine maintenance) may displace birds flying between established foraging and roosting areas or disturb birds from foraging areas located near to the proposed infrastructure. We agree that the foraging areas identified during surveys will not be significantly affected from the development but the macro-avoidance of turbines when commuting between these areas and roost sites are not discussed in the assessment, despite recognising that it happens in section 6.4.65. Since the proposed development is located between some feeding areas and known roost sites, the barrier effects of the development should be assessed for Caithness Lochs SPA qualifying species.

As stated in NatureScot guidance for assessing small wind farm impacts on geese (SNH, 2014¹) barrier effects may increase the energetic costs of geese if forced to alter their preferred flight paths, or by preventing birds from reaching certain roosts or feeding areas at all. It was however considered by NatureScot that the latter eventuality was extremely unlikely for small-scale wind farms (up to three turbines). Although Cairnmore Hill would be larger, with eight turbines, it is still likely to be too small, and too distant to the SPA to present any material effects to the fitness or survival of individuals as a result of barrier effects. As per NatureScot guidance on assessing connectivity of project sites with SPAs (SNH, 2016²), pink-footed and greylag geese may travel up to 20km from roost sites to feed, with Greenland white-fronted goose travelling up to 8km. A detour around an eight-turbine wind farm would therefore be a negligible increase in overall distance travelled and energy consumed, if for example, birds undertake one return trip per day from the SPA which is 5.5km distant at its closest point (compared to other species subject to greater barrier effect risks, e.g. breeding terns, which may make numerous trips to and from nest sites each day). It should be noted that if the turbines act as a barrier to prevent birds from accessing the site at all, this is covered by the assessment of displacement effects. Overall, it can be reasonably concluded that there would be no adverse effects on SPA populations as a result of potential barrier effects.

2 FURTHER INFORMATION REQUIRED FOR CURLEW AND LAPWING

2.1 Territory analysis and data presentation

Figure 6.20 (Breeding wader activity) does not seem to reflect the numbers reported in Table 6.13: Breeding Wader Activity, 2013 to 2017. For example, Figure 6.20 shows 9 curlew map registrations in in 2016 and 6 in 2017; compared to Table 6.13 which reports 3-5 in 2016 and 2-3 in 2017. Crucially, neither map nor table specify whether numbers refer to territories or numbers of birds observed

¹ Scottish Natural Heritage (2014). Assessing impacts to pink-footed and greylag geese from small-scale wind farms in Scotland.

² Scottish Natural Heritage (2016). Assessing Connectivity with Special Protection Areas (SPAs).

during surveys. Therefore, it is not clear if territory analysis has been undertaken as per the Brown and Shepherd methodology.

Figure 6.20 of the EIA Report presents all wader species observations made during the survey period, which aims to provide a better demonstration of the spatial distribution of each species within the site than an estimated central territory point would. It is likely that the majority of records during the breeding season relate to territorial birds. Table 6.13 of the EIA Report provides an estimate of the total number of territories for each species in each year, utilising the data collected and analysis using the Brown and Shepherd (1993) methodology. A minimum-maximum range of territories has been estimated in later years to capture any uncertainties as to whether nearby records are of individuals from a single territory or separate territories, particularly in areas of higher density nesting.

There are also discrepancies in reported figures in Section 6.3.42 of the EIAR, which states that the “breeding bird surveys recorded breeding curlew within the 500 m study area during each of the survey years with an estimated minimum of two and a maximum of five territories in any one year.” However, section 6.3.43 suggests the presence of up to six breeding pairs within 500 m of the proposed development. In addition, the table does not produce a definitive number of territories for 2016 (3-5) and 2017 (2-3) and this should be explained.

In any one year, a range of two to five territories were occupied within 500m of the proposed layout, and these values were taken forward to assessment with the worst-case maximum used to determine impacts on the curlew population (see Section 6.4.21 of the EIA Report).

As with curlew, it is unclear exactly how many lapwing pairs bred on this site in 2016 and 2017. Table 6.13 and Section 6.3.48 indicate between 2 and 8 territories were found each survey period within the 500m study area. However, Figure 6.20 shows 23 lapwing map registrations in 2016 and 8 in 2017. The EIAR does not attempt to explain this variation, particularly the high figure of 23 in 2016. Also, Table 6.13 does not produce a definitive number of territories for 2016 (4-8) and 2017 (3-5).

The numbers, or range of lapwing territories in each year were estimated using the same methodology as for curlew. Again, all registrations are shown on Figure 6.20 for an indication of spatial distribution. As with curlew, the estimated maximum possible number of territories affected has been assessed as a precaution (Section 6.4.22 of the EIA Report). The Brown and Shepherd analysis method was used to determine the numbers of territories, and this is not necessarily correlated with the numbers of observations made in any particular year, which may be a reflection of other factors such as timing of surveys or weather conditions on a particular day rather than numbers of birds present. Careful analysis was therefore required to avoid double counting individuals and overestimating numbers of territories.

Therefore, this data should be re-visited to undertake a territory analysis and to produce new territory maps for curlew and lapwing to inform a more accurate appraisal of effects for these species. We would welcome discussions with the applicant on these issues.

As outlined above, a combination of a presentation of distributions of all wader observations made during the breeding season, with an estimate of territory numbers, is considered sufficient to be

able to undertake a robust assessment of potential effects. In each case, a worst-case estimate of numbers was used to assess the significance at a population level, and conclusions of the EIA Report would therefore likely remain unchanged after the production of territory maps.

2.2 Impacts on curlew and mitigation

The data presented in Figure 6.20 and Table 6.13 indicates the likely displacement of between 2 and 9 curlew pairs within 500m of this site. However, further pairs are likely to be displaced as curlew show behavioural avoidance up to 800m from turbines and Figure 6.20 shows additional curlew registrations up to 800m from infrastructure. Breeding densities may be reduced by up to 42% within a 500m buffer and there is currently no evidence of recovery to pre-construction levels during operation.

However, Section 6.4.64 disputes the potential impacts as set out in the Pearce-Higgins et al. 2009 paper and references a technical review paper by Whitfield et al. (2010). It should be noted that this paper is not peer-reviewed, has no statistical analysis or data presentation and therefore is not reliable evidence. Since the review attempts to dismiss the findings in an unpublished report, we believe it should carry little or no weight. This is supported in section 2.6 of the Rebuttal Proof of Evidence of Curlew in relation to Llandinam Wind Farm by James Pearce-Higgins.

Curlew displacement rates and extents are likely to be dependent on a number of site-specific factors such as topography, baseline levels of human activity and quality and availability of alternative habitats nearby. With incomplete displacement within 500-800m of turbines, an assessment assuming the worst-case loss of a maximum of five territories (0.15% of the Natural Heritage Zone, NHZ breeding population) recorded within 500m of turbines is however considered appropriately precautionary.

It is acknowledged that the Whitfield et al. (2010) report was not a peer-reviewed paper, however it does form part of the widespread 'grey' literature of monitoring that is commonly referenced for wind farm studies and was produced by respected authors in the field. It is therefore valid for consideration alongside published scientific journal articles to provide an increased evidence base for judging disturbance-displacement effects of wind farms.

The EIAR also argues that curlews are unlikely to be displaced during operation as there is additional suitable breeding habitat surrounding the site and it is more likely that any curlew that may have bred near the site would be displaced to adjacent habitat (section 6.4.21). Curlew breeding territories will cover a significant area around the points where they are recorded on survey visits. However, given the conservation status of curlew, speed of population decline, reduction in distribution, and site-faithfulness of the species, it would be prudent to assume that any pairs displaced by a proposal will be lost from the population. This would therefore amount to an increased loss of up to 0.3% from the NHZ curlew population (if the maximum reported figure of 9 pairs are affected).

As noted above, a maximum of five territories were considered to be located within 500m of turbines within any year, and whilst acknowledging that loss of all these territories is unlikely, this figure was used as a worst-case for determining magnitude of impact at a population level. This impact magnitude falls well below the 1% value used for guidance for determining a 'low' impact

magnitude or higher (as does the 0.3% if nine pairs are affected), but when taking into account uncertainties of numbers affected and the unfavourable status of the population, a low magnitude impact was considered appropriate for evaluating disturbance-displacement impacts.

It should be noted that the NHZ2 includes the breeding curlew population in Orkney, which has much higher breeding densities according to the BTO 2007-11 Atlas, and therefore the impact on the Caithness population would be much higher. In the context of their population decline, and for such a small development (8 turbines), this level of impact appears significant.

It is acknowledged that much of the NHZ 2 breeding population is likely to be located in Orkney. However, NatureScot guidance for assessing the significance of impacts of wind farms (SNH, 2018a³) which was followed in the EIA Report, advises that the appropriate geographic scale of assessment is the NHZ, “the boundaries of which have been drawn to reflect biogeographical differences between different zones, with a high level of environmental coherence within each zone”. At this ‘regional’ rather than ‘district/local’ level the effects were not predicted to be significant. It should also be noted that part of Caithness also falls within the neighbouring Peatlands of Caithness and Sutherland NHZ, which has suitable habitat and is likely to hold a number of additional pairs not considered in the assessment.

The cumulative loss via displacement during operation is calculated to be 27-44 pairs of curlew (up to 1.36% of the NHZ 2 population). However, no breakdown of these figures has been provided, although section 6.4.101 alludes to there being 6 developments with a risk of displacement for this species. It seems that the proposed development could make up a large proportion this risk as reported figures for this site vary between 2 and 9.

Table 1 below provides the information from other wind farm projects used to determine the number of curlew pairs potentially affected. Cairnmore Hill would account for between 5% and 17% of the total cumulative figure for these projects when a range of 2-5 breeding pairs is considered.

³ Scottish Natural Heritage (2018). Assessing Significance of Impacts from Onshore Wind Farms Outwith Designated Areas. Guidance.

Table 1 NHZ 2 Cumulative Assessment Information for Curlew.

Project	Orkney or Mainland	Number of turbines	Status	Info available (Source)	Breeding pairs on site	Annual collision rate
Hammars Hill Wind Energy Project	O	5	Installed	Technical description and Environmental Studies	12	-
Lochend	M	4	Installed	SNH CCR spreadsheet/EIA Chapter	4	-
Stroupster	M	13	Installed	Ornithology Technical Appendix 5.1	1 to 8	-
Wathegar 2	M	9	Installed	EIA Chapter	2	-
Cogle Moss	M	12	Approved	SNH CCR spreadsheet, EIA	5 to 12	-
Slickly Wind Farm	M	11	Application	ES chapter	1	0.080
Cairnmore Hill	M	8	Application	EIA Report	2-5	0.349
Total					27-44	0.429

We are also concerned that the population impact of the calculated collision risk has been underestimated for the same reasons outlined above. The annual rate is 0.3493 or 12 over the 35-year lifetime of the development, equating to 0.4% of the NHZ2 population. The cumulative risk is 0.429 for curlew or 15 over the 35 year lifetime of the development which equates to 80% of the risk originating from the proposed development, and 20% from Slickly Wind Farm (the only other development included in the analysis, which is larger at 11 turbines).

The annual collision rate associated with Cairnmore Hill would result in an increase in the baseline annual mortality rate of the NHZ 2 curlew population by 0.020%, using available information on annual adult mortality rates (0.264 as per BTO BirdFacts data). This method is the standard way of interpreting the effects of additional mortality associated with wind turbine collisions on bird populations, rather than determining what proportion of birds within a population may be affected (it should be noted that under RSPB's method the proportion of birds affected would be 0.2%, i.e., 12 out of 5,830 individuals (taken from 2,915 pairs) rather than 0.4%).

When collision rates from Slickly Wind Farm are included, the annual collision rate of 0.429 would increase the annual mortality rate by 0.025%, which is well below a magnitude that would reach significance within the population. Despite some collision risk likely to be associated with some of the other wind farm projects in NHZ 2, the overall cumulative risk is unlikely to reach significance.

In summary, until further information is provided on territory analyses to provide more accurate figures for the assessment, we do not have confidence that impacts on this species will be mitigated. We also suggest habitat management actions in the Habitat Management Plan section of this letter to ensure further suitable breeding habitat is provided away from turbines.

Further information on the presentation and analysis of curlew records within the EIA Report chapter and Figure 6.20 has been provided, to help determine the assessment. Information on a habitat management plan is provided in Section 5 below.

2.3 Impacts on lapwing and mitigation

Section 6.4.78 recognises that loss of eight lapwing territories would result in a loss of up to 0.16 % of the breeding population in Caithness. If, however, the 23 pairs noted in 2016 on Figure 6.20, were lost, this would increase to 0.46%. The cumulative loss of lapwing from displacement is calculated to be 21-30 pairs. However, no breakdown of these figures has been provided, although section 6.4.101 alludes to there being 6 developments with a risk of displacement for this species. It seems that the proposed development makes up a large proportion of this risk as reported figures for this site vary between 2 and 8. We agree this is a small population effect but in the context of their population decline, and for such a small development (8 turbines), this level of impact is significant.

As outlined above in Section 2.1, each point on Figure 6.20 of the EIA Report represents an individual lapwing observation rather than a territory. Using the Brown and Shepherd method for analysis, it was estimated that up to eight lapwing territories may be affected, as per Table 6.13 of the EIA Report. This would result in a non-significant effect within the context of the estimated NHZ 2 population (at least 5,000 pairs).

Within a cumulative context, Cairnmore Hill would contribute between 8% and 24% of the total number of pairs potentially affected (Table 2). The estimated cumulative effect on up to 0.6% of the NHZ 2 breeding population is not predicted to reach significance.

Table 2 NHZ 2 Cumulative Assessment Information for Lapwing.

Project	Orkney or Mainland	Number of turbines	Status	Info available (Source)	Breeding pairs on site	Annual collision rate
Hammers Hill Wind Energy Project	O	5	Installed	Technical description and Environmental Studies	7	-
Lochend	M	4	Installed	SNH CCR spreadsheet/EIA Chapter	3	-
Stroupster	M	13	Installed	Ornithology Technical Appendix 5.1	4 to 7	-
Wathegar 2	M	9	Installed	EIA Chapter	1	-
Cogle Moss	M	12	Approved	SNH CCR spreadsheet, EIA	3	-
Slickly Wind Farm	M	11	Application	ES chapter	1	1.28
Cairnmore Hill	M	8	Application	EIA Report	2-8	1.86
Total					21-30	3.14

The EIAR argues that birds may continue to nest successfully in proximity to turbines and "it is unlikely that all breeding lapwing activity would be entirely lost from the population during construction as there is additional suitable breeding habitat surrounding the site and it is more likely that any lapwing that may have bred near the site would be displaced to adjacent habitat." As with curlew, this would likely extend to operation and they would be displaced from the site. However, Figure 6.20 shows there is already a high density of lapwing breeding to the south of the site on Lythmore Moss. RSPB surveys have also been undertaken along the Forss Water to the west of the site and show lapwing also breed there. Therefore, much of the suitable habitat surrounding the site is already occupied. In addition, it should be recognised that lapwings are extremely site faithful. 95% of lapwings return to breed in the same or adjacent field.

It is acknowledged that if the surrounding area is of favourable habitat and already at capacity for occupied territories, this would contribute to the increased likelihood that lapwings may be lost, if not to the NHZ 2 breeding population, then at least the local Caithness population. Evidence in Steinborn & Reichenbach (2011⁴) does however show that lapwings can continue to breed within wind farms, with displacement recorded out to 100m around individual turbines. Thus, although some losses may occur, with site-fidelity this is unlikely to reach 100%, particularly if habitat within the site remains of good quality, and so a non-significant effect is predicted on the NHZ 2 population.

We are also concerned that the calculated collision risk is high. The annual rate is 1.8599 or 65 over the 35-year lifetime of the development, equating to 1.3% of the NHZ2 population. Lapwing territorial display flights in particular increase the risk of collision. The cumulative risk is 3.14, which equates to 60% of the risk originating from the proposed development, and 40% from Slickly Wind Farm (the only other development included in the analysis, which is larger at 11 turbines).

As per the standard method for assessment of collision risks, the predicted annual collision rate would equate to an increase in baseline annual mortality rate by 0.063% (using an adult annual mortality rate of 0.295, as per BTO BrdFacts), using a minimum NHZ 2 population of 5,000 pairs, which does not reach significance. Note that under the method mentioned by RSPB above, this would equate to 0.65% of the population being affected (10,000 individuals) over the lifetime of the development.

In summary, until further information is provided on territory analyses to provide more accurate figures for the assessment, we do not have confidence that impacts on this species will be mitigated. We, therefore, also suggest some habitat management actions in the Habitat Management Plan section of this letter to ensure further suitable breeding habitat is provided away from turbines. Consideration should also be given to moving or removing the closest turbines to the lapwing breeding areas. This could reduce this potential impact on this species.

⁴ Steinborn, H. & Reichenbach, Marc. (2011). Lapwing and wind turbines [Kiebitz und Windkraftanlagen: Ergebnisse aus einer siebenjährigen Studie im südlichen Ostfriesland]. Naturschutz und Landschaftsplanung. 43. 261-270.

Further information on the presentation and analysis of lapwing records within the EIA Report chapter and Figure 6.20 has been provided, to help determine the assessment. Information on a habitat management plan is provided in the relevant section below.

As outlined in Chapter 3: Design Evolution and Alternatives of the EIA Report, careful placement of the proposed turbines within the site boundary and a reduction in the number of turbines from 10 to 8 has occurred through the design process in response to avoiding significant effects on various receptors, including ornithological features. This included keeping turbine ground clearance above 20m to minimise collision risks and avoiding areas of suitable goose foraging habitat to the south the proposed development following the removal of the southern access route and borrow pit.

3 CUMULATIVE IMPACTS ON BIRD SPECIES

We note that information was not always available for some developments included in the cumulative assessment. This missing data results in underestimated impacts. A particular difficulty may be that for many development proposals no quantification is made of displacement or collisions; it is not acceptable to assume zero-values. We recommend that either an estimate (with justification) should be made or it is expressly noted that an unquantified, but positive, figure be set against each potential impact.

It is agreed that a lack of information available for other projects does not necessarily mean that there would be a lack of impact, the assumption of which could lead to an underestimation of risks. This has been considered in the conclusion of significance in the cumulative assessment, but in each case, it was thought that enough headroom remains for the significance of effect to be unchanged after adding possible impacts from other projects, where data were not available. For example, cumulative additional mortality rates due to collisions for curlew and lapwing (1.36% and 0.60% respectively) were well below those considered potentially significant (~5% as per Table 6.3 of the EIA Report), and it was thought unlikely that projects with no information would increase the risk to an extent that the level of significance would change. For more recent projects at least, a lack of assessment of key species in the EIA is likely to be due to the fact that the species was absent from breeding, or that site usage was minimal, hence impacts would be negligible. In other aspects, layers of precaution for the cumulative assessment have been added, for example by assuming all projects would become fully operational, and that all breeding pairs recorded at other sites would be displaced, regardless of possible location in relation to turbines. These assumptions may lead to overestimates of actual cumulative effects.

The applicant has only considered the wind energy projects whereas NatureScot guidance indicates that in combination effects should also be considered for other types of project and pressures. This omission should also be addressed; and justification is required as to why the 'cumulative sites' considered has been limited. A revised cumulative assessment is needed to consider all projects that could impact on the qualifying interests of the SPA and NHZ such as the Limekiln grid connection overhead line.

It is acknowledged that NatureScot's guidance on assessing cumulative effects (SNH, 2018b⁵) does advise non-wind farm projects to be considered, as appropriate. As mentioned in Section 6.4.89 no other major projects subject to EIA within NHZ 2 were identified that could have a significant bearing on the outcome of a cumulative assessment for the species scoped in. Whilst there are likely to be some other projects, such as the Limekiln grid connection mentioned, that have the potential to affect species scoped in to the cumulative assessment, these were not considered to be of a scale, or consist of similar impacts, that could reach significance at a population level when combined with wind farm projects, and so would be unlikely to alter the conclusions of significance of effect.

We also disagree with a number of species that were scoped out of the assessment due to the negligible effects of the addition of less than one collision across the 35-year lifespan of the proposed development or the negligible effects of the additional mortality as a result of the predicted collisions as this undermines the point of a cumulative assessment. Any species for which an in-isolation collision risk was calculated should have been included in the cumulative assessment i.e. hen harrier, herring gull and golden plover.

Whilst having a small collision risk does not mean that contributions to a long-term cumulative effect on an NHZ 2 population are completely excluded, when a collision occurring during the 35-year operational lifespan of the proposed development is predicted to be unlikely, this is considered to provide a clear indication that contributions to a cumulative effect at a population level would be negligible. It is therefore considered reasonable to scope these species out of a cumulative assessment. For other species with relatively higher predicted collision rates that have been scoped out, such as hen harrier and golden plover, it should be noted that no breeding was recorded during baseline surveys and so cumulative effects would be correctly assessed against a much larger migratory or national wintering population, rather than an NHZ 2 breeding population.

Cumulative collision impacts on pink-footed geese were not assessed despite high in-isolation impacts. This is justified in section 6.4.95 which states that the cumulative impacts resulting from wind farms are trivial in comparison to the estimated shooting bag numbers. It must be recognised that mortality from wind farms is additional to mortality from hunting and should not be dismissed in this way.

It was estimated that a mean annual collision rate of 3-4 pink-footed geese would result from the proposed development. In the NatureScot (SNH, 2018a) guidance, “[i]n some cases, such as wintering goose and swan populations that are highly mobile, it may be necessary to undertake assessment at a much broader scale [than at an NHZ scale] such as that of the entire Scottish population.” The UK population is estimated to be 510,000 individuals⁶ and in favourable condition, and so this estimated collision rate would be well below rates to reach significance at a population level.

⁵ Scottish Natural Heritage (2018). Assessing the cumulative impacts of onshore wind farms on birds. Guidance.

⁶ Frost, T., G.E. Austin, R.D. Hearn, S. McAvoy, A. Robinson, D.A. Stroud, I. Woodward & S.R. Wotton. 2019. Population estimates of wintering waterbirds in Great Britain. *British Birds* 112: 130-145.

As advised by NatureScot on their website, “In light of the robust population and its high avoidance rate of 99.8%, collision risk modelling for pink-footed geese is only required if a proposal has connectivity with a protected area where this species is a qualifying interest.”⁷ As pink-footed geese on site are not considered to have connectivity to any particular SPA, it was concluded that the species could be scoped out of the cumulative/in-combination assessments.

Finally, the cumulative assessment does not examine barrier effects for species such as geese and gulls when commuting between roosts/breeding sites and foraging areas, which is a key potential impact identified in NatureScot guidance. Therefore, the reason this was not included should be justified.

As outlined above, barrier effects are likely to be negligible for geese, gulls and other commuting species for site- and species-specific reasons, both at an individual and a population level. The wind farm site is of sufficient distance to negate the risk of proximal interference in lower altitude flightpaths around roost sites, and of a small enough extent that any deviations in flight paths compared to overall foraging trip length would be negligible. In the case of geese, the slight increase in length of one return flight in and out of the local area per day would not adversely affect individuals’ levels of fitness over the season. The relatively small extent of the wind farm would not prevent geese from accessing foraging locations in the local area. Gull species do not tend to show avoidance behaviour around wind farms as a whole, and so are unlikely to be subject to barrier effects.

4 OTHER BIRDS OF CONSERVATION CONCERN

4.1 Hen Harrier

We are concerned that hen harrier was scoped out of the assessment. Section 6.3.30 explains that this was due to the species’ low on-site activity, no recorded breeding activity and negligible predicted risk of collision. However, Figures 6.15 and 16 show frequent usage of the site, particularly during the non-breeding season, indicating the site is important for foraging birds. We note the majority of these flights were recorded to be below collision-risk height (21.5m), which is likely why the calculated collision risk is small at 0.0005 predicted collisions per year.

Species were scoped in to the assessment when it was considered possible that an unmitigated significant effect could occur to the species’ relevant reference population due to potential impacts associated with the proposed development. In the case of hen harrier this likelihood was very much reduced because of a lack of breeding or roosting evidence within the study area, and very low predicted collision rates, despite regular records. Although it is possible that localised displacement of foraging non-breeding individuals may result from the presence of operational turbines, there is evidence from a number of wind farms (e.g. Cruach Mhor (Robson 2012⁸),

⁷ <https://www.nature.scot/professional-advice/planning-and-development/planning-and-development-advice/renewable-energy/onshore-wind-energy/wind-farm-impacts-birds>

⁸ Robson, P. (2012). Hen Harrier activity at Cruach Mhor windfarm. Review of monitoring data 2001-2011. SNH Sharing Good Practice Workshop - Assessing the impact of windfarms on birds, 3 April 2012.

Edinbane (Haworth & Fielding 2012⁹) and Paul's Hill (Robinson & Lye 2012¹⁰) that hen harrier can exist alongside turbines, with evidence of birds flying and nesting in proximity to turbines. The likelihood of any significant effects on any widely ranging non-breeding individual was therefore considered to be sufficiently low as to scope out an assessment of population-level effects.

Displacement of hen harrier has not been assessed. It is possible that hen harriers could be deterred from using the site in future, particularly if prey species numbers are not maintained. We suggest some actions in the Habitat Management Plan section of this letter to ensure harrier prey species are promoted away from turbines.

As noted above, significant displacement effects are unlikely to occur to any non-breeding individuals, and therefore no significant population-level effects are predicted.

As part of the habitat management plan, effort will be made to investigate whether it is possible that part of the land under management options could be maintained/improved for foraging hen harrier. It would have to be ensured that this is consistent with management of grassland for waders, where for example, a litter layer may be suitable for hen harrier prey such as field voles, but less so for breeding waders and their chicks. Spatial separation may therefore be required, which may help encourage potential wader predators to forage elsewhere within the site, away from nesting areas.

4.2 Redshank, oystercatcher and snipe

We note that the EIAR does not mention the presence or potential impacts on redshank, oystercatcher and snipe, all amber-listed Birds of Conservation Concern. The habitats described in Chapter 5 are very suitable for these species and in fact Annex C of Appendix 6.1 (Hill of Forss Wind Farm: Baseline Ornithology 2012 – 2014) does confirm that the surveys recorded one oystercatcher, one redshank and three snipe breeding on the site. With regard to the impacts, the report predicts the displacement of the redshank territory, and includes these species in the collision impact assessment.

The EIAR does not justify why these species were not included in the updated assessment for Cairnmore wind farm and justification should be provided.

These three species were not scoped in to the assessment as they did not fit the criteria for inclusion, which is based on SNH (2018a) guidance (where none of these are listed as a priority species). As amber-listed species, the likelihood of a significant effect at a population level is lower than rarer, or more sensitive Red-listed or Schedule 1-listed species. In this case only small numbers of breeding birds were present, which would not reach significance at an NHZ 2 level. Breeding waders, including these species, will however be considered as part of the habitat management plan.

⁹ Haworth, P. & Fielding, A. (2012). A review of the impacts of terrestrial wind farms on breeding and wintering hen harriers. Haworth Conservation.

<http://www.alanfielding.co.uk/fielding/pdfs/Hen%20harriers%20and%20Windfarms.pdf>

¹⁰ Robinson, C. & Lye, G. (2012). Paul's Hill Wind Farm: Flight Activity & Breeding Success of Hen Harrier. Presentation at Sharing Good Practice: Assessing the Impact of Windfarms on Birds Battleby, April 2012.

4.3 Golden plover

The calculated collision risk for golden plover is high at 2.8 birds per year. Although this level of mortality is low on the population level, the potential loss of 98 birds over 35 years is appears extremely high for such a small wind development. Mitigation for this impact should be provided in the Habitat Management Plan.

Golden plover habitat preferences (e.g. bog management) will be considered within the habitat management plan, to encourage birds to forage or roost away from turbines, and alter distribution within the site, meaning that hopefully the predicted collision rate is an overestimate.

4.4 Ringed plover

This red-listed species was found to be breeding within 500m of the proposed infrastructure during 2016 surveys. It will be necessary to ensure that pre-construction surveys are undertaken to check for nests and appropriate safe working buffers put in place during the breeding season.

Ringed plover and all breeding bird species would be protected from disturbance during the construction period through pre- and during-construction surveys and implementation of protective measures contained in the Breeding Bird Protection Plan. The species would also be considered as part of the habitat management plan.

4.5 Pink-footed goose

The calculated collision risk for pink-footed goose is high at 3.4818 birds per year. This affects 0.6% of the NHZ2 population. Although this level of mortality for the NHZ2 population is low, the potential loss of 122 birds over 35 years is high for such a small wind development. In addition, as with other goose species as mentioned above, barrier effects could be an issue for this species and should be considered in the assessment as it is priority species for assessment for onshore wind farms.

See responses above relating to potential for barrier effects on geese, and significance of additional mortality within a wider population context. In general, although goose collisions have been known to occur, these remain very rare events, particularly in areas away from key roost sites. Although the collision risk model has taken this into account by using NatureScot's advised evidence-based high avoidance rate of 99.8% (which based on a 2013 report), this may still be precautionary, particularly when considering the continued lack of evidence for goose collisions in Scotland since derivation of the avoidance rate.

5 HABITAT MANAGEMENT PLAN

We are concerned that no outline Habitat Management Plan (HMP) has been included in the EIAR despite Section 6.5.2 (Mitigation) and Table 6.22 suggesting that habitat improvement for waders will be undertaken and agreed prior to commencement of construction. An outline HMP at this stage would allow the proposed mitigation to be better understood and an assessment made as to whether this could satisfactorily address the predicted impacts.

Details of specific habitat management were not available at the time of publication of the EIA Report, as they were dependent on agreement with landowners. Key stakeholders, including RSPB

Scotland will be consulted throughout the process of creating an HMP, with aim of reaching agreement on the final version prior to commencement of construction.

We strongly support the aim outlined in Section 6.5.2 to maintain/improve habitat suitability for breeding and wintering waders within the site boundary, particularly in areas away from the turbines. We support habitat management measures to improved degraded habitat and support the aim to enhance the quality of wet heath habitat, retain boggy ground and create new wet areas by drain blocking and scrape provision in selected areas as outlined in 5.5.2. These measures would benefit habitats and wading birds, as well as aid carbon storage in peat. It will also help to offset the loss of 8.46ha of wet heath, an Annex 1 habitat and priority habitat on the Scottish Biodiversity List, and of rough and acid grassland.

We would also support controlled grazing to create a variable sward length for foraging and nesting wading birds as outlined in 6.5.2. To ensure that this proposed mitigation is carried out, a condition must be attached to any consent requiring the submission and approval of a habitat management plan prior to any works commencing. The HMP should include the objectives outlined in the application and must include maps to show where such management will be undertaken, away from turbine locations and sources of disturbance.

Noted. We would welcome further comment from RSPB Scotland on the HMP to ensure that proposed management measures within the site are sufficient and appropriate for waders and other species and habitats.

In addition to the above, foraging habitat for hen harrier should be provided or maintained away from turbine areas, such as rough grassland, which would support good numbers of voles.

This option will be considered as part of the HMP, although as noted above, this should not conflict with other management measures for breeding waders.

The HMP must include a comprehensive monitoring programme for the above-mentioned habitat improvements, breeding birds on the site and SPA-featured species of wintering geese and swans. As mentioned above, remote sensing using radar or infra-red cameras should be considered, to help inform future development and decision making within the industry.

The proposed monitoring programme would be included in the HMP and agreed with key stakeholders prior to finalisation. This would be relevant to, and proportional for monitoring potential adverse effects on key species assessed in the EIA Report, as well as any habitat enhancement measures implemented.

Appropriate protocols should also be included for reporting bird collisions.

It is anticipated that site managers and operational staff will be made aware of the potential for discovering bird carcasses near wind turbines. A protocol would be devised to ensure that all potential bird strikes uncovered would be reported, in a consistent manner, to the ecologists overseeing operational monitoring, and NatureScot. Any evidence would also be included in annual monitoring reports.

6 PEATLAND

We note that there are no chapters in the EIAR to assess impacts to hydrology and peat, yet a draft Peat Management Plan (PMP) is included in Technical Appendix 2.2. The Figure 2.2.1 within the PMP shows that although most of the site is covered by shallow peat, turbines 5 and 7 seem to be located on deep peat >0.5m. In addition, the track to turbine 8 is through deep peat >0.5m and turbine 8 has no peat depth data. The decision to locate infrastructure in deep peat should be justified as to why it was not able to be avoided.

The specific requirement for a dedicated EIAR chapter on Hydrology, Geology & Peat was scoped out prior to submission of the EIAR, as per Technical Appendix 1.1 and Chapter 3 of the EIAR, with agreement that hydrology and peat could be suitably addressed within the suite of Technical Appendices appended to Chapter 2 of the EIAR, as specifically provided within Technical Appendices 2.2, 2.3, 2.4 and 2.5.

The majority of the site is covered by shallow peat, or organo-mineral soils (i.e. those less than 0.5m in depth). The used term ‘deep peat’ in this case is misleading - based on the Scottish soil classification it is clear that an organic soil can only be described as peat when its depth exceeds 0.5m. Using this approach, it cannot therefore be concluded that all peat over 0.5m is ‘deep’. Table 2 of SNH Report No. 701¹¹ indicates that deep peat would be peat >1m. The depth category 0.5m to 1m is therefore more appropriately just referred to as ‘peat’. The layout has sought to avoid areas of deeper peatland, i.e. those greater than 1m, and as can be seen from Figures 2.2.1 and 2.4.3 of the EIAR this has been achieved. Furthermore, only a very small proportion of the south-western area of land-take for turbine 5 is within 0.5m-1m of peat, with the remainder on peaty soil less than 0.5m (Figures 2.2.1 and 2.4.3). Similarly, turbine 7 and the track to turbine 8 are within peat (0.5m-1m) and are outwith areas of ‘deep peat’ (>1m) (Figures 2.2.1 and 2.4.3).

In response to the comment that turbine 8 has no peat depth data, this is incorrect. EIAR Figures 2.2.1, 2.4.1, 2.4.2 and 2.4.3 show that peat surveys have been undertaken around turbine 8, however there is no peat present here. This is further reinforced by Figure 5.1.2b of the EIAR which indicates the area around turbine 8 is grassland (of non-peatland habitat types).

Furthermore, as per Table 5.1 of Chapter 5 of the EIAR, extensive pre-submission consultation was undertaken with SEPA with regards the site layout to balance potential effects to GWDTE, peatland, and hydrological sensitivities. SEPA were provided baseline NVC data, peat depth data, and locations of hydrological sensitivities overlain by iterations of proposed infrastructure layouts. The proposed development layout as presented in the EIAR has been agreed with SEPA, pursuant to pre-construction planning conditions to be proposed by SEPA being met, and the implementation of associated commitments made within the EIAR.

Technical Appendix 2.6 states that the proposed development would pay back the carbon emissions associated with its construction, operation and subsequent decommissioning in 0.9 years. This could

¹¹ Bruneau, P.M.C & Johnson, S.M. (2014). Scotland’s peatland - definitions & information resources. Scottish Natural Heritage Commissioned Report No 701.

be improved by micro-siting turbines as above and including peatland restoration within a Habitat Management Plan.

A period of 0.9 years is a relatively fast carbon payback period. The carbon calculator inputs for the proposed development also assumed there would be no improvement of degraded bog. However, as detailed further above, habitat management will be undertaken at the site and the detailed proposals will be agreed in advance of construction. It is highly likely given the habitats present on site that the HMP will include proposals for peatland habitat restoration and/or enhancements. Assuming this is the case the current payback time of 0.9 years is a precautionary estimate, and with the inclusion of peatland habitat restoration and/or enhancement within the HMP the actual payback period will be less. Therefore, the information submitted provides a worst-case scenario based on available evidence and data, with the carbon payback period likely less than stated.

ANNEX B. FLIGHT ACTIVITY DATA (2015-2017)

Table 1 Summary of flight activity surveys undertaken at Cairnmore Hill Wind Farm, 2015 to 2017 (sorted chronologically)

Date	Observer	Season	VP	Start	Finish	Hours
19/10/2015	TW	NBR 2015/2016	1	1600	1900	3.00
20/10/2015	TW	NBR 2015/2016	1	0700	1000	3.00
29/10/2015	TW	NBR 2015/2016	1	1435	1735	3.00
30/10/2015	TW	NBR 2015/2016	1	0625	0925	3.00
16/11/2015	SJ	NBR 2015/2016	1	1353	1653	3.00
17/11/2015	SJ	NBR 2015/2016	1	0706	1006	3.00
19/11/2015	JS	NBR 2015/2016	1	0715	1015	3.00
19/11/2015	JS	NBR 2015/2016	1	1045	1345	3.00
23/11/2015	JS	NBR 2015/2016	1	1015	1315	3.00
23/11/2015	JS	NBR 2015/2016	1	1345	1645	3.00
28/11/2015	JS	NBR 2015/2016	1	0730	1030	3.00
28/11/2015	JS	NBR 2015/2016	1	1100	1400	3.00
30/11/2015	TW	NBR 2015/2016	1	1330	1630	3.00
01/12/2015	GN	NBR 2015/2016	1	0736	1036	3.00
17/12/2015	SJ	NBR 2015/2016	1	1320	1620	3.00
18/12/2015	SJ	NBR 2015/2016	1	0800	1100	3.00
24/01/2016	JS	NBR 2015/2016	1	1415	1715	3.00
28/01/2016	SJ	NBR 2015/2016	1	0731	1031	3.00
28/01/2016	SJ	NBR 2015/2016	1	1115	1415	3.00
29/01/2016	SJ	NBR 2015/2016	1	0728	1028	3.00
09/02/2016	LC	NBR 2015/2016	1	1455	1755	3.00
11/02/2016	LC	NBR 2015/2016	1	0700	1000	3.00
24/02/2016	JS	NBR 2015/2016	1	0945	1245	3.00
25/02/2016	JS	NBR 2015/2016	1	1530	1830	3.00
10/03/2016	SJ, JES	NBR 2015/2016	1	1604	1904	3.00
11/03/2016	SJ	NBR 2015/2016	1	0544	0844	3.00
18/03/2016	JS	BR 2016	1	1000	1300	3.00
19/03/2016	JS	BR 2016	1	0500	0800	3.00
22/03/2016	JS	BR 2016	1	1100	1400	3.00
24/03/2016	JS	BR 2016	1	1240	1540	3.00
24/03/2016	JS	BR 2016	1	1610	1910	3.00
07/04/2016	JS	BR 2016	1	1630	1930	3.00
17/04/2016	JS	BR 2016	1	1830	2130	3.00

Date	Observer	Season	VP	Start	Finish	Hours
20/04/2016	JS	BR 2016	1	0445	0745	3.00
20/04/2016	JS	BR 2016	1	0815	1115	3.00
25/04/2016	JS	BR 2016	1	1515	1815	3.00
25/04/2016	JS	BR 2016	1	1845	2145	3.00
10/05/2016	JS	BR 2016	1	0400	0700	3.00
10/05/2016	JS	BR 2016	1	1045	1345	3.00
14/05/2016	JS	BR 2016	1	1600	1900	3.00
14/05/2016	JS	BR 2016	1	1930	2230	3.00
26/05/2016	JS	BR 2016	1	0330	0630	3.00
26/05/2016	JS	BR 2016	1	0700	1000	3.00
07/06/2016	JS	BR 2016	1	1645	1945	3.00
07/06/2016	JS	BR 2016	1	2015	2315	3.00
23/06/2016	JS	BR 2016	1	0300	0600	3.00
26/06/2016	JS	BR 2016	1	1500	1800	3.00
19/07/2016	SJ	BR 2016	1	2005	2305	3.00
20/07/2016	SJ	BR 2016	1	0335	0635	3.00
09/08/2016	SJ	BR 2016	1	1920	2220	3.00
10/08/2016	SJ	BR 2016	1	0900	1200	3.00
12/08/2016	SJ	BR 2016	1	0900	1200	3.00
30/09/2016	AM	NBR 2016/2017	2	1300	1600	3.00
30/09/2016	AM	NBR 2016/2017	3	1650	1950	3.00
01/10/2016	AM	NBR 2016/2017	3	1120	1420	3.00
03/10/2016	JES	NBR 2016/2017	2	1646	1846	2.00
03/10/2016	SJ	NBR 2016/2017	3	1646	1946	3.00
05/10/2016	JES	NBR 2016/2017	2	0930	1230	3.00
05/10/2016	SJ	NBR 2016/2017	2	1340	1640	3.00
05/10/2016	SJ	NBR 2016/2017	3	0950	1250	3.00
11/10/2016	SJ	NBR 2016/2017	3	1723	1923	2.00
12/10/2016	SJ	NBR 2016/2017	3	1305	1505	2.00
12/10/2016	SJ	NBR 2016/2017	3	1535	1735	2.00
13/10/2016	SJ	NBR 2016/2017	2	0643	0943	3.00
13/10/2016	SJ	NBR 2016/2017	2	1015	1315	3.00
24/10/2016	SJ	NBR 2016/2017	2	1548	1848	3.00
25/10/2016	SJ	NBR 2016/2017	2	1400	1700	3.00
26/10/2016	SJ	NBR 2016/2017	3	0714	1014	3.00
26/10/2016	SJ	NBR 2016/2017	3	1105	1405	3.00

Date	Observer	Season	VP	Start	Finish	Hours
07/11/2016	NC	NBR 2016/2017	2	1511	1711	2.00
08/11/2016	NC	NBR 2016/2017	2	0647	0847	2.00
08/11/2016	NC	NBR 2016/2017	2	0917	1117	2.00
08/11/2016	SJ	NBR 2016/2017	3	0647	0947	3.00
08/11/2016	SJ	NBR 2016/2017	3	1017	1317	3.00
21/11/2016	SJ	NBR 2016/2017	2	1441	1641	2.00
21/11/2016	NC	NBR 2016/2017	3	1443	1643	2.00
22/11/2016	SJ	NBR 2016/2017	2	0719	0919	2.00
22/11/2016	SJ	NBR 2016/2017	2	0949	1149	2.00
22/11/2016	NC	NBR 2016/2017	3	0719	0919	2.00
22/11/2016	NC	NBR 2016/2017	3	0949	1149	2.00
05/12/2016	JS	NBR 2016/2017	2	1424	1624	2.00
05/12/2016	SJ	NBR 2016/2017	3	1424	1624	2.00
06/12/2016	JS	NBR 2016/2017	2	0746	0946	2.00
06/12/2016	JS	NBR 2016/2017	2	1015	1215	2.00
06/12/2016	SJ	NBR 2016/2017	3	0746	0946	2.00
06/12/2016	SJ	NBR 2016/2017	3	1016	1216	2.00
20/12/2016	JS	NBR 2016/2017	2	0802	1102	3.00
20/12/2016	JS	NBR 2016/2017	2	1132	1432	3.00
20/12/2016	SJ	NBR 2016/2017	3	0802	1102	3.00
21/12/2016	JS	NBR 2016/2017	3	1000	1300	3.00
05/01/2017	LC	NBR 2016/2017	2	1337	1637	3.00
05/01/2017	JS	NBR 2016/2017	3	1337	1637	3.00
06/01/2017	LC	NBR 2016/2017	2	0800	1100	3.00
06/01/2017	JS	NBR 2016/2017	3	0800	1100	3.00
18/01/2017	SJ	NBR 2016/2017	2	1020	1320	3.00
18/01/2017	SJ	NBR 2016/2017	2	1402	1702	3.00
18/01/2017	NC	NBR 2016/2017	3	1402	1702	3.00
19/01/2017	NC	NBR 2016/2017	3	0745	1045	3.00
01/02/2017	SJ	NBR 2016/2017	2	1434	1734	3.00
01/02/2017	NC	NBR 2016/2017	3	1104	1404	3.00
01/02/2017	NC	NBR 2016/2017	3	1434	1734	3.00
02/02/2017	SJ	NBR 2016/2017	3	0719	1019	3.00
15/02/2017	NC	NBR 2016/2017	2	1509	1809	3.00
15/02/2017	SJ	NBR 2016/2017	3	1509	1809	3.00
16/02/2017	SJ	NBR 2016/2017	2	0645	0945	3.00

Date	Observer	Season	VP	Start	Finish	Hours
01/03/2017	NC	NBR 2016/2017	2	1225	1525	3.00
13/03/2017	LC	NBR 2016/2017	2	1611	1911	3.00
13/03/2017	NC	NBR 2016/2017	3	1611	1911	3.00
14/03/2017	LC	NBR 2016/2017	2	0533	0833	3.00
14/03/2017	NC	NBR 2016/2017	3	0533	0833	3.00
27/03/2017	LC	BR 2017	2	1741	2041	3.00
27/03/2017	NC	BR 2017	3	1741	2041	3.00
28/03/2017	NC	BR 2017	2	0556	0856	3.00
28/03/2017	LC	BR 2017	3	0556	0856	3.00
10/04/2017	LC	BR 2017	2	1530	1830	3.00
10/04/2017	NC	BR 2017	3	1532	1832	3.00
11/04/2017	NC	BR 2017	2	1645	1845	2.00
11/04/2017	NC	BR 2017	2	1915	2115	2.00
11/04/2017	LC	BR 2017	3	1645	1845	2.00
11/04/2017	LC	BR 2017	3	1915	2115	2.00
12/04/2017	LC	BR 2017	2	0513	0813	3.00
12/04/2017	LC	BR 2017	2	0843	1043	2.00
12/04/2017	NC	BR 2017	3	0516	0816	3.00
12/04/2017	NC	BR 2017	3	0846	1046	2.00
24/04/2017	NC	BR 2017	2	1852	2152	3.00
25/04/2017	JES	BR 2017	2	1250	1550	3.00
26/04/2017	NC	BR 2017	2	0434	0734	3.00
26/04/2017	JES	BR 2017	2	1235	1535	3.00
01/05/2017	LC	BR 2017	2	1901	2201	3.00
01/05/2017	NC	BR 2017	3	1901	2201	3.00
02/05/2017	NC	BR 2017	2	0930	1230	3.00
02/05/2017	NC	BR 2017	2	1300	1600	3.00
02/05/2017	LC	BR 2017	3	0915	1215	3.00
02/05/2017	LC	BR 2017	3	1245	1545	3.00
03/05/2017	LC	BR 2017	2	0416	0716	3.00
03/05/2017	NC	BR 2017	3	0416	0716	3.00
08/05/2017	NC	BR 2017	2	1917	2217	3.00
08/05/2017	LC	BR 2017	3	1917	2217	3.00
09/05/2017	NC	BR 2017	2	0402	0702	3.00
09/05/2017	LC	BR 2017	3	0402	0702	3.00
11/05/2017	NC	BR 2017	3	1924	2224	3.00

Date	Observer	Season	VP	Start	Finish	Hours
12/05/2017	LC	BR 2017	3	0354	0654	3.00
06/06/2017	SJ	BR 2017	2	1230	1530	3.00
06/06/2017	NC	BR 2017	3	1233	1533	3.00
07/06/2017	SJ	BR 2017	3	1500	1800	3.00
07/06/2017	NC	BR 2017	3	1914	2214	3.00
13/07/2017	LC	BR 2017	2	0325	0625	3.00
13/07/2017	LC	BR 2017	2	0655	0955	3.00
13/07/2017	SJ	BR 2017	3	0325	0625	3.00
13/07/2017	SJ	BR 2017	3	0655	0955	3.00
14/07/2017	LC	BR 2017	2	0825	1125	3.00
14/07/2017	SJ	BR 2017	3	0830	1130	3.00
07/08/2017	SJ	BR 2017	2	1925	2225	3.00
07/08/2017	NC	BR 2017	3	1926	2226	3.00
08/08/2017	NC	BR 2017	2	1006	1306	3.00
08/08/2017	SJ	BR 2017	2	1010	1310	3.00

Table 2 Details of target species recorded during flight activity surveys, 2015-2017

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
07/08/2014	1	11:06	Golden plover	1	30	30	0	
19/10/2015	1	16:17	Greylag goose	12	75	0	75	
17/11/2015	1	07:51	Golden plover	70	60	30	30	
19/10/2015	1	17:01	Greylag goose	19	135	0	135	
20/10/2015	1	08:27	Greylag goose	1	60	0	60	
20/10/2015	1	08:43	Greylag goose	17	195	0	195	
20/10/2015	1	08:49	Greylag goose	19	90	0	90	
29/10/2015	1	13:34	Hen harrier	1	30	30	0	
30/10/2015	1	07:37	Greylag goose	1	45	45	0	
30/10/2015	1	07:37	Greylag goose	3	45	45	0	
30/10/2015	1	07:50	Greylag goose	23	60	60	0	
17/11/2015	1	08:00	Golden plover	60	135	0	135	
30/10/2015	1	08:40	Hen harrier	1	45	45	0	
30/10/2015	1	08:48	Greylag goose	10	60	60	0	
16/11/2015	1	14:31	Whooper swan	11	75	30	45	
16/11/2015	1	15:15	Greylag goose	200	75	75	0	
16/11/2015	1	15:15	Whooper swan	60	75	75	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
16/11/2015	1	16:01	Whooper swan	5	30	30	0	
16/11/2015	1	16:27	Whooper swan	3	60	60	0	
16/11/2015	1	16:34	Peregrine	1	45	45	0	
30/10/2015	1	08:22	Golden plover	4	15	15	0	
19/10/2015	1	16:25	Golden plover	3	60	60	0	
17/11/2015	1	08:31	Greylag goose	15	75	0	75	
19/11/2015	1	07:38	Whooper swan	8	135	15	120	
01/12/2015	1	07:47	Golden plover	15	30	30	0	
19/11/2015	1	07:47	Greylag goose	560	165	150	15	
19/11/2015	1	07:55	Greylag goose	21	105	105	0	
01/12/2015	1	08:29	Golden plover	15	45	45	0	
01/12/2015	1	08:55	Golden plover	3	15	15	0	
19/11/2015	1	08:08	Greylag goose	275	195	195	0	
19/11/2015	1	08:16	Greylag goose	290	105	105	0	
19/11/2015	1	08:23	Greylag goose	130	105	105	0	
19/11/2015	1	08:40	Greylag goose	30	105	105	0	
19/11/2015	1	08:52	Greylag goose	22	225	225	0	
19/11/2015	1	08:59	Greylag goose	40	105	105	0	
01/12/2015	1	09:09	Golden plover	15	90	90	0	
19/11/2015	1	10:53	Hen harrier	1	75	75	0	
19/11/2015	1	11:48	Greylag goose	22	105	105	0	
19/11/2015	1	12:03	Greylag goose	83	225	210	15	
19/11/2015	1	12:27	Greylag goose	27	165	165	0	
19/11/2015	1	12:37	Greenland white-fronted goose	170	1035	1020	15	
19/11/2015	1	13:20	Whooper swan	6	60	0	60	
19/11/2015	1	13:22	Whooper swan	4	45	45	0	
28/11/2015	1	08:19	Greylag goose	115	45	0	45	
28/11/2015	1	08:50	Greylag goose	65	105	105	0	
28/11/2015	1	10:24	Greylag goose	45	75	75	0	
30/11/2015	1	14:37	Greylag goose	50	195	0	195	
30/11/2015	1	15:18	Golden plover	6	15	15	0	
17/12/2015	1	15:01	Golden plover	31	75	0	75	
29/01/2016	1	09:09	Golden plover	34	90	15	75	
01/12/2015	1	08:34	Short-eared owl	1	15	15	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
01/12/2015	1	08:39	Greylag goose	75	60	60	0	
19/11/2015	1	07:45	Golden plover	1	15	15	0	
01/12/2015	1	08:59	Greylag goose	50	60	60	0	
19/11/2015	1	07:56	Golden plover	1	15	0	15	
01/12/2015	1	09:24	Greylag goose	6	75	0	75	
01/12/2015	1	09:33	Hen harrier	1	45	45	0	
01/12/2015	1	09:46	Greylag goose	88	90	15	75	
01/12/2015	1	09:47	Greylag goose	200	90	0	90	
01/12/2015	1	09:47	Greylag goose	70	75	0	75	
01/12/2015	1	10:10	Whooper swan	10	105	105	0	
01/12/2015	1	10:26	Greylag goose	9	90	90	0	
19/11/2015	1	07:57	Golden plover	1	15	15	0	
17/12/2015	1	15:13	Greylag goose	23	75	75	0	
18/12/2015	1	08:47	Whooper swan	5	105	105	0	
18/12/2015	1	09:16	Greylag goose	70	210	150	60	
18/12/2015	1	09:21	Whooper swan	5	45	45	0	
18/12/2015	1	09:27	Greylag goose	60	165	105	60	
18/12/2015	1	09:38	Greylag goose	130	135	105	30	
18/12/2015	1	09:42	Whooper swan	14	120	90	30	
18/12/2015	1	10:08	Greylag goose	40	135	60	75	
18/12/2015	1	10:09	Greylag goose	10	150	120	30	
28/01/2016	1	08:09	Whooper swan	2	75	75	0	
28/01/2016	1	08:37	Greylag goose	3	45	45	0	
28/01/2016	1	08:47	Whooper swan	2	90	90	0	
28/01/2016	1	08:57	Lapwing	30	120	90	30	
28/01/2016	1	09:16	Greylag goose	1	60	0	60	
28/01/2016	1	09:44	Pink-footed goose	75	105	15	90	
28/01/2016	1	09:52	Greylag goose	14	135	0	135	
28/01/2016	1	09:54	Greylag goose	28	60	0	60	
28/01/2016	1	10:01	Whooper swan	4	75	75	0	
19/11/2015	1	10:13	Golden plover	1	15	15	0	
29/01/2016	1	09:38	Pink-footed goose	1	120	15	105	
09/02/2016	1	18:31	Golden plover	12	15	15	0	
11/02/2016	1	08:26	Greylag goose	77	300	255	45	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
11/02/2016	1	08:46	Hen harrier	1	45	45	0	
10/03/2016	1	16:05	Lapwing	2	30	30	0	
10/03/2016	1	16:23	Pink-footed goose	30	90	0	90	
10/03/2016	1	16:35	Greylag goose	23	105	0	105	
10/03/2016	1	16:39	Lapwing	1	30	30	0	
10/03/2016	1	16:44	Lapwing	1	15	15	0	
10/03/2016	1	16:57	Greylag goose	7	435	15	420	
10/03/2016	1	17:41	Lapwing	4	75	45	30	
10/03/2016	1	17:46	Lapwing	1	45	30	15	
10/03/2016	1	17:47	Lapwing	1	30	0	30	
10/03/2016	1	18:13	Pink-footed goose	100	135	0	135	
10/03/2016	1	18:49	Pink-footed goose	40	45	0	45	
10/03/2016	1	18:57	Pink-footed goose	60	75	0	75	
10/03/2016	1	19:00	Pink-footed goose	10	45	0	45	
11/03/2016	1	06:36	Greylag goose	1	105	0	105	
11/03/2016	1	07:21	Lapwing	1	30	30	0	
18/03/2016	1	10:30	Lapwing	3	150	105	45	
18/03/2016	1	10:40	Lapwing	2	30	15	15	
18/03/2016	1	11:30	Lapwing	5	60	30	30	
18/03/2016	1	11:38	Curlew	3	60	15	45	
18/03/2016	1	12:06	Curlew	1	60	60	0	
18/03/2016	1	12:08	Curlew	1	30	30	0	
18/03/2016	1	12:31	Lapwing	2	30	0	30	
18/03/2016	1	12:32	Curlew	1	30	30	0	
18/03/2016	1	12:47	Lapwing	2	75	30	45	
19/03/2016	1	06:27	Pink-footed goose	97	75	0	75	
19/03/2016	1	06:29	Pink-footed goose	230	105	0	105	
19/03/2016	1	06:32	Pink-footed goose	2	90	45	45	
19/03/2016	1	07:01	Lapwing	2	45	30	15	
19/03/2016	1	07:07	Lapwing	2	30	15	15	
19/03/2016	1	07:20	Lapwing	3	30	15	15	
19/03/2016	1	07:51	Curlew	2	30	15	15	
22/03/2016	1	11:01	Curlew	1	105	45	60	
22/03/2016	1	11:01	Lapwing	1	75	75	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
22/03/2016	1	11:17	Curlew	1	75	45	30	
22/03/2016	1	11:33	Lapwing	1	60	60	0	
22/03/2016	1	11:37	Curlew	1	45	0	45	
22/03/2016	1	12:29	Curlew	1	270	15	255	
22/03/2016	1	12:34	Curlew	1	30	30	0	
22/03/2016	1	12:36	Lapwing	2	30	15	15	
22/03/2016	1	13:01	Lapwing	1	45	30	15	
22/03/2016	1	13:07	Lapwing	2	45	45	0	
22/03/2016	1	13:12	Lapwing	1	45	0	45	
22/03/2016	1	13:12	Lapwing	1	75	15	60	
22/03/2016	1	13:23	Lapwing	2	30	15	15	
22/03/2016	1	13:33	Golden plover	35	45	0	45	
22/03/2016	1	13:33	Lapwing	3	45	15	30	
22/03/2016	1	13:35	Curlew	1	30	15	15	
24/03/2016	1	13:11	Lapwing	4	330	255	75	
24/03/2016	1	13:12	Lapwing	2	60	15	45	
24/03/2016	1	13:25	Lapwing	3	30	30	0	
24/03/2016	1	13:25	Lapwing	4	105	105	0	
24/03/2016	1	13:35	Lapwing	5	135	90	45	
24/03/2016	1	13:44	Lapwing	1	30	30	0	
24/03/2016	1	13:55	Lapwing	2	30	15	15	
24/03/2016	1	14:27	Lapwing	6	270	60	210	
24/03/2016	1	14:31	Curlew	1	45	30	15	
24/03/2016	1	14:37	Lapwing	5	135	75	60	
24/03/2016	1	14:40	Oystercatcher	2	30	30	0	
24/03/2016	1	14:58	Lapwing	8	105	30	75	
24/03/2016	1	15:08	Lapwing	5	90	30	60	
24/03/2016	1	15:20	Curlew	1	30	15	15	
24/03/2016	1	15:27	Lapwing	6	135	60	75	
24/03/2016	1	15:30	Curlew	2	45	15	30	
24/03/2016	1	15:34	Curlew	1	45	30	15	
24/03/2016	1	15:39	Lapwing	3	150	90	60	
24/03/2016	1	15:40	Curlew	1	30	30	0	
24/03/2016	1	16:22	Lapwing	5	195	135	60	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
24/03/2016	1	17:49	Curlew	1	45	15	30	
24/03/2016	1	17:49	Lapwing	2	30	15	15	
24/03/2016	1	18:16	Curlew	1	45	30	15	
07/04/2016	1	16:31	Lapwing	1	30	15	15	
07/04/2016	1	16:31	Lapwing	2	30	15	15	
07/04/2016	1	16:32	Curlew	1	30	30	0	
07/04/2016	1	16:44	Lapwing	1	30	15	15	
07/04/2016	1	16:56	Curlew	1	45	0	45	
07/04/2016	1	17:02	Curlew	1	60	30	30	
07/04/2016	1	17:05	Curlew	1	45	30	15	
07/04/2016	1	17:07	Lapwing	2	30	15	15	
07/04/2016	1	17:13	Curlew	2	30	30	0	
07/04/2016	1	17:26	Lapwing	1	30	15	15	
07/04/2016	1	17:26	Lapwing	1	45	15	30	
07/04/2016	1	17:31	Lapwing	1	60	30	30	
07/04/2016	1	17:32	Lapwing	1	30	0	30	
07/04/2016	1	17:32	Lapwing	1	30	15	15	
07/04/2016	1	17:34	Curlew	1	45	0	45	
07/04/2016	1	17:35	Curlew	1	30	15	15	
07/04/2016	1	17:40	Curlew	1	135	60	75	
07/04/2016	1	17:41	Curlew	1	30	15	15	
07/04/2016	1	17:50	Lapwing	5	135	60	75	
07/04/2016	1	18:15	Curlew	1	30	15	15	
07/04/2016	1	18:15	Teal	2	30	30	0	
07/04/2016	1	19:00	Curlew	1	120	60	60	
07/04/2016	1	19:01	Curlew	1	30	15	15	
07/04/2016	1	19:07	Curlew	1	30	0	30	
17/04/2016	1	18:35	Lapwing	1	30	30	0	
17/04/2016	1	18:40	Lapwing	2	45	30	15	
17/04/2016	1	18:40	Lapwing	2	30	30	0	
17/04/2016	1	19:00	Curlew	1	60	30	30	
17/04/2016	1	19:03	Snipe	1	30	30	0	
17/04/2016	1	19:11	Lapwing	1	30	30	0	
17/04/2016	1	19:12	Curlew	1	45	15	30	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
17/04/2016	1	19:16	Lapwing	1	30	15	15	
17/04/2016	1	19:37	Lapwing	2	45	30	15	
17/04/2016	1	19:38	Curlew	1	30	30	0	
17/04/2016	1	19:40	Golden plover	25	30	15	15	
17/04/2016	1	19:45	Lapwing	1	30	30	0	
17/04/2016	1	19:45	Lapwing	1	30	30	0	
17/04/2016	1	19:53	Greylag goose	1	75	30	45	
17/04/2016	1	19:54	Golden plover	6	195	180	15	
17/04/2016	1	20:01	Redshank	1	30	30	0	
17/04/2016	1	20:10	Lapwing	2	75	15	60	
17/04/2016	1	20:24	Golden plover	50	255	240	15	
20/04/2016	1	05:14	Pink-footed goose	2	90	0	90	
20/04/2016	1	05:20	Pink-footed goose	350	75	0	75	
20/04/2016	1	05:22	Greylag goose	70	75	0	75	
20/04/2016	1	05:33	Pink-footed goose	20	105	15	90	
20/04/2016	1	05:37	Pink-footed goose	60	105	45	60	
20/04/2016	1	05:38	Pink-footed goose	110	135	60	75	
20/04/2016	1	05:40	Greylag goose	18	60	15	45	
20/04/2016	1	05:44	Curlew	1	45	30	15	
20/04/2016	1	05:46	Pink-footed goose	190	75	75	0	
20/04/2016	1	05:53	Curlew	1	30	15	15	
20/04/2016	1	05:55	Lapwing	1	30	30	0	
20/04/2016	1	06:09	Pink-footed goose	120	135	60	75	
20/04/2016	1	06:14	Lapwing	1	30	30	0	
20/04/2016	1	06:17	Pink-footed goose	20	60	30	30	
20/04/2016	1	06:26	Lapwing	1	45	30	15	
20/04/2016	1	06:28	Lapwing	1	30	30	0	
20/04/2016	1	06:28	Lapwing	1	30	30	0	
20/04/2016	1	06:32	Curlew	1	60	30	30	
20/04/2016	1	06:35	Curlew	1	45	0	45	
20/04/2016	1	06:42	Lapwing	4	105	30	75	
20/04/2016	1	06:45	Lapwing	2	30	15	15	
20/04/2016	1	06:52	Lapwing	1	30	30	0	
20/04/2016	1	06:58	Lapwing	1	45	15	30	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
20/04/2016	1	06:58	Lapwing	1	45	15	30	
20/04/2016	1	06:58	Lapwing	1	45	30	15	
20/04/2016	1	06:58	Lapwing	1	45	30	15	
20/04/2016	1	07:03	Oystercatcher	1	45	15	30	
20/04/2016	1	07:04	Curlew	1	45	0	45	
20/04/2016	1	07:12	Lapwing	1	45	30	15	
20/04/2016	1	07:12	Lapwing	1	45	30	15	
20/04/2016	1	07:13	Lapwing	1	30	30	0	
20/04/2016	1	07:13	Lapwing	1	30	30	0	
20/04/2016	1	07:22	Redshank	1	15	15	0	
20/04/2016	1	07:29	Lapwing	5	45	15	30	
20/04/2016	1	07:30	Pink-footed goose	82	75	30	45	
20/04/2016	1	07:35	Lapwing	1	60	0	60	
20/04/2016	1	07:37	Curlew	1	135	90	45	
20/04/2016	1	07:39	Curlew	1	30	30	0	
20/04/2016	1	08:20	Curlew	1	255	120	135	
20/04/2016	1	08:24	Pink-footed goose	18	45	0	45	
20/04/2016	1	08:26	Lapwing	1	30	30	0	
20/04/2016	1	08:56	Pink-footed goose	1	45	15	30	
20/04/2016	1	09:04	Lapwing	1	30	30	0	
20/04/2016	1	09:11	Lapwing	2	90	30	60	
20/04/2016	1	09:12	Curlew	1	135	45	90	
20/04/2016	1	09:21	Curlew	1	165	60	105	
20/04/2016	1	09:23	Pink-footed goose	250	60	0	60	
20/04/2016	1	09:23	Pink-footed goose	6	75	15	60	
20/04/2016	1	09:39	Pink-footed goose	6	45	15	30	
20/04/2016	1	09:44	Pink-footed goose	120	75	30	45	
20/04/2016	1	09:44	Pink-footed goose	90	165	60	105	
20/04/2016	1	10:00	Golden plover	48	60	30	30	
20/04/2016	1	10:20	Golden plover	7	30	0	30	
20/04/2016	1	10:24	Lapwing	1	30	15	15	
20/04/2016	1	10:29	Greylag goose	26	60	15	45	
20/04/2016	1	10:57	Pink-footed goose	130	165	165	0	
20/04/2016	1	11:00	Lapwing	1	30	15	15	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
20/04/2016	1	11:07	Lapwing	4	30	15	15	
20/04/2016	1	11:08	Pink-footed goose	70	60	30	30	
20/04/2016	1	16:53	Lapwing	1	30	15	15	
25/04/2016	1	15:15	Lapwing	1	30	30	0	
25/04/2016	1	15:17	Snipe	1	15	15	0	
25/04/2016	1	15:18	Golden plover	40	30	15	15	
25/04/2016	1	15:20	Lapwing	1	30	30	0	
25/04/2016	1	15:39	Lapwing	1	30	15	15	
25/04/2016	1	16:02	Lapwing	2	30	15	15	
25/04/2016	1	16:43	Lapwing	1	45	30	15	
25/04/2016	1	17:37	Oystercatcher	1	60	30	30	
25/04/2016	1	18:05	Lapwing	1	45	30	15	
25/04/2016	1	18:13	Lapwing	1	30	15	15	
25/04/2016	1	19:02	Lapwing	1	30	30	0	
25/04/2016	1	19:24	Oystercatcher	1	30	30	0	
25/04/2016	1	20:35	Lapwing	4	105	60	45	
25/04/2016	1	20:36	Curlew	2	45	45	0	
25/04/2016	1	21:30	Pink-footed goose	350	135	0	135	
25/04/2016	1	21:42	Pink-footed goose	3000	210	0	210	
10/05/2016	1	04:50	Curlew	1	15	15	0	
10/05/2016	1	05:55	Curlew	1	30	30	0	
10/05/2016	1	05:56	Curlew	1	45	45	0	
10/05/2016	1	06:00	Lapwing	1	15	15	0	
10/05/2016	1	06:23	Lapwing	1	75	45	30	
10/05/2016	1	06:24	Lapwing	1	30	30	0	
10/05/2016	1	06:24	Lapwing	1	60	45	15	
10/05/2016	1	06:25	Lapwing	1	30	15	15	
10/05/2016	1	06:31	Snipe	1	30	15	15	
10/05/2016	1	06:38	Lapwing	1	30	15	15	
10/05/2016	1	06:54	Lapwing	1	30	30	0	
10/05/2016	1	10:48	Lapwing	1	45	30	15	
10/05/2016	1	10:55	Lapwing	1	30	30	0	
10/05/2016	1	11:00	Lapwing	1	45	15	30	
10/05/2016	1	11:04	Curlew	1	30	30	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
10/05/2016	1	11:19	Lapwing	1	30	15	15	
10/05/2016	1	11:24	Lapwing	1	75	15	60	
10/05/2016	1	11:59	Lapwing	4	75	15	60	
10/05/2016	1	12:00	Lapwing	2	75	30	45	
10/05/2016	1	12:07	Lapwing	1	30	30	0	
10/05/2016	1	12:18	Lapwing	2	30	15	15	
10/05/2016	1	12:25	Lapwing	1	90	15	75	
10/05/2016	1	12:29	Lapwing	1	30	30	0	
10/05/2016	1	12:36	Lapwing	1	30	30	0	
10/05/2016	1	12:49	Lapwing	2	30	15	15	
10/05/2016	1	13:06	Lapwing	1	60	30	30	
10/05/2016	1	13:23	Lapwing	1	30	30	0	
10/05/2016	1	13:23	Lapwing	2	45	0	45	
14/05/2016	1	16:09	Curlew	1	30	30	0	
14/05/2016	1	16:11	Lapwing	1	30	30	0	
14/05/2016	1	16:13	Curlew	1	30	30	0	
14/05/2016	1	16:18	Curlew	1	30	15	15	
14/05/2016	1	16:24	Lapwing	1	30	30	0	
14/05/2016	1	16:24	Lapwing	1	30	15	15	
14/05/2016	1	16:26	Lapwing	1	30	30	0	
14/05/2016	1	16:30	Lapwing	1	30	30	0	
14/05/2016	1	16:43	Lapwing	1	30	30	0	
14/05/2016	1	16:51	Lapwing	2	30	15	15	
14/05/2016	1	16:58	Oystercatcher	1	30	30	0	
14/05/2016	1	17:15	Lapwing	2	75	45	30	
14/05/2016	1	17:20	Lapwing	2	45	30	15	
14/05/2016	1	17:22	Curlew	1	45	30	15	
14/05/2016	1	17:29	Curlew	1	30	15	15	
14/05/2016	1	17:31	Lapwing	1	45	45	0	
14/05/2016	1	17:46	Curlew	1	30	30	0	
14/05/2016	1	17:59	Lapwing	4	45	45	0	
14/05/2016	1	18:10	Oystercatcher	1	45	45	0	
14/05/2016	1	18:15	Lapwing	1	30	30	0	
14/05/2016	1	18:22	Lapwing	2	345	120	225	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
14/05/2016	1	18:40	Lapwing	1	210	90	120	
14/05/2016	1	18:57	Lapwing	2	30	15	15	
14/05/2016	1	18:57	Lapwing	1	45	15	30	
14/05/2016	1	18:59	Curlew	3	45	0	45	
14/05/2016	1	19:34	Lapwing	2	75	75	0	
14/05/2016	1	19:37	Lapwing	2	120	75	45	
14/05/2016	1	19:52	Lapwing	2	45	30	15	
14/05/2016	1	19:53	Lapwing	2	45	30	15	
14/05/2016	1	19:58	Lapwing	2	195	105	90	
14/05/2016	1	19:59	Golden plover	9	15	15	0	
14/05/2016	1	20:08	Lapwing	5	75	30	45	
14/05/2016	1	20:17	Lapwing	1	75	60	15	
14/05/2016	1	20:19	Lapwing	1	45	45	0	
14/05/2016	1	20:21	Lapwing	2	165	45	120	
14/05/2016	1	20:31	Lapwing	2	90	45	45	
14/05/2016	1	20:33	Lapwing	1	45	30	15	
14/05/2016	1	20:35	Lapwing	2	45	15	30	
14/05/2016	1	20:41	Lapwing	3	45	30	15	
14/05/2016	1	20:43	Lapwing	1	15	15	0	
14/05/2016	1	20:51	Lapwing	1	15	15	0	
14/05/2016	1	20:56	Lapwing	1	15	15	0	
14/05/2016	1	21:39	Curlew	1	30	30	0	
14/05/2016	1	21:45	Curlew	1	30	15	15	
26/05/2016	1	03:58	Curlew	1	45	15	30	
26/05/2016	1	04:46	Lapwing	3	60	45	15	
26/05/2016	1	04:46	Lapwing	4	60	60	0	
26/05/2016	1	04:47	Curlew	1	45	15	30	
26/05/2016	1	04:47	Oystercatcher	1	60	0	60	
26/05/2016	1	05:20	Oystercatcher	1	30	30	0	
26/05/2016	1	06:20	Lapwing	1	30	30	0	
26/05/2016	1	07:15	Curlew	1	45	0	45	
26/05/2016	1	07:20	Lapwing	1	135	45	90	
26/05/2016	1	07:21	Lapwing	1	30	0	30	
26/05/2016	1	07:21	Lapwing	1	30	0	30	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
26/05/2016	1	07:21	Lapwing	1	45	0	45	
26/05/2016	1	07:21	Lapwing	1	105	45	60	
26/05/2016	1	07:35	Lapwing	1	105	45	60	
26/05/2016	1	07:46	Lapwing	1	45	15	30	
26/05/2016	1	07:51	Lapwing	1	30	0	30	
26/05/2016	1	07:51	Lapwing	1	30	0	30	
26/05/2016	1	08:49	Lapwing	6	60	0	60	
26/05/2016	1	08:49	Lapwing	2	105	30	75	
26/05/2016	1	09:02	Curlew	1	60	0	60	
26/05/2016	1	09:02	Curlew	1	135	15	120	
26/05/2016	1	09:11	Oystercatcher	2	30	30	0	
26/05/2016	1	09:33	Curlew	1	15	15	0	
26/05/2016	1	09:42	Lapwing	4	45	0	45	
26/05/2016	1	09:45	Lapwing	2	60	0	60	
07/06/2016	1	16:46	Curlew	2	30	30	0	
07/06/2016	1	16:47	Lapwing	1	135	30	105	
07/06/2016	1	16:50	Lapwing	1	30	30	0	
07/06/2016	1	16:56	Lapwing	5	105	75	30	
07/06/2016	1	16:56	Lapwing	20	150	0	150	
07/06/2016	1	16:58	Lapwing	1	30	15	15	
07/06/2016	1	17:04	Lapwing	1	30	30	0	
07/06/2016	1	18:07	Lapwing	3	120	90	30	
07/06/2016	1	18:12	Lapwing	1	45	30	15	
07/06/2016	1	18:22	Lapwing	4	90	75	15	
07/06/2016	1	18:30	Lapwing	3	150	105	45	
07/06/2016	1	18:39	Oystercatcher	1	30	30	0	
07/06/2016	1	18:42	Lapwing	1	45	15	30	
07/06/2016	1	18:50	Oystercatcher	1	45	45	0	
07/06/2016	1	18:54	Curlew	1	45	0	45	
07/06/2016	1	18:55	Lapwing	1	30	30	0	
07/06/2016	1	19:06	Lapwing	5	30	30	0	
07/06/2016	1	19:14	Lapwing	9	45	15	30	
07/06/2016	1	19:15	Snipe	1	15	15	0	
07/06/2016	1	19:20	Snipe	1	15	15	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
07/06/2016	1	19:24	Lapwing	1	45	15	30	
07/06/2016	1	19:26	Snipe	2	30	15	15	
07/06/2016	1	19:28	Snipe	4	135	0	135	
07/06/2016	1	20:20	Snipe	1	15	15	0	
07/06/2016	1	20:35	Lapwing	1	30	30	0	
07/06/2016	1	20:47	Snipe	1	15	0	15	
07/06/2016	1	20:56	Lapwing	1	30	15	15	
07/06/2016	1	20:58	Lapwing	1	30	30	0	
07/06/2016	1	20:59	Snipe	1	1200	0	1200	
07/06/2016	1	21:10	Curlew	1	30	0	30	
07/06/2016	1	21:10	Lapwing	2	30	0	30	
07/06/2016	1	21:18	Snipe	3	30	0	30	
07/06/2016	1	21:25	Lapwing	3	30	0	30	
07/06/2016	1	21:40	Lapwing	1	45	0	45	
07/06/2016	1	21:59	Oystercatcher	1	30	30	0	
23/06/2016	1	03:30	Lapwing	1	30	30	0	
26/06/2016	1	15:22	Lapwing	1	30	30	0	
26/06/2016	1	16:13	Lapwing	3	75	75	0	
26/06/2016	1	16:52	Lapwing	1	30	15	15	
26/06/2016	1	17:40	Lapwing	3	30	30	0	
10/08/2016	1	09:26	Hen harrier	1	45	45	0	
10/08/2016	1	09:31	Hen harrier	1	75	75	0	
10/08/2016	1	09:45	Hen harrier	1	30	30	0	
12/08/2016	1	10:07	Hen harrier	1	150	150	0	
12/08/2016	1	11:18	Greylag goose	4	60	60	0	
30/09/2016	2	13:06	Hen harrier	1	45	45	0	
30/09/2016	2	13:13	Golden plover	450	60	60	0	
30/09/2016	2	13:22	Golden plover	70	75	45	30	
30/09/2016	2	14:44	Hen harrier	1	105	105	0	
30/09/2016	2	14:50	Golden plover	85	105	0	105	
30/09/2016	2	15:48	Golden plover	150	135	30	105	
30/09/2016	3	16:55	Greylag goose	8	75	30	45	
30/09/2016	3	17:16	Greylag goose	28	150	60	90	
30/09/2016	3	17:34	Peregrine	1	30	0	30	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
30/09/2016	3	17:40	Greylag goose	10	30	15	15	
30/09/2016	3	19:27	Greylag goose	55	165	0	165	
01/10/2016	3	12:07	Hen harrier	1	120	90	30	
01/10/2016	3	13:20	Golden plover	70	135	0	135	
03/10/2016	2	16:45	Golden plover	7	30	30	0	
03/10/2016	2	17:23	Whooper swan	6	60	15	45	
03/10/2016	2	17:34	Golden plover	20	30	30	0	
03/10/2016	2	18:40	Merlin	1	30	30	0	
05/10/2016	2	09:32	Hen harrier	1	30	15	15	
05/10/2016	2	09:50	Hen harrier	1	30	30	0	
05/10/2016	2	10:09	Greylag goose	15	60	45	15	
05/10/2016	2	10:25	Greylag goose	10	30	0	30	
05/10/2016	2	10:35	Hen harrier	1	45	45	0	
05/10/2016	2	11:15	Greylag goose	6	45	0	45	
05/10/2016	2	11:40	Greylag goose	5	60	30	30	
05/10/2016	2	14:53	Hen harrier	1	210	210	0	
05/10/2016	2	15:07	Hen harrier	1	45	45	0	
05/10/2016	2	16:04	Hen harrier	1	165	135	30	
05/10/2016	2	16:38	Hen harrier	1	30	30	0	
11/10/2016	3	17:33	Hen harrier	1	45	45	0	
11/10/2016	3	17:51	Snipe	1	75	15	60	
11/10/2016	3	19:11	Barn owl	1	30	0	30	
12/10/2016	3	15:53	Greylag goose	18	30	15	15	
12/10/2016	3	15:55	Greylag goose	57	45	15	30	
12/10/2016	3	16:10	Lapwing	14	225	0	225	
12/10/2016	3	17:09	Greylag goose	21	30	15	15	
13/10/2016	2	06:53	Snipe	1	15	0	15	
13/10/2016	2	06:59	Barn owl	1	30	30	0	
13/10/2016	2	09:04	Golden plover	50	45	45	0	
13/10/2016	2	09:28	Golden plover	35	30	15	15	
13/10/2016	2	09:28	Golden plover	14	45	30	15	
13/10/2016	2	09:32	Golden plover	14	105	15	90	
13/10/2016	2	09:42	Golden plover	19	15	15	0	
13/10/2016	2	10:18	Golden plover	36	30	30	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
13/10/2016	2	11:52	Greylag goose	39	75	0	75	
13/10/2016	2	13:09	Golden plover	4	45	0	45	
24/10/2016	2	15:56	Hen harrier	1	30	30	0	
24/10/2016	2	16:49	Greylag goose	70	105	15	90	
24/10/2016	2	17:28	Pink-footed goose	11	180	15	165	
24/10/2016	2	18:06	Hen harrier	1	45	45	0	
25/10/2016	2	14:12	Greylag goose	35	105	0	105	
25/10/2016	2	14:13	Greylag goose	4	135	0	135	
25/10/2016	2	14:13	Greylag goose	18	150	0	150	
25/10/2016	2	14:46	Golden plover	28	90	0	90	
25/10/2016	2	15:17	Golden plover	17	45	15	30	
25/10/2016	2	16:21	Greylag goose	19	195	0	195	
25/10/2016	2	16:26	Golden plover	30	75	30	45	
25/10/2016	2	16:52	Greylag goose	13	75	15	60	
25/10/2016	2	16:53	Greylag goose	2	195	0	195	
25/10/2016	2	16:56	Greylag goose	4	90	0	90	
25/10/2016	2	16:57	Snipe	1	60	0	60	
26/10/2016	3	08:06	Greylag goose	25	120	0	120	
26/10/2016	3	08:16	Golden plover	1	75	0	75	
26/10/2016	3	08:25	Greylag goose	18	75	0	75	
26/10/2016	3	08:44	Greylag goose	300	135	0	135	
26/10/2016	3	08:51	Greylag goose	13	45	0	45	
26/10/2016	3	09:32	Greylag goose	15	45	0	45	
26/10/2016	3	09:33	Pink-footed goose	35	225	0	225	
26/10/2016	3	09:34	Greylag goose	28	60	0	60	
26/10/2016	3	10:06	Pink-footed goose	23	210	45	165	
26/10/2016	3	10:13	Golden plover	1	30	30	0	
26/10/2016	3	11:11	Golden plover	40	45	45	0	
26/10/2016	3	11:21	Greylag goose	7	135	0	135	
26/10/2016	3	11:54	Greylag goose	8	270	15	255	
07/11/2016	2	15:36	Greylag goose	28	120	120	0	
07/11/2016	2	15:50	Greylag goose	1	105	105	0	
07/11/2016	2	16:03	Hen harrier	1	75	0	75	
07/11/2016	2	16:29	Greylag goose	37	105	105	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
08/11/2016	2	07:16	Greylag goose	10	60	0	60	
08/11/2016	2	07:18	Greylag goose	1	45	0	45	
08/11/2016	2	07:39	Greylag goose	18	90	0	90	
08/11/2016	2	07:51	Pink-footed goose	16	60	60	0	
08/11/2016	2	07:51	Pink-footed goose	49	60	60	0	
08/11/2016	2	07:52	Greylag goose	25	90	90	0	
08/11/2016	2	08:03	Greylag goose	32	45	45	0	
08/11/2016	2	08:05	Greylag goose	7	45	0	45	
08/11/2016	2	08:07	Pink-footed goose	9	75	75	0	
08/11/2016	2	08:14	Pink-footed goose	7	45	45	0	
08/11/2016	2	08:14	Pink-footed goose	19	60	60	0	
08/11/2016	2	08:15	Greylag goose	36	75	0	75	
08/11/2016	2	08:19	Greylag goose	10	75	0	75	
08/11/2016	2	08:21	Greylag goose	83	195	120	75	
08/11/2016	2	08:32	Greylag goose	14	60	0	60	
08/11/2016	2	08:34	Greylag goose	10	45	45	0	
08/11/2016	2	08:37	Greylag goose	67	135	135	0	
08/11/2016	2	08:37	Pink-footed goose	67	135	135	0	
08/11/2016	2	08:38	Greylag goose	25	90	90	0	
08/11/2016	2	08:38	Pink-footed goose	25	90	90	0	
08/11/2016	2	08:39	Greylag goose	15	60	0	60	
08/11/2016	2	09:27	Pink-footed goose	38	105	15	90	
08/11/2016	2	09:34	Greylag goose	24	90	0	90	
08/11/2016	2	09:51	Greylag goose	3	75	0	75	
08/11/2016	2	09:59	Golden plover	6	45	0	45	
08/11/2016	2	10:08	Greylag goose	57	120	120	0	
08/11/2016	2	10:15	Greylag goose	62	195	30	165	
08/11/2016	2	10:16	Greylag goose	38	75	30	45	
08/11/2016	2	10:28	Greylag goose	14	75	0	75	
08/11/2016	2	10:45	Greylag goose	28	165	0	165	
08/11/2016	2	10:45	Pink-footed goose	24	75	0	75	
08/11/2016	2	10:49	Greylag goose	1	45	0	45	
08/11/2016	2	10:53	Greylag goose	12	75	0	75	
08/11/2016	2	10:54	Greylag goose	47	60	60	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
08/11/2016	2	10:59	Greylag goose	27	255	0	255	
08/11/2016	3	07:01	Greylag goose	4	75	0	75	
08/11/2016	3	07:43	Greylag goose	19	165	0	165	
08/11/2016	3	07:54	Greylag goose	44	90	90	0	
08/11/2016	3	08:04	Greylag goose	22	135	0	135	
08/11/2016	3	08:12	Greylag goose	4	75	0	75	
08/11/2016	3	08:23	Greylag goose	70	255	0	255	
08/11/2016	3	08:37	Pink-footed goose	19	210	0	210	
08/11/2016	3	08:41	Greylag goose	10	90	0	90	
08/11/2016	3	09:02	Greylag goose	25	120	0	120	
08/11/2016	3	09:16	Greylag goose	24	75	75	0	
08/11/2016	3	09:38	Greylag goose	26	75	0	75	
08/11/2016	3	09:38	Pink-footed goose	26	75	0	75	
08/11/2016	3	10:19	Greylag goose	48	135	0	135	
08/11/2016	3	10:28	Greylag goose	50	105	30	75	
08/11/2016	3	10:42	Greylag goose	18	135	0	135	
08/11/2016	3	10:45	Greylag goose	5	45	45	0	
08/11/2016	3	10:46	Greylag goose	65	60	30	30	
08/11/2016	3	12:37	Greylag goose	20	75	0	75	
08/11/2016	3	12:39	Greylag goose	2	105	15	90	
08/11/2016	3	12:55	Greylag goose	24	45	45	0	
21/11/2016	2	14:53	Peregrine	1	45	30	15	
21/11/2016	2	14:55	Golden plover	13	60	45	15	
21/11/2016	2	15:01	Hen harrier	1	45	45	0	
21/11/2016	2	15:08	Golden plover	18	165	135	30	
21/11/2016	2	16:01	Golden plover	20	45	45	0	
21/11/2016	3	16:27	Greylag goose	10	60	0	60	
22/11/2016	2	07:38	Greylag goose	14	75	0	75	
22/11/2016	2	08:13	Greylag goose	5	135	0	135	
22/11/2016	2	08:46	Golden plover	2	75	30	45	
22/11/2016	2	09:49	Golden plover	30	120	105	15	
22/11/2016	2	10:51	Merlin	1	30	30	0	
22/11/2016	2	10:52	Greylag goose	50	90	0	90	
22/11/2016	2	10:57	Greylag goose	55	105	0	105	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
22/11/2016	2	11:11	Golden plover	35	240	105	135	
22/11/2016	2	11:26	Golden plover	20	60	60	0	
22/11/2016	2	11:39	Golden plover	1	75	75	0	
22/11/2016	3	07:39	Greylag goose	1	75	0	75	
22/11/2016	3	07:48	Greylag goose	5	30	30	0	
22/11/2016	3	08:34	Greylag goose	2	45	45	0	
22/11/2016	3	09:57	Greylag goose	1	45	0	45	
22/11/2016	3	10:21	Greylag goose	3	45	30	15	
22/11/2016	3	10:46	Greylag goose	1	60	60	0	
22/11/2016	3	10:52	Greylag goose	15	60	45	15	
22/11/2016	3	10:58	Greylag goose	52	60	45	15	
05/12/2016	2	16:05	Merlin	1	15	15	0	
06/12/2016	2	07:59	Greenland white-fronted goose	16	105	30	75	
06/12/2016	2	08:16	Greenland white-fronted goose	50	90	30	60	
06/12/2016	2	08:16	Greenland white-fronted goose	17	90	30	60	
06/12/2016	2	08:51	Hen harrier	1	75	75	0	
06/12/2016	2	09:39	Golden plover	15	30	30	0	
20/12/2016	2	08:30	Greenland white-fronted goose	16	60	15	45	
20/12/2016	2	08:45	Greenland white-fronted goose	14	45	30	15	
20/12/2016	2	09:00	Greenland white-fronted goose	24	45	15	30	
20/12/2016	2	09:09	Greenland white-fronted goose	8	30	30	0	
20/12/2016	2	09:21	Greenland white-fronted goose	10	15	15	0	
20/12/2016	2	09:35	Greenland white-fronted goose	10	15	15	0	
20/12/2016	2	10:00	Greenland white-fronted goose	10	15	15	0	
20/12/2016	2	10:00	Greenland white-fronted goose	6	15	15	0	
20/12/2016	2	10:20	Greenland white-fronted goose	27	210	90	120	
20/12/2016	2	11:35	Golden plover	16	60	60	0	
20/12/2016	2	11:38	Golden plover	24	45	15	30	
20/12/2016	2	13:56	Lapwing	1	30	30	0	
05/01/2017	2	13:47	Greylag goose	70	45	30	15	
05/01/2017	2	15:29	Greylag goose	4	30	0	30	
05/01/2017	2	15:53	Whooper swan	2	120	0	120	
05/01/2017	3	13:47	Greylag goose	13	165	75	90	
06/01/2017	2	08:14	Greylag goose	4	30	30	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
06/01/2017	2	08:15	Greylag goose	30	60	15	45	
06/01/2017	2	08:17	Greylag goose	2	45	30	15	
06/01/2017	2	08:18	Greylag goose	20	75	15	60	
06/01/2017	2	08:19	Greylag goose	10	30	30	0	
06/01/2017	2	08:20	Greylag goose	70	45	15	30	
06/01/2017	2	08:21	Greylag goose	5	30	15	15	
06/01/2017	2	08:22	Greylag goose	15	45	15	30	
06/01/2017	2	08:22	Greylag goose	16	30	30	0	
06/01/2017	2	08:23	Greylag goose	6	45	15	30	
06/01/2017	2	08:23	Greylag goose	7	45	15	30	
06/01/2017	2	08:23	Greylag goose	2	30	30	0	
06/01/2017	2	09:02	Greylag goose	6	120	15	105	
06/01/2017	2	09:05	Greylag goose	2	75	15	60	
06/01/2017	2	09:06	Greylag goose	150	105	0	105	
06/01/2017	2	09:22	Greylag goose	2	30	15	15	
06/01/2017	2	09:27	Greylag goose	8	30	30	0	
06/01/2017	2	10:16	Greylag goose	140	105	15	90	
06/01/2017	2	10:26	Greylag goose	200	135	30	105	
06/01/2017	2	10:26	Greylag goose	30	75	15	60	
06/01/2017	2	10:27	Greylag goose	6	45	45	0	
06/01/2017	2	10:28	Greylag goose	20	45	15	30	
06/01/2017	3	08:35	Greenland white-fronted goose	2	90	45	45	
06/01/2017	3	08:36	Greenland white-fronted goose	16	75	75	0	
06/01/2017	3	09:03	Greylag goose	13	60	15	45	
06/01/2017	3	09:10	Greylag goose	9	45	45	0	
06/01/2017	3	09:21	Greylag goose	1	30	0	30	
06/01/2017	3	09:43	Greylag goose	1	75	45	30	
18/01/2017	2	12:23	Hen harrier	1	105	105	0	
18/01/2017	2	12:37	Merlin	1	90	75	15	
19/01/2017	3	09:18	Greylag goose	3	60	60	0	
01/02/2017	2	17:01	Greylag goose	20	30	15	15	
01/02/2017	3	11:46	Greylag goose	13	105	0	105	
01/02/2017	3	12:21	Hen harrier	1	30	30	0	
01/02/2017	3	15:06	Golden plover	19	60	30	30	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
15/02/2017	2	15:36	Greylag goose	34	135	105	30	
15/02/2017	2	15:38	Whooper swan	13	90	75	15	
15/02/2017	2	15:38	Whooper swan	3	30	0	30	
15/02/2017	2	16:13	Hen harrier	1	30	30	0	
15/02/2017	2	18:04	Pink-footed goose	120	60	0	60	
15/02/2017	2	18:09	Greylag goose	12	45	0	45	
15/02/2017	3	16:01	Peregrine	1	15	15	0	
15/02/2017	3	17:17	Greylag goose	3	75	0	75	
16/02/2017	2	07:04	Pink-footed goose	1	75	0	75	
16/02/2017	2	07:12	Greylag goose	3	90	0	90	
16/02/2017	2	07:54	Greylag goose	5	135	0	135	
16/02/2017	2	08:31	Lapwing	9	150	0	150	
16/02/2017	2	08:36	Greylag goose	1	120	0	120	
01/03/2017	2	12:46	Greylag goose	12	30	0	30	
01/03/2017	2	12:46	Greylag goose	38	30	15	15	
13/03/2017	2	16:26	Greylag goose	140	135	0	135	
13/03/2017	2	16:29	Greylag goose	3	75	0	75	
13/03/2017	2	17:10	Greylag goose	5	150	0	150	
13/03/2017	2	18:32	Whooper swan	8	135	90	45	
13/03/2017	3	16:17	Greylag goose	1	255	105	150	
13/03/2017	3	16:26	Greylag goose	107	90	90	0	
14/03/2017	2	06:37	Greylag goose	1	75	75	0	
14/03/2017	2	06:38	Greylag goose	30	45	0	45	
14/03/2017	2	06:38	Greylag goose	10	120	0	120	
14/03/2017	2	07:10	Greylag goose	4	45	45	0	
14/03/2017	2	07:29	Greylag goose	1	300	165	135	
14/03/2017	2	07:41	Greylag goose	30	30	30	0	
14/03/2017	2	07:43	Greylag goose	17	45	15	30	
14/03/2017	2	07:46	Lapwing	1	30	15	15	
14/03/2017	2	07:47	Lapwing	2	30	15	15	
14/03/2017	2	07:47	Lapwing	2	30	30	0	
14/03/2017	2	07:47	Lapwing	1	30	30	0	
14/03/2017	2	07:50	Greylag goose	13	60	15	45	
14/03/2017	2	07:59	Greylag goose	13	45	15	30	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
14/03/2017	2	08:01	Greylag goose	8	45	15	30	
14/03/2017	2	08:05	Whooper swan	9	75	0	75	
14/03/2017	2	08:05	Whooper swan	3	90	0	90	
14/03/2017	2	08:09	Greylag goose	3	75	15	60	
14/03/2017	2	08:12	Greylag goose	10	45	45	0	
14/03/2017	2	08:25	Greylag goose	10	45	45	0	
14/03/2017	2	08:25	Greylag goose	5	120	15	105	
14/03/2017	2	08:31	Greylag goose	1	60	30	30	
14/03/2017	3	06:26	Greylag goose	6	60	60	0	
14/03/2017	3	06:40	Greylag goose	166	180	0	180	
14/03/2017	3	06:41	Greylag goose	1	45	0	45	
14/03/2017	3	07:52	Greylag goose	52	90	90	0	
27/03/2017	2	17:46	Lapwing	1	15	15	0	
27/03/2017	2	17:46	Lapwing	1	15	15	0	
27/03/2017	2	17:46	Lapwing	1	15	15	0	
27/03/2017	2	17:48	Lapwing	1	45	0	45	
27/03/2017	2	17:49	Greylag goose	5	150	135	15	
27/03/2017	2	18:01	Greylag goose	20	195	135	60	
27/03/2017	2	18:20	Lapwing	1	15	15	0	
27/03/2017	2	18:29	Curlew	1	15	15	0	
27/03/2017	2	18:31	Greylag goose	85	225	225	0	
27/03/2017	2	18:45	Lapwing	1	45	45	0	
27/03/2017	2	18:53	Lapwing	2	105	90	15	
27/03/2017	2	18:57	Curlew	1	45	45	0	
27/03/2017	3	18:08	Greylag goose	27	75	75	0	
27/03/2017	3	18:18	Greylag goose	4	45	0	45	
27/03/2017	3	18:34	Greylag goose	60	75	75	0	
27/03/2017	3	18:58	Greylag goose	16	60	60	0	
27/03/2017	3	20:23	Greylag goose	14	30	0	30	
27/03/2017	3	20:23	Greylag goose	90	30	0	30	
27/03/2017	3	20:23	Greylag goose	50	30	0	30	
27/03/2017	3	20:28	Greylag goose	4	30	0	30	
28/03/2017	2	06:28	Greylag goose	24	45	45	0	
28/03/2017	2	06:42	Greylag goose	6	75	0	75	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
28/03/2017	2	06:42	Greylag goose	18	75	75	0	
28/03/2017	2	06:42	Pink-footed goose	43	150	150	0	
28/03/2017	2	06:48	Greylag goose	1	45	0	45	
28/03/2017	2	06:48	Greylag goose	30	135	0	135	
28/03/2017	2	06:48	Pink-footed goose	150	135	0	135	
28/03/2017	2	06:49	Greylag goose	5	105	0	105	
28/03/2017	2	06:52	Greylag goose	9	135	0	135	
28/03/2017	2	06:59	Greylag goose	1	60	0	60	
28/03/2017	2	07:04	Greylag goose	2	75	0	75	
28/03/2017	2	07:07	Curlew	1	15	15	0	
28/03/2017	2	07:08	Curlew	1	60	45	15	
28/03/2017	2	07:09	Greylag goose	10	45	0	45	
28/03/2017	2	07:09	Pink-footed goose	60	150	0	150	
28/03/2017	2	07:11	Pink-footed goose	40	75	0	75	
28/03/2017	2	07:16	Pink-footed goose	3	60	0	60	
28/03/2017	2	07:16	Pink-footed goose	71	150	0	150	
28/03/2017	2	07:18	Greylag goose	34	75	75	0	
28/03/2017	2	07:18	Pink-footed goose	34	75	75	0	
28/03/2017	2	07:19	Greylag goose	170	105	105	0	
28/03/2017	2	07:22	Lapwing	1	60	15	45	
28/03/2017	2	07:34	Greylag goose	13	120	120	0	
28/03/2017	2	07:38	Greylag goose	6	45	0	45	
28/03/2017	2	07:40	Lapwing	1	45	15	30	
28/03/2017	2	07:45	Lapwing	1	90	90	0	
28/03/2017	2	07:50	Lapwing	5	15	0	15	
28/03/2017	2	07:56	Greylag goose	2	45	45	0	
28/03/2017	2	08:00	Lapwing	1	15	15	0	
28/03/2017	2	08:03	Greylag goose	1	75	0	75	
28/03/2017	2	08:05	Greylag goose	1	60	0	60	
28/03/2017	2	08:53	Greylag goose	2	45	0	45	
28/03/2017	3	06:18	Pink-footed goose	27	225	180	45	
28/03/2017	3	06:20	Pink-footed goose	50	390	285	105	
28/03/2017	3	06:38	Greylag goose	2	60	0	60	
28/03/2017	3	06:40	Greylag goose	27	255	255	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
28/03/2017	3	06:47	Greylag goose	14	60	60	0	
28/03/2017	3	06:48	Greylag goose	5	45	45	0	
28/03/2017	3	06:58	Greylag goose	17	165	165	0	
28/03/2017	3	07:01	Greylag goose	1	60	45	15	
28/03/2017	3	07:13	Pink-footed goose	150	210	180	30	
28/03/2017	3	07:28	Pink-footed goose	13	75	75	0	
28/03/2017	3	07:29	Greylag goose	1	90	90	0	
28/03/2017	3	07:54	Pink-footed goose	45	120	75	45	
28/03/2017	3	07:54	Pink-footed goose	1	60	60	0	
28/03/2017	3	08:15	Pink-footed goose	9	255	255	0	
10/04/2017	2	15:40	Pink-footed goose	7	240	0	240	
11/04/2017	2	18:25	Golden plover	16	15	0	15	
10/04/2017	2	15:54	Golden plover	60	75	45	30	
10/04/2017	2	16:17	Lapwing	1	30	30	0	
10/04/2017	2	16:18	Lapwing	1	60	60	0	
10/04/2017	2	16:20	Lapwing	2	495	375	120	
10/04/2017	2	15:59	Golden plover	30	30	30	0	
10/04/2017	2	16:30	Golden plover	200	45	45	0	
10/04/2017	2	17:03	Lapwing	1	60	45	15	
10/04/2017	2	16:50	Golden plover	200	105	60	45	
10/04/2017	2	17:10	Pink-footed goose	7	30	30	0	
10/04/2017	2	17:10	Golden plover	40	105	75	30	
10/04/2017	2	17:21	Lapwing	2	30	30	0	
10/04/2017	2	17:15	Golden plover	40	30	30	0	
10/04/2017	2	17:25	Lapwing	1	15	15	0	
10/04/2017	2	17:38	Lapwing	1	15	15	0	
10/04/2017	2	17:39	Lapwing	1	30	15	15	
10/04/2017	2	17:39	Lapwing	1	15	15	0	
10/04/2017	2	17:23	Golden plover	50	30	30	0	
10/04/2017	2	17:51	Lapwing	1	30	15	15	
10/04/2017	2	17:47	Golden plover	120	30	15	15	
10/04/2017	2	17:55	Golden plover	120	15	0	15	
10/04/2017	2	18:12	Golden plover	30	45	30	15	
10/04/2017	2	18:19	Golden plover	120	360	255	105	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
10/04/2017	3	16:00	Pink-footed goose	2	75	0	75	
10/04/2017	3	16:15	Curlew	1	30	0	30	
10/04/2017	3	16:15	Curlew	1	45	0	45	
10/04/2017	3	16:40	Curlew	1	15	15	0	
10/04/2017	3	16:47	Curlew	1	15	15	0	
10/04/2017	3	17:04	Curlew	1	30	30	0	
10/04/2017	3	17:04	Curlew	1	135	60	75	
10/04/2017	3	17:42	Peregrine	1	15	15	0	
11/04/2017	2	16:45	Lapwing	1	15	15	0	
11/04/2017	2	16:48	Lapwing	1	15	15	0	
11/04/2017	2	16:53	Lapwing	1	15	15	0	
11/04/2017	2	16:55	Lapwing	4	15	15	0	
11/04/2017	2	17:17	Lapwing	2	45	45	0	
11/04/2017	2	17:31	Pink-footed goose	43	45	0	45	
11/04/2017	2	17:42	Lapwing	1	15	15	0	
11/04/2017	2	17:53	Lapwing	2	15	15	0	
11/04/2017	2	18:01	Lapwing	1	15	15	0	
11/04/2017	2	18:11	Lapwing	5	60	30	30	
11/04/2017	2	18:15	Lapwing	1	15	0	15	
11/04/2017	2	18:18	Pink-footed goose	8	15	0	15	
10/04/2017	2	18:24	Golden plover	120	60	60	0	
11/04/2017	2	19:19	Pink-footed goose	130	60	0	60	
11/04/2017	2	20:35	Pink-footed goose	1	75	0	75	
11/04/2017	2	20:52	Golden plover	7	15	15	0	
11/04/2017	2	21:02	Pink-footed goose	200	75	0	75	
11/04/2017	2	21:04	Pink-footed goose	250	75	0	75	
11/04/2017	2	21:09	Pink-footed goose	50	45	0	45	
11/04/2017	3	17:29	Pink-footed goose	200	135	0	135	
11/04/2017	3	17:29	Pink-footed goose	42	165	15	150	
12/04/2017	2	06:07	Pink-footed goose	30	135	0	135	
12/04/2017	2	06:07	Pink-footed goose	70	105	60	45	
12/04/2017	2	06:07	Pink-footed goose	40	45	0	45	
12/04/2017	2	06:08	Greylag goose	25	45	45	0	
12/04/2017	2	06:08	Pink-footed goose	25	45	45	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
12/04/2017	2	06:09	Pink-footed goose	28	45	15	30	
12/04/2017	2	06:09	Pink-footed goose	70	75	45	30	
12/04/2017	2	06:10	Pink-footed goose	45	75	45	30	
12/04/2017	2	06:11	Greylag goose	25	45	45	0	
12/04/2017	2	06:11	Pink-footed goose	25	45	45	0	
12/04/2017	2	06:11	Pink-footed goose	15	75	0	75	
12/04/2017	2	06:19	Pink-footed goose	45	105	60	45	
12/04/2017	2	06:19	Pink-footed goose	17	90	60	30	
12/04/2017	2	06:20	Pink-footed goose	12	90	30	60	
12/04/2017	2	06:34	Pink-footed goose	46	90	90	0	
12/04/2017	2	06:59	Lapwing	2	15	15	0	
12/04/2017	2	07:08	Greylag goose	30	255	30	225	
12/04/2017	2	07:08	Pink-footed goose	30	255	30	225	
12/04/2017	2	07:10	Lapwing	2	15	15	0	
12/04/2017	2	07:13	Pink-footed goose	12	45	30	15	
12/04/2017	2	07:13	Pink-footed goose	5	45	0	45	
12/04/2017	2	07:16	Pink-footed goose	1	60	60	0	
12/04/2017	2	07:27	Pink-footed goose	13	105	0	105	
12/04/2017	2	07:27	Pink-footed goose	47	165	0	165	
12/04/2017	2	07:29	Curlew	1	15	15	0	
12/04/2017	2	07:44	Pink-footed goose	13	180	60	120	
12/04/2017	2	07:53	Pink-footed goose	5	60	0	60	
12/04/2017	2	08:11	Lapwing	1	15	15	0	
12/04/2017	2	09:01	Pink-footed goose	140	75	30	45	
12/04/2017	2	09:22	Lapwing	1	30	30	0	
12/04/2017	2	09:33	Lapwing	2	30	30	0	
12/04/2017	2	09:37	Lapwing	3	45	45	0	
12/04/2017	2	09:42	Lapwing	1	15	15	0	
12/04/2017	2	09:49	Pink-footed goose	2	45	0	45	
12/04/2017	2	09:50	Pink-footed goose	30	180	165	15	
12/04/2017	2	10:05	Pink-footed goose	25	75	0	75	
12/04/2017	2	10:07	Pink-footed goose	105	60	45	15	
12/04/2017	2	10:07	Pink-footed goose	150	315	300	15	
12/04/2017	2	10:26	Curlew	1	30	30	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
12/04/2017	2	10:33	Greylag goose	1	90	30	60	
12/04/2017	3	06:05	Pink-footed goose	24	90	0	90	
12/04/2017	3	06:09	Greylag goose	49	60	0	60	
12/04/2017	3	06:09	Pink-footed goose	49	60	0	60	
12/04/2017	3	06:18	Pink-footed goose	36	75	0	75	
12/04/2017	3	06:20	Pink-footed goose	48	60	0	60	
12/04/2017	3	06:22	Pink-footed goose	13	75	0	75	
12/04/2017	3	06:26	Pink-footed goose	80	90	0	90	
12/04/2017	3	06:39	Greylag goose	13	45	0	45	
12/04/2017	3	06:39	Pink-footed goose	13	45	0	45	
12/04/2017	3	06:45	Pink-footed goose	1	30	0	30	
12/04/2017	3	06:51	Curlew	1	120	0	120	
12/04/2017	3	06:55	Curlew	1	90	60	30	
12/04/2017	3	06:58	Curlew	1	60	60	0	
12/04/2017	3	07:10	Pink-footed goose	34	60	0	60	
12/04/2017	3	07:18	Pink-footed goose	42	45	15	30	
12/04/2017	3	07:30	Curlew	1	30	0	30	
12/04/2017	3	07:31	Pink-footed goose	2	45	0	45	
12/04/2017	3	07:38	Pink-footed goose	200	30	0	30	
12/04/2017	3	07:42	Greylag goose	50	60	0	60	
12/04/2017	3	07:42	Pink-footed goose	50	60	0	60	
12/04/2017	3	07:50	Pink-footed goose	10	45	0	45	
12/04/2017	3	07:52	Greylag goose	2	60	0	60	
12/04/2017	3	07:52	Pink-footed goose	2	60	0	60	
12/04/2017	3	07:58	Curlew	1	30	30	0	
12/04/2017	3	08:14	Curlew	1	15	15	0	
12/04/2017	3	08:49	Curlew	1	45	45	0	
12/04/2017	3	09:02	Pink-footed goose	120	105	0	105	
12/04/2017	3	09:02	Pink-footed goose	27	135	0	135	
12/04/2017	3	09:03	Curlew	1	30	0	30	
12/04/2017	3	09:10	Curlew	1	15	15	0	
12/04/2017	3	09:21	Pink-footed goose	9	60	0	60	
12/04/2017	3	09:24	Curlew	1	15	15	0	
12/04/2017	3	09:44	Curlew	1	15	15	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
12/04/2017	3	09:50	Greylag goose	26	90	30	60	
12/04/2017	3	10:14	Pink-footed goose	46	45	15	30	
12/04/2017	3	10:20	Pink-footed goose	37	75	0	75	
12/04/2017	3	10:23	Pink-footed goose	120	105	105	0	
24/04/2017	2	19:04	Pink-footed goose	500	60	0	60	
24/04/2017	2	19:05	Pink-footed goose	12	30	0	30	
24/04/2017	2	19:09	Pink-footed goose	31	90	0	90	
24/04/2017	2	19:21	Lapwing	3	15	15	0	
24/04/2017	2	19:25	Pink-footed goose	1	45	0	45	
24/04/2017	2	19:27	Lapwing	2	30	30	0	
24/04/2017	2	19:42	Lapwing	2	30	30	0	
24/04/2017	2	19:47	Pink-footed goose	65	45	45	0	
24/04/2017	2	19:53	Pink-footed goose	1	15	0	15	
24/04/2017	2	20:04	Lapwing	2	30	15	15	
24/04/2017	2	20:37	Pink-footed goose	48	60	0	60	
24/04/2017	2	20:54	Lapwing	1	15	0	15	
26/04/2017	2	05:54	Golden plover	45	45	30	15	
25/04/2017	2	13:05	Lapwing	4	15	15	0	
25/04/2017	2	13:10	Lapwing	2	15	15	0	
25/04/2017	2	13:20	Lapwing	3	15	15	0	
25/04/2017	2	13:23	Lapwing	2	30	30	0	
25/04/2017	2	13:30	Lapwing	1	30	30	0	
25/04/2017	2	13:32	Lapwing	1	15	15	0	
25/04/2017	2	13:46	Lapwing	1	30	15	15	
25/04/2017	2	13:47	Lapwing	2	15	15	0	
25/04/2017	2	13:49	Lapwing	2	15	15	0	
25/04/2017	2	13:49	Lapwing	1	15	15	0	
25/04/2017	2	13:50	Lapwing	1	15	15	0	
25/04/2017	2	14:05	Lapwing	2	45	30	15	
26/04/2017	2	07:15	Golden plover	27	30	30	0	
25/04/2017	2	14:58	Lapwing	2	255	225	30	
25/04/2017	2	15:14	Lapwing	1	75	60	15	
25/04/2017	2	15:22	Lapwing	1	30	30	0	
25/04/2017	2	15:35	Lapwing	1	135	135	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
26/04/2017	2	05:06	Pink-footed goose	8	45	0	45	
26/04/2017	2	05:09	Curlew	1	15	15	0	
26/04/2017	2	05:37	Pink-footed goose	30	75	0	75	
26/04/2017	2	05:37	Pink-footed goose	65	45	0	45	
26/04/2017	2	05:38	Pink-footed goose	45	60	0	60	
26/04/2017	2	05:38	Pink-footed goose	50	60	0	60	
26/04/2017	2	05:38	Pink-footed goose	62	60	0	60	
26/04/2017	2	05:39	Pink-footed goose	160	75	75	0	
26/04/2017	2	05:39	Pink-footed goose	76	60	0	60	
26/04/2017	2	05:40	Pink-footed goose	27	60	0	60	
26/04/2017	2	05:42	Curlew	2	15	15	0	
26/04/2017	2	05:42	Pink-footed goose	48	60	0	60	
26/04/2017	2	05:45	Pink-footed goose	39	90	0	90	
26/04/2017	2	05:48	Curlew	1	15	0	15	
26/04/2017	2	05:48	Lapwing	1	15	15	0	
26/04/2017	2	05:51	Curlew	3	60	0	60	
26/04/2017	2	07:25	Golden plover	2	30	30	0	
26/04/2017	2	05:56	Lapwing	3	15	0	15	
26/04/2017	2	06:13	Lapwing	2	30	30	0	
26/04/2017	2	06:27	Pink-footed goose	20	30	0	30	
26/04/2017	2	06:36	Pink-footed goose	10	150	150	0	
26/04/2017	2	06:45	Lapwing	1	15	15	0	
26/04/2017	2	06:49	Lapwing	5	15	0	15	
26/04/2017	2	06:55	Lapwing	1	15	15	0	
26/04/2017	2	06:58	Lapwing	1	15	15	0	
26/04/2017	2	07:00	Lapwing	2	15	15	0	
26/04/2017	2	07:04	Lapwing	3	30	0	30	
26/04/2017	2	07:11	Pink-footed goose	17	75	75	0	
25/04/2017	2	13:00	Golden plover	48	75	30	45	
26/04/2017	2	07:16	Pink-footed goose	20	45	0	45	
26/04/2017	2	07:19	Pink-footed goose	78	75	75	0	
26/04/2017	2	07:23	Lapwing	3	45	30	15	
25/04/2017	2	14:07	Golden plover	45	165	105	60	
26/04/2017	2	07:30	Lapwing	2	30	0	30	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
26/04/2017	2	07:32	Pink-footed goose	1	60	60	0	
26/04/2017	2	12:35	Lapwing	2	15	15	0	
26/04/2017	2	12:37	Lapwing	2	45	45	0	
26/04/2017	2	12:44	Lapwing	1	30	30	0	
26/04/2017	2	12:53	Lapwing	2	15	15	0	
26/04/2017	2	12:59	Lapwing	2	45	45	0	
26/04/2017	2	13:07	Lapwing	2	30	30	0	
26/04/2017	2	13:18	Lapwing	2	45	45	0	
26/04/2017	2	13:30	Golden plover	15	30	0	30	
26/04/2017	2	13:34	Lapwing	2	75	45	30	
26/04/2017	2	13:46	Lapwing	3	60	30	30	
26/04/2017	2	13:51	Golden plover	10	30	0	30	
26/04/2017	2	14:00	Lapwing	1	15	15	0	
26/04/2017	2	14:04	Lapwing	2	45	45	0	
26/04/2017	2	14:05	Lapwing	2	15	15	0	
26/04/2017	2	14:48	Golden plover	62	150	75	75	
26/04/2017	2	15:02	Lapwing	2	15	15	0	
26/04/2017	2	15:11	Lapwing	1	45	45	0	
26/04/2017	2	15:19	Curlew	1	15	15	0	
26/04/2017	2	15:35	Curlew	1	15	15	0	
01/05/2017	2	19:11	Lapwing	1	45	15	30	
01/05/2017	2	19:15	Golden plover	4	30	0	30	
01/05/2017	2	19:51	Golden plover	34	90	30	60	
02/05/2017	2	09:42	Lapwing	1	15	15	0	
02/05/2017	2	09:51	Lapwing	4	30	0	30	
02/05/2017	2	10:09	Lapwing	5	15	0	15	
02/05/2017	2	10:11	Lapwing	1	15	0	15	
02/05/2017	2	10:18	Lapwing	1	15	15	0	
02/05/2017	2	10:23	Lapwing	1	15	15	0	
02/05/2017	2	10:30	Lapwing	1	15	0	15	
02/05/2017	2	10:43	Lapwing	2	15	15	0	
02/05/2017	2	10:45	Lapwing	2	15	15	0	
02/05/2017	2	10:49	Lapwing	1	60	0	60	
02/05/2017	2	10:50	Lapwing	2	15	0	15	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
02/05/2017	2	10:53	Lapwing	3	15	15	0	
02/05/2017	2	10:56	Lapwing	3	45	0	45	
02/05/2017	2	11:02	Lapwing	1	15	0	15	
02/05/2017	2	11:03	Lapwing	1	15	15	0	
02/05/2017	2	11:07	Lapwing	1	30	0	30	
02/05/2017	2	11:14	Lapwing	3	15	0	15	
02/05/2017	2	11:28	Lapwing	3	15	0	15	
02/05/2017	2	11:35	Lapwing	4	30	0	30	
02/05/2017	2	11:51	Lapwing	2	15	15	0	
02/05/2017	2	11:52	Lapwing	2	75	0	75	
02/05/2017	2	12:09	Lapwing	2	30	0	30	
02/05/2017	2	12:12	Lapwing	3	30	15	15	
02/05/2017	2	12:15	Lapwing	4	30	0	30	
02/05/2017	2	12:23	Lapwing	2	15	0	15	
02/05/2017	2	13:05	Lapwing	1	90	15	75	
02/05/2017	2	13:10	Lapwing	1	30	30	0	
02/05/2017	2	13:30	Lapwing	1	30	0	30	
02/05/2017	2	13:33	Lapwing	1	15	0	15	
02/05/2017	2	14:07	Lapwing	1	15	0	15	
02/05/2017	2	14:15	Lapwing	1	15	0	15	
02/05/2017	2	14:26	Lapwing	1	15	15	0	
02/05/2017	2	14:32	Lapwing	2	15	0	15	
02/05/2017	2	14:35	Lapwing	1	15	15	0	
02/05/2017	2	14:44	Lapwing	1	30	30	0	
02/05/2017	2	14:51	Lapwing	1	30	0	30	
02/05/2017	2	14:57	Lapwing	1	15	0	15	
02/05/2017	2	14:59	Peregrine	1	45	0	45	
02/05/2017	2	15:15	Lapwing	2	15	0	15	
02/05/2017	2	15:19	Lapwing	2	60	30	30	
02/05/2017	2	15:21	Lapwing	1	30	30	0	
02/05/2017	2	15:24	Lapwing	2	30	15	15	
02/05/2017	2	15:33	Lapwing	1	30	15	15	
02/05/2017	2	15:43	Lapwing	1	45	0	45	
02/05/2017	2	15:49	Lapwing	1	15	0	15	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
02/05/2017	2	15:50	Curlew	1	30	0	30	
02/05/2017	3	09:55	Curlew	1	45	15	30	
02/05/2017	3	10:25	Curlew	1	45	45	0	
02/05/2017	3	10:34	Curlew	1	15	15	0	
02/05/2017	3	10:57	Curlew	2	60	60	0	
02/05/2017	3	11:10	Curlew	1	45	15	30	
02/05/2017	3	11:35	Lapwing	1	30	15	15	
02/05/2017	3	11:35	Lapwing	1	60	30	30	
02/05/2017	3	11:42	Lapwing	1	15	15	0	
02/05/2017	3	13:20	Lapwing	3	60	30	30	
02/05/2017	3	13:24	Lapwing	1	15	15	0	
02/05/2017	3	13:24	Lapwing	2	30	30	0	
02/05/2017	3	13:39	Lapwing	2	15	15	0	
02/05/2017	3	13:56	Lapwing	1	45	0	45	
02/05/2017	3	14:29	Curlew	1	30	0	30	
02/05/2017	3	14:32	Lapwing	2	30	30	0	
02/05/2017	3	14:41	Lapwing	1	15	15	0	
02/05/2017	3	14:47	Lapwing	1	30	30	0	
02/05/2017	3	14:47	Lapwing	1	30	30	0	
02/05/2017	3	14:52	Lapwing	1	15	15	0	
02/05/2017	3	14:55	Lapwing	1	15	0	15	
02/05/2017	3	15:27	Lapwing	2	135	105	30	
02/05/2017	3	15:36	Lapwing	2	30	30	0	
02/05/2017	3	15:39	Lapwing	2	30	30	0	
02/05/2017	3	15:43	Lapwing	2	30	30	0	
03/05/2017	2	04:58	Curlew	2	60	60	0	
03/05/2017	2	05:06	Curlew	1	30	30	0	
03/05/2017	2	05:12	Curlew	1	30	30	0	
03/05/2017	2	05:20	Curlew	1	60	60	0	
03/05/2017	2	05:21	Curlew	1	45	45	0	
03/05/2017	2	05:24	Curlew	1	60	30	30	
03/05/2017	2	05:33	Lapwing	1	30	15	15	
03/05/2017	2	05:33	Lapwing	1	15	15	0	
03/05/2017	2	05:35	Lapwing	1	15	15	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
03/05/2017	2	05:38	Lapwing	2	45	45	0	
03/05/2017	2	05:45	Lapwing	1	15	15	0	
03/05/2017	2	05:50	Lapwing	1	15	15	0	
03/05/2017	2	06:00	Pink-footed goose	300	135	0	135	
03/05/2017	2	06:24	Lapwing	2	30	30	0	
03/05/2017	2	06:25	Lapwing	2	30	0	30	
03/05/2017	2	06:37	Curlew	1	45	45	0	
03/05/2017	2	06:37	Curlew	1	30	30	0	
03/05/2017	2	06:43	Lapwing	2	45	30	15	
03/05/2017	2	06:48	Curlew	2	30	30	0	
03/05/2017	2	06:48	Pink-footed goose	5	105	0	105	
03/05/2017	2	06:49	Curlew	1	30	30	0	
03/05/2017	2	06:58	Lapwing	1	15	15	0	
03/05/2017	2	07:14	Lapwing	1	15	15	0	
03/05/2017	3	05:52	Curlew	1	45	30	15	
03/05/2017	3	05:53	Curlew	1	30	30	0	
03/05/2017	3	06:03	Pink-footed goose	150	75	45	30	
03/05/2017	3	06:15	Pink-footed goose	2	75	30	45	
03/05/2017	3	06:36	Curlew	1	15	15	0	
08/05/2017	2	19:26	Lapwing	1	120	15	105	
08/05/2017	2	19:31	Lapwing	1	45	15	30	
08/05/2017	2	19:34	Lapwing	3	30	30	0	
08/05/2017	2	19:37	Lapwing	1	15	15	0	
08/05/2017	2	19:53	Lapwing	1	15	15	0	
08/05/2017	2	20:04	Lapwing	2	15	15	0	
08/05/2017	2	20:08	Lapwing	1	45	45	0	
08/05/2017	2	20:08	Lapwing	2	30	30	0	
08/05/2017	2	20:38	Lapwing	1	15	0	15	
08/05/2017	2	20:44	Lapwing	2	15	0	15	
08/05/2017	2	20:44	Lapwing	2	45	0	45	
08/05/2017	2	20:49	Curlew	1	30	30	0	
08/05/2017	2	20:53	Curlew	2	30	0	30	
08/05/2017	2	20:56	Lapwing	1	15	15	0	
08/05/2017	2	20:58	Lapwing	2	15	0	15	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
08/05/2017	2	21:12	Curlew	1	15	15	0	
08/05/2017	2	21:23	Curlew	1	15	0	15	
08/05/2017	2	21:27	Curlew	2	15	0	15	
08/05/2017	2	21:30	Golden plover	1	15	15	0	
08/05/2017	2	21:54	Short-eared owl	1	30	30	0	
08/05/2017	2	21:58	Short-eared owl	1	15	15	0	
08/05/2017	3	19:36	Curlew	1	75	75	0	
08/05/2017	3	20:12	Lapwing	2	30	15	15	
08/05/2017	3	20:13	Curlew	1	60	15	45	
08/05/2017	3	20:35	Snipe	1	30	15	15	
08/05/2017	3	21:18	Curlew	1	30	15	15	
08/05/2017	3	21:18	Curlew	1	75	30	45	
09/05/2017	2	04:56	Curlew	2	15	0	15	
09/05/2017	2	04:56	Curlew	1	15	15	0	
09/05/2017	2	04:57	Curlew	1	15	15	0	
09/05/2017	2	05:16	Curlew	1	30	30	0	
09/05/2017	2	05:39	Curlew	1	15	15	0	
09/05/2017	2	05:42	Lapwing	4	15	15	0	
09/05/2017	2	05:42	Lapwing	1	45	0	45	
09/05/2017	2	05:46	Curlew	1	15	0	15	
09/05/2017	2	05:46	Lapwing	4	75	15	60	
09/05/2017	2	05:57	Curlew	1	60	0	60	
09/05/2017	2	06:02	Lapwing	1	30	0	30	
09/05/2017	2	06:07	Lapwing	1	60	15	45	
09/05/2017	2	06:08	Lapwing	2	15	15	0	
09/05/2017	2	06:21	Lapwing	2	15	0	15	
09/05/2017	2	06:24	Curlew	1	45	0	45	
09/05/2017	2	06:29	Lapwing	2	30	30	0	
09/05/2017	2	06:37	Lapwing	1	15	15	0	
09/05/2017	2	06:39	Lapwing	2	30	30	0	
09/05/2017	2	06:50	Lapwing	2	15	0	15	
09/05/2017	2	06:55	Lapwing	1	15	0	15	
09/05/2017	2	06:57	Lapwing	1	15	15	0	
09/05/2017	3	06:39	Curlew	1	45	45	0	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
09/05/2017	3	06:47	Lapwing	2	30	30	0	
09/05/2017	3	06:59	Lapwing	1	45	30	15	
12/05/2017	3	05:16	Lapwing	1	15	15	0	
12/05/2017	3	05:16	Lapwing	1	30	30	0	
12/05/2017	3	05:24	Lapwing	1	135	105	30	
12/05/2017	3	05:29	Lapwing	1	240	180	60	
12/05/2017	3	05:32	Lapwing	1	60	45	15	
12/05/2017	3	05:36	Lapwing	1	15	0	15	
12/05/2017	3	05:37	Lapwing	1	45	45	0	
12/05/2017	3	05:37	Lapwing	1	30	30	0	
12/05/2017	3	05:44	Lapwing	3	30	15	15	
12/05/2017	3	05:44	Lapwing	3	30	15	15	
12/05/2017	3	05:47	Lapwing	1	105	75	30	
12/05/2017	3	05:58	Lapwing	3	30	15	15	
12/05/2017	3	05:58	Lapwing	2	30	30	0	
12/05/2017	3	05:59	Lapwing	1	30	30	0	
12/05/2017	3	06:02	Lapwing	1	30	15	15	
12/05/2017	3	06:06	Lapwing	1	75	45	30	
12/05/2017	3	06:14	Lapwing	2	30	30	0	
12/05/2017	3	06:14	Lapwing	1	75	60	15	
12/05/2017	3	06:22	Lapwing	1	75	60	15	
12/05/2017	3	06:23	Lapwing	1	45	30	15	
12/05/2017	3	06:31	Lapwing	1	30	30	0	
12/05/2017	3	06:34	Golden plover	12	30	30	0	
12/05/2017	3	06:43	Lapwing	1	30	30	0	
12/05/2017	3	06:43	Lapwing	1	15	15	0	
12/05/2017	3	06:47	Lapwing	1	30	30	0	
12/05/2017	3	06:47	Lapwing	1	15	15	0	
06/06/2017	2	12:31	Snipe	1	105	30	75	
06/06/2017	3	12:38	Curlew	1	15	15	0	
07/06/2017	3	16:22	Lapwing	1	15	15	0	
07/06/2017	3	17:13	Curlew	1	90	75	15	
07/06/2017	3	17:54	Lapwing	1	60	30	30	
07/06/2017	3	17:55	Lapwing	4	75	45	30	

Date	VP	Flight Start Time	Species	No. Of Birds	Duration (seconds)	Band 1	Band 2	Band 3
07/06/2017	3	17:57	Snipe	1	195	60	135	
07/06/2017	3	19:35	Curlew	1	15	15	0	
07/06/2017	3	20:14	Lapwing	2	15	15	0	
07/06/2017	3	20:37	Lapwing	2	15	15	0	
07/06/2017	3	20:48	Curlew	1	15	0	15	
07/06/2017	3	20:53	Curlew	1	30	0	30	
07/06/2017	3	22:10	Lapwing	2	15	15	0	
13/07/2017	2	04:33	Lapwing	2	90	90	0	
13/07/2017	2	05:06	Curlew	1	30	30	0	
13/07/2017	2	05:12	Lapwing	19	90	90	0	
13/07/2017	2	05:44	Curlew	1	45	45	0	
13/07/2017	2	07:35	Lapwing	1	45	45	0	
13/07/2017	2	09:15	Curlew	1	30	30	0	
13/07/2017	2	09:16	Curlew	1	30	30	0	
13/07/2017	2	09:41	Curlew	3	45	45	0	
13/07/2017	2	09:45	Curlew	1	30	30	0	
14/07/2017	2	08:25	Oystercatcher	1	75	75	0	
14/07/2017	2	09:04	Curlew	1	15	0	15	
14/07/2017	2	09:04	Lapwing	2	75	75	0	
14/07/2017	2	09:05	Curlew	1	15	15	0	
14/07/2017	2	09:14	Golden plover	1	75	0	75	
14/07/2017	2	10:32	Hen harrier	1	105	105	0	
14/07/2017	2	10:42	Curlew	1	30	30	0	
14/07/2017	3	10:36	Hen harrier	1	75	75	0	
07/08/2017	2	19:52	Hen harrier	1	195	195	0	
07/08/2017	2	19:54	Lapwing	1	15	15	0	
08/08/2017	2	10:10	Lapwing	13	30	0	30	
08/08/2017	2	10:46	Lapwing	1	45	15	30	
08/08/2017	2	11:15	Hen harrier	1	105	105	0	
08/08/2017	2	12:31	Hen harrier	1	180	180	0	