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A7.2.1 INTRODUCTION

This appendix includes the full results of all the bird surveys carried out for the Cloghercor Wind Farm project, apart from the flightline maps from the vantage point surveys and the Golden Eagle survey results. The flightline maps are included in Appendix 7.3. The Golden Eagle survey results are included in Appendices 7.4 and 7.5.

A7.2.2 SPECIES CODES

Most of the data tables in this appendix use the standard BTO species codes. These codes, and the corresponding full species names, are listed in Table A7.2.1.

BTO code	Common name	Scientific name						
ВН	Black-headed Gull	Chroicocephalus ridibundus						
BY	Barnacle Goose	Branta leucopsis						
BZ	Buzzard	Buteo buteo						
СА	Cormorant	Phalacrocorax carbo						
СМ	Common Gull	Larus canus						
CN	Common Tern	Sterna hirundo						
CS	Common Sandpiper	Actitis hypoleucos						
CU	Curlew	Numenius arquata						
EA	Golden Eagle	Aquila chrysaetos						
ET	Little Egret	Egretta garzetta						
GB	Great Black-backed Gull	Larus marinus						
GJ	Greylag Goose	Anser anser						
GK	Greenshank	Tringa nebularia						
GP	Golden Plover	Pluvialis apricaria						
GX	Gannet	Morus bassanus						
н.	Grey Heron	Ardea cinerea						
HG	Herring Gull	Larus argentatus						
нн	Hen Harrier	Circus cyaneus						
КТ	Red Kite	Milvus milvus						
LB	Lesser Black-backed Gull	Larus fuscus						
LN	Long-tailed Duck	Clangula hyemalis						
MA	Mallard	Anas platyrhynchos						
МН	Moorhen	Gallinula chloropus						
MS	Mute Swan	Cygnus olor						
ос	Oystercatcher	Haematopus ostralegus						
OP	Osprey	Pandion haliaetus						
RK	Redshank	Tringa totanus						

Table A7.2.1 BTO species codes and corresponding species names..





BTO code	Common name	Scientific name
RM	Red-breasted Merganser	Mergus serrator
RP	Ringed Plover	Charadrius hiaticula
SA	Shag	Phalacrocorax aristotelis
SH	Sparrowhawk	Accipiter nisus
SN	Snipe	Gallinago gallinago
SU	Shelduck	Tadorna tadorna
UU	Unidentified gull	-
WК	Woodcock	Scolopax rusticola
WM	Whimbrel	Numenius phaeopus
WS	Whooper Swan	Cygnus cygnus
XR	Unidentified raptor	-

A7.2.3 VANTAGE POINT SURVEYS

Summary data

The recording rates of the species recorded during the vantage point surveys are shown in Table A7.2.2 and Table A7.2.3.

Species	Winter 2019/20	Summer 2020	Winter 2020/21	Summer 2021	Winter 2021/22
Mute Swan	0	0	0	0	1.7
Whooper Swan	18.1	0	6	0	6.9
Greylag Goose	1.6	0	0	0	0
Barnacle Goose	0	0	1	0	0
Teal	0	0	0	2.7	0
Mallard	1.6	1.9	10	5.5	5.1
Red Grouse	6.6	1	8	3.6	3.4
Cormorant	1.6	0	2	3.6	0
Grey Heron	3.3	4.8	0	1.8	0
White-tailed Eagle	0	1.9	0	0	0
Hen Harrier	0	0	0	0	1.7
Sparrowhawk	1.6	5.7	2	0.9	5.1
Buzzard	0	14.4	3	5.5	15.4
Golden Eagle	19.7	14.4	22	28.2	36
Osprey	0	2.9	0	4.5	0
Golden Plover	0	4.8	0	0.9	1.7

Table A7.2.2 Recording rates (records / 360 hours) per season of waterbird, raptor and grouse species during the Cloghercor Wind Farm vantage point surveys.





Species	Winter 2019/20	Summer 2020	Winter 2020/21	Summer 2021	Winter 2021/22
Common Sandpiper	0	1.9	0	0.9	1.7
Snipe	0	1.9	1	2.7	5.1
Black-headed Gull	0	0	2	0	0
Common Gull	0	28.7	1	6.4	0
Lesser Black-backed Gull	11.5	17.2	3	25.4	3.4
Herring Gull	0	72.8	24	8.2	0
Great Black-backed Gull	11.5	15.3	4	5.5	0
Kestrel	8.2	40.2	8	9.1	8.6
Merlin	3.3	2.9	3	1.8	1.7
Peregrine	1.6	1.9	0	2.7	0

The data in this table is derived from vantage point survey records during timed watches, including non-flight records and records outside viewsheds, but excluding records from the Gweebarra Estuary buffer.

Table A7.2.3 Recording rates per month (records / 60 hours) of waterbird, raptor and grouse species during the Cloghercor Wind Farm vantage point surveys.

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mute Swan	0	0		0	0	0	0	0	0	0	0	0
	-	-	0.5	-	-	-	-	-	-	-	-	-
Whooper Goose	0	1	1.8	0	0	0	0	0	0	6.3	0.8	0
Greylag Goose	0	0	0	0	0	0	0	0	0	0.5	0	0
Barnacle Goose	0	0	0	0	0	0	0	0	0	0.5	0	0
Teal	0	0	0	0	0.4	0.4	0.4	0	0	0	0	0
Mallard	0	2.4	3.2	2.7	0.4	0.4	0	0.5	0	0	0.4	0.5
Red Grouse	0.9	0	0.9	2.7	0	0	0	0	0	1.5	2.5	0.5
Cormorant	0	0	0.5	0	0.4	0.4	0.4	0.5	0	0	0.8	0
Grey Heron	0.5	0	0.5	0.5	1.7	0	0.4	0	0.5	0	0	0
White-tailed Eagle	0	0	0	0	0	0	0	0	1	0	0	0
Hen Harrier	0	0	0	0	0	0	0	0	0	0.5	0	0
Sparrowhawk	0.9	0	0	0	1.3	1.3	0	0	0.5	1	0.8	0
Buzzard	0	1.9	1.8	3.2	2.6	2.6	1.3	0	0	1.9	0	0
Golden Eagle	5.9	1	6.8	3.8	1.7	2.6	5	6	5.5	6.8	1.2	0.9
Osprey	0	0	0	0.5	0	0	0	3.5	0	0	0	0
Golden Plover	0	0	0	0.5	0.4	0	1.7	0	0	0.5	0	0
Common Sandpiper	0	0	0	0	0.9	0.4	0	0	0.5	0	0	0
Snipe	0.5	0	1.4	0	0.4	0.9	0.4	0	0.5	0	0	0





Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Black-headed Gull	0	0	0	0	0	0	0	0	0	0	0.4	0.5
Common Gull	0.5	0	0	3.8	7.2	1.3	2.9	1	0	0	0.4	0
Lesser Black- backed Gull	2.3	1.4	1.4	1.1	3	12.3	2.1	1.5	0.5	0	0.4	0
Herring Gull	0.5	0.5	0.5	1.1	12.3	8.8	11.3	1.5	1.5	3.4	6.2	0
Great Black- backed Gull	0	1.4	3.2	2.7	0.4	2.2	2.9	2	0	0.5	0	0
Kestrel	1.8	1.9	1.4	0.5	2.1	3.5	2.5	6	11	0.5	0.8	0.9
Merlin	0	0	0.9	0.5	0.4	0	0	0.5	1	0	0.8	0.9
Peregrine	0	0	0.5	0	1.7	0	0.4	0	0	0	0	0

The data in this table is derived from vantage point survey records during timed watches, including non-flight records and records outside viewsheds, but excluding records from the Gweebarra Estuary buffer.

Full data

Table A7.2.4 shows all the flightlines records from the timed vantage point watches. These are the flightlines that can contribute to the collision risk model (when they were within the viewshed of the vantage point). The flight durations are shown in secs for the following height bands: Band1 = 0-25 m; Band2 = 25-50 m; Band 3 = 50-160 m; Band4 = 160-220 m; Band5 = > 220 m.

Table A7.2.5 shows comments about the flightline records of the more notable species: species included in Annex I of the Birds Directive and species red-listed in Birds of Conservation Concern in Ireland 4. Note, some records of these species did not have any comments and are not, therefore, included in this table.

Table A7.2.6 shows details of additional flightlines that were recorded outside the timed vantage point watches. These flightlines are not included in the collision risk model.

Table A7.2.7 shows non-flightline records that were recorded during the timed vantage point watches. These include records of birds on the ground, on mudflats, on water and in trees, as well as records of birds that were heard only.

Table A7.2.8 shows non-flightline records that were recorded outside the timed vantage point watches. These include records made while travelling to / from the vantage point, and records made during breaks between the watches.

These records can be cross-referenced to the flightline maps in Appendix 3 by the combination of Species – Date – VP – Watch – FL_ref – Obs_ref.





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
вн	24/01/2020	6	1	1	1	1	10:01	5						
вн	28/04/2020	6	1	2	2	2	09:06	6						
вн	28/04/2020	6	2	1	1	1	16:29	6						
вн	28/04/2020	6	2	2	2	1	17:38	5						
вн	28/04/2020	6	2	3	3	1	17:39	8						
вн	10/06/2020	6	2	1	1	1	13:48		20					
BH	25/06/2020	8	1	4	4	1	09:22			122				
вн	25/06/2020	8	1	6	6	1	09:39	38	25					
BH	12/08/2020	6	1	1	1	1	08:10		12					
BH	04/11/2020	8	1	6	6	1	09:56	58						
BH	11/11/2020	6	1	1	1	1	08:02	6						
BH	11/11/2020	6	1	1	1	1	09:20	6						
BH	30/11/2020	8	1	2	2	1	09:48							adult
BH	11/12/2020	6	1	1	1	1	09:00	6						
BH	11/12/2020	6	1	1	1	2	09:04	6						
BH	12/12/2020	8	2	3	3a	1	12:17							adult
BH	26/02/2021	8	1	6	6	1	09:07							adult
вн	26/02/2021	8	2	13	13a	4	14:26							adult
BH	22/03/2021	8	1	7	7	2	07:30							adult
вн	16/05/2021	8	1	2	2	4	10:18							adult
вн	16/05/2021	8	2	6	6	3	14:04							adult
BH	16/05/2021	8	2	7	7	1	14:15	5	20					adult

Table A7.2.4 Vantage point survey flightline records recorded during timed watches.





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
BY	30/10/2020	10	1	4	4	7	10:26			20	10	73		
BZ	28/04/2020	6	1	1	1	1	08:42	20						
BZ	29/04/2020	3	2	1	1	1	17:31			2				
BZ	30/04/2020	5	2	1	1	1	14:14				50			
BZ	12/05/2020	4	1	1	1	1	14:01		7	25				
BZ	26/05/2020	8	1	5	5a	1	09:40			330				
BZ	26/05/2020	8	1	5	5b	1	10:30	145	68					
BZ	26/05/2020	8	1	8	8	1	10:56			238				
BZ	26/05/2020	10	1	3	3	1	12:32	114						
BZ	11/06/2020	10	1	1	1	1	11:09	170	322	132				
BZ	11/06/2020	10	1	2	2	1	11:15		82					
BZ	11/06/2020	10	1	16	16	1	13:39	5	127					
BZ	25/06/2020	10	1	8	8	1	11:46			282				
BZ	25/06/2020	10	1	12	12	1	13:05			126				
BZ	17/07/2020	10	1	6	6	1	12:29	10						
BZ	17/07/2020	10	2	8	8	1	16:13	24						
BZ	18/07/2020	8	1	5	5	1	18:04		183					
BZ	07/10/2020	2	2	1	1	1	13:52		54					
BZ	25/02/2021	10	2	3	3	1	15:27							
BZ	26/04/2021	5	1	1	1	2	12:12		124					
BZ	26/04/2021	5	1	2	2	2	12:15		10	12				
BZ	26/04/2021	5	1	3	3	2	12:27				40			
BZ	26/04/2021	5	1	5	5	1	12:42		76					
BZ	16/05/2021	8	2	10	10	2	15:02							adult





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
BZ	21/06/2021	8	2	4	4	1	13:00		20	20	30			
BZ	28/10/2021	8	1	3	3	1	13:16		122	134			male	adult
BZ	29/10/2021	10	1	2	2	1	14:29	56	157				male	adult
BZ	30/10/2021	9	1	1	1	1	10:11		205	11			female	adult
BZ	03/02/2022	10	2	2	2	1	10:20		30					
BZ	03/02/2022	10	2	4	4	1	10:58	30						
BZ	23/02/2022	8	2	1	1	2	08:55	30	100	90				
BZ	25/03/2022	10	2	2	2	3	11:55			190	100			
BZ	29/03/2022	10	1	5	5	1	15:05							adult
CA	29/10/2019	6	2	1	1	1	15:44		13					
CA	18/05/2020	8	1	1	1	1	08:22		27					
CA	11/06/2020	8	1	2	2	1	08:57	15						
CA	27/08/2020	8	2	2	2	1	14:45	20						
CA	27/08/2020	8	2	3	3	1	14:58	12						
CA	04/11/2020	8	1	12	12	1	10:43		228					
CA	13/11/2020	3	1	1	1	1	09:31	6						
CA	28/01/2021	8	2	3	3a	2	15:46							
CA	16/05/2021	8	1	3	3	1	10:38		16					adult
CA	18/05/2021	9	2	4	4	1	09:23			15	5			adult
CA	22/06/2021	9	1	2	2	1	15:15	15						
СА	17/07/2021	5	2	1	1	1	11:50					80		
СМ	29/04/2020	3	1	1	1	4	08:41	12	60	22				
СМ	29/04/2020	3	1	2	2	5	09:30	115	10					
СМ	29/04/2020	3	1	3	3	2	10:53	10	30					





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
СМ	29/04/2020	3	1	4	4	2	10:54	7	60					
СМ	13/05/2020	3	1	1	1	4	07:34	2	5	10				
СМ	13/05/2020	3	1	2	2	2	07:50	6	10	12				
СМ	13/05/2020	3	1	3	3	1	07:58	2	4	13				
СМ	13/05/2020	3	1	4	4	1	09:33	3	6	10				
СМ	18/05/2020	10	1	1	1a	4	10:38		7					
СМ	18/05/2020	10	1	1	1b	1	10:46	8						
СМ	18/05/2020	10	1	1	1c	2	10:53	10						
СМ	18/05/2020	10	1	1	1i	9	12:08		12					
СМ	18/05/2020	10	1	3	3b	2	10:53		9					
СМ	18/05/2020	10	1	3	Зc	2	11:23	9						
СМ	18/05/2020	10	1	3	3d	2	11:24	12						
СМ	18/05/2020	10	1	6	6	4	11:26	12						
СМ	18/05/2020	10	1	6	6	12	11:31	19						
СМ	18/05/2020	10	1	9	9	1	11:57	8						
СМ	18/05/2020	10	1	11	11	5	12:04	12						
СМ	18/05/2020	10	1	12	12b	6	12:21	15	32					
СМ	26/05/2020	10	1	4	4	4	13:00			130				
СМ	11/06/2020	8	1	4	4	1	08:58		25					
СМ	11/06/2020	8	1	6	6	1	09:26		64	116				
СМ	11/06/2020	8	1	8	8	1	09:56	21						
СМ	25/06/2020	8	1	5	5	1	09:26	56						
СМ	25/06/2020	8	1	5	5	1	09:44	48						
СМ	08/07/2020	3	2	1	1	1	12:49	117	30					





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
СМ	08/07/2020	3	2	2	2	1	12:49	129						
СМ	12/07/2020	9	1	2	2	6	10:47		310					
СМ	12/07/2020	9	1	4	4	2	11:50	100	10					
СМ	12/07/2020	9	1	4	4	5	11:52	120	30					
СМ	12/07/2020	9	1	4	4	3	12:02	70	20					
СМ	12/07/2020	9	1	5	5	7	12:28	110	85					
СМ	12/07/2020	9	1	6	6	4	12:40	124						
СМ	17/07/2020	8	1	6	6	2	19:35	65						
СМ	26/07/2020	9	1	2	2	9	14:12		100					
СМ	30/11/2020	8	1	1	1	6	09:46							2 adults, 1 1W
СМ	30/11/2020	8	2	1	1a	1	14:30							adult
СМ	30/11/2020	8	2	2	2a	1	14:48							adult
СМ	30/11/2020	8	2	7	7a	4	15:54							adult
СМ	12/12/2020	8	1	1	1	3	08:40							5 adults, 1 1W
СМ	12/12/2020	8	1	2	2	1	08:51							adult
СМ	12/12/2020	8	1	3	3	1	09:12							adult
СМ	12/12/2020	8	1	4	4	1	09:15							adult
СМ	12/12/2020	8	1	5	5	1	09:33							adult
СМ	12/12/2020	8	1	6	6	1	09:40							2W
СМ	12/12/2020	8	2	2	2a	2	12:17							adult
СМ	12/12/2020	8	2	5	5a	1	12:36							1W
СМ	30/01/2021	9	2	0	NC	12	13:45							adult
СМ	26/02/2021	8	1	2	2	1	08:44							adult
СМ	26/02/2021	8	1	4	4	1	09:02							adult





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
СМ	22/03/2021	8	1	5	5	1	07:14							adult
СМ	22/03/2021	8	1	9	9	4	07:33							adult
СМ	22/03/2021	8	1	16	16	2	08:34							adult
СМ	26/04/2021	3	1	1	1	1	16:17	4						
СМ	26/04/2021	3	1	2	2	2	16:31	10						
СМ	27/04/2021	8	1	4	4	2	14:31							adult
СМ	27/04/2021	8	2	6	6	7	18:32		55					6 adults, 1 1W
СМ	27/04/2021	8	2	7	7	2	19:39		30					adult
СМ	29/04/2021	3	1	1	1	5	17:34	10	20					
СМ	16/05/2021	8	1	4	4	1	11:23							adult
СМ	16/05/2021	8	2	5	5	2	14:04							adult
СМ	18/06/2021	3	1	1	1	3	10:24	40						
СМ	18/06/2021	3	1	2	2	2	09:44	57						
СМ	18/06/2021	3	1	2	2	3	11:07	80	25					
СМ	18/06/2021	3	1	3	3	3	11:32	50	15					
CN	16/05/2021	8	1	7	7	1	11:28							adult
CN	16/05/2021	8	2	8	8	2	14:21							adult
CS	18/05/2020	10	1	15	15	1	12:31	11						
CS	26/05/2020	10	1	10	10	1	14:12	9						
CS	30/06/2021	10	1	4	4	1	16:17	900						
CS	29/09/2021	9	1	3	3	1	09:00	5	5	40	70			adult
CU	27/08/2020	8	1	8	8	1	13:21	36						
CU	27/08/2020	8	2	6	6	1	16:25	16						
CU	17/09/2020	8	1	2	2	2	15:05	15						





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
CU	30/11/2020	8	1	3	3	1	11:39							
CU	12/12/2020	8	1	8	8	1	09:46							
CU	12/12/2020	8	1	11	11	1	10:26							
CU	12/12/2020	8	2	1	1a	1	11:20							
CU	28/01/2021	8	1	2	2	1	09:21							
CU	28/01/2021	8	1	3	3	1	09:26							
CU	28/01/2021	8	1	5	5	1	09:38							
CU	28/01/2021	8	2	5	5a	1	15:56							
EA	23/01/2020	1	1	2	2	1	13:38					10		
EA	23/01/2020	1	2	3	3	1	14:35					120		
EA	23/01/2020	4	1	1	1	1	13:40	30						
EA	23/01/2020	4	1	1	1	1	13:40		90	300				
EA	23/01/2020	4	1	2	2	1	13:47			90				
EA	23/01/2020	4	1	4	4	1	13:49	10	5	275				
EA	23/01/2020	4	1	4	4	1	13:49	10						
EA	23/01/2020	4	1	5	5	1	13:54			20				
EA	23/01/2020	4	1	5	5	1	13:54			14				
EA	23/01/2020	4	1	6	6	1	14:00		5	55				
EA	23/01/2020	4	1	6	6	1	14:00		10					
EA	23/01/2020	4	1	7	7	1	14:12		5	65				
EA	23/01/2020	4	1	7	7	1	14:12		7	6				
EA	11/03/2020	4	1	1	1	1	07:58					5		
EA	11/03/2020	4	1	1	1	1	07:58					1		
EA	11/03/2020	4	2	2	2	2	09:22					100		





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
EA	11/03/2020	4	2	2	2	2	09:22					100		
EA	12/03/2020	2	1	3	3	1	14:34			120				
EA	12/03/2020	2	1	3	3	1	14:34			5				
EA	12/03/2020	2	2	2	2	1	17:37		4					
EA	12/03/2020	2	2	2	2	1	17:37		58	22				
EA	26/05/2020	8	1	9	9	1	11:21					245		
EA	06/07/2020	4	1	1	1	1	14:51		12	30	30	260		
EA	12/07/2020	5	1	0	x	2	12:55							
EA	12/07/2020	5	1	2	2	2	12:55			15	20			adult
EA	11/08/2020	1	1	1	1	1	11:00				60	60		
EA	11/08/2020	1	1	1	1	1	11:00							
EA	28/08/2020	10	2	2	2	1	15:42			194				
EA	28/08/2020	10	2	3	3	1	16:08	164						
EA	28/08/2020	10	2	4	41	1	16:17	115	122					
EA	28/08/2020	10	2	4	41	1	16:17	15	16					
EA	28/08/2020	10	2	4	42	1	16:17		32					
EA	28/08/2020	10	2	4	42	1	16:17		48					
EA	28/08/2020	10	2	5	5	1	16:39	204						
EA	17/09/2020	8	1	4	4	1	17:04			255				
EA	17/09/2020	8	1	5	5	1	17:16		67					
EA	21/09/2020	10	1	4	4	1	13:59		80					
EA	21/09/2020	10	1	4	4	1	13:59		127					
EA	21/09/2020	10	1	6	6.1	1	14:40			133				
EA	21/09/2020	10	1	6	6.2	1	14:40		372	37				





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
EA	21/09/2020	10	1	6	6.2	1	14:40		28	3				
EA	26/10/2020	9	1	1	1	1	13:12	9	6	6				
EA	26/10/2020	9	1	1	1	1	13:12	36	24	25				
EA	26/10/2020	9	1	2	2	1	14:24	52						
EA	26/10/2020	9	1	3	3	2	14:36	5						
EA	26/10/2020	9	1	4	4	1	14:36		28	31	21			
EA	26/10/2020	9	1	4	4	1	14:36	191	67	74	49			
EA	30/10/2020	10	1	1	1	1	10:05	187						
EA	30/10/2020	10	1	2	2	1	10:15		21					
EA	30/10/2020	10	1	2	2	1	10:15		71					
EA	30/10/2020	10	1	3	ЗА	1	10:17	123						
EA	30/10/2020	10	1	3	ЗA	1	10:17	47						
EA	30/10/2020	10	1	3	ЗB	1	10:17		26					
EA	30/10/2020	10	1	3	3C	1	10:17			49				
EA	30/10/2020	10	2	1	1	1	14:15	3						
EA	04/11/2020	8	1	2	2	1	09:03		124	401				
EA	04/11/2020	8	1	3	3	1	09:14	40	51	302				
EA	04/11/2020	8	2	8	8	1	13:22	78	326	52				sub-adult
EA	08/12/2020	2	1	1	1	1	10:24	42	45					
EA	08/12/2020	2	1	2	2	1	10:26		10					
EA	14/01/2021	4	2	1	1	1	16:01			65				
EA	14/01/2021	4	2	2	2	1	16:03			60				
EA	16/02/2021	2	2	1	1	1	15:50		220	60				
EA	16/02/2021	7	2	1	1	1	15:43	20	5	380	20			





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
EA	09/03/2021	7	4	2	2	1	11:14	80	420	50				
EA	09/03/2021	7	4	2	2	1	11:14							
EA	09/03/2021	7	4	4	4	1	11:41		100	20				
EA	16/03/2021	1	2	2	2	1	11:59		220					
EA	27/04/2021	2	1	1	1	1	14:20	15	234					
EA	27/04/2021	2	1	2	2	1	14:22			30	130			
EA	27/04/2021	7	2	1	1	1	16:38	5						
EA	27/04/2021	8	1	2	2	1	13:55							
EA	27/04/2021	8	1	8	8	1	16:00							sub_adult
EA	27/04/2021	9	1	2	2	1	16:03				30			
EA	29/04/2021	1	1	3	3	1	10:07	30	10	150				
EA	16/05/2021	8	2	2	2	1	13:13	80		35	70			sub-adult
EA	17/05/2021	9	1	1	1	1	17:40	25	15	20				adult
EA	18/05/2021	9	2	6	6	1	10:33	360						sub-adult
EA	21/06/2021	8	1	1	1	1	07:49	120			120			
EA	21/06/2021	8	1	1	1a	1	07:49		90					
EA	21/06/2021	8	1	1	1b	1	07:49			60				
EA	21/06/2021	8	1	1	1c	1	07:49	880			200	400		
EA	21/06/2021	8	2	2	2	1	11:45		30	30	45			
EA	21/06/2021	8	2	2	2a	1	11:45	20			20			
EA	21/06/2021	8	2	2	2b	1	11:45		5	30				
EA	16/07/2021	5	1	1	1	1	11:53		500					
EA	16/07/2021	5	1	1	1a	1	12:01			100				
EA	16/07/2021	5	1	2	2	1	11:53					600		





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
EA	18/07/2021	8	2	1	1	1	12:05			70				
EA	18/07/2021	8	2	1	1a	1	12:06				400			
EA	18/07/2021	8	2	1	1b	1	12:13					190		
EA	18/07/2021	8	2	2	2	1	12:05			70				
EA	18/07/2021	8	2	2	2a	1	12:06				400			
EA	18/07/2021	8	2	2	2b	1	12:13					190		
EA	23/08/2021	9	2	3	3	1	16:20		130					
EA	23/08/2021	9	2	3	3a	1	16:22		770					
EA	23/08/2021	9	2	4	4	1	16:20			130				
EA	23/08/2021	9	2	4	4a	1	16:22			770				
EA	23/08/2021	9	2	5	5	1	16:30		280					
EA	23/08/2021	9	2	5	5a	1	16:30			200				
EA	29/09/2021	9	2	5	5	2	13:10		30	20				adult
EA	29/09/2021	9	2	6	6a	1	13:11	60	50					adult
EA	29/09/2021	9	2	6	6b	1	13:11							adult
EA	29/09/2021	9	2	7	7	2	13:14							adult
EA	29/09/2021	9	2	8	8	1	13:16							adult
EA	29/09/2021	9	2	9	9	1	13:19	5	10					adult
EA	29/10/2021	1	1	1	1	2	09:35							
EA	29/10/2021	1	1	2	2	1	09:37							
EA	29/10/2021	1	1	3	3	1	09:40							
EA	30/10/2021	9	1	2	2	2	14:22	44	109				pair	adult
EA	12/01/2022	1	1	2	2	1	12:24		120					adult
EA	12/01/2022	1	1	2	2a	1	12:26			50				adult





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
EA	27/01/2022	9	1	1	1	1	13:48							adult
EA	25/03/2022	10	2	3	3	1	12:31			80				
EA	25/03/2022	10	2	3	3a	1	12:33				10			
EA	25/03/2022	10	2	3	3b	1	12:33					30		
EA	25/03/2022	10	2	4	4	1	12:54		30					
EA	25/03/2022	10	2	4	4a	1	12:55	45						
EA	25/03/2022	10	2	4	4b	1	12:56			85				
EA	29/03/2022	10	1	1	1	2	14:40			25	25	15		adult, sub-adult
EA	29/03/2022	10	1	1	1a	2	14:42							adult, sub-adult
EA	23/05/2022	1	2	2	2	1	12:59	10						
EA	23/05/2022	1	2	2	2a	1	12:59		25					
EA	23/05/2022	4	1	1	1	1	13:03	3	85					sub-adult
EA	23/05/2022	4	2	1	1	1	18:27	4	12					sub-adult
EA	24/05/2022	10	1	1	1	1	11:00	6						
EA	24/05/2022	10	2	4	4	1	15:27	90						sub-adult
EA	24/05/2022	10	2	4	4a	1	15:28		120					sub-adult
EA	24/05/2022	10	2	4	4b	1	15:30			80				sub-adult
EA	25/05/2022	8	2	1	1	1	11:33				50			
EA	25/05/2022	8	2	1	1a	1	11:35			50				
EA	25/05/2022	8	2	1	1b	1	11:36		20					
EA	19/06/2022	10	2	2	2	1	16:50		15					
EA	19/06/2022	10	2	2	2a	1	16:50	7						
GB	18/02/2020	3	1	4	4	1	17:43			72				
GB	10/03/2020	3	1	1	1	2	07:18		15	37				





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
GB	11/03/2020	1	1	1	1	2	09:27		17					
GB	11/03/2020	4	2	3	3	1	09:42					70		
GB	12/03/2020	2	1	1	1	1	12:58		160	20				
GB	12/03/2020	2	1	2	2	1	13:22		210					
GB	12/03/2020	2	2	1	1	2	16:31	10	65	45				
GB	30/04/2020	2	1	1	1	1	09:19					180		
GB	26/05/2020	8	1	2	2	3	08:49			93				
GB	26/05/2020	8	1	7	7	1	10:00		125					
GB	11/06/2020	10	1	3	3	2	11:43					224		
GB	11/06/2020	10	1	7	7	1	13:19			42				
GB	11/06/2020	10	1	8	8	1	12:18			129				
GB	11/06/2020	10	1	14	14	1	13:21	30	28	208				
GB	09/07/2020	1	1	2	2	1	10:51				18			
GB	12/07/2020	5	1	1	1	1	13:47		34					
GB	17/07/2020	10	1	4	4a	1	11:57				15	90		
GB	17/07/2020	10	2	9	9	1	16:47		40					
GB	18/07/2020	8	1	3	3	1	17:18				200	90		
GB	18/07/2020	8	1	10	10	1	19:31		190					
GB	26/07/2020	9	1	3	3	1	14:55		35					
GB	27/08/2020	8	1	1	1	1	10:54				105			
GB	28/08/2020	10	1	5	5	1	11:52	203	129					
GB	28/08/2020	10	1	6	6	1	11:54	93						
GB	08/10/2020	1	1	2	2	1	08:10	4	22					
GB	16/02/2021	7	1	1	1	1	12:07	10	5	50				





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
GB	19/02/2021	3	1	1	1	2	08:39	40						
GB	26/02/2021	8	1	7	7	1	09:15							adult
GB	26/02/2021	8	1	8	8	1	10:06							adult
GB	26/02/2021	8	2	3	За	4	12:13							adult
GB	26/02/2021	8	2	6	6a	1	12:55							adult
GB	26/02/2021	8	2	7	7a	2	13:26							adult
GB	26/02/2021	8	2	8	8a	2	13:40							adult
GB	26/02/2021	8	2	14	14a	1	14:56							adult
GB	15/03/2021	1	1	1	1	2	15:59	27						
GB	22/03/2021	8	1	2	2	2	06:54							adult
GB	22/03/2021	8	1	4	4	1	07:10							adult
GB	22/03/2021	8	1	6	6	1	07:25							adult
GB	27/04/2021	8	1	9	9	2	16:18	20						adult
GB	27/04/2021	8	1	10	10	4	16:25							adult
GB	28/04/2021	6	1	5	5	1	19:54		50					
GB	29/04/2021	1	1	4	4	1	14:34	30						
GB	30/04/2021	10	1	3	3	3	09:35				105			
GB	30/04/2021	10	2	7	7	8	11:37		30					
GB	30/06/2021	10	1	7	7	1	15:25		30					
GB	12/08/2021	3	2	1	1	1	14:24		84					adult
GJ	25/10/2019	1	1	2	2	6	08:33					46		
GP	14/05/2020	7	2	2	2	2	18:35	3						
GP	10/07/2020	7	1	1	1	1	08:47	90						
GP	10/07/2020	7	1	2	2	1	10:29	420						





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
GP	15/10/2021	2	1	1	1	18	10:55	5						adult
Н.	24/01/2020	6	2	2	2	1	12:14		4					
Н.	09/03/2020	5	1	1	1	1	13:38		13					
Н.	12/03/2020	6	1	1	1	1	11:56		4					
Н.	12/03/2020	6	2	4	4	1	17:40	8						
Н.	30/04/2020	2	2	3	3	1	15:58				160			
Н.	13/05/2020	2	2	1	1	1	19:27				10	25		
Н.	18/05/2020	10	1	17	17	1	13:05		41	72	126	98		
Н.	18/07/2020	8	1	2	2	1	17:10			130				
Н.	09/09/2020	2	1	1	1	1	10:08		60					
Н.	21/09/2020	8	1	3	3	1	12:12	27						
Н.	13/01/2021	6	1	2	2	1	10:19	10						
Н.	18/02/2021	6	4	1	1	1	16:14		10					
Н.	10/03/2021	6	2	1	1	1	13:11	21						
Н.	20/05/2021	10	2	1	1	1	18:46	30						
Н.	20/05/2021	10	2	2	2	1	19:18	15	15					
HG	12/12/2019	6	1	1	1	1	10:06		6					
HG	12/12/2019	6	1	3	3	1	12:37		7					
HG	18/05/2020	10	1	1	1d	5	11:12		17					
HG	18/05/2020	10	1	1	1e	1	11:16		20					
HG	18/05/2020	10	1	1	1f	1	11:29		8					
HG	18/05/2020	10	1	1	1g	5	11:41		8					
HG	18/05/2020	10	1	1	1h	3	11:58			15				
HG	18/05/2020	10	1	1	1j	21	12:49	10						





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
HG	18/05/2020	10	1	3	3a	1	10:47		9					
HG	18/05/2020	10	1	3	3e	1	11:35	8						
HG	18/05/2020	10	1	3	3f	5	12:26	9						
HG	18/05/2020	10	1	4	4	1	11:01	55						
HG	18/05/2020	10	1	5	5	5	11:01		20					
HG	18/05/2020	10	1	7	7	1	11:38	28	80	55				
HG	18/05/2020	10	1	8	8	1	11:55		39					
HG	18/05/2020	10	1	10	10	4	12:01		31	125				
HG	18/05/2020	10	1	12	12a	6	12:21	15	32					
HG	18/05/2020	10	1	14	14a	1	12:28	38						
HG	18/05/2020	10	1	16	16	6	12:39	12						
HG	18/05/2020	10	1	18	18	5	13:22			32				
HG	26/05/2020	10	1	4	4	3	12:37			73				
HG	26/05/2020	10	1	4	4	4	12:42			48				
HG	26/05/2020	10	1	4	4	7	13:00			130				
HG	26/05/2020	10	1	4	4	15	14:15			115				
HG	26/05/2020	10	1	6	6	4	13:42		62					
HG	26/05/2020	10	1	11	11	2	14:31			34				
HG	29/05/2020	9	1	2	2	2	12:44	40						
HG	29/05/2020	9	1	3	3	6	15:10	160						
HG	11/06/2020	8	1	1	1	4	08:28	21						
HG	11/06/2020	8	1	3	3	1	08:57	17						
HG	11/06/2020	8	1	5	5	3	09:09				115			
HG	11/06/2020	8	1	7	7	4	09:34			37				





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
HG	11/06/2020	8	1	9	9	1	10:07	25						
HG	11/06/2020	8	1	10	10	1	10:14			32				
HG	11/06/2020	10	1	4	4	2	11:56			16				
HG	11/06/2020	10	1	7	7	4	12:12			21				
HG	11/06/2020	10	1	7	7	2	12:12			21				
HG	11/06/2020	10	1	7	7	5	12:51			20				
HG	11/06/2020	10	1	7	7	3	13:01			18				
HG	11/06/2020	10	1	7	7	15	13:30			56				
HG	11/06/2020	10	1	7	7	4	13:45			27				
HG	11/06/2020	10	1	7	7	7	13:58			35				
HG	11/06/2020	10	1	9	9	5	12:26			52				
HG	11/06/2020	10	1	10	10	1	12:31			12				
HG	11/06/2020	10	1	11	11	9	12:40		17	67				
HG	11/06/2020	10	1	12	12	1	12:54	8	10					
HG	11/06/2020	10	1	13	13	1	13:09		24					
HG	11/06/2020	10	1	15	15	1	13:38			15				
HG	25/06/2020	8	1	1	1	1	08:39	35						
HG	25/06/2020	8	1	3	3	1	08:57			46				
HG	25/06/2020	8	1	7	7	1	10:09	100	79					
HG	25/06/2020	10	1	1	1	1	11:15			17				
HG	25/06/2020	10	1	2	2	3	11:22			102				
HG	25/06/2020	10	1	4	4	8	11:37			90				
HG	25/06/2020	10	1	7	7	1	11:42			34				
HG	25/06/2020	10	1	11	11	1	12:51		12	37				





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
HG	25/06/2020	10	1	14	14	1	14:08	32	50					
HG	07/07/2020	6	2	3	3	3	17:35		8					
HG	07/07/2020	6	2	4	4	1	17:46		8					
HG	07/07/2020	6	2	5	5	1	17:55		8					
HG	07/07/2020	6	2	6	6	2	18:39		22					
HG	12/07/2020	9	1	1	1	1	10:19			55				adult
HG	12/07/2020	9	1	3	3	55	11:00		1800					
HG	17/07/2020	8	1	4	4	2	18:54	10	100	178				
HG	17/07/2020	8	1	5	5	1	19:20	15						
HG	17/07/2020	10	1	1	1	2	11:03		33					
HG	17/07/2020	10	1	2	2a	1	11:13			38				
HG	17/07/2020	10	1	2	2b	1	11:26			38				
HG	17/07/2020	10	1	2	2c	1	11:45			40				
HG	17/07/2020	10	1	3	3	1	11:32			32				
HG	17/07/2020	10	1	4	4b	6	12:41			100				
HG	17/07/2020	10	1	4	4c	6	13:06				78			
HG	17/07/2020	10	1	5	5	3	12:06				120			
HG	17/07/2020	10	1	7	7	4	12:38			78				
HG	17/07/2020	10	1	8	8	6	12:46			46				
HG	17/07/2020	10	1	9	9	2	13:05			98	35	60		
HG	17/07/2020	10	1	10	10	4	13:17			87				
HG	17/07/2020	10	1	11	11	1	13:21		16					
HG	17/07/2020	10	2	1	1	1	14:53			72				
HG	17/07/2020	10	2	2	2	2	14:57		27					





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
HG	17/07/2020	10	2	3	3	1	15:23			58				
HG	17/07/2020	10	2	4	4	1	15:39			188				
HG	17/07/2020	10	2	5	5	1	15:46			73				
HG	17/07/2020	10	2	6	6a	1	15:56		44					
HG	17/07/2020	10	2	6	6b	3	16:10		40					
HG	17/07/2020	10	2	7	7	1	16:01			210				
HG	18/07/2020	8	1	1	1	8	17:02		95					
HG	18/07/2020	8	1	4	4	1	17:37			124				
HG	18/07/2020	8	1	8	8	6	19:15		130					
HG	26/07/2020	9	1	2	2	25	14:12		100					
HG	27/08/2020	8	1	6	6	1	12:19		42					
HG	28/08/2020	10	1	3	3	6	11:14			92				
HG	28/08/2020	10	1	4	4	1	11:23			141				
HG	17/09/2020	8	1	1	1	2	15:02	34						
HG	17/09/2020	10	1	10	10	1	13:48	73	60					
HG	21/09/2020	8	1	2	2	1	11:42	22						
HG	21/09/2020	10	1	1	1a	1	13:25			87				
HG	21/09/2020	10	1	1	1b	1	13:25			46				
HG	08/10/2020	1	2	4	4	250	11:20		207					
HG	08/10/2020	1	2	5	5	170	11:26		184					
HG	08/10/2020	1	2	6	6	35	11:32		200					
HG	08/10/2020	1	2	7	7	185	12:32		270					
HG	30/10/2020	10	1	5	5	5	10:43			45				
HG	30/10/2020	10	1	6	6.1	1	11:14		51					





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
HG	30/10/2020	10	1	6	6.2	1	11:14			164				
HG	04/11/2020	8	1	1	1	1	08:56		68					
HG	04/11/2020	8	1	5	5	6	09:21			30				
HG	04/11/2020	8	1	7	7	1	10:05	18	140					
HG	04/11/2020	8	1	8	8	8	10:11		54					
HG	04/11/2020	8	1	9	9	1	10:15	47						
HG	04/11/2020	8	1	10	10	5	10:17		108					
HG	04/11/2020	8	1	13	13	6	11:09		58					
HG	04/11/2020	8	1	16	16	30	11:33		135					
HG	04/11/2020	8	2	1	1a	29	12:17	85	44					
HG	04/11/2020	8	2	1	1b	1	12:36			120				
HG	04/11/2020	8	2	2	2	10	12:23		65					
HG	04/11/2020	8	2	3	3a	35	12:25		40					
HG	04/11/2020	8	2	3	3b	12	12:37	40						
HG	04/11/2020	8	2	3	3c	38	12:38		40					
HG	04/11/2020	8	2	3	3d	26	12:43		40					
HG	04/11/2020	8	2	3	3e	8	12:45			40				
HG	04/11/2020	8	2	3	3f	4	12:51		40					
HG	11/11/2020	6	2	1	1	1	10:51	5	17					
HG	13/01/2021	6	1	1	1	1	10:06	14						
HG	28/01/2021	8	1	1	1	1	09:07							adult
HG	28/01/2021	8	1	4	4	1	09:30							adult
HG	28/01/2021	8	1	6	6	1	09:44							adult
HG	28/01/2021	8	1	7	7	1	09:48							adult





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
HG	28/01/2021	8	1	8	8	1	09:54							adult
HG	28/01/2021	8	1	9	9	1	10:17							adult
HG	28/01/2021	8	1	10	10	1	10:20							adult
HG	28/01/2021	8	1	11	11	1	10:39							adult
HG	28/01/2021	8	2	1	1a	1	15:11							adult
HG	28/01/2021	8	2	2	2a	1	15:11							adult
HG	28/01/2021	8	2	4	4a	1	15:53							adult
HG	28/01/2021	8	2	6	6a	2	16:00							adult
HG	28/01/2021	8	2	7	7a	1	16:15							3W
HG	26/02/2021	8	1	3	3	1	08:49							1W
HG	26/02/2021	8	2	9	9a	1	14:08							adult
HG	26/02/2021	8	2	12	12a	2	14:25							adult
HG	26/02/2021	9	2	4	4	1	12:48	40	80					adult
HG	22/03/2021	8	1	1	1	1	06:54							adult
HG	22/03/2021	8	1	3	3	1	07:03							adult
HG	22/03/2021	8	1	8	8	2	07:31							adult
HG	22/03/2021	8	1	17	17	2	09:10							adult, 2W
HG	27/04/2021	8	1	1	1	2	13:45							adult
HG	27/04/2021	8	1	7	7	2	15:54	55						adult
HG	27/04/2021	8	2	4	4	2	18:03	55						adult
HG	27/04/2021	8	2	5	5	4	18:25		50					adult
HG	28/04/2021	6	1	1	1	6	17:52		90					
HG	28/04/2021	6	1	2	2	1	17:58	20						
HG	28/04/2021	6	1	3	3	1	18:15		80					





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
HG	28/04/2021	6	1	4	4	1	18:46	30						
HG	28/04/2021	6	1	6	6	2	20:20	21						
HG	30/04/2021	10	2	6	6	1	11:25			30				
HG	30/04/2021	10	2	9	9	3	13:18		30					
HG	16/05/2021	8	1	6	6	1	11:27							adult
HG	18/05/2021	9	2	3	3	1	09:20	10	5	15				adult
HG	18/05/2021	9	2	5	5	4	10:02	20	10					
HG	18/05/2021	9	2	7	7	12	10:29					90		adult
HG	18/05/2021	9	2	8	8	2	11:37	10	15					adult
HG	20/05/2021	10	2	3	3	1	19:21		30					
HG	22/06/2021	9	1	5	5	1	15:20		35					adult
HG	15/07/2021	9	1	1	1	1	10:22		10	20	35			adult
нн	28/10/2021	8	1	1	1	1	10:47	194					female	adult
К.	18/02/2020	3	1	2	2	1	16:16	5	15	80				
К.	18/02/2020	3	1	3	3	1	16:20	7		7				
К.	18/02/2020	5	1	1	1	1	09:07	29						
К.	20/02/2020	4	2	1	1	1	16:55		47	62				
К.	12/03/2020	6	2	3	3	1	17:25	4	10					
К.	18/05/2020	8	1	4	4	1	09:04	5						
К.	26/05/2020	10	1	1	1	1	11:53		95	635				
К.	26/05/2020	10	1	2	2	1	11:58			350				
К.	26/05/2020	10	1	7	7	1	13:57			37				
К.	11/06/2020	1	1	1	1	2	13:01	175					pair	
К.	11/06/2020	1	2	1	1	1	19:24	6						





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
К.	11/06/2020	10	1	17	17	1	13:46		47	195	27			
К.	14/06/2020	5	1	1	1	1	14:12	35						
К.	25/06/2020	10	1	6	6	1	11:37		3					
К.	25/06/2020	10	1	13	13	1	13:19	150						
К.	17/07/2020	8	1	1	1	1	17:50	22						
К.	17/07/2020	8	1	2	2	1	17:53	250	113					
К.	17/07/2020	8	1	3	3	1	18:02	407	200					
К.	18/07/2020	8	1	9	9	1	19:28	107						
К.	18/07/2020	8	1	11	11	1	19:44		230					
К.	26/07/2020	9	1	1	1	1	13:26	40						
К.	11/08/2020	4	1	1	1	1	10:31	7						
К.	27/08/2020	8	1	4	4	1	11:29	11						
К.	27/08/2020	8	1	5	5	1	11:43	12						
К.	27/08/2020	8	2	4	4	1	15:16	642	25					
К.	27/08/2020	8	2	5	5	1	16:17	28						
К.	28/08/2020	10	1	1	1	1	11:03	7						
К.	28/08/2020	10	1	2	2	1	11:07		213					
К.	28/08/2020	10	2	1	1	1	14:55	82	255					
К.	09/09/2020	2	2	1	1	1	11:55		10					
К.	09/09/2020	7	1	3	3	1	09:06	20						juv
К.	09/09/2020	7	1	4	4	1	09:07	2						juv
К.	17/09/2020	10	1	1	1	1	11:44	12						
К.	17/09/2020	10	1	2	2	1	11:48	123						
К.	17/09/2020	10	1	3	3	1	11:52	38						





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
К.	17/09/2020	10	1	4	4	1	11:53	225						
К.	17/09/2020	10	1	5	5	1	12:08	111						
К.	17/09/2020	10	1	6	6	1	12:15	30						
К.	17/09/2020	10	1	7	7	1	12:17	22						
К.	17/09/2020	10	1	8	8	1	12:50	34						
К.	17/09/2020	10	1	9	9	1	13:47	13						
К.	17/09/2020	10	1	11	11	1	13:48		25	105				
К.	17/09/2020	10	1	13	13.1	1	14:08	128	10	211				
К.	17/09/2020	10	1	13	13.2	1	14:08	8	20	63				
К.	17/09/2020	10	1	14	14	1	14:25	54						
К.	20/09/2020	9	1	1	1	1	15:54	60	265					
К.	21/09/2020	10	1	2	2	1	13:36	8						
К.	21/09/2020	10	1	5	5	1	14:02	560						
К.	04/11/2020	8	1	11	11	1	10:32	62					female	adult
К.	04/11/2020	8	1	14	14	1	11:09	92	150					
К.	04/11/2020	8	1	15	15	1	11:21	72	418					
К.	07/12/2020	5	1	1	1	1	14:17	4						
К.	12/12/2020	8	1	9	9	1	09:49						male	
К.	12/12/2020	8	2	8	8a	1	13:44	21					male	
К.	14/01/2021	1	2	1	1	1	13:41		120					
К.	14/01/2021	1	2	2	2	1	13:49		86					
К.	16/03/2021	1	1	1	1	1	06:51	4						
К.	31/03/2021	9	1	1	1	1	09:50	10	5	5				adult
К.	28/04/2021	7	1	3	3	1	12:54	17	5					





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
К.	17/06/2021	2	2	6	6	1	20:34	70						
К.	22/07/2021	6	1	1	1	1	11:31		70					adult
К.	10/08/2021	7	1	1	1	1	10:18	50						adult
К.	10/08/2021	7	1	2	2	1	18:19		65					adult
К.	10/08/2021	7	1	3	3	1	10:20			15				adult
К.	10/08/2021	7	1	4	4	1	10:21	25						adult
К.	10/08/2021	7	1	5	5	1	10:18	110						adult
К.	10/08/2021	7	2	6	6	1	13:09	360	10					adult
К.	08/09/2021	1	1	1	1	1	07:10		20					adult
К.	29/09/2021	9	1	4	4	1	10:06			40	140			adult
К.	29/09/2021	9	2	10	10	1	14:46							adult
К.	29/10/2021	10	1	1	1	1	10:17		43				male	adult
К.	13/01/2022	8	1	1	1	1	10:20		40				female	adult
К.	13/01/2022	8	1	2	2	1	10:22		20				male	adult
LB	12/12/2019	6	1	2	2	2	11:42			20				
LB	21/01/2020	5	1	1	1	2	10:57	10	30	52				
LB	21/01/2020	5	1	2	2	2	11:00		128					
LB	21/01/2020	5	1	3	3	1	11:10	480						
LB	21/01/2020	5	1	4	4	1	11:18	300						
LB	21/01/2020	5	1	5	5	1	11:23	47						
LB	24/01/2020	6	2	3	3	4	12:30			18				
LB	18/02/2020	3	1	1	1	1	15:20			15				
LB	22/02/2020	2	1	1	1	1	08:48					8		
LB	18/05/2020	8	1	2	2	1	08:40		42					





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
LB	18/05/2020	10	1	14	14b	1	12:28	38						
LB	26/05/2020	8	1	1	1	2	08:32		185	37				
LB	26/05/2020	8	1	3	3	3	08:57			145				
LB	26/05/2020	8	1	4	4	1	09:32			160				
LB	29/05/2020	9	1	1	1	5	11:21	25	40					
LB	09/06/2020	7	1	1	1	1	13:28			138				
LB	09/06/2020	7	1	2	2	1	13:33	7						
LB	10/06/2020	2	1	1	1	2	07:50		4	4	4			
LB	10/06/2020	2	1	2	2	2	08:07		4	4	4			
LB	10/06/2020	2	1	3	3	1	08:38		4	4	4			
LB	10/06/2020	2	1	4	4	1	08:51		4	4	4			
LB	11/06/2020	10	1	9	9	4	12:28			50				
LB	07/07/2020	6	1	1	1	1	11:42			12				
LB	07/07/2020	6	1	2	2	1	13:31			8				
LB	08/07/2020	7	1	1	1	1	10:45	8	12					
LB	09/07/2020	1	1	1	1	1	08:37				30			
LB	09/07/2020	1	1	3	3	1	10:52				20			
LB	18/07/2020	8	1	6	6	2	18:26		135					
LB	11/11/2020	6	2	2	2	1	11:09		12					adult
LB	26/11/2020	9	1	1	1	2	12:00			80				adult
LB	30/11/2020	8	1	4	4	1	12:11							adult
LB	12/12/2020	8	1	10	10	1	10:06							adult
LB	28/01/2021	8	2	8	8a	2	16:58							3W
LB	28/01/2021	8	2	9	9a	3	17:03							adult





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
LB	18/02/2021	6	1	2	2	1	10:43		12					
LB	26/02/2021	8	1	9	9	1	11:01							adult
LB	26/02/2021	9	2	3	3	2	12:47	200	600	1000				adult
LB	10/03/2021	6	1	1	1	2	07:51		8					
LB	10/03/2021	6	1	2	2	1	08:17	6						
LB	10/03/2021	6	1	3	3	1	09:31	6						
LB	27/04/2021	2	2	1	1	1	17:05		24					
LB	27/04/2021	9	1	1	1	1	15:34	10	5	10				adult
LB	20/05/2021	6	1	1	1	2	18:09	21						
LB	15/06/2021	6	1	1	1	1	11:41			35				adult
LB	15/06/2021	6	1	1	1	1	14:35		40					
LB	15/06/2021	6	1	2	2	1	12:53			15				adult
LB	15/06/2021	6	1	2	2	1	14:41	10						
LB	15/06/2021	6	1	3	3	1	16:44	10						
LB	16/06/2021	4	1	1	1	1	15:17				20	90		
LB	16/06/2021	4	2	0	x	1	NR					90		
LB	16/06/2021	4	2	1	1	1	20:39				40	80		
LB	17/06/2021	2	1	1	1	1	15:46			90				
LB	17/06/2021	2	1	2	2	1	16:07		15	160				
LB	17/06/2021	2	1	3	3	2	16:50		30	150				
LB	17/06/2021	2	2	1	1	1	19:01		120					
LB	17/06/2021	2	2	2	2	1	19:27		80					
LB	17/06/2021	2	2	3	3	1	19:31	60	20					
LB	17/06/2021	2	2	4	4	1	19:42	30	30					





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
LB	17/06/2021	2	2	5	5	1	20:16		45	45				
LB	18/06/2021	3	1	1	1	1	09:38	40	24					
LB	30/06/2021	10	1	1	1	3	15:02					30		
LB	30/06/2021	10	1	2	2	1	15:52					15		
LB	30/06/2021	10	1	6	6	1	16:54		15					
LB	30/06/2021	10	2	8	8	8	18:48					45		
LB	30/06/2021	10	2	9	9	9	19:05					30		
LB	30/06/2021	10	2	10	10	2	19:17	30		30		30		
LB	21/07/2021	2	2	1	1	2	19:14			120				adult
LB	29/07/2021	10	2	2	2	2	15:47					30		adult
LB	11/08/2021	4	2	1	1	1	20:06		95					adult
LB	11/08/2021	4	2	2	2	1	20:37		80					adult
LB	12/08/2021	6	2	1	1	1	15:37	10						adult
LB	12/08/2021	6	2	2	2	1	16:24	7						adult
LB	10/09/2021	10	2	1	1	2	12:34	15	15	15				adult
LB	01/03/2022	9	1	1	1	1	08:44	10	20	80				adult
LB	29/03/2022	10	2	2	2	1	17:52	35						adult
MA	11/12/2019	3	1	1	1	2	09:59			23				
MA	12/12/2019	6	2	1	1	2	14:34	11						
МА	29/04/2020	3	2	2	2	1	20:02			2				
МА	18/05/2020	10	1	2	2	2	10:40	23					male	
MA	18/05/2020	10	1	2	2	1	10:40	23					female	
МА	18/07/2020	8	1	7	7	1	18:48		128					
MA	27/08/2020	8	2	7	7	1	16:48	25						





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
MA	21/09/2020	8	1	1	1	2	10:17	6						
MA	04/11/2020	8	2	5	5	2	12:53		24					
MA	30/11/2020	10	2	1	1	2	14:17			30			pair	
MA	26/02/2021	8	1	5	5	2	09:10							
MA	09/03/2021	7	4	1	1	2	11:03		12					
MA	09/03/2021	7	4	3	3	2	11:16		10					
MA	31/03/2021	10	2	1	1	3	08:38	30	60				pair	
MA	31/03/2021	10	2	2	2	3	03:36	5		70			pair	
MA	31/03/2021	10	2	3	3	3	03:36	30	60	135			pair	
MA	30/04/2021	10	1	1	1	3	08:51	15					pair	
MA	30/04/2021	10	1	2	2	1	09:08	15					pair	
MA	30/04/2021	10	1	4	4	2	09:57	15						
MA	30/04/2021	10	2	8	8	2	12:01	15						
MA	16/05/2021	8	1	8	8	1	11:52		22				male	
MA	09/08/2021	3	1	1	1	1	18:10	92					female	adult
MA	03/02/2022	10	2	1	1	1	09:46	15					female	
ML	09/12/2019	4	2	1	1	1	11:59		5					
ML	12/03/2020	2	2	3	3	1	17:54	8						
ML	18/05/2020	10	1	13	13	1	12:25	3					male	
ML	09/09/2020	7	1	1	1	1	08:07	11					male	adult
ML	09/09/2020	7	1	2	2	1	08:07	4	10				male	adult
ML	13/11/2020	5	1	1	1	1	09:37	23					male	
ML	07/12/2020	5	1	2	2	1	15:27	11						
ML	30/04/2021	10	1	5	5	1	10:29		30					





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
ML	11/08/2021	1	2	0	X	1	19:10							
ML	29/03/2022	10	2	3	3	1	20:10	12						adult
OP	27/08/2020	8	1	2	2	1	11:16		55					
OP	27/08/2020	8	1	3	3	1	11:23	18						
OP	26/04/2021	5	1	4	4	1	12:27				57			
OP	16/05/2021	8	1	1	1	1	10:08			17				adult
OP	16/05/2021	8	2	3	3	1	13:20							adult
OP	16/05/2021	8	2	4	4	1	13:53							adult
OP	11/08/2021	1	2	2	2	1	20:40		15					
OP	12/08/2021	6	1	1	1	1	08:56	10	25	20				
OP	20/08/2021	10	2	1	1	1	12:15		110					adult
OP	23/08/2021	9	1	2	2	1	12:46	15	25					
PE	11/03/2020	4	2	4	4	1	10:57					3		
PE	12/05/2020	1	1	1	1	1	11:15					185		
PE	20/07/2020	5	1	1	1	1	10:49			125				
PE	16/05/2021	8	2	11	11	1	15:02							adult
PE	17/05/2021	9	1	0	х	1	17:42							adult
PE	20/05/2021	10	2	4	4	1	20:02					15		
RG	24/10/2019	2	1	2	2	1	12:50	20						
RG	24/10/2019	2	1	3	3	1	12:56	15						
RG	20/11/2019	2	1	1	1	1	08:39	4						
RG	23/01/2020	4	1	3	3	2	13:49	6						
RG	08/10/2020	1	1	1	1	2	07:41	7						
RG	28/04/2021	7	1	2	2	1	10:21	15						





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
RG	29/04/2021	1	1	1	1	1	09:59	70						
RG	29/04/2021	1	1	2	2	1	10:07	2						
RG	12/01/2022	1	1	1	1	2	11:29	5					male	adult
SH	29/10/2019	6	1	1	1	1	11:06				22			
SH	29/10/2019	6	1	4	4	1	12:59	2						
SH	20/11/2019	6	2	1	1	1	11:08	5						
SH	18/05/2020	8	1	3	3	1	08:50	20						
SH	18/05/2020	8	1	5	5	1	09:21	48					female	
SH	26/05/2020	8	1	6	6	1	09:44		5	45				
SH	26/05/2020	8	1	10	10	1	11:21			28				
SH	25/06/2020	8	1	2	2	1	08:43		123				female	
SH	25/06/2020	10	1	9	9	1	12:45		50					
SH	25/06/2020	10	1	10	10	1	12:50			92				
SH	27/08/2020	8	1	7	7	1	13:12	4						
SH	27/08/2020	8	1	9	9	1	13:21	12						
SH	17/09/2020	8	1	3	3	1	16:00		189				male	adult
SH	17/09/2020	10	1	12	12	1	13:49	12	12	95				
SH	04/11/2020	8	2	6	6	1	13:04			720				
SH	04/11/2020	8	2	7	7	1	13:14			120				
SH	13/01/2021	6	2	1	1	1	14:16	60						
SH	21/06/2021	8	2	3	3	1	12:46		30	30	20			
SH	28/10/2021	8	1	2	2	1	11:01		43				female	juvenile
SH	13/12/2021	8	1	1	1	1	16:06	8					male	adult
SH	11/01/2022	8	1	1	1	1	16:08	6					male	





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
SH	20/01/2022	4	2	1	1	1	13:16	15						adult
SN	29/10/2019	6	1	3	3	1	12:56	2						
SN	11/06/2020	10	1	6	6	1	12:08	6						
SN	21/09/2020	10	1	3	3	1	13:38	16						
SN	30/06/2021	10	2	11	11	1	19:27	15						
SN	29/07/2021	10	1	1	1	1	08:30	15						adult
SN	27/01/2022	9	2	2	2	1	15:37	8						adult
SN	25/03/2022	10	1	1	1	1	09:11	7						
SN	29/03/2022	10	2	4	4	1	20:33		20	40				adult
SU	27/04/2021	8	1	3	3	2	14:01						pair	
SU	27/04/2021	8	2	3	3	2	17:52	10						adult
WE	21/09/2020	10	1	7	7.1	1	15:21		60	318	20			
WE	21/09/2020	10	1	7	7.2	1	15:21					274		
WE	19/06/2022	10	2	3	3	1	17:36			35				adult
WE	19/06/2022	10	2	3	3a	1	17:36		30					adult
WE	19/06/2022	10	2	3	3b	1	17:37	10						adult
WE	19/06/2022	10	2	3	3c	1	17:37		40					adult
WE	19/06/2022	10	2	3	3d	1	17:38			55				adult
WE	19/06/2022	10	2	5	5	1	18:05			50				adult
WE	19/06/2022	10	2	5	5a	1	18:06		30					adult
WS	24/10/2019	2	1	7	7	12	15:12			34				
WS	25/10/2019	1	1	1	1	7	08:08			39				
WS	25/10/2019	1	1	3	3	3	09:44		47					
WS	25/10/2019	1	1	4	4	13	10:15		72	20				





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
WS	25/10/2019	1	2	1	1	7	12:13		52		27			
WS	25/10/2019	1	2	2	2	16	14:18			56				
WS	25/10/2019	4	1	2	2	6	08:07			60				
WS	25/10/2019	4	1	2	2	6	08:07			270				
WS	25/10/2019	4	2	5	5	14	11:59			90				
WS	18/02/2020	3	1	5	5	2	17:55			120				
WS	18/02/2020	5	1	2	2	6	10:18		26					
WS	08/10/2020	1	1	3	3	1	08:24		47					juv
WS	08/10/2020	4	1	1	1	20	08:25		45					
WS	04/11/2020	8	1	4	4	1	09:21			15				
WS	13/11/2020	3	1	2	2	2	09:52		4					
WS	22/03/2021	8	1	11	11	15	07:50				20			
WS	21/10/2021	4	2	2	2	7	11:42			40				
WS	21/10/2021	4	2	3	3	12	11:59					30		
WS	25/03/2022	10	1	2	2	5	09:26					35		
UU	13/05/2020	6	1	1	1	1	15:00	6						
UU	13/05/2020	6	1	2	2	1	15:01		10					
UU	13/05/2020	6	2	1	1	1	18:23		8					
UU	04/11/2020	8	2	4	4	11	12:50			102				
XR	25/03/2022	10	2	1	1	1	11:43					2		

Table A7.2.5 Comments on Vantage point survey flightline records of Annex I and red-listed species.

Species	Date	VP	Watch	FL_ref	Obs_ref	Comments
BY	30/10/2020	10	1	4	4	Traveling flight





Species	Date	VP	Watch	FL_ref	Obs_ref	Comments
EA	23/01/2020	1	1	2	2	Hunting. Shot over head of surveyor towards VP2, circled a couple of times before the mist rolled in.
EA	23/01/2020	1	2	3	3	Flying briefly round VP2 again. Mist rolled in again and lost view.
EA	23/01/2020	4	1	1	1	Flew from SE of VP along hill side, flew 30 m in front of VP and circled briefly and drifted NE where it hovered/soared on wind.
EA	23/01/2020	4	1	1	1	Flew from SE of VP along hill side, flew 30m in front of VP and circled briefly and drifted NE where it hovered/soared on wind.
EA	23/01/2020	4	1	2	2	Moved from hover/soaring on wind and drifted E out of view.
EA	23/01/2020	4	1	4	4	Flew from SE travelling SW, then turned and rose to above 100 where it hove red/soared on wind slowly drifting ${\sf N}$
EA	23/01/2020	4	1	5	5	Turned E and drifted out of view.
EA	23/01/2020	4	1	6	6	Flew from SE of VP, travelling SW then drifted N over conifers and ruin, continued N out of view.
EA	23/01/2020	4	1	7	7	Flew from SE of VP and continued SW, hovered over conifers and drifted SW out of view behind Gafarretmoyle hill.
EA	11/03/2020	4	1	1	1	Flew S just under VP, round hill side and out of view.
EA	11/03/2020	4	2	2	2	Commuting and hunting. Pair flew over VP, mobbed by 3 Raven. Flying SW over VP2 and out of view. Approx. 20 m above VP4 and 4 0m above VP2.
EA	12/03/2020	2	1	3	3	Flying/Commuting. Flew from E/VP4, over Lough Aneane and continued W towards Lettermacaward, flight varying between 70-10 0m. Adult bird (uniform brown plumage on upper body/wings).
EA	12/03/2020	2	2	2	2	Flying/Commuting. Flew from SE, over bog habitat, quartered/circled area and then flew back SE rising to approx. 100 m. Some pale feathers on upper wings.
EA	26/05/2020	8	1	9	9	Drifting flight, then vertical dive out of view. Not definite identifcation due to distance and haze
EA	06/07/2020	4	1	1	1	Flew NE below VP, hunting low over forestry, then gradually started to soar over VP to NW of VP. After a few minutes headed S directly.
EA	12/07/2020	5	1	0	Х	Flying south at approx 54.909, -8.170. Traveling flight 150 m.





Species	Date	VP	Watch	FL_ref	Obs_ref	Comments
EA	12/07/2020	5	1	2	2	Pair flying - travelling north to south passing east of Croaghleheen, thus obstructed from view from VP5.
EA	11/08/2020	1	1	1	1	Flew into site from E of VP1 and towards VP2. Flew in low and turned N, circling a few times. Began to soar in the thermals and rose into the clouds. Then turned and headed straight south.
EA	28/08/2020	10	2	2	2	Adult, possibly male, drifting flight.
EA	28/08/2020	10	2	3	3	Low foraging flight.
EA	28/08/2020	10	2	4	41	Slow foraging flight, hanging in air, drifting.
EA	28/08/2020	10	2	4	42	Continued offsite to the west.
EA	28/08/2020	10	2	5	5	Playing drop and catch with stick at 54.821, -8.832, then landing under low crags until end of survey.
EA	17/09/2020	8	1	4	4	From Cleengort Hill flew south over site to VP 9.
EA	17/09/2020	8	1	5	5	Out of view over VP 9.
EA	21/09/2020	10	1	4	4	Slow drifting flight, mobbed by 2 Kestrels.
EA	21/09/2020	10	1	6	6.1	Slow drifting flight.
EA	21/09/2020	10	1	6	6.2	Chasing a gull over lake then travel flight to hill and circling.
EA	26/10/2020	9	1	1	1	Adult Golden Eagle flew from southeast over Derkbeg Hill ridge, quartering the heath for prey; followed by long direct stooping descent into the valley of Derkmore forest and nature reserve area, out of view then below tree top level. Apparently to surprise possible prey therin. Shock caused subsequent rise of Fieldfare flock (c.150 birds) from shelter dispersing over forest just above treetop level.
EA	26/10/2020	9	1	2	2	Foraging. Adult Golden Eagle flew a line along slope over deep heather and Molina cover, along contour 200 m above forest edge, from NE to SW, 10 to 20 m above ground, passing within 200 m of VP9, then out of view
EA	26/10/2020	9	1	3	3	Foraging. Very briefly, two Golden Eagle seen apart. The first bird only watched for a few secs flying north low over forest, then out of view towards Derkmore Lough.





Species	Date	VP	Watch	FL_ref	Obs_ref	Comments
EA	26/10/2020	9	1	4	4	Foraging. Simultaneous with the above, the second adult Golden Eagle flew up add out from forest to east, over heath, then turned and faced into wind, holding steady into strong wind (hover like buzzard) scanning heath on top of Derkbeg Hill for some time, gradually moving and changing position, quatering ground, then drifting off over slope to forest over Derryloughan and >100 m over lower ground drifting sideways off as far as Gweebarra and onwards out of view.
EA	30/10/2020	10	1	1	1	Foraging flight.
EA	30/10/2020	10	1	2	2	Circling.
EA	30/10/2020	10	1	3	3A	Foraging flight.
EA	30/10/2020	10	1	3	3B	Foraging flight.
EA	30/10/2020	10	1	3	3C	Foraging flight.
EA	30/10/2020	10	2	1	1	Flew in and perched until end of survey.
EA	04/11/2020	8	1	2	2	Hanging in air, drifting, then travellling.
EA	04/11/2020	8	1	3	3	Hanging in air, foraging over hill, then travelling, mobbing Whooper Swan.
EA	04/11/2020	8	2	8	8	Foraging flight; 25-50 m over Derryloughan Hill; Band 50-160 m over loughs, forestry; Bands 0-50 m over Derkbeg Hill.
EA	08/12/2020	2	1	1	1	Commuting. First seen low over edge of forestry (at ~ 20 m). Passed in front of VP drifting W, turned N over forestry and rose to approx 50 m and drifted NW out of viewshed.
EA	08/12/2020	2	1	2	2	Commuting. Same bird as flight ref 1, continued to drift NW out of view.
EA	14/01/2021	4	2	1	1	Commuting. Flew from E at approx 12 0m, flew over met mast heading W, out of viewshed.
EA	14/01/2021	4	2	2	2	Commuting. Same bird as flight ref 1, continued W to Coilte lands at far W of Cloghercor site, until sharply turning behind hills out of view.
EA	16/02/2021	2	2	1	1	Hunting. Appeared from the valley to the E of VP. Flew along edge of conifers before turning N towards lake. Before reaching the lake turned W to edge of conifers plantation. Then turned S towards VP1 and out of view.
EA	16/02/2021	7	2	1	1	Commuting. First seen over peaks of hills in front of VP, low to ground before turning and drifting higher to 50-160 m. Hovered on wind over peaks briefly behind VP4 and drifted SW, reaching 160-220 m. Then moved out of viewshed towards VP2.





Species	Date	VP	Watch	FL_ref	Obs_ref	Comments
EA	09/03/2021	7	4	2	2	Hunting. Appeared over VP4, circled, hunting, before heading over to hills to NNE of VP. Circled a number of times, back over VP4 area and then headed SSW, then SW behind VP2. Dissappeared from view in cloud/rain.
EA	09/03/2021	7	4	4	4	Seen briefly hunting over VP4 area, over hills to NNE of VP. Turned and headed W back over VP4 before disappearing out of view.
EA	16/03/2021	1	2	2	2	Hunting. Flew from E of VP, turned W before heading NNW towards estuary and out of view.
EA	27/04/2021	2	1	1	1	Outside/behind viewshed. Flying over ridge/brow of hill before drifting NW out of view.
EA	27/04/2021	2	1	2	2	Same bird as ref 1. Flew over forestry and began to slowly rise and hover in wind before drifting W out of view. Bird had small patch of white feathers on upper parts of wing.
EA	27/04/2021	7	2	1	1	Hunting. Flying low up valley to E of VP
EA	27/04/2021	8	1	2	2	Over VP9 viewshed area. Too far to age properly from VP8. Flew NE through valley over Lough Doo / Lough Smuttan, lost sight of it for a time. Picked it up again and followed it in direction of VP2 as it rose on thermal. Then flew E.
EA	27/04/2021	8	1	8	8	Looping flight around VP2 area. Good view of underside (at distance) when it banked. Sunlight excellent at that time to aid age.
EA	27/04/2021	9	1	2	2	Briefly viewed soaring at height c. 4 km ENE of VP9. Gulls were mobbing the bird
EA	29/04/2021	1	1	3	3	Flew W round corner hunting RG. Saw surveyor, circled and flew hunting NW. As it went over WD4 mobbed by 2 Hooded Crows.
EA	16/05/2021	8	2	2	2	In Flight. Flying
EA	17/05/2021	9	1	1	1	Quartering, then commuting flight. Bird initially viewed flying low over ground east of VP. Was chased briefly by Hooded Crow. Gained altitude to a height of c. 70-90 m above the ground as it passed to north of VP. Bird then flew out of viewshed to SW, slightly gaining altitute to a height of c. 120 m above ground as it left the viewshed. Around 1.5 km SW of VP, the bird was chased by Peregrine - lost sight of both birds c. 2.5 km SW of VP.





Species	Date	VP	Watch	FL_ref	Obs_ref	Comments
EA	18/05/2021	9	2	6	6	Hunting. Bird had distinctive pale markings on upperside of wings (when viewed from above). First viewed flying low over oak woodland in valley to NW of VP. Chased by Hooded Crow. After 3 minutes it flew NW along hillside and then circled and soared outside the viewshed at elevation of 220 m plus to NW of hill for c. 6 mins. Then descended and flew back into the viewshed and quartered the tree tops over the oak woodland again. Mobbed by c. 5 Hooded Crows, then flew NW again out of viewshed and climbed to 200 m and disappeared from view to the NW.
EA	21/06/2021	8	1	1	1	Soaring/hunting.
EA	21/06/2021	8	1	1	1a	Soaring/hunting.
EA	21/06/2021	8	1	1	1b	Soaring/hunting.
EA	21/06/2021	8	1	1	1c	Soaring/hunting.
EA	21/06/2021	8	2	2	2	Circular flight pattern/hunting.
EA	21/06/2021	8	2	2	2a	Circular flight pattern/hunting.
EA	21/06/2021	8	2	2	2b	Circular flight pattern/hunting.
EA	16/07/2021	5	1	1	1	Quartering area, flying low along N slopes of Meenmore. Could not age.
EA	16/07/2021	5	1	2	2	Quartering area. EA flying above EA in previous note. Calling constantly.
EA	18/07/2021	8	2	1	1	Rising circular flight. EA rising as a pair same time/height rate in flight over vicinity of VP4. Lost in cloud while still climbing at same rate and altitude together.
EA	18/07/2021	8	2	1	1a	Rising circular flight. EA rising as a pair same time/height rate in flight over vicinity of VP4. Lost in cloud while still climbing at same rate and altitude together.
EA	18/07/2021	8	2	1	1b	Rising circular flight. EA rising as a pair same time/height rate in flight over vicinity of VP4. Lost in cloud while still climbing at same rate and altitude together.
EA	18/07/2021	8	2	2	2	Rising circular flight. EA rising as a pair same time/height rate in flight over vicinity of VP4. Lost in cloud while still climbing at same rate and altitude together.
EA	18/07/2021	8	2	2	2a	Rising circular flight. EA rising as a pair same time/height rate in flight over vicinity of VP4. Lost in cloud while still climbing at same rate and altitude together.
EA	18/07/2021	8	2	2	2b	Rising circular flight. EA rising as a pair same time/height rate in flight over vicinity of VP4. Lost in cloud while still climbing at same rate and altitude together.





Species	Date	VP	Watch	FL_ref	Obs_ref	Comments
EA	29/09/2021	9	2	5	5	Two birds appeared to playfully chase each other in valley to northwest of VP. Birds were 40 to 70 m above valley floor when initially viewed. Both then rose and flew south out of viewshed.
EA	29/09/2021	9	2	6	6a	Both birds as described above separated and flew to ridges south of VP while both appeared to quarter the ground for c. 100 secs at a height of c. 25 to 40 m.
EA	29/09/2021	9	2	6	6b	Both birds as described above separated and flew to ridges south of VP while both appeared to quarter the ground for c. 100 secs at a height of c. 25 to 40 m.
EA	29/09/2021	9	2	7	7	Both birds as described above rejoined briefly c. 1 km to S/SW of VP before disappearing to the south.
EA	29/09/2021	9	2	8	8	Likely to be one of the above birds, reappeared flying N c. 20 to 30 m above ground for 10 secs.
EA	29/09/2021	9	2	9	9	Likely to be one of the above birds, circled over valley in same location as initial observation (ref 3) for c. 15 secs and then dropped out of sight close to the valley floor.
EA	29/10/2021	1	1	1	1	2 eagles flying in valley at height of 20 to 40 m above ground to S and SW of VP9 for c. 50 secs. 1 bird dropped out of view to the W and the other bird flew NE (see ref 2 below). Birds too far away to age or sex.
EA	29/10/2021	1	1	2	2	Separated from other bird and flew NE close to ridgeline to north of Lough Nacroaghy and disappeared behind Derkbeg Hill.
EA	29/10/2021	1	1	3	3	Subsequent to the above sightings, one Eagle flew southwards across the valley at height of 20 m for 25 secs.
EA	30/10/2021	9	1	2	2	Adult pair circling, low at times over outcrop mobbed by Ravens. Approached close to VP before moving off back E, dropping out of view.
EA	12/01/2022	1	1	2	2	Adult flight feather colouration but still faint white on tail. Bars on tail easily seen. Looked more adult than sub-adult. No tags. Mobbed by 2 Raven all during flight.
EA	27/01/2022	9	1	1	1	Viewed to WSW of VP at same elevation as VP (ie. c. 90 m above ground). Flew WSW and then S. Brief sighting (10 secs), to south of viewshed.
EA	25/03/2022	10	2	3	3	Territorial Display. Clear silhouette observed of EA but could not sex because of sunlight glare.
EA	25/03/2022	10	2	3	3A	Territorial Display. Clear silhouette observed of EA but could not sex because of sunlight glare.
EA	25/03/2022	10	2	3	3B	Territorial Display. Clear silhouette observed of EA but could not sex because of sunlight glare.





Species	Date	VP	Watch	FL_ref	Obs_ref	Comments
EA	25/03/2022	10	2	4	4	Partial territorial display during flightline. First seen at 25/50 m band. Then dropped to 0/25 m and glided low over terrain while crossing west from Derekbeg Hill. As it gained height it started to display again.
EA	25/03/2022	10	2	4	4a	Partial territorial display during flightline.
EA	25/03/2022	10	2	4	4b	Partial territorial display during flightline.
EA	29/03/2022	10	1	1	1	2 birds c. 40 m apart flew in straight line at a steady mean elevation (change in recorded heights is due to change in topography). Following bird appeared slightly larger than leading bird. Following bird had white markings on tail, indicating sub-adult.
EA	29/03/2022	10	1	1	1a	Continuation of above observation. Following bird caught up with leading bird just after leaving viewshed and both birds then dropped c. 30 m in elevation with following bird appeared to aggressively pursue leading bird as both birds turned NE and disappeared to N of Cleengort Hill.
EA	23/05/2022	1	2	2	2	Direct flight. Could not age because view of EA was from directly behind and it did not bank. Lost sight due to contours of the plantation. Informed observer at VP4 and he picked it up. Mobbed by 2 Ravens.
EA	23/05/2022	1	2	2	2a	Direct flight. Could not age because view of EA was from directly behind and it did not bank. Lost sight due to contours of the plantation. Informed observer at VP4 and he picked it up. Mobbed by 2 Ravens.
EA	23/05/2022	4	1	1	1	EA flying low over trees at E end of site while being mobbed by 2 Ravens at 13:03. Left to the N, lost sight of it as it went past the end of the forestry to the NE. Possibly landed there. Subadult.
EA	23/05/2022	4	2	1	1	EA got up from same spot (to NE of viewshed) where sight was lost in previous watch at 18:27. It hung in the air, rising on thermal, it appeared to be hunting and dropped down out of view again. Same bird as previous watch. Subadult.
EA	24/05/2022	10	1	1	1	Seen briefly in low flight on E side of viewshed. Mobbed by 2 Ravens.
EA	24/05/2022	10	2	4	4	Meandering flight. Flight originated east of Derkmore Lough at approx 5 m in height. Made its way gliding, using the wind to move slowly SW along the slopes of Derkbeg Hill and finally over Derkbeg ridge.
EA	24/05/2022	10	2	4	4a	Meandering flight. Flight originated east of Derkmore Lough at approx 5 m in height. Made its way gliding, using the wind to move slowly SW along the slopes of Derkbeg Hill and finally over Derkbeg ridge.





Species	Date	VP	Watch	FL_ref	Obs_ref	Comments	
EA	24/05/2022	10	2	4	4b	Meandering flight. Flight originated east of Derkmore Lough at approx 5 m in height. Made its way gliding, using the wind to move slowly SW along the slopes of Derkbeg Hill and finally over Derkbeg ridge.	
EA	25/05/2022	8	2	1	1	Wandering flight. Seen flying high, approx over VP4, drifting across VP2 viewshed towards VP1. Dropping in height as it approached VP1. Lost sight due to contours in plantation. Could not sex/age due to distance and light.	
EA	25/05/2022	8	2	1	1a	Wandering flight.	
EA	25/05/2022	8	2	1	1b	Wandering flight.	
EA	19/06/2022	10	2	2	2	Gliding. Sighted in low flight coming from behind plantation. View was side on to observer so no markings/tags were seen to age it.	
EA	19/06/2022	10	2	2	2a	Gliding. Sighted in low flight coming from behind plantation. View was side on to observer so no markings/tags were seen to age it.	
GJ	25/10/2019	1	1	2	2	Flew N over road/cutover bog, calling.	
GP	14/05/2020	7	2	2	2	Pair of GP flew in front of VP from W to E and landed on side of hill to E of VP. Spent rest of survey calling with one GP on hummock and visible for rest of survey.	
GP	10/07/2020	7	1	1	1	Circling and calling.	
GP	10/07/2020	7	1	2	2	Perched on peat hags, moving E from peat hag to hag, calling and singing	
GP	15/10/2021	2	1	1	1	Flew either side of surveyor at approx 1.5 m.	
НН	28/10/2021	8	1	1	1	Foraging at c. 5 m in a NW direction before moving off and out of view in a SE direction.	
ML	09/12/2019	4	2	1	1	Flying NE.	
ML	12/03/2020	2	2	3	3	Male hunting/chasing Meadow Pipit, spotted surveyor and turned SE.	
ML	18/05/2020	10	1	13	13	Very low flight, partially obscured by topography.	
ML	09/09/2020	7	1	1	1	Male flew from N to W over hill, then rose to ~ 20m continuing S.	
ML	09/09/2020	7	1	2	2	Samebird as ref 1, flying overheaf but outside of VP viewshed, circled above surveyor.	
ML	13/11/2020	5	1	1	1	Male flew from S, along edge of forestry, continuing N out of viewshed.	





Species	Date	VP	Watch	FL_ref	Obs_ref	Comments
ML	07/12/2020	5	1	2	2	Female flew right in front of VP, ~ 10 m from surveyor, then flew north, out of viewshed. Had piece of Molinia grass trailing behind her (possibly carrying prey).
ML	30/04/2021	10	1	5	5	Hassled by Meadow Pipits.
ML	11/08/2021	1	2	0	Х	Outside viewshed, flew c. 30 m above ground and landed on electricity pole.
ML	29/03/2022	10	2	3	3	Flew low just 4 m above ground. Mobbed briefly by 2 thrushes. Quickly passed from view to SW of VP.
OP	27/08/2020	8	1	2	2	Flying to land on tidal flats.
OP	27/08/2020	8	1	3	3	From tidal flats to perch on tree.
OP	26/04/2021	5	1	4	4	Mobbed by pair of Buzzards, then flew E over land but following river upstream towards Doochary, till out of view.
OP	16/05/2021	8	2	3	3	Hunting.
OP	16/05/2021	8	2	4	4	Hunting.
OP	11/08/2021	1	2	2	2	Flew, N, landed on different pole.
OP	12/08/2021	6	1	1	1	Flew NW over woodland, towards VP, then flew SW over river.
OP	20/08/2021	10	2	1	1	Circlig flight over lake and hill.
PE	11/03/2020	4	2	4	4	Commuting and hunting. Flew fast below VP, round hillside and out of view. Travelling S.
PE	12/05/2020	1	1	1	1	Flew up from under VP, circled and headed SW hunting.
PE	20/07/2020	5	1	1	1	Searching flight then gaining height. Lost sight of it as it flew above and couldn't pick it up again.
PE	16/05/2021	8	2	11	11	On the northeast side of Derkbeg Hill, buzzing Buzzard.
PE	17/05/2021	9	1	0	Х	Mobbed Golden Eagle (ref 1), c. 1.5 km SW of VP.
PE	20/05/2021	10	2	4	4	Flight at height, hunting.
RG	24/10/2019	2	1	2	2	Flushed and flew E.
RG	24/10/2019	2	1	3	3	Flushed and flew E.
RG	20/11/2019	2	1	1	1	Flew directly in front of VP heading E. Likely flushed at sight of surveyor.
RG	23/01/2020	4	1	3	3	Flushed by Golden Eagle and flew NE out of view over hilltop.





Species	Date	VP	Watch	FL_ref	Obs_ref	Comments	
RG	08/10/2020	1	1	1	1	First heard calling, then flew briefly W, low to ground at approx 2 m.	
RG	28/04/2021	7	1	2	2	Flew W slowly down hill till out of viewshed.	
RG	29/04/2021	1	1	1	1	Flew from W of VP round hill. Landed in front of VP and stayed for c. 60 secs, then flew E on round hill.	
RG	29/04/2021	1	1	2	2	Flew W round corner, landed in front of VP. Golden Eagle cam round corner hot on its heels, the grouse took off W and out of view.	
RG	12/01/2022	1	1	1	1	Fast flight, one grouse following exactly behind other, as if chasing from territory.	
SN	29/10/2019	6	1	3	3	Snipe ran across road towards VP and flushed/flew S into field across from VP.	
SN	27/01/2022	9	2	2	2	Flushed from ground and flew low over ridge in SSW direction.	
SN	25/03/2022	10	1	1	1	Display flight. Calling for 3-4 secs 4/5 times over a 2 min period before taking flight and continued intermittent call of 3-4 sec for a minute after landing.	
SN	29/03/2022	10	2	4	4	Approached from NW calling continuously. Circled close to VP several times and then disappeared from view to W of VP (may have gone to ground).	
WE	21/09/2020	10	1	7	7.1	Circling hill, then travelling.	
WE	21/09/2020	10	1	7	7.2	Circling, gaining height, then travelling.	
WE	19/06/2022	10	2	3	3	Very rough looking, primaries missing, tail feathers missing. Slow flight, soaring. Flash of red tag (left wing), silver/white tag (right wing) seen. Peregrine observed making two passes at it.	
WE	19/06/2022	10	2	3	3A	Decending slow flight/gliding.	
WE	19/06/2022	10	2	3	3B	Gliding.	
WE	19/06/2022	10	2	3	3C	Flapping/gliding/rising on thermal.	
WE	19/06/2022	10	2	3	3d	Flapping/gliding/rising on thermal.	
WE	19/06/2022	10	2	5	5	Gliding. Banked twice in circular pattern on hillside. First observed at approx 90-120 m, dropping in height and landing in clear cut section of plantation on to leftover cut offs. Red tag (left wing), white tag (right wing) seen. While perched only red tag observed. No marking could be made out on the red tag. Did not observe it take flight from perch but surmise it left the viewshed in low flight.	
WE	19/06/2022	10	2	5	5a	Gliding/dropping onto perch.	





Species	Date	VP	Watch	FL_ref	Obs_ref	Comments
WS	24/10/2019	2	1	7	7	Flew south near VP4.
WS	25/10/2019	1	1	1	1	Flew S over cutover bog and road, calling.
WS	25/10/2019	1	1	3	3	Flew S over cutover bog and road, calling.
WS	25/10/2019	1	1	4	4	Flew S over cutover bog and road, calling.
WS	25/10/2019	1	2	1	1	Flew W calling. Flew over peak at VP2 to Peak at VP1 and the valley in between.
WS	25/10/2019	1	2	2	2	Flew S over cutover bog and road.
WS	25/10/2019	4	1	2	2	Flew S below VP calling.
WS	25/10/2019	4	2	5	5	Flying from E to W, calling.
WS	18/02/2020	3	1	5	5	High above forestry, flew W heading towards river, appeared to be heading to Gweebarra Bay.
WS	18/02/2020	5	1	2	2	Calling, flew from river directly over VP heading NE.
WS	08/10/2020	1	1	3	3	Juv calling, flew from S towards river and continued outside of viewshed to join flock of 20, which were commuting upstream along river (outside viewshed).
WS	08/10/2020	4	1	1	1	Flock commuting south.
WS	04/11/2020	8	1	4	4	Mobbed by Golden Eagle.
WS	13/11/2020	3	1	2	2	Flew E from estuary.
WS	22/03/2021	8	1	11	11	In flight (single line).
WS	21/10/2021	4	2	2	2	First sighted outside viewshed and spent 40 secs flying in viewshed.
WS	21/10/2021	4	2	3	3	Direct, fast flight N-S.
WS	25/03/2022	10	1	2	2	Direct flight. Heard before coming into view

Table A7.2.6 Vantage point survey flightline records recorded outside timed watches.

Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
EA	11/03/2020	1	1	2	2	1	09:40							
EA	11/03/2020	1	1	3	3	1	09:42							
EA	14/05/2020	7	1	1	1	2	09:48							





Species	Date	VP	Watch	FL_ref	Obs_ref	Number	Time	Band1	Band2	Band3	Band4	Band5	Sex	Age
WE	19/06/2022	10	2	5	5	1	18:05							adult
WE	19/06/2022	10	2	5	5a	1	18:06							adult
WS	01/03/2022	9	1			4	11:00							adult

Table A7.2.7 Vantage point survey non-flightline records recorded during timed watches.

BTO	Date	VP	Number	Time	Sex	Age	Notes
BH	18/05/2020	8	5				On mudflats, short low flights moving from flat to flat.
BH	11/06/2020	8	1	09:18			Feeding on tidal flats.
BH	17/09/2020	8	1	15:00			On tidal flats.
ΒZ	31/03/2021	10	1	14:24			In tree at water treatment plant.
ΒZ	01/03/2022	9	1	12:28		adult	Mewing call heard 1.2 km to NNE of VP.
CA	09/03/2020	3	1				Sitting on rock in lake below VP. Didn't see it fly in or out but it was there between 15:43 and 16:32.
CA	27/04/2021	8	1	14:44		adult	Wing drying on sandbar.
CA	16/05/2021	8	2	11:24		adult	Wing drying.
CA	16/05/2021	8	1	14:26		adult	Diving.
СМ	18/05/2020	8	3				On mudlfats, short low flights moving from flat to flat.
СМ	11/06/2020	8	2	08:41			Feeding on tidal flats.
СМ	25/06/2020	8	1	07:55			Feeding on tidal flats.
СМ	30/01/2021	9	2	14:30			Resting on tidal sandflat in estuary just east of VP8 for over 1 hour.
СМ	26/02/2021	8	1	14:17		adult	On water working NE along estuary.
СМ	13/01/2022	8	1	10:44		adult	On water.
CU	30/11/2020	8	1	15:33			Feeding on silt bank at NE end of estuary.
CU	26/02/2021	8	1	08:30			Feeding on sandbars.
CU	26/02/2021	8	1	11:40			Feeding on sandbanks.





BTO	Date	VP	Number	Time	Sex	Age	Notes
CU	18/07/2021	8	2	09:17		adult	Wading/feeding.
CU	17/08/2021	8	1	17:08		adult	Wading.
CU	16/09/2021	8	1	09:15		adult	Foraging at channel edge.
CU	13/01/2022	8	1	10:44			On estuary.
GB	23/02/2022	8	1	07:36		adult	On estuary.
GB	23/02/2022	8	2	08:03		adult	On estuary.
GP	08/07/2020	7	1	12:32			Heard calling to N of VP across valley.
GP	08/07/2020	7	1	13:52			Heard calling to NE of VP across valley.
Н.	18/07/2021	8	1	08:19		adult	Wading/feeding.
Н.	17/08/2021	8	1	14:19		adult	Wading/feeding.
HG	11/06/2020	8	2	08:00			Feeding on flats of river.
HG	12/12/2020	8	1	13:05		adult	On water floating SW down estuary.
HG	26/02/2021	8	1	12:17		adult	Preening on sandbar on Gweebarra R.
HG	26/02/2021	8	1	14:17		adult	On water working NE along estuary.
HG	27/04/2021	8	2	15:04		adult	Feeding on edges of low tide water channel. Stayed for duration of VP watch.
HG	23/02/2022	8	1	07:32		adult	On water.
К	18/05/2021	9		10:25		adult	In conifer woodland on valley floor to N of VP.
LB	23/02/2022	8	1	08:32			On water.
MA	17/09/2020	8	2	15:19			On tidal flats.
MA	24/11/2020	8	4	13:20	2 pairs		
MA	15/02/2021	3	2		pair		On lake below VP foraging throughout survey.
MA	25/02/2021	10	4		pair		
MA	25/02/2021	10	4		pair		





BTO	Date	VP	Number	Time	Sex	Age	Notes
МА	22/06/2021	9	3	15:20		2 adults, 1 juvenile	On Lough Doo.
MA	17/08/2021	8	3	14:30	female		
MA	16/09/2021	8	3	09:05	2 males, 1 female		
MA	25/03/2022	10	2	11:34	pair		Probable breeding pair on reservoir.
MA	29/03/2022	10	6			adult	On reservoir lake and Derkmore Lough. Intermittently flying between both lakes.
MS	01/03/2022	9	3			adult	On lake beside VP10 for majority of second watch.
RG	23/01/2020	4	1	11:02			Calling around 50 m to E of VP.
RG	30/04/2020	2	1	09:50			Heard calling behind VP.
RG	10/11/2020	2	1	10:55			Heard calling behind VP.
RG	30/03/2021	9	1	20:35		adult	Called briefly 250 m to west.
RG	22/03/2022	2	1	17:41	male		Heard.
RK	18/07/2021	8	1	11:02		adult	Wading/feeding.
RM	24/03/2022	8	4	17:26	pair		
RP	12/12/2020	8	1	12:31			Heard calling from estuary.
SB	22/11/2021	1	5	14:22	3 males, 2 females		
SN	30/03/2021	9	1	19:04		adult	Calling briefly 300 m to west.
SN	17/05/2021	5	1	08:34			Brief call, 400 metres S of VP.
SU	27/04/2021	8	2	16:40		adult	Feeding on sandbar.
T.	18/05/2021	9	2			adult Intermittently visible throughout watch on west side of Lough Doo, occasionally in open water but mainly in reeds.	
T.	22/06/2021	9	7	16:35	1 female	1 adult, 6 chicks	NW section of Lough Doo.





BTO	Date	VP	Number	Time	Sex	Age	Notes
Т.	15/07/2021	9	3				Intermittently visible on Lough Doo. Possibly a female with two juveniles.
T.	23/08/2021	9	1	10:35	female		Female in rush bed on L Nacroaghy. Seen while walking to VP9 at 10:30
WM	18/05/2020	8	1	08:38			On mudflats of river opposite VP.
WS	25/10/2019	4		08:24			Heard calling below VP.
WS	21/03/2021	8	?	19:20			Heard in flight, not seen.

Table A7.2.8 Vantage point survey non-flightline records recorded outside timed watches.

BTO	Date	VP	Location	No_birds	Time	Sex_age	Age	Activity	Comments
BZ	16/06/2021	4		1	14:15			Soaring, hovering	Seen above conifer plantation on walk to VP
ΒZ	21/02/2022	8		1	07:28			F	Seen in flight, in VP8 viewshed while travelling to VP4.
ΒZ	21/02/2022	8		1	07:28			Т	Seen on ground, in VP8 viewshed while travelling to VP5
CS	17/07/2020	10		1	10:45				Flushed as approaching VP. 54.836, -8.304
GP	19/06/2021	5		1	13:20			Calling	Brief 4 second call. Calling from area 400 m to NW of VP. Heard while walking to VP.
HG	18/05/2021	9		8	08:55	adult		Commuting	Observed on walk-in to VP. Flock flew over ridge to east of VP in NW direction. Then reappeared offsite to SW of VP.
К.	10/08/2020	5		1					Flushed when parking car near VP5, flew from road to SE into/over forestry.
LB	27/04/2021	9		1	13:50	adult		Commuting	Flew south overhead when walking to VP.
ML	12/08/2020	2		1					Flushed from open bog on way to VP. Flew north towards forestry low to ground out of view behind peat bogs/low cloud cover.
RG	07/10/2020	4		2	06:50				Flushed on route to VP, to S of VP4.
RG	26/10/2020	9		2					Pair put up on east side of Derkbeg Hill summit.





BTO	Date	VP	Location	No_birds	Time	Sex_age	Age	Activity	Comments
RG	10/11/2020			1					Flushed from behind VP during walk at break before start of VP survey
RG	12/01/2021	7		2					Flushed on way to VP7. On top between VP4 and VP7
RG	30/03/2021	9		1	20:05		Adult	Calling	Called briefly 250 m to west at 20:35
RG	21/10/2021	4		1	11:36	Male		Flushed	RG flushed while taking walk between VP watch. SE of VP.
RG	23/11/2021	4						RG Droppings	Dropping found around VP4, from single droppings to groupings of 7+. VP is a possible roosting site.
RG	14/12/2021	2		1	11:20			On Ground	RG droppings found within 20 m N of VP2. +5 days old.
RG	14/12/2021	2		1	12:50			On Ground	RG droppings found within 20 m NE of VP2. 3 days old.
RG	01/03/2022	9		1	07:58	adult		Flushed flight	Flushed from ground near hilltop just south of viewhed, when walking to VP
SN	25/01/2021	10		1	09:52				Startled when accessing the VP outside viewshed.
SN	17/07/2021	5		1	07:05			Calling	Call heard while walking in to VP5. Approx 150 m from entrance gate.
T.	14/07/2021	9		2	13:45	Female		Flushed flight	Flushed from reeds in west side of Lough Nacroaghy when walking to VP9.
T.	15/07/2021	9		3				Foraging	Intermittently visible on L. Doo. Possibly a Teal hen with two juveniles
T.	23/08/2021	9		1	10:35	Female	Adult	On water	Female in rush bed on L Nacroaghy. Seen while walking to VP.
T.	29/09/2021	9		5	08:45	1 adult, 4 sub-adults		On water	Viewed in Lough Nacroaghy on route to VP.
WК	10/11/2020	0		1					Flushed by observer when leavng vehicle and heading up track.
WК	17/02/2021	0		1					Flew across track in front of vehicle.
WК	14/12/2021	2		1	08:15			On Ground	Flushed
WК	14/12/2021	2		1	08:17			On Ground	Flushed





BTO	Date	VP	Location	No_birds	Time	Sex_age	Age	Activity	Comments
WK	01/03/2022	9		1	07:45	adult		Flushed flight	Flushed from ground on route to VP beside access track 400 metres south of Lough Nacroaghy.



A7.2.4 MOORLAND BREEDING BIRD SURVEY

The bird observations from the moorland breeding bird surveys are shown in Table A7.2.9 and are mapped in Figure A7.2.1 - Figure A7.2.4. Comments about the observations of the more notable species are shown in Table A7.2.10.

The records of bird signs from the moorland breeding bird surveys are shown in Table A7.2.11 and are mapped in Figure A7.2.5 - Figure A7.2.7.

BTO	Date	Obs no.	Time	Number	Sex	Age	Map ref
ΒZ	12/05/2020	1	15:00	1			11
ΒZ	20/07/2020	1		1			5
CA	22/06/2021	2	09:27	1		adult	58
CS	22/06/2021	2	09:30	3		adult	33
EA	28/04/2021	3	12:28	1		sub-adult	65
EA	17/05/2021	3	15:43	1			60
EA	17/05/2021	5	16:01	1			64
EA	22/06/2021	5	13:15	1		adult	63
EA	22/06/2021	6	13:23	1		adult	59
EA	15/07/2021	1	12:55	1		sub-adult	56
EA	15/07/2021	1a	13:12	1		sub-adult	52
EA	15/07/2021	1b	13:24	1		sub-adult	53
GP	10/06/2020	1	10:06				14
GP	11/06/2020	1	15:54	1			15
GP	11/06/2020	2	16:29	1			
GP	08/07/2020	1	11:37	1			18
GP	08/07/2020	2	11:42	2			19
GP	09/07/2020	1	11:16	1		adult	16
GP	09/07/2020	2	11:17	1		adult	17
GP	27/04/2021	1	14:50	1			
GP	27/04/2021	2	15:22	1			
GP	16/06/2021	2	18:28	2			24
GP	20/07/2021	3	12:03	2		adult	28
GP	27/07/2021	1	14:50	1			20
GP	27/07/2021	2	15:22	2			21
HG	15/07/2021	4	13:45	3		adult	57
К.	20/07/2021	2	11:56	1		adult	27
MA	11/05/2020	1	15:00	2			
MA	28/04/2021	7	13:43	1	female	adult	62
ML	17/06/2021	2	17:40	1			25

Table A7.2.9 Bird observations from the moorland breeding bird surveys.





BTO	Date	Obs no.	Time	Number	Sex	Age	Map ref
PE	28/04/2021	4	12:57	2	pair	adult	50
PE	28/04/2021	8	13:44	1		adult	61
PE	15/07/2021	5	16:30	1	Female	adult	54
RG	30/04/2020	1	11:29	1			9
RG	12/05/2020	2	16:04	1			12
RG	13/05/2020	1	15:37	1			13
RG	11/06/2020	3	16:48	1			
RG	28/04/2021	2	11:23	1	male	adult	51
RG	28/04/2021	6	13:27	1	male	adult	31
RG	30/04/2021	1	12:42	1		adult	22
RG	16/06/2021	1	17:53	1			23
RG	17/06/2021	1	17:37	1			26
RG	15/07/2021	4	15:12	1	male	adult	55
RG	15/07/2021	6	15:30	3	1 male, 2 female2	adult	49
SH	04/07/2020	1	11:25	1			3
SH	18/07/2020	1	14:32	3	1 male, 2 females		4
SN	30/04/2020	2	13:05	1			10
SN	29/05/2020	1	18:25	1			7
SN	29/05/2020	2	18:50	1			8
SN	03/07/2020	1	15:26	1			1
SN	03/07/2020	2	16:42	1			2
SN	19/07/2020	1		1			6
SN	22/06/2021	7	14:25	1		adult	47
Т.	09/06/2020	1	11:42		female		
Т.	22/06/2021	1	09:25	1	female	adult	32
Т.	15/07/2021	6	17:30	2	1 female	adult	39
Т.	20/07/2021	1	11:35	3		1 adult, 1 juv	1

Table A7.2.10 Comments about Golden Eagle, Golden Plover, Merlin, Peregrine, Snipe and Teal records.

BTO	Date	Ref	Comments
EA	28/04/2021	3	Viewed from NW slope of Derkbeg Hill. First seen inflight at 25-50 m, flew directly overhead, rising to 300 m+.
EA	17/05/2021	3	Briefly viewed flying low over ridge in southerly direction.
EA	17/05/2021	5	Hovered briefly at c. 50 m height, then dropped to ground.
EA	22/06/2021	5	Flew NE to ENE along northwest side of Derkbeg Hill at height of 25-50 m and then turned north (at steady elevation, therefore height above ground increased to 100 m plus) and crossed valley before dropping low to north of conifers to east of mast on Cleengort Hill.
EA	22/06/2021	6	Flew south at height of 25-50 m over top of ridge just west of VP9.





вто	Date	Ref	Comments
EA	15/07/2021	1	First seen inflight in valley to west of Lough Nacroaghy at 25-50m. No
	13/07/2021	-	tags. Flew and circled along north end of lake and then went to ground at 1a.
EA	15/07/2021	1a	Took flight from 1a. Flew across east end of lake and landed near top of the ridge at 1b.
EA	15/07/2021	1b	Took flight and flew SSW from the ridge and soared and circled gradually to a height of c. 250 m above ground. Continued soaring flight southwards, viewed for c. 15 mins until 3-4 km to south. Briefly mobbed by Ravens c. 5 mins after taking off.
GP	10/06/2020	1	Adult calling around 100 m to NE of transect.
GP	11/06/2020	1	Calling to S of observer.
GP	11/06/2020	2	Calling to S of transect.
GP	08/07/2020	1	Calling
GP	08/07/2020	2	Pair on lookout calling.
GP	09/07/2020	1	One of pair calling and seen to S of transect.
GP	09/07/2020	2	Second of pair, calling and seen to N of transect.
GP	27/04/2021	1	Heard calling to W of transect.
GP	27/04/2021	2	Flew N across path of surveyor, calling.
GP	16/06/2021	2	Flew back and forth, E and W, in the same area, c. 30 m from observer.
GP	20/07/2021	3	Pair calling and seen in area of eroding peat/peat hags.
ML	17/06/2021	2	Perched on fence post between PB2 and WD4, flew away NE into WD4.
PE	28/04/2021	4	Heard calling in flight first. Viewed from hillside to NE of VP9 for 35 sec at 25-50 m. Food pass seen. Male was subsequently observed to fly offsite in a NW direction, climbing to 200 m plus - eventually lost from view c. 2.5 km to NW. Female flew in north direction and quickly disappeared from view.
PE	28/04/2021	8	Flew low downhill from south, then turned east and soared to 100 m plus, before diving to ground.
PE	15/07/2021	5	Short 4 sec glimpse. Lost due to low cloud/mist.
SN	30/04/2020	2	SN flushed and flew W out of view
SN	29/05/2020	1	Flushed.
SN	29/05/2020	2	Chipping
SN	03/07/2020	1	Chipping
SN	03/07/2020	2	Chipping
SN	19/07/2020	1	Chipping
SN	22/06/2021	7	Flushed and flew low in east direction
Т.	09/06/2020	1	Female flew across lake calling. Trying to lead away 4 ducklings.
Т.	22/06/2021	1	Seen on Lough Nacroaghy.
Т.	15/07/2021	6	Could not ID sex of second bird due to mist and reeds.
Т.	20/07/2021	1	1 female and 2 Juvenile on small pond





Date	Ref	Time	вто	Sign	ng the moorland breeding bird surveys. Comments	Map ref
12/05/2020	1	15:00	ΒZ	whitewash	Whitewash and pellet and feathers along fence posts	
28/04/2021	8	14:05	GP	feathers	Flight feather.	21
11/06/2020	1	15:53	К.	pellet	Small pellet ~30 mm long; small bones and beetles elytra and gut; old pellet.	9
30/04/2020	1	11:42	RG	droppings		6
30/04/2020	2	12:37	RG	droppings		5
28/04/2021	1	09:53	RG	droppings		18
28/04/2021	2	09:28	RG	pellet		32
28/04/2021	5	13:22	RG	droppings		19
28/04/2021	7	13:48	RG	droppings		20
28/04/2021	10	14:38	RG	pellet		35
30/04/2021	1	12:32	RG	droppings		11
17/05/2021	1	13:16	RG	droppings		22
17/05/2021	2	13:33	RG	pellet		36
17/05/2021	2	13:41	RG	droppings		23
17/05/2021	3	13:44	RG	droppings		24
17/05/2021	4	13:47	RG	droppings		25
17/05/2021	5	13:54	RG	droppings		26
17/05/2021	6	15:50	RG	droppings		27
18/05/2021	1	13:06	RG	droppings		13
17/06/2021	1		RG	droppings		15
22/06/2021	3	10:38	RG	droppings		28
22/06/2021	4	11:39	RG	nest	7 eggs, warm; probably flushed RG off nest; did not delay at nest.	29
22/06/2021	4		RG	pellet		38
22/06/2021	5	11:45	RG	droppings	1 pile. washed out.	30
15/07/2021	3	14:47	RG	droppings	3 pile. Washed out.	31
15/07/2021	5	14:33	RG	pellets and feathers	RG preening post on moss hummock near hilltop; feathers and 1 pile of fresh pellets.	39
16/07/2021			RG	droppings		
20/07/2021	1	11:52	RG	droppings		17
21/07/2021	1	17:29	RG	droppings		16
27/07/2021	1	15:07	RG	dead bird		12
13/05/2020	1	16:08	XR	feathers	Old feathers on peat hummock, some fox scat; no signs of pellets or whitewash.	7
13/05/2020	2	16:16	XR	feathers	Old feathers on peat hummock.	8

Table A7.2.11 Bird signs recorded during the moorland breeding bird surveys.





Date	Ref	Time	вто	Sign	Comments	Map ref
10/06/2020	1	15:20	XR	plucking post		10
04/07/2020	1		XR	pellet	Pellet containing fur, small bones.	1
19/07/2020	1		XR	feathers	Plucked feathers in forestry ride.	2
19/07/2020	2		XR	pellet	2 pellets on rock feature containing fur / bone.	3
19/07/2020	3		XR	pellet	Pellet with small mammal bones.	4
28/04/2021	4		XR	pellet	Single pellet, c. 3.5 cm long with small mammal bones; on hilltop.	33
28/04/2021	9	13:58	XR	plucking post	Potential plucking post for medium to large raptor; down and wing feathers of prey indicate prey was corvid.	34
17/05/2021	4	16:16	XR	plucking post	Same plucking post location as observed on 28/04/21; no evidence of any new activity since last month.	37
19/05/2021	1	11:51	XR	pellet	Small 2 cm pellet with large amount of beetle elytra inside, found on moss hummock.	14

A7.2.5 WINTER WATERBIRD SURVEYS

Waterbird and Red Grouse observations recorded during the winter walkover surveys are shown in Table A7.2.12.

The waterbird and raptor counts from the Gweebarra Estuary waterbird surveys are shown in Table A7.2.13 and Table A7.2.14.

The waterbird and raptor records from the Gweebarra Estuary waterbird vantage point survey are shown in Table A7.2.15.

Species	Date	Time	Number	Lat	Long
Red Grouse	21/11/2019	11:47	1	54.85428	-8.22029
Red Grouse	19/02/2020	09:22	2	54.84999	-8.22201
Woodcock	21/11/2019	12:40	1	54.84632	-8.2281
Woodcock	21/11/2019	12:56	1	54.84276	-8.23094
Woodcock	21/11/2019	13:06	1	54.85641	-8.24456

Table A7.2.12 Waterbird and Red Grouse records from the winter walkover surveys.

Table A7.2.13 Waterbird and raptor counts from the Gweebarra Estuary waterbird counts, 31/10/2019 – 09/12/2020..

Species	31/10/19 LT	07/10/20 LT	09/10/20 HT	11/11/20 HT	11/11/20 LT	09/12/20 HT
МА	34	1	4	2	0	2
RM	0	0	0	0	10	0





Species	31/10/19 LT	07/10/20 LT	09/10/20 HT	11/11/20 HT	11/11/20 LT	09/12/20 HT
СА	2	3	6	0	3	1
Н.	3	1	0	0	1	0
WE	1	0	0	0	0	0
SH	1	0	0	0	0	0
CU	4	3	0	0	2	0
GK	0	0	1	0	0	0
вн	92	3	0	0	0	0
LB	0	0	0	0	1	0
HG	6	47	0	0	19	0
К.	1	0	0	0	0	0

<i>Table A7.2.14 Waterbird and raptor counts from the Gweebarra Estuary waterbird counts,</i>
11/12/2020 – 10/03/2021.

Species	11/12/20	11/01/21	13/01/21	18/02/21	18/02/21	10/03/21
Species	LT	HT	LT	HT	LT	LT
МА	2	0	0	0	0	0
RM	0	1	4	0	2	0
Н.	1	1	1	0	0	0
WE	0	0	0	0	0	0
МН	1	0	0	0	0	0
ос	6	0	0	0	0	0
CU	0	0	1	1	0	2
GK	0	2	0	0	0	0
LB	0	0	0	0	0	2
HG	3	0	1	0	0	4
GB	0	0	0	1	0	0

Table A7.2.15 Waterbird and raptor records from the Gweebarra Estuary waterbird vantage
point survey.

Species	Date	VP	Time	Number	Activity	Bearing
BH	22/11/2019	D/S VP	10:06	1	Flying	NE
BH	22/11/2019	D/S VP	11:48	2	Flying	SW
BH	22/11/2019	D/S VP	12:32	3	Flying	SW
BH	22/11/2019	U/S VP	10:08	3	Flying, on ground/wading	NE
BH	22/11/2019	U/S VP	10:50	2	Flying, on water	NE
BH	10/12/2019	U/S VP	13:34	1	Flying	SW
BH	21/01/2020	U/S VP	14:37	1	Flying	SW
BH	21/01/2020	U/S VP	15:35	7	Flying	SW
BH	19/02/2020	D/S VP	12:51	1	Flying	





Species	Date	VP	Time	Number	Activity	Bearing
BH	10/03/2020	D/S VP	15:15	1	Flying	W
BZ	10/03/2020	D/S VP	16:40	2	Flying, calling	
CA	22/11/2019	U/S VP	11:34	1	Flying	SW
CA	22/11/2019	U/S VP	12:08	1	Flying, on water	NE
CA	10/03/2020	D/S VP	16:52	2	Flying	SW
CA	10/03/2020	D/S VP	17:00	2	Flying	W
CU	22/11/2019	D/S VP	10:04	1	Flying, on sand spit	NE
CU	22/11/2019	D/S VP	10:57	1	Flying	E
CU	22/11/2019	D/S VP	11:00	2	Flying	SW
CU	22/11/2019	D/S VP	11:25	1	Flying, on ground/wading	N
CU	22/11/2019	D/S VP	11:39	1	Flying, on ground/wading	
CU	22/11/2019	D/S VP	11:46	1	Flying, on ground/wading	E
CU	22/11/2019	D/S VP	12:12	1	Flying	SW
CU	22/11/2019	D/S VP	12:50	1	Flying	SW
CU	22/11/2019	U/S VP	12:40	1	Flying	NE
CU	10/12/2019	D/S VP	13:20	2	Flying	SW
CU	10/12/2019	D/S VP	13:28	1	Flying	SW
CU	10/12/2019	D/S VP	13:28	1	Flying, on ground/wading	SW
CU	10/12/2019	D/S VP	13:31	1	Flying	SW
CU	10/12/2019	D/S VP	13:48	2	Flying	SW
CU	10/12/2019	D/S VP	13:51	1	Flying	SW
CU	10/12/2019	D/S VP	13:57	1	Flying	SW
CU	10/12/2019	D/S VP	13:58	2	Flying	SW
CU	10/12/2019	D/S VP	14:19	7	Flying	SW
CU	21/01/2020	D/S VP	13:06	1	Flying	E
CU	21/01/2020	D/S VP	13:56	1	Flying	Ν
CU	21/01/2020	D/S VP	15:14	1	Flying	W
CU	21/01/2020	U/S VP	12:29	1	Flying	NE
CU	21/01/2020	U/S VP	13:38	1	On sand spit, calling	
CU	21/01/2020	U/S VP	13:40	1	On sand spit	
CU	19/02/2020	D/S VP	14:29	1	Flying	W
CU	10/03/2020	D/S VP	15:15	1	On sand	
CU	10/03/2020	D/S VP	15:15	1	On sand	
CU	10/03/2020	D/S VP	16:52	3	Flying, calling	W
CU	10/03/2020	D/S VP	17:06	1	Flying, on sand, calling	SW
CU	10/03/2020	D/S VP	17:19	5	Flying	W
GX	21/01/2020	D/S VP	12:46	1	Flying	N
GB	22/11/2019	U/S VP	10:16	1	Flying	NE





Species	Date	VP	Time	Number	Activity	Bearing
GB	22/11/2019	U/S VP	12:38	1	Flying	SW
GB	19/02/2020	U/S VP	12:57	1	Flying	SW
GB	19/02/2020	U/S VP	13:28	1	Flying, on sand spit	NE
GB	19/02/2020	U/S VP	13:28	1	Flying	SW
ND	19/02/2020	D/S VP	14:10	1	On water	
ND	19/02/2020	D/S VP	15:03	1	On water	E
Н.	22/11/2019	D/S VP	12:54	1	Flying	NW
Н.	10/03/2020	D/S VP	15:51	1	Flying	W
HG	22/11/2019	D/S VP	10:11	1	Flying	NE
HG	22/11/2019	D/S VP	10:44	1	Flying, on sand spit	NE
HG	22/11/2019	D/S VP	10:45	1	Flying	SW
HG	22/11/2019	D/S VP	10:58	2	Flying	SW
HG	22/11/2019	D/S VP	11:02	1	Flying	NE
HG	22/11/2019	D/S VP	11:15	1	Flying, on water	SW
HG	22/11/2019	U/S VP	10:02	1	Flying	NE
HG	22/11/2019	U/S VP	10:34	49	Flying, on ground/wading	SW
HG	22/11/2019	U/S VP	10:42	67	Flying	SW
HG	22/11/2019	U/S VP	11:41	23	Flying	SW
HG	10/12/2019	D/S VP	13:53	115	Flying	W
HG	10/12/2019	D/S VP	14:29	21	Flying	W
HG	10/12/2019	D/S VP	14:37	78	Flying	W
HG	10/12/2019	D/S VP	14:55	50	Flying	W
HG	10/12/2019	D/S VP	15:01	98	Flying	W
HG	10/12/2019	D/S VP	15:11	62	Flying	W
HG	10/12/2019	U/S VP	13:50	300	Flying, on ground/wading, on water	
HG	21/01/2020	D/S VP	12:38	1	Flying	W
HG	21/01/2020	D/S VP	13:38	2	Flying	W
HG	21/01/2020	D/S VP	13:47	1	Flying	W
HG	21/01/2020	U/S VP	13:46	1	Flying	SW
HG	19/02/2020	U/S VP	13:37	1	Flying, on sand spit	SW
HG	19/02/2020	U/S VP	14:56	1	Flying	SW
HG	10/03/2020	D/S VP	15:15	2	On sand	
HG	10/03/2020	D/S VP	16:01	1	Flying, on sand	N
HG	10/03/2020	D/S VP	16:07	1	Flying, on sand	W
HG	10/03/2020	D/S VP	16:13	1	Flying, on sand	N
HG	10/03/2020	D/S VP	16:53	6	Flying, on sand	W
HG	10/03/2020	D/S VP	16:54	1	Flying, on sand	SW
HG	10/03/2020	D/S VP	17:01	2	Flying	W





Species	Date	VP	Time	Number	Activity	Bearing
К.	10/12/2019	D/S VP	15:06	1	Flying	SW
LB	21/01/2020	D/S VP	13:17	1	Flying	W
LB	21/01/2020	D/S VP	13:50	1	Flying	W
ET	21/01/2020	D/S VP	15:23	1	Flying	W
LN	10/12/2019	D/S VP	13:45	4	Flying, on water	SW
LN	10/12/2019	D/S VP	15:17	1	Flying	SW
LN	21/01/2020	D/S VP	14:05	1	Flying	W
LN	21/01/2020	D/S VP	14:47	1	Flying	E
LN	19/02/2020	D/S VP	15:18	2	On water	
MA	10/12/2019	U/S VP	13:55	1	Flying	NE
MA	10/12/2019	U/S VP	14:09	3	Flying, on water	
MA	21/01/2020	U/S VP	14:00	2	Flying, on water	SW-NE
MA	19/02/2020	U/S VP	12:48	2	Flying	NE
MA	19/02/2020	U/S VP	12:51	2	Flying	NE
MA	10/03/2020	D/S VP	16:33	2	Flying, on water	NE
ос	22/11/2019	D/S VP	11:36	2	Flying, on ground/wading	N
RM	22/11/2019	D/S VP	10:20	1	Flying, landed in front of VP	NE
RM	22/11/2019	D/S VP	10:59	1	Flying, on water	NE
RM	22/11/2019	D/S VP	11:07	4	Flying, on water	NE
RM	22/11/2019	D/S VP	11:40	2	Flying, on water	NE
RM	22/11/2019	D/S VP	11:51	1	Flying	SW
RM	22/11/2019	D/S VP	12:04	1	Flying	SW
RM	22/11/2019	D/S VP	12:08	3	Flying	SW
RM	22/11/2019	D/S VP	12:14	1	Flying, on water	NE
RM	22/11/2019	D/S VP	12:21	1	Flying	SW
RM	22/11/2019	D/S VP	12:40	2	Flying	SW
RM	10/12/2019	U/S VP	15:04	4	On water	SW
RM	21/01/2020	D/S VP	13:14	2	Flying	E
RM	21/01/2020	D/S VP	13:20	1	Flying	W
RM	21/01/2020	U/S VP	13:15	2	On water	
RM	21/01/2020	U/S VP	13:16	2	Flying, on water	NE
RM	21/01/2020	U/S VP	13:54	2	Flying, on water	
RM	21/01/2020	U/S VP	14:12	2	Flying, on water	SW
RM	21/01/2020	U/S VP	14:38	1	Flying	SW
RM	21/01/2020	U/S VP	14:38	2	On water	NE
RM	19/02/2020	D/S VP	13:48	1	On water	
RM	19/02/2020	D/S VP	14:43	1	Flying	W
RM	19/02/2020	U/S VP	12:36	2	On water	





Species	Date	VP	Time	Number	Activity	Bearing
RM	19/02/2020	U/S VP	12:40	2	Flying, on water	N
RM	19/02/2020	U/S VP	13:07	2	Flying	SW
RM	19/02/2020	U/S VP	14:53	2	Flying, on water	NE
RM	10/03/2020	D/S VP	16:39	1	Flying, on water	W
RM	10/03/2020	D/S VP	16:46	1	Flying, on water	W
RM	10/03/2020	D/S VP	17:04	6	Flying	W
RM	10/03/2020	D/S VP	17:27	2	Flying	W
SA	22/11/2019	D/S VP	10:22	2	Flying, landed in front of VP	NE
SA	22/11/2019	D/S VP	10:39	1	Flying, on sand spit	NE
SA	22/11/2019	D/S VP	10:55	2	Flying, on water	NE
SA	22/11/2019	D/S VP	11:28	3	Flying, on water	NE
SA	22/11/2019	D/S VP	11:31	1	Flying	SW
SA	22/11/2019	D/S VP	11:55	3	Flying, on water	NE
SA	22/11/2019	D/S VP	11:55	2	Flying, on water	NE
SA	22/11/2019	D/S VP	11:56	1	Flying	SW
SA	22/11/2019	D/S VP	12:05	1	Flying	SW
SA	22/11/2019	D/S VP	12:16	1	Flying, on water	NE
SA	22/11/2019	D/S VP	12:17	1	Flying	SW
SA	22/11/2019	D/S VP	12:20	1	Flying, on ground/wading	NE
SA	10/12/2019	D/S VP	14:04	1	Flying	W
SA	10/12/2019	D/S VP	14:35	1	Flying	W
SA	10/12/2019	D/S VP	14:42	1	Flying	W
SA	10/12/2019	U/S VP	14:47	1	Flying	SW
SA	21/01/2020	D/S VP	14:12	1	Flying, calling	E
SA	10/03/2020	D/S VP	16:06	1	Flying, on water	W
SA	10/03/2020	D/S VP	16:18	1	Flying	W
SA	10/03/2020	D/S VP	16:35	1	Flying	W
SA	10/03/2020	D/S VP	16:42	1	Flying	W

A7.2.6 BREEDING RED-THROATED DIVER AND GULL SURVEY

No records, or signs, of Red-throated Diver were recorded in the Red-throated Diver and gull survey. Gull records, and records of other waterbird species, from the breeding Red-throated Diver and gull survey are shown in Table A7.2.16. Note that this table does not include survey visits to lakes when no waterbirds were recorded. All survey visits are listed in Appendix 7.1.

Table A7.2.16 Waterbird records from the breeding Red-throated Diver and gull survey.

BTO	Date	Lake	Number	Comments
СМ	18/06/2021	Lough Aneane More	2	On rocks to N of lake.





BTO	Date	Lake	Number	Comments
СМ	09/06/2020	Lough Aneane More	2	Pair of CM calling and circling around lake throughout survey.
СМ	08/07/2020	Lough Aneane More	1	On rock/vegetation in lake near NW shore. When walking around lake, gull left rocks, circled over water and flew west. No evidence of breeding gulls.
CS	09/06/2020	Lough Aneane More	2	
CS	08/06/2020	Lough Beg	1	
CS	08/06/2020	Lough Errig	1	
CS	09/06/2020	Lough Nabrack	3	Pair and single chick on south shore of lake.
LB	06/07/2020	Lough Nabrack	1	Juvenile on lake in water, also flushed from sheep carcass beside track to lake.
MA	08/06/2020	Lough Errig	2	
MA	11/05/2020	Lough Machugh	1	
MA	06/07/2020	Lough Namurleog	2	
Т.	09/06/2020	Lough Aneane Beg	5	Female flying across lake and calling. Trying to lead surveyor away from 4 ducklings.
Т.	08/07/2020	Lough Aneane More	3	1 female and 2 juveniles.
UM	18/06/2021	Lough Aneane More	2	Two ducklings, one significantly larger than the other, feeding along NE edge of lake. No adults observed.
UM	18/06/2021	Lough Aneane More	1	1 duckling, feeding in reeds in centre of lake, no adults observed.

A7.2.7 BREEDING GOLDEN PLOVER SURVEY

The Golden Plover and Red Grouse records from the 2022 Golden Plover survey are shown in Table A7.2.17.

Date	Species	Ref	Number	Time	Comments
24/04/2022	GP	1	1	07:01	Called for 2 secs, unseen.
24/04/2022	GP	2	1	07:05	Called for 2 secs, unseen, different location.
24/04/2022	GP	3	1	07:20	Called for 2 secs, unseen, same location as Ref 1.
24/04/2022	RG	4	1	07:25	Male heard calling for 5 secs.
24/04/2022	GP	5	1	10:02	Heard singing.
24/04/2022	GP	6	1	10:02	Second bird flushed from suitable breeding habitat.

Table A7.2.17 Records from the 2022 Golden Plover survey.





Date	Species	Ref	Number	Time	Comments
02/05/2022	GP	1	1	07:42	Heard singing from back of Croaghleheen. This bird was seen circling that area and continued to sing for 2 mins.
02/05/2022	GP	2	1	08:10	Sitting on top of Croaghleheen but bird had left by the time the observer reached the summit.
02/05/2022	GP	3	2	08:25	While on summit, 2 birds heard: one from north peak of Croaghleheen and other bird directly to the west. Not incubating yet, both birds too mobile and singing regualrly. Both birds in song for around 10 mins.
02/05/2022	GP	4	2	09:07	Both birds in flight and singing above Croaghleheen.
11/05/2022	GP	1	1	20:53	Heard calling for 2 mins.
11/05/2022	GP	2	1	21:17	Flushed after heard calling. One bird seen, flew around 15 m away and watched me, potentially incubating.
17/05/2022	GP	1	1	18:30	Heard calling over Croaghleheen.
17/05/2022	GP	2	1	18:56	Heard calling twice over top of Croaghleheen.
17/05/2022	GP	3	2	19:32	Heard calling and flying around lake.
17/05/2022	GP	4	1	20:21	20:21-20:30: GP song in response to call from north. Both birds heard calling simultaneously.
17/05/2022	GP	5	1	21:07	Flushed bird which called as it flew south and circled back while calling.
17/05/2022	GP	6	2	22:00	While leaving, bird still calling from same area as ref Ref 4. Potential nest site.
23/05/2022	GP	1	1	18:50	Flushed GP from around 10 m from point flushed from last week. Possibly running from nest. Bird flew around area for 5 mins before returning, calling throughout.
23/05/2022	GP	2	2	20:27	Bird heard calling from north. Bird at nest called back. The two birds could be seen moving towards each other. Then seen in flight together, heading south and calling.
23/05/2022	GP	3	1	20:34	Bird heard calling over Croaghleheen repeatedly for a couple of secs. Also at 20:39 and 20:43. Unseen.
23/05/2022	GP	4	1	21:27	Bird heard calling and moving around area. Calling for several secs at a time. Bird heard intermittently until the end of the survey.
23/05/2022	GP	5	1	21:45	Bird heard calling from nest. Flushed off nest. 4 eggs found. Flushed west.
01/06/2022	GP	1	2	14:35	Approached within 100 m of nest and both GP were calling and standing on high ground watching me.





Date	Species	Ref	Number	Time	Comments
01/06/2022	GP	2	2	15:52	GP1 flew to slopes on south side of Croaghleheen. Both birds could be heard calling to each other. Bird first heard from this location at 15:30. Left again and flew back to nest site at 15:52.
01/06/2022	GP	3	2	16:00	16:00-18:05: Birds could be heard frequently calling throughout and occasionally singing.
01/06/2022	GP	4	1	18:05	From 18:05, GP2 could be heard moving further south away from nest site, moving chicks around 200 m way.

A7.2.8 BREEDING MERLIN SURVEY

The bird observations from the Merlin survey in 2022 are shown in Table A7.2.18 Bird observations from the 2022 Merlin survey. and are mapped in Figure A7.2.?. Comments about the observations of the more notable species are shown in Table A7.2.10 and Table A7.2.?.

The records of bird signs from the moorland breeding bird surveys are shown in Table A7.2.11 and are mapped in Figure A7.2.8 - Figure A7.2.10.

вто	Date	Time	Ref	Number	Comments	Map ref
BZ	07/05/2022	10:52	1	1	Flushed from hill, flew to WD4.	5
BZ	07/05/2022	12:43	3	1	Hunting.	18
ΒZ	08/05/2022	15:02	4	1	Mobbed by CM over Lough Aneane, then hunting.	14
BZ	22/06/2022	16:48	2	1	Hunting over hillside, offsite.	32
BZ	29/07/2022	10:10	5	1	Flew near Kestrels.	2
BZ	10/08/2022	11:00	1	1	Hunting, flying.	1
СМ	08/05/2022	15:02	5	1	Mobbing BZ (Ref 4); not mapped.	-
EA	29/03/2022	12:07	1	1	Low circling flight, out of view to the west behind higher ground.	11
EA	29/03/2022	12:13	2	1	Circling, gaining height to 250 m,, display swoops and dives, drifted west out of view.	10
EA	29/03/2022	12:34	3	1	Circling, gaining height from 250 to 400 m, then shallow gliding flight NW towards Dooey Hill, until going out of view due to distance at 12:40.	9
EA	25/04/2022	11:20	2	1	11:20-11:25: Adult low over ridge mobbed by 3 Ravens, crossed over valley, level flight, then circled higher to 400 m, then drifted SW.	7
EA	25/04/2022	11:32	3	1	Low over ridge for 45 secs.	6

Table A7.2.18 Bird observations from the 2022 Merlin survey.





вто	Date	Time	Ref	Number	Comments	Map ref
EA	07/05/2022	10:58	2	1	Being mobbed by 2 HC, then flew east to circle under ridge, ascending above ridge where it was mobbed by 2 BZ. Continued to ascend to over 300 m, then travelling glide out of view.	19
EA	07/05/2022	13:36	4	1	Circling at 40 m, being mobbed by ring- tailed Hen Harrier.	15
EA	07/05/2022	14:10	7	1	Perching on crag (Ref 1, 10/07/2022); not mapped.	-
EA	07/05/2022	14:16	8	1	Flew from crag (Ref 1, 10/07/2022), west, then back to crag (Ref 1, 10/07/2022); not mapped.	-
EA	07/05/2022	14:23	9	1	Flew from crag (Ref 1, 10/07/2022), west out of view; not mapped.	-
EA	07/05/2022	14:31	10	1	Flew to crag (Ref 1, 10/07/2022); not mapped.	-
EA	07/05/2022	14:43	11	1	Flew from crag (Ref 1, 10/07/2022), west out of view; not mapped.	-
EA	07/05/2022	14:47	12	1	Flew back to crag from crag (Ref 1, 10/07/2022), landed out of view; not mapped.	-
EA	07/05/2022	14:51	13	1	Flew from crag (Ref 1, 10/07/2022), west out of view; no return up to 16:15; not mapped.	-
EA	08/05/2022	11:02	3	1	Adult circling, gaining height to 250 m, then travelling out of view.	27
EA	27/06/2022	15:18	2	1	Hunting low (25 m) over hill close to surveyor. Quickly flew away from surveyor.	23
EA	12/07/2022	11:55	1	1	Perched above crag.	37
EA	12/07/2022	12:50	2	1	Flew from crag, circling, gaining height to 150 m, then travelled NE to Derryloughan area where it circled, gaining height to over 200 m. Then flew NE out of view.	22
EA	12/07/2022	15:46	3	1	Travelling at 100-120 m SW back in direction of crag at Ref 1.	21
ET	08/05/2022	08:22	1	1	Travelling flight.	12
GP	29/07/2022	10:31	6	1	Heard calling as Kestrels hunting.	39
НН	07/05/2022	13:36	5	1	Ring-tail, mobbing adult Golden Eagle.	17
К.	25/04/2022	11:32		1	With Golden Eagle (Ref 3); not mapped.	-
К.	22/06/2022	15:44	1	1	Travelling flight over WD4 to land at edge oif WD4. Then flew on to land again of edge of WD4. Perched on tree top, then flew low, out of view.	15
К.	29/07/2022	09:39	1	1	Hunting.	20





вто	Date	Time	Ref	Number	Comments	Map ref
К.	29/07/2022	09:50	2	2	Acting like 2 juveniles, chasing each other, landing together.	3811
К.	29/07/2022	10:01	3	3	3 birds hunting together.	4
К.	29/07/2022	10:10	4	4	Fourth bird appeared when BZ came close. Birds flew NE together, hunting.	3
КТ	27/06/2022	13:22	1	1	Drifted in and out of view over hilltop.	24
МА	08/05/2022	10:00	2	3	Flew to Lough Sallagh. 2 males and 1 female.	13
ML	07/05/2022	15:54	6	1	Travelling flight at 20-30 m, out of view over ridge.	16
ML	12/07/2022	17:05	4	1	Very brief call heard over ridge from surveyor. Area checked for ML presence, plucking posts, etc., but nothing found.	28
ML/SH	25/04/2022	08:33	1	1	Probable adult male Merlin flying low over PB2 out of view into lower ground. Checked area it went into but no suitable nesting habitat. There is anice area of heather and WD4 nearby that is suitable habitat. Watched area for 2 hours, no return of bird.	8
RG	27/06/2022	15:25	3	1	Calling.	9
SH	14/05/2022	09:05	1	2	Pair displaying, making vertical dives over WD4, then circling higher together, making mock attacks, then flew west.	26
SN	22/06/2022	11:25	3	1	Heard chipping.	6

Table A7.2.19 Bird signs from the 2022 Merlin survey.

Date	Time	Ref	Comments	Map ref
28/03/2022	13:15	1	Feather pluck. Old feathers (more than 6 months old) on mossy mound. Other likely plucking post checked nearby with no evidence of being used.	29
29/03/2022	14:55	4	Feather pluck. Very fresh pluck feathers on open ground of small passerine.	30
26/04/2022		1	Red Grouse droppings.	31
08/05/2022		6	Old feather pluck on mossy mound, more than 6 months old.	34
08/05/2022		7	Red Grouse droppings.	35
29/07/2022	10:40	7	Feather pluck on prominent mossy mound from 2/3 different species. Moulted Kestrel or Merlin feathers.	40
29/07/2022	10:59	8	Feather pluck on mossy mound.	41
29/07/2022	12:32	9	2 broken eggshells from unknown species.	42





A7.2.9 OTHER SPECIES

The non-waterbird / raptor species recorded in the bird surveys for the Cloghercor Wind Farm project are listed in Table A7.2.20, along with their classification in Birds of Conservation Concern in Ireland 4: 2020-2026.

Species	BOCCI4
Pheasant	Not classified
Woodpigeon	Green
Collared Dove	Green
Cuckoo	Green
Magpie	Green
Jay	Green
Jackdaw	Green
Rook	Green
Hooded Crow	Green
Raven	Green
Goldcrest	Amber
Blue Tit	Green
Great Tit	Green
Coal Tit	Green
Skylark	Amber
Swallow	Amber
House Martin	Amber
Chiffchaff	Green
Willow Warbler	Amber
Blackcap	Green
Whitethroat	Green
Sedge Warbler	Green
Wren	Green
Starling	Amber
Blackbird	Green
Fieldfare	Green
Song Thrush	Green
Redwing	Red
Spotted Flycatcher	Amber
Robin	Green
Rebin	
Stonechat	Green

Table A7.2.20 Non-waterbird / raptor species recorded in bird surveys for the Cloghercor Wind Farm project.





Species	BOCCI4
Grey Wagtail	Red
Pied Wagtail	Green
Meadow Pipit	Red
Chaffinch	Green
Greenfinch	Amber
Linnet	Amber
Lesser Redpoll	Green
Common Crossbill	Green
Goldfinch	Green
Siskin	Green
Reed Bunting	Green
Mistle Thrush	Green
Wheatear	Amber
Snow Bunting	Green





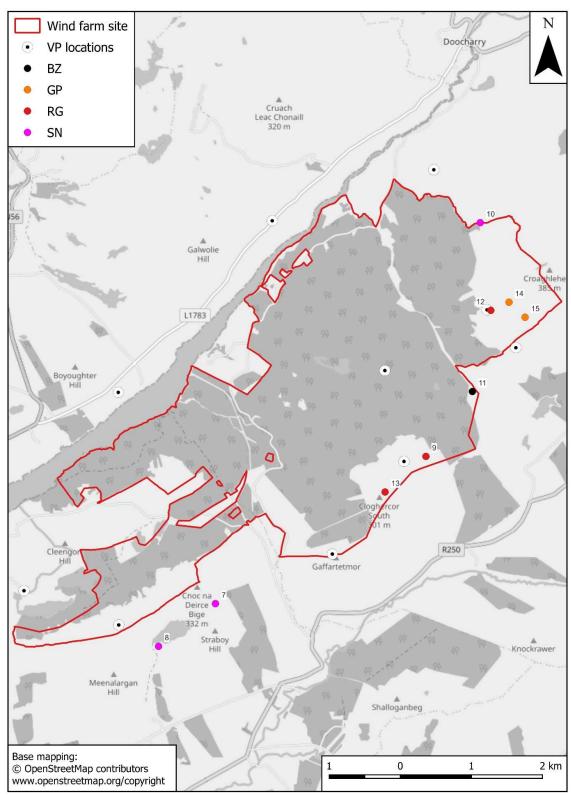


Figure A7.2.1 - Moorland survey bird records (April – June 2020).





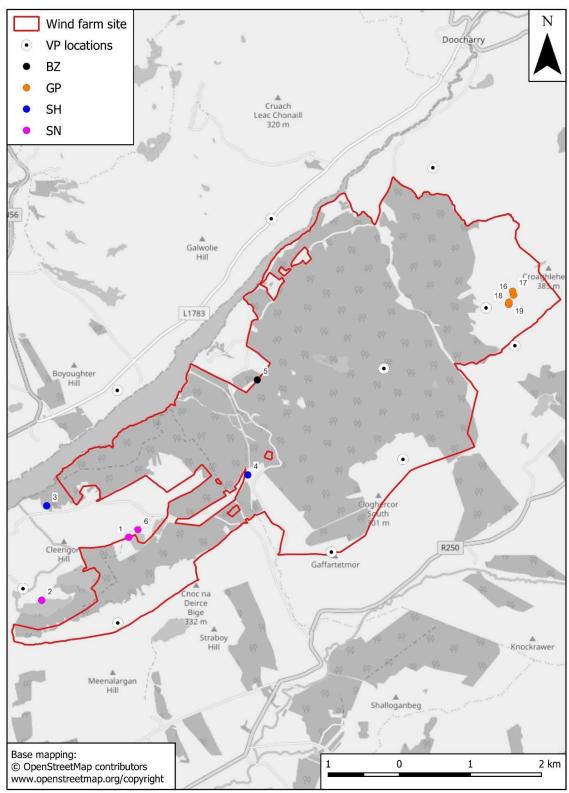


Figure A7.2.2 - Moorland survey bird records (July 2020).





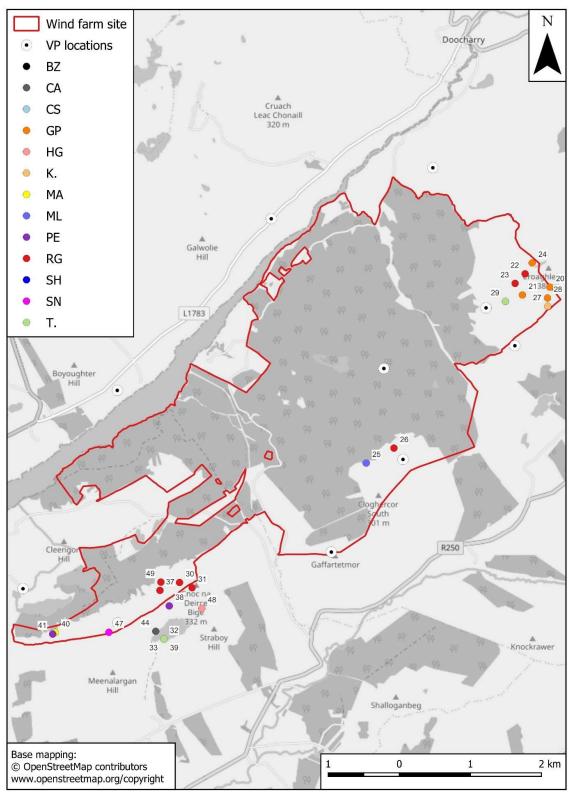


Figure A7.2.3 - Moorland survey bird records (2021).





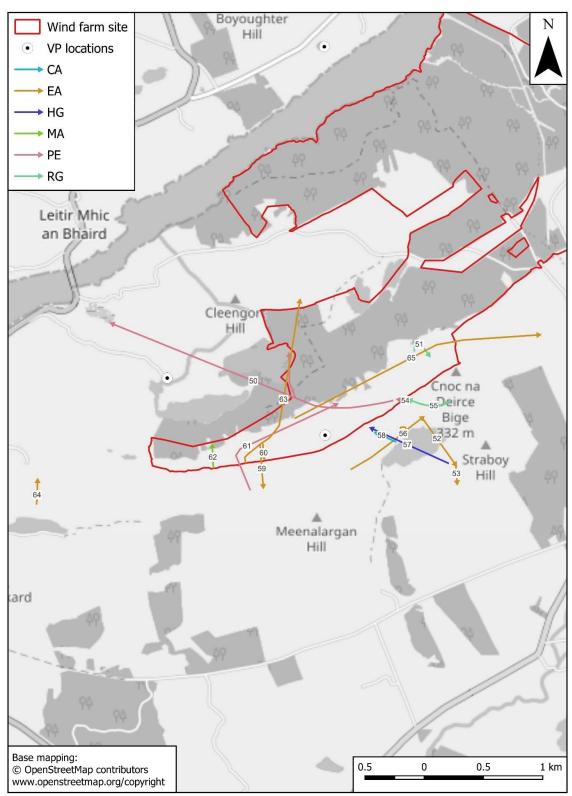


Figure A7.2.4 - Moorland survey flightlines.





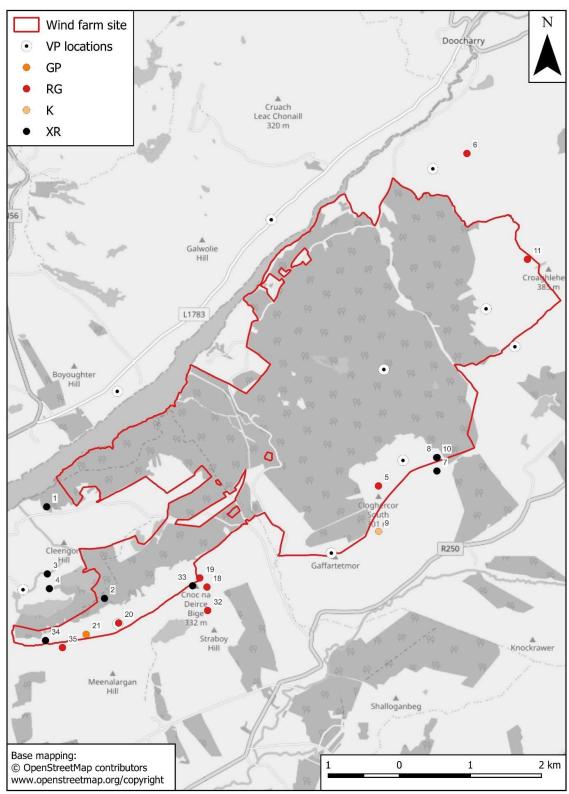


Figure A7.2.5 - Moorland survey bird signs (2020 and April 2021).





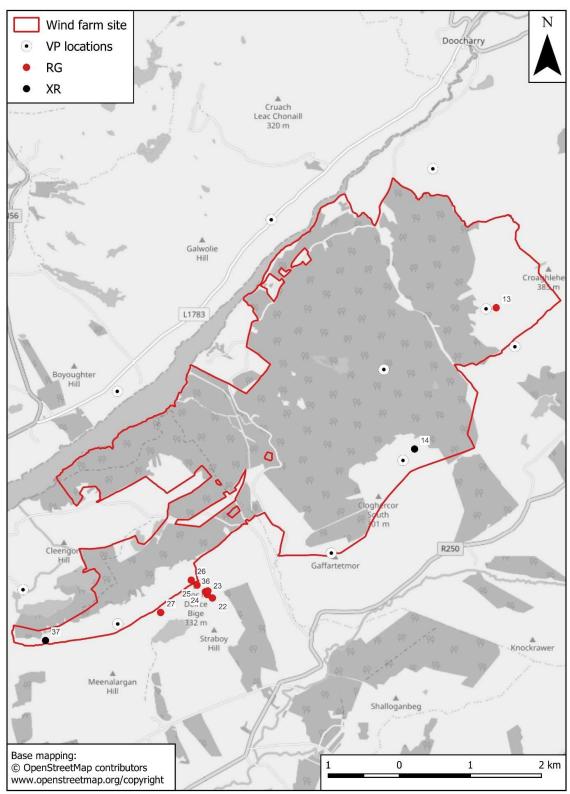


Figure A7.2.6 - Moorland survey bird signs (May 2021).





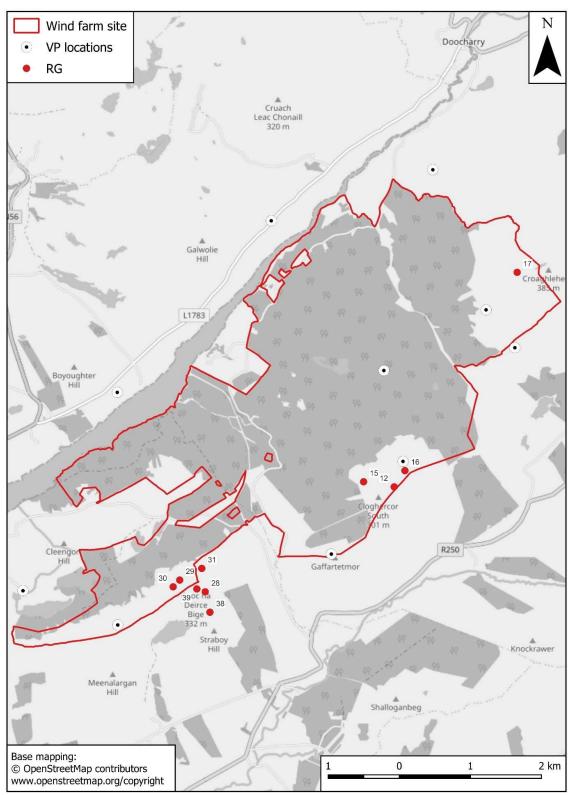


Figure A7.2.7 - Moorland survey bird signs (June and July 2021).





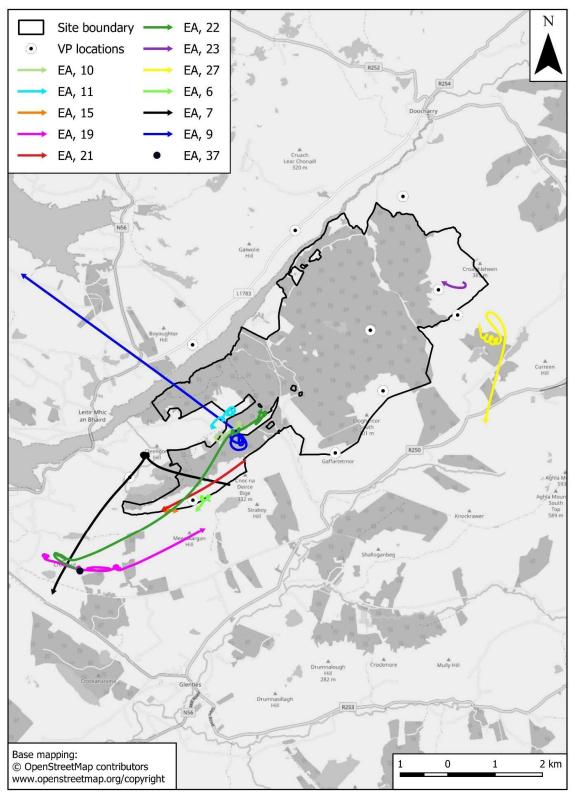


Figure A7.2.8 - Merlin survey - Golden Eagle records.





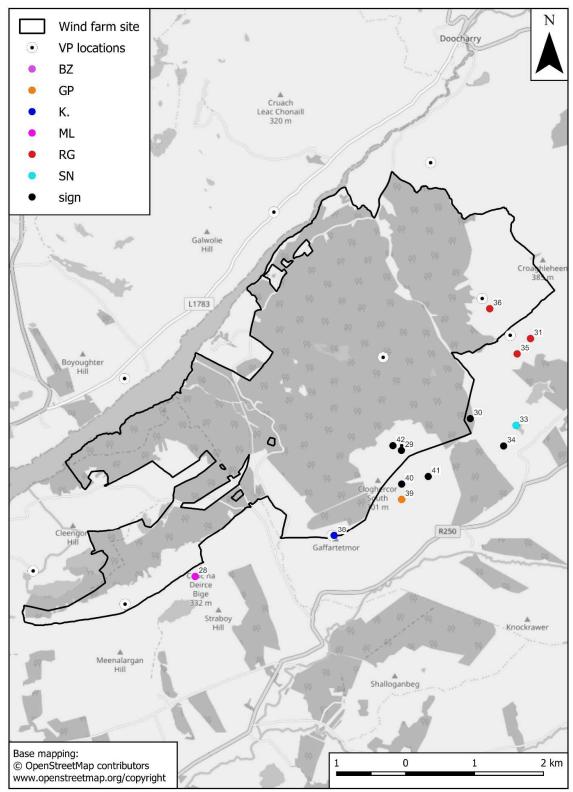


Figure A7.2.9 - Merlin survey - other records.





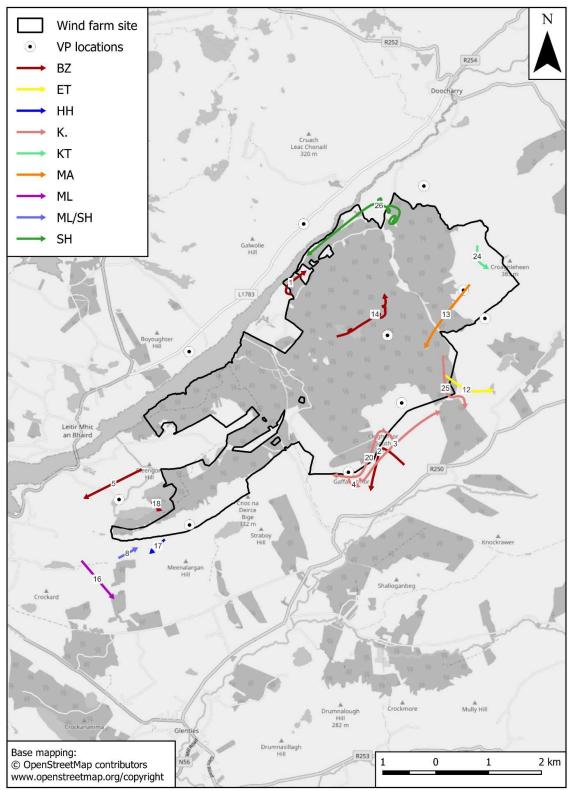


Figure A7.2.10 - Merlin survey - other flightlines.

