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#### **HEN HARRIER**

Table 7-5- 1 Han Harrier Vantage Point Survey Data (Apr 2018-Sep 2021)

Map Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	PCH (25- 175m)	Band 4 (>175m)	Habitat and activity	Surveyor
HH012		28/03/2019	10:02	Hen Harrier	1	110	0	30	0	0	upland blanket bog; male, brief circling display	TR
HH013		28/03/2019	10:25	Hen Harrier	1	590	0	30	560	0	upland blanket bog; male circling display	TR
HH014		28/03/2019	10:40	Hen Harrier	1	80	0	0	80	0	upland blanket bog and conifer plantation; male circling display	TR
HH015		28/03/2019	10:43	Hen Harrier	1	70	0	0	70	0	upland blanket bog and conifer plantation; circling display male	TR
HH016	-	17/04/2019	16:36	Hen Harrier	1	360	0	260	100	0	upland blanket bog and conifer plantation; first adult male. skydance display before getting mobbed by 2 Buzzard	TR
HH019		17/04/2019	20:46	Hen Harrier	1	190	0	100	90	0	upland blanket bog and conifer plantation; first adult male- likely roosting nearby	TR
HH022		18/04/2019	20:48	Hen Harrier	1	75	0	25	0	0	upland blanket bog and conifer plantation; first adult male-flying low towards previous roosting area	TR
HH026		18/06/2019	10:23	Hen Harrier	1	40	0	25	0	0	upland blanket bog and conifer plantation; carrying food to female	TR
HH029		18/06/2019	13:40	Hen Harrier	1	50	0	40	0	0	upland blanket bog; male travelling towards suspected nest area	TR
HH030		18/06/2019	13:44	Hen Harrier	1	10	0	0	0	0	upland blanket bog; female rising to meet male	TR
HH036		25/06/2019	10:23	Hen Harrier	1	0	0	0	0	0	bogs; food pass - female receiving food from male	TR
HH039		26/07/2019	11:00	Hen Harrier	1	50	0	25	0	0	upland blanket bog; alarming at surveyor	TR
HH040		26/07/2019	11:04	Hen Harrier	1	40	0	20	0	0	upland blanket bog; alarming in flight before perching	TR
HH063		15/12/2020	16:10	Hen Harrier	1	45	0	0	0	0	upland blanket bog; male flew low over bog, then onto heather bank,	AM



Map Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	PCH (25- 175m)	Band 4 (>175m)	Habitat and activity	Surveyor
											perched there until 1637 (see ), adult	
HH064		15/12/2020	16:19	Hen Harrier	1	90	15	0	0	0	upland blanket bog; 2nd male hunting low over bog, flew past Hen Harrier2 male, kept going s then out of view behind forestry, adult male	AM
HH065		15/12/2020	16:31	Hen Harrier	1	120	0	0	0	0	upland blanket bog; 3rd male over bog, past Hen Harrier2 male, circling then west past VP, out of view, adult male	AM
НН066		15/12/2020	16:35	Hen Harrier	1	15	0	0	0	0	upland blanket bog; previous male Hen Harrier (still perched), down to roost, ringtail female	AM
HH067		15/12/2020	16:37	Hen Harrier	1	15	0	0	0	0	upland blanket bog; previous male on bank gone, must have gone to roost very quickly, not seen to fly off, adult male. estimated minimum of 4 birds roosting (3 males + 1 ringtail), range 4- 5 birds	AM
HH069	-	06/01/2021	08:47	Hen Harrier	1	90	90	0	0	0	conifer plantation and upland blanket bog; southwest from across bog to south of lost from view heading southwest past mast, adult male. bird late leaving roost after frost?	AM
HH070		08/01/2021	08:53	Hen Harrier	1	30	15	0	0	0	upland blanket bog; away from roost area in willow scrub, flew low and slowly north to east of VP, adult male. bird late leaving roost after frost?	AM
HH071		08/01/2021	12:19	Hen Harrier	1	15	0	0	0	0	upland blanket bog; flew round corner of forestry, low out of view; adult male	AM



Table 7-5-2 Hen Harrier Vantage Point Survey Data (Sep 2021-Sep 2023)

Map Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
HH090		06/04/2023	07:35	Hen Harrier	1	200	30	170	0	0	conifer plantation and upland blanket bog; displaying, male	JG
HH091		06/04/2023	11:45	Hen Harrier	1	610	10	300	300	0	conifer plantation; male displaying, soaring	JG
HH092		06/04/2023	11:48	Hen Harrier	2	10	0	10	0	0	conifer plantation and upland blanket bog; pair flying, possibly displaying	JG
HH093		06/04/2023	12:00	Hen Harrier	1	20	20	0	0	0	conifer plantation and upland blanket bog; male displaying	JG
HH095		13/04/2023	09:30	Hen Harrier	1	180	90	90	0	0	upland blanket bog and conifer plantation; display, came from same direction as the ringtail a few mins before, didn't see together but saw ringtail and male within 2 mins of each other	JG
HH098		10/05/2023	17:05	Hen Harrier	1	10	10	0	0	0	upland blanket bog; male, carrying prey, lost sight of him behind hill so not 100% sure of the direction, suspect he went to area of bog to the east of however could also head straight to central bog and missed due to the undulating landscape	JG



Table 7-5-3 Hen Harrier Breeding Walkover Survey Data

Map Ref.	Date	Time	Species	Number	Habitat and activity	Surveyor
HH003	12/04/2019	11:45	Hen Harrier	1	conifer plantation and upland blanket bog; skydance display, immature male (courtship and display; probable breeding)	TR
HH004	12/04/2019	11:50	Hen Harrier	1	conifer plantation; skydance display, immature male (courtship and display; probable breeding)	TR
HH007	16/04/2019	10:25	Hen Harrier	2	conifer plantation; skydance display, adult female, first adult male. displaying over conifer area before travelling w together (courtship and display; probable breeding)	TR
HH008	16/04/2019	11:01	Hen Harrier	1	conifer plantation; high circling display, male first adult (courtship and display; probable breeding)	TR
HH009	12/05/2020	11:05	Hen Harrier	1	conifer plantation and wet grassland; high circle display flight, high circling before travelling on going ne, breeding possible (courtship and display; probable breeding)	TR
HH014	23/07/2019	09:20	Hen Harrier	3	cutover bog; on nest, 2 chicks on nest, female alarming (occupied nest; confirmed breeding)	TR
HH015	23/07/2019	14:20	Hen Harrier	1	upland blanket bog; carrying food, male, travelling southwest in direction of nest on site (adult carrying food/faecal sac; confirmed breeding)	TR
HH017	13/05/2020	15:15	Hen Harrier	1	conifer plantation and wet grassland; skydancing and going east, breeding probable (courtship and display; probable breeding)	TR
HH025	17/05/2023	12:17	Hen Harrier	2	improved agricultural grassland, conifer plantation and scrub; adult male chasing immature male.  (permanent territory; probable breeding)	JG
HH027	17/07/2023	14:26	Hen Harrier	1	conifer plantation and scrub; anxiety calls, mobbing observer, flushed ringtail from area of small conifers to the south of the track, was mobbing me with calls (occupied nest; confirmed breeding)	JG
HH029	17/07/2023	14:26	Hen Harrier	1	conifer plantation; recently fledgling (fledged young; confirmed breeding)	JG



Table 7-5- 4 Hen Harrier Breeding Raptor Survey Data

Map Ref.	BRVP	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
HH002		24/04/2019	13:15	Hen Harrier	1	conifer plantation and upland blanket bog, skydance display, male flying east to west	courtship and display; probable breeding	TR
HH003		24/04/2019	13:20	Hen Harrier	2	upland blanket bog and conifer plantation, skydance display, likely adult pair	courtship and display; probable breeding	TR
HH004		24/04/2019	13:40	Hen Harrier	1	conifer plantation, skydance display, male flying east	courtship and display; probable breeding	TR
HH005		29/04/2019	11:15	Hen Harrier	2	conifer plantation, flying low over 2nd rotation conifer, pair hanging around area, perching 11:15-11:45	pair; probable breeding	TR
HH008		02/05/2019	09:29	Hen Harrier	2	conifer plantation, skydance display male, female present perching in conifers second rotation, probable nest area	courtship and display; probable breeding	TR
HH010		03/05/2019	15:28	Hen Harrier	1	upland blanket bog, skydance display high up, flying 2km southwest, ringtail - likely young male	courtship and display; probable breeding	TR
HH011		03/05/2019	15:32	Hen Harrier	1	conifer plantation, skydance display low over conifers second rotation pre thicket, ringtail likely young male	courtship and display; probable breeding	TR
HH014		19/06/2019	08:55	Hen Harrier	2	upland blanket bog, female alarm calling at surveyor before receiving food from male via aerial food pass	courtship and display; probable breeding	TR
HH015		19/06/2019	09:28	Hen Harrier	1	upland blanket bog, carrying nest material, travelling 150m ne to collect nest material, flying back westwards	nest building; probable breeding	TR
HH016		19/06/2019	10:24	Hen Harrier	2	upland blanket bog, male bringing food from north aerial food pass. female dropping food.	courtship and display; probable breeding	TR
HH018		21/06/2019	09:15	Hen Harrier	2	upland blanket bog, male bringing food from north female receiving food and feeding away from nest to north of bog area	occupied nest; confirmed breeding	TR
HH019		21/06/2019	09:18	Hen Harrier	1	upland blanket bog, carrying nest material and dropping on to nest, female	occupied nest; confirmed breeding	TR
HH020		21/06/2019	11:20	Hen Harrier	1	upland blanket bog, incubating 4 eggs on nest, exact nest location photographed - female rising from nest and alarming at surveyor	nest with eggs; confirmed breeding	TR
HH025		15/05/2020	11:23	Hen Harrier	1	conifer plantation, male skydancing (weakly) then landed in trees, possibly missed food pass, likely nesting in this area ( adult male	courtship and display; probable breeding	AM



Map Ref.	BRVP	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
HH029		21/04/2022	10:16	Hen Harrier	1	raised bog and conifer plantation, sky dancing	courtship and display; probable breeding	IH
HH038	_	22/05/2023	16:00	Hen Harrier	2	conifer plantation and scrub, agitated behaviour, calling circling, flushed pair from young conifer growth, both circling and calling for 5 mins approx.	agitated behaviour; probable breeding	JG
HH039		22/05/2023	16:53	Hen Harrier	1	conifer plantation and scrub, calling circling, ringtail	agitated behaviour; probable breeding	JG
HH043		22/05/2023	18:26	Hen Harrier	1	conifer plantation and scrub, circle low, calling, ringtail circling low for 5 mins, did see drop below treeline, but no sign of prey	permanent territory; probable breeding	JG
HH046		22/05/2023	19:55	Hen Harrier	1	conifer plantation and scrub, calling, mobbed by hooded crow, ringtail	agitated behaviour; probable breeding	JG
HH048		13/07/2023	09:32	Hen Harrier	1	highly modified/non-native woodland, flying low, male	probable nest site; probable breeding	NL
HH049		13/07/2023	09:36	Hen Harrier	1	highly modified/non-native woodland, calling in flight, ringtail 1	probable nest site; probable breeding	NL
HH050		13/07/2023	09:53	Hen Harrier	1	highly modified/non-native woodland, dove into bush, ringtail	fledged young; confirmed breeding	NL
HH051		13/07/2023	09:54	Hen Harrier	1	highly modified/non-native woodland, flying, ringtail	fledged young; confirmed breeding	NL
HH052		13/07/2023	10:00	Hen Harrier	1	highly modified/non-native woodland, flying fast over trees and calling, ringtail	probable nest site; probable breeding	NL
HH054		13/07/2023	11:57	Hen Harrier	1	conifer plantation, food pass to juvenile, male	adult carrying food/faecal sac; confirmed breeding	NL
HH055		13/07/2023	11:59	Hen Harrier	1	conifer plantation, food pass from adult, recent fledgling. still with some downy feathers	adult carrying food/faecal sac; confirmed breeding	NL
HH056		16/08/2023	16:00	Hen Harrier	1	conifer plantation and scrub, begging calls, juvenile, calling/begging for 30 mins or so	fledged young; confirmed breeding	JG
HH057		16/08/2023	16:30	Hen Harrier	3	conifer plantation and scrub, food pass and 2 juveniles, ringtail with food and 2 juveniles at nest site	adult carrying food/faecal sac; confirmed breeding	JG
HH058		16/08/2023	18:28	Hen Harrier	2	conifer plantation and scrub, juveniles at nest location, nest location	fledged young; confirmed breeding	JG



Table 7-5- 5 Hen Harrier Roost Survey Data

Map Ref.	HHVP	Date	Time	Species	Number	Habitat and activity	Surveyor
HH001		06/12/2018	05:10	Hen Harrier	1	lowland blanket bog and scrub, to roost, adult male	
HH008		25/03/2019	18:50	Hen Harrier	1	upland blanket bog and conifer plantation, gradual descend into roost, female	
HH009		04/11/2019	17:10	Hen Harrier	1 upland blanket bog, perched for 1.5 hrs before roosting in heather, male		TR
HH010		04/11/2019	17:12	Hen Harrier	1	upland blanket bog, roosting in heather, male	
HH011		07/01/2020	16:15	Hen Harrier	1	upland blanket bog and conifer plantation, gliding and circling high over roost area, female/ringtail type - flew northeast	TR
HH018		18/02/2022	17:08	Hen Harrier	1	upland blanket bog and conifer plantation, hunting, possible roost, hunting/perched for 20mins, did see go down to ground/possibly to roost but can't confirm	JG
HH019		26/10/2022	17:34	Hen Harrier	1	bogs, in flight, male, appeared to drop to the ground	CG
HH022		24/02/2023	17:37	Hen Harrier	1	bogs, in flight, flying low to ground close to dusk. not roosting here, likely nearby	CG

Table 7-5-6 Hen Harrier Incidental Observation Data

Map Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
HH001	Vantage Point Survey,	26/07/2019 - H		Hen Harrier	2	bogs; food pass (southwest corner of bog close to nest)	TR
НН003	Vantage Point Survey,	21/01/2021	17:08	Hen Harrier	1	bogs; in to roost area just west of VP4. obviously on roost area identified in dec 2020. came in from northwest, went to roost to south out of view, adult male	AM
HH006	Vantage Point Survey, knockshanvo -	01/08/2023	17:00	Hen Harrier	1	conifer plantation and scrub; recently fledged young, flushed by observer, no sign of adults or other chick	JG

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#### PEREGRINE FALCON

Table 7-5- 7 Peregrine Falcon Breeding Raptor Survey Data

Map Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
PE001	5km Survey	25/07/2019	17:40	Peregrine Falcon	3	bogs, outside 2km buffer - minimum of 2 fledglings present, 1 adult, confidential	fledged young; confirmed breeding	TR
	Radius							

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#### KESTREL

Table 7-5-8 Kestrel Vantage Point Survey Data

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 (25-175m)	Band 4 (>175m)	Habitat and activity	Surveyor
K.222		19/05/2022	16:16	Kestrel	1	88	0	0	88	0	conifer plantation; mobbing, male, mobbed	PDC
											2nd Buzzard then lost behind forestry	
K.229		12/07/2022	15:26	Kestrel	1	30	0	30	0	0	conifer plantation and improved	JG
											agricultural grassland; carrying prey, female	

Table 7-5-9 Kestrel Breeding Walkover Survey Data

Ref.	Date	Time	Species	Number	Habitat and activity	Surveyor
K.004	12/05/2020	10:45	Kestrel	1	conifer plantation; anxiety calling from mature forestry (agitated behaviour; probable breeding)	TR
K.017	27/07/2022	11:35	Kestrel	1	upland blanket bog and conifer plantation; flying from tree to tree, flew southwest, second individual observed, flew close together briefly (pair; probable breeding)	ZOC
K.018	27/07/2022	11:44	Kestrel	1	upland blanket bog and conifer plantation; flew from tree on bog when other individual passed, landed on tree (pair; probable breeding)	ZOC
K.021	06/06/2023	15:04	Kestrel	1	improved agricultural grassland, scrub and conifer plantation; carrying prey, male, went into conifers (adult carrying food/faecal sac; confirmed breeding)	JG
K.022	06/06/2023	15:30	Kestrel	1	improved agricultural grassland and conifer plantation; nest confirmed (occupied nest; confirmed breeding)	JG
K.024	19/07/2023	12:37	Kestrel	2	conifer plantation and improved agricultural grassland; carrying prey and recently fledged chick, flushed a male carrying prey, then a possible recently fledged chick came out of tree where I flushed the male (fledged young; confirmed breeding)	JG
K.026	19/07/2023	13:07	Kestrel	1	conifer plantation and improved agricultural grassland; perched in tree, presumably a juvenile, recently fledged (fledged young; confirmed breeding)	JG



Table 7-5- 10 Kestrel Breeding Raptor Survey Data

Map Ref.	BRVP	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
K.037	_	09/07/2020	15:26	Kestrel	1	mixed broadleaved/conifer woodland, circling overhead, calling, flew to perch on tree, continued calling, possible nest site within woodland., adult	probable nest site; probable breeding	ТК
K.060		20/06/2021	13:52	Kestrel	1	improved agricultural grassland, hedgerows, and treelines, carrying prey, male Kestrel carrying prey.	adult carrying food/faecal sac; confirmed breeding	TK
K.061		20/06/2021	14:05	Kestrel	2	improved agricultural grassland and hedgerows, hunting, pair of Kestrel in air, hovering/hunting.	pair; probable breeding	TK
K.062		29/06/2021	13:19	Kestrel	3	improved agricultural grassland, hedgerows and treelines, family of Kestrel in air practicing flying/hovering.	fledged young; confirmed breeding	TK
K.079		27/06/2022	11:20	Kestrel	1	conifer plantation and improved agricultural grassland, travelling, came up below female, went talon to talon with her then carried on past VP. possible food pass him to her	suitable nesting habitat; possible breeder	PDC
K.091		17/04/2023	11:20	Kestrel	1	improved agricultural grassland, hedgerows and mixed broadleaved/conifer woodland, chasing Buzzard for a long time, 30-40m	permanent territory; probable breeding	MS
K.092		17/04/2023	11:23	Kestrel	1	improved agricultural grassland, hedgerows and mixed broadleaved/conifer woodland, pair chasing Buzzard, 30- 40m	permanent territory; probable breeding	MS
K.093		17/04/2023	12:20	Kestrel	1	improved agricultural grassland, hedgerows and mixed broadleaved/conifer woodland, hunting/long time, 20m	pair; probable breeding	MS
K.094		17/04/2023	13:52	Kestrel	1	improved agricultural grassland, hedgerows and mixed broadleaved/conifer woodland, hover hunting, 20m	pair; probable breeding	MS
K.100		03/05/2023	13:40	Kestrel	1	upland blanket bog, scrub and conifer plantation, mobbing Sparrowhawk	agitated behaviour; probable breeding	JG
K.102		03/05/2023	14:20	Kestrel	1	upland blanket bog, carrying prey, seen come up again from behind the hill few mins after so nest can't be too far away	adult carrying food/faecal sac; confirmed breeding	JG
K.105		22/05/2023	15:04	Kestrel	1	improved agricultural grassland and scrub, mobbing Buzzard	agitated behaviour; probable breeding	JG

Table 7-5-11 Kestrel Incidental Data

Map Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
K.005	Breeding Woodcock Survey,	25/06/2019	-	Kestrel	1	bogs; going to roost in thinned spruce, male	TR
K.006	Vantage Point Survey,	13/08/2019	-	Kestrel	1	bogs; carrying prey - confirmed breeding on site, female	TR

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#### 4. RED GROUSE

Table 7-5- 12 Red Grouse Vantage Point Survey Data (Sep 2021-Sep 2023)

Map Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
RG0	21	13/04/2022	10:39	Red Grouse	2	10	10	0	0		upland blanket bog; heard singing and two males fighting, possible breeding	JG

Table 7-5- 13 Red Grouse Survey Data

Map Ref.	Transect	Date	Time	Species	Number	Habitat and activity	Surveyor
RG001		19/03/2019	10:15	Red Grouse	2	wet heath, two males flushed calling towards, one flew all around the surveyor.	CP
RG003		19/03/2019	13:29	Red Grouse	2	wet heath, two males flushed calling towards and across front of surveyor.	СР
RG004		19/03/2019	14:20	Red Grouse	1	wet heath, male flushed calling towards and around surveyor.	СР
RG005		19/03/2019	14:25	Red Grouse	1	wet heath, male flushed calling towards and around surveyor.	CP
RG006		19/03/2019	14:30	Red Grouse	1	wet heath, male flushed calling towards and across front of surveyor.	СР
RG007		30/03/2020	07:47	Red Grouse	1	wet heath, male flushed towards and around surveyor.	СР
RG009		30/03/2020	08:28	Red Grouse	1	wet heath, male flushed calling towards and around surveyor.	СР
RG010		30/03/2020	09:25	Red Grouse	2	wet heath, two birds flushed and flew parallel to surveyor.	СР
RG011		30/03/2020	09:40	Red Grouse	1	wet heath, male flushed towards and behind surveyor.	СР
RG012		30/03/2020	10:31	Red Grouse	1	wet heath, male flushed calling towards surveyor.	СР

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## Figure 7-5-15 Confidential Map Redacted

## Figure 7-5-16 Confidential Map Redacted



#### WOODCOCK

Table 7-5- 14 Woodcock Vantage Point Survey Data (Apr 2018-Sep 2021)

Map Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 (25-175m)	Band 4 (>175m)	Habitat and activity	Surveyor
WK007		15/05/2019	04:38	Woodcock	1	25	0	25	0	0	conifer plantation; roding, seen and heard	TR
WK010		09/04/2021	21:02	Woodcock	1	15	0	15	0	0	conifer plantation; roding, woodcock roding, seen briefly in flight.	TK

Table 7-5- 15 Woodcock Vantage Point Survey Data (Sep 2021-Sep 2023)

Map Ref.	VP	Date	Time	Species	Number	Duration of flight (s)			Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
WK011		29/05/2023	21:56	Woodcock	1	30	0	30	0	0	conifer plantation and scrub; roding	JG
WK012		29/05/2023	22:08	Woodcock	1	20	0	20	0	0	conifer plantation and improved agricultural grassland; roding	JG



Table 7-5- 16 Woodcock Survey Data

Ref.	Transect	Date	Time	Species	Number	Habitat and activity	Surveyor
WK001		24/06/2019	22:05	Woodcock	1	conifer plantation and upland blanket bog, male heard roding	TR
WK002		24/06/2019	22:29	Woodcock	1	conifer plantation, heard only	TR
WK003		24/06/2019	22:35	Woodcock	1	conifer plantation, roding	TR
WK004		25/06/2019	22:07	Woodcock	1	conifer plantation, thinned spruce	TR
WK005		25/06/2019	22:17	Woodcock	1	conifer plantation, chipping	TR
WK006		25/06/2019	22:19	Woodcock	1	conifer plantation,	TR
WK007		25/06/2019	22:19	Woodcock	2	conifer plantation, males	TR
WK008		25/06/2019	22:23	Woodcock	1	conifer plantation, chipping heard only	TR
WK009		25/06/2019	22:32	Woodcock	1	conifer plantation, heard only	TR
WK010		25/06/2019	22:38	Woodcock	1	conifer plantation, heard only	TR
WK011		25/05/2020	22:05	Woodcock	1	conifer plantation, roding over forest track by edge of mature forest patch	AM
WK012		28/05/2020	22:10	Woodcock	1	conifer plantation and wet grassland, bird roding along forest-grassland edge	AM
WK013		09/06/2020	21:40	Woodcock	1	conifer plantation, chipping and roding male over thinned wd4 at belvoir, within 500m	TR
WK014		09/06/2020	21:45	Woodcock	1	conifer plantation, chipping and roding male over thinned wd4	TR
WK015		09/06/2020	21:48	Woodcock	1	conifer plantation, chipping and rosing male over thinned wd4.	TR
WK016		09/06/2020	21:50	Woodcock	1	conifer plantation, chipping and roding over thinned wd4. all 4 observations of wk appears to be the same individual.	TR
WK017		10/06/2020	22:11	Woodcock	1	scrub, conifer plantation and bogs, chipping and roding display s of whithin 500m, going n over wd4	TR
WK018		10/06/2020	22:32	Woodcock	1	conifer plantation, chipping and roding over thinned wd4 going n	TR
WK019		10/06/2020	22:36	Woodcock	1	conifer plantation, chipping and roding over thinned wd4 going n	TR
WK020		10/06/2020	22:42	Woodcock	1	conifer plantation, chipping and roding over thinned wd4 going n	TR
WK021		30/06/2020	22:12	Woodcock	1	conifer plantation, roding over forest track by edge of mature forest patch	AM
WK022		10/05/2021	21:20	Woodcock	1	conifer plantation, calling/rhoding	JG
WK023		10/05/2021	21:26	Woodcock	1	conifer plantation, calling/rhoding	JG
WK024		10/05/2021	21:37	Woodcock	2	scrub/transitional woodland and conifer plantation, two males calling and fighting	JG
WK025		10/05/2021	21:53	Woodcock	1	conifer plantation, calling/rhoding	JG
WK026		10/05/2021	21:56	Woodcock	1	conifer plantation, calling/rhoding	JG
WK027		10/05/2021	22:00	Woodcock	1	scrub/transitional woodland and conifer plantation, calling/rhoding	JG



Ref.	Transect	Date	Time	Species	Number	Habitat and activity	Surveyor
WK028		10/05/2021	22:15	Woodcock	1	conifer plantation, calling/rhoding	JG
WK029		10/06/2021	21:56	Woodcock	2	bogs and conifer plantation, chipping/chasing	TR
WK030		10/06/2021	21:57	Woodcock	1	conifer plantation, chipping/roding	TR
WK031		10/06/2021	22:06	Woodcock	1	conifer plantation, roding, mature thinned conifers	TR
WK032		21/06/2021	22:11	Woodcock	1	conifer plantation, seen and heard chipping only	IH
WK033		21/06/2021	22:16	Woodcock	1	conifer plantation, seen and heard roding over forestry road	IH
WK034		21/06/2021	22:19	Woodcock	1	conifer plantation, seen and heard chipping only	IH
WK035		21/06/2021	22:22	Woodcock	1	conifer plantation, seen and heard roding over woodland	IH
WK036		21/06/2021	22:32	Woodcock	1	conifer plantation, seen and heard roding over woodland	IH
WK037		21/06/2021	22:38	Woodcock	1	conifer plantation, heard roding(not seen)	IH
WK038		21/06/2021	22:39	Woodcock	1	conifer plantation, seen and heard roding	IH
WK039		21/06/2021	23:10	Woodcock	1	conifer plantation, seen and heard roding	IH
WK040		21/06/2021	23:15	Woodcock	1	conifer plantation, heard roding only	IH
WK041		21/06/2021	23:31	Woodcock	1	conifer plantation, heard roding only	IH
WK042		22/06/2021	22:14	Woodcock	1	conifer plantation, seen and heard roding over woodland	IH
WK043		22/06/2021	22:31	Woodcock	1	conifer plantation, seen and heard roding briefly	IH
WK044		22/06/2021	22:39	Woodcock	1	conifer plantation, heard chipping only (not seen)	IH
WK045		30/06/2021	22:28	Woodcock	1	conifer plantation and bogs, roding	TR
WK046		30/06/2021	22:38	Woodcock	1	conifer plantation, roding, thinned mature conifers	TR
WK047		01/06/2022	22:07	Woodcock	1	conifer plantation, rhoding	JS
WK048		01/06/2022	22:14	Woodcock	1	conifer plantation and raised bog, rhoding	JS
WK049		01/06/2022	22:22	Woodcock	1	highly modified/non-native woodland and conifer plantation, rhoding, heard only	JS
WK050		01/06/2022	22:31	Woodcock	1	conifer plantation and highly modified/non-native woodland, rhoding	JS
WK051		01/06/2022	22:34	Woodcock	1	conifer plantation, rhoding	JS
WK052		01/06/2022	22:37	Woodcock	1	conifer plantation, rhoding	JS
WK053		01/06/2022	22:42	Woodcock	1	conifer plantation and bogs, rhoding	JS
WK054		22/06/2022	22:14	Woodcock	1	conifer plantation, rhoding	CC
WK055		22/06/2022	22:32	Woodcock	1	conifer plantation, rhoding	CC
WK056		22/06/2022	22:38	Woodcock	1	conifer plantation, rhoding	CC



Ref.	Transect	Date	Time	Species	Number	Habitat and activity	Surveyor
WK057		22/06/2022	22:45	Woodcock	1	conifer plantation, rhoding	CC
WK058		22/06/2022	22:55	Woodcock	1	conifer plantation, rhoding	CC
WK059		22/06/2022	23:03	Woodcock	1	conifer plantation, rhoding	CC
WK060		22/06/2022	23:04	Woodcock	1	conifer plantation, calling, flying over, squeak calls heard. bird not seen, too dark. no display flight or song.	KG
WK061		17/05/2023	21:44	Woodcock	1	conifer plantation and recently-felled woodland, roding	PM
WK062		17/05/2023	21:52	Woodcock	1	conifer plantation, travelling, same bird as previous observation	PM
WK063		02/06/2023	22:31	Woodcock	1	conifer plantation, roding	PM
WK064		14/06/2023	22:21	Woodcock	1	conifer plantation, roding, heading south	NL
WK065		14/06/2023	22:31	Woodcock	1	conifer plantation, roding, probably same bird as 10mins before looping back	NL
WK066		14/06/2023	22:37	Woodcock	1	conifer plantation, roding, calls audible behdnd trees as the bird travelled along	NL

## Figure 7-5-17 Confidential Map Redacted

# Figure 7-5-18 Confidential Map Redacted

# Figure 7-5-19 Confidential Map Redacted



#### 6. **BUZZARD**

Table 7-5- 17 Buzzard Vantage Point Survey Data (Apr 2018-Sep 2021)

Map Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 (25-175m)	Band 4 (>175m)	Habitat and activity	Surveyor
BZ021		27/02/2019	14:31	Buzzard	2	540	0	0	250	0	conifer plantation and upland blanket bog; displaying, mobbed by Raven	TR
BZ037		13/03/2020	10:32	Buzzard	2	350	0	60	290	0	conifer plantation; displaying together	TR
BZ038		13/03/2020	10:50	Buzzard	3	900	0	100	600	0	conifer plantation; displaying together	TR
BZ069		08/05/2021	11:58	Buzzard	2	315	0	0	215	100	conifer plantation and improved agricultural grassland; soaring/displaying, pair of Buzzards displaying	TK



Table 7-5- 18 Buzzard Vantage Point Survey Data (Sep 2021-Sep 2023)

Map Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ102		29/05/2023	18:28	Buzzard	1	195	30	65	100	0	conifer plantation and scrub/transitional woodland; came out of nest site	JG
BZ103		29/05/2023	21:36	Buzzard	1	40	10	30	0	0	conifer plantation and scrub; carrying prey	JG
BZ105		26/06/2023	13:05	Buzzard	1	15	15	0	0	0	conifer plantation and recently felled woodland; carrying prey to nest	JG
BZ109		26/06/2023	15:57	Buzzard	1	10	10	0	0	0	conifer plantation and improved agricultural grassland; mobbing Sparrowhawk	JG
BZ110		26/06/2023	16:00	Buzzard	1	20	20	0	0	0	recently felled woodland, recently felled woodland and conifer plantation; carrying prey	JG
BZ112		26/06/2023	17:37	Buzzard	2	104	50	54	0	0	conifer plantation and recently felled woodland; carrying prey, one bird carrying prey, both went to nest	JG
BZ113		04/07/2023	14:04	Buzzard	1	245	145	200	0	0	conifer plantation and improved agricultural grassland; carrying prey to nest, can hear begging calls from nest	JG
BZ116		01/08/2023	11:56	Buzzard	1	25	25	0	0	0	conifer plantation and recently felled woodland; travelling flight, recently fledged, recently fledged chick from nest probably	JG
BZ118		01/08/2023	13:02	Buzzard	1	20	20	0	0	0	scrub and conifer plantation; possibly bring food to calling fledgling, went to begging fledgling	JG
BZ119		01/08/2023	14:05	Buzzard	1	-	-	-	-	-	conifer plantation and scrub; recently fledged Buzzard begging calls and perched for 3h	JG



Table 7-5- 19 Buzzard Breeding Walkover Survey

Map Ref.	Date Time Species Number		Number	Habitat and activity	Surveyor	
	16/04/2019	10:05	Buzzard	1	conifer plantation; territorial call (singing male; possible breeder)	TR
	16/04/2019	13:16	Buzzard	2	conifer plantation; flying low, territorial calling, immature and adult present (singing male; possible breeder)	TR
	16/04/2019	13:30	Buzzard	1	conifer plantation; display for 2 mins before descending sharply 100m se (courtship and display; probable breeding)	TR
	16/04/2019	16:20	Buzzard	2	improved agricultural grassland and scrub; displaying. high circling flying e (courtship and display; probable breeding)	TR
	16/04/2019	16:33	Buzzard	2	conifer plantation; talon grasp, courtship, off site - within 2km (courtship and display; probable breeding)	TR
	12/05/2020	09:50	Buzzard	1	conifer plantation; displaying over young conifers, displaying (courtship and display; probable breeding)	TR
	12/05/2020	13:00	Buzzard	2	conifer plantation and scrub; territorial alarm call, uneasy around area when approached, breeding probable, no nest found (agitated behaviour; probable breeding)	TR
	08/06/2020	14:05	Buzzard	1	bogs and conifer plantation; display and territorial call, worn looking adult, occupied breeding territory (courtship and display; probable breeding)	TR
_	09/06/2020	15:00	Buzzard	2	conifer plantation; display, perched above nest, both adults present at nest site (occupied nest; confirmed breeding)	TR
	09/06/2020	15:35	Buzzard	2	conifer plantation; perched above nest, nest observed in Scots pine. both adults alarming on approach. no young or eggs visible (occupied nest; confirmed breeding)	TR
	19/04/2023	11:31	Buzzard	1	conifer plantation and scrub; displaying (courtship and display; probable breeding)	JG
	19/04/2023	11:53	Buzzard	2	conifer plantation and scrub; seen bring nest material and build nest, building a nest, nest is located 3/4 up a large beech tree. nest is visible from the south looking north (nest building; probable breeding)	JG
	17/07/2023	12:40	Buzzard	2	scrub and conifer plantation; anxiety calls, came from nest (occupied nest; confirmed breeding)	JG



Table 7-5- 20 Buzzard Breeding Raptor Survey Data

Map Ref.	BRVP	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
BZ001	5km Survey Radius	dius - Buzzard 1 bogs, displaying to 5km radius					courtship and display; probable breeding	TR
BZ004	5km Survey Radius	11/07/2018	15:10	Buzzard	2	cutover bog and conifer plantation, soaring, male and female	pair; probable breeding	ЈК
BZ006		10/04/2019	17:20	Buzzard	1	conifer plantation, high circling display, likely to be part of its territory	courtship and display; probable breeding	TR
BZ010		23/05/2019	16:06	Buzzard	1	conifer plantation, territorial calling, heard on 2-3 occasions	singing male; possible breeder	TR
BZ017		29/05/2020	15:20	Buzzard	2	oak-ash-hazel woodland, in flight/soaring over deciduous mature woodland. possibly breeding in this area of woodland.	probable nest site; probable breeding	TK
BZ018		31/05/2020	14:34	Buzzard	2	conifer plantation, pair soaring over forestry. possibly breeding in conifer forest.	probable nest site; probable breeding	TK
BZ020		13/07/2020	13:07	Buzzard	2	conifer plantation and semi-natural grassland, pair circling up over forest edge, grassland	pair; probable breeding	AM
BZ029		09/05/2021	15:38	Buzzard	2	conifer plantation, upland blanket bog and improved agricultural grassland, displaying, Buzzards displaying.	courtship and display; probable breeding	TK
BZ030	_	07/06/2021	05:31	Buzzard	1	mixed broadleaved/conifer woodland, carrying prey, Buzzard in flight carrying prey towards	adult carrying food/faecal sac; confirmed breeding	TK
BZ031		28/06/2021	18:04	Buzzard	1	conifer plantation, carrying prey, Buzzard carrying prey into conifer woodland	adult carrying food/faecal sac; confirmed breeding	TK
BZ040		17/04/2023	08:43	Buzzard	2	recently felled woodland and conifer plantation, hover hunting, ~20m	pair; probable breeding	MS
BZ042		17/04/2023	10:15	Buzzard	2	recently felled woodland and conifer plantation, soaring/hunting, ~20-30m	pair; probable breeding	MS
BZ046		19/04/2023	13:34	Buzzard	2	conifer plantation, displaying	courtship and display; probable breeding	LDV
BZ049		19/04/2023	14:20	Buzzard	1	conifer plantation, displaying	courtship and display; probable breeding	LDV
BZ050		20/04/2023	09:28	Buzzard	2	bogs and conifer plantation, displaying	courtship and display; probable breeding	LDV
BZ053		04/05/2023	13:12	Buzzard	1	conifer plantation, recently felled woodland and scrub, on eggs/seen incubating, confirmed breeding, adult incubating in nest	occupied nest; confirmed breeding	JG

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# Figure 7-5-21 Confidential Map Redacted

# Figure 7-5-22 Confidential Map Redacted

# Figure 7-5-23 Confidential Map Redacted



#### **SPARROWHAWK**

Table 7-5- 21 Sparrowhawk Vantage Point Survey Data (Sep 2021-Sep 2023)

Map Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 (25-175m)	Band 4 (>175m)	Habitat and activity	Surveyor
SH020		13/03/2020	11:07	Sparrowhawk	1	150	0	0	100	0	conifer plantation; displaying	TR

Table 7-5- 22 Sparrowhawk Vantage Point Survey Data (Sep 2021-Sep 2023)

Map Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
SH050	-	26/06/2023	14:45	Sparrowhawk	1	10	0	10	0	0	recently felled woodland, recently felled woodland and conifer plantation; carrying prey, male carrying prey, only had a brief glimpse so can't confirm if it continued over conifers	JG
SH051		26/06/2023	15:56	Sparrowhawk	1	45	20	25	0	0	improved agricultural grassland, improved agricultural grassland and conifer plantation; carrying prey, male carrying prey then mobbed by Buzzard	JG
SH052		01/08/2023	13:00	Sparrowhawk	2	246	20	100	126	0	improved agricultural grassland, improved agricultural grassland and conifer plantation; pair chasing each other, one male one female	JG

Table 7-5-23 Sparrowhawk Breeding Walkover Survey Data

Map Ref.	Date	Time	Species	Number	Habitat and activity	Surveyor
SH004	12/04/2019	11:15	Sparrowhawk	1	conifer plantation; display, female (courtship and display; probable breeding)	TR
SH005	16/04/2019	16:35	Sparrowhawk	1	conifer plantation; high circling display (courtship and display; probable breeding)	TR
SH007	12/06/2019	12:30	Sparrowhawk	1	upland blanket bog; carrying prey, confirmed breeding on site, travelling southeast with prey towards area (adult carrying food/faecal sac; confirmed breeding)	TR
SH008	13/06/2019	12:00	Sparrowhawk	1	conifer plantation; distant call heard probable nest close by (singing male; possible breeder)	TR
SH009	22/07/2019	10:56	Sparrowhawk	1	conifer plantation; carrying prey to nesting area, travelling from west to east. disappearing into mature conifer carrying prey (adult carrying food/faecal sac; confirmed breeding)	TR
SH010	24/07/2019	09:29	Sparrowhawk	2	conifer plantation; carrying food and juveniles calling from nest site, exact nest area- thinned spruce (nest with young; confirmed breeding)	TR
SH011	24/07/2019	12:50	Sparrowhawk	1	conifer plantation; hunting, coming from direction of nest (occupied nest; confirmed breeding)	TR
SH013	01/07/2020	14:39	Sparrowhawk	1	conifer plantation; carrying prey, confirmed breeding (adult carrying food/faecal sac; confirmed breeding)	TR



Table 7-5- 24 Sparrowhawk Breeding Raptor Survey Data

Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
SH004		29/04/2019	11:45	Sparrowhawk	1	conifer plantation, aggressive encounter with Hooded Crow, flying southwest to northeast female	suitable nesting habitat; possible breeder	TR
SH008		14/06/2019	11:52	Sparrowhawk	1	hedgerows, travelling with prey- just outside 2km buffer, rising from road travelling southwest along hedgerow	adult carrying food/faecal sac; confirmed breeding	TR
SH011	5km Survey Radius	29/07/2019	11:34	Sparrowhawk	2	bogs, adult female with at least one fledgling	fledged young; confirmed breeding	TR
SH014		28/05/2020	12:52	Sparrowhawk	1	conifer plantation, flew out of forestry calling, nest in area	probable nest site; probable breeding	AM
SH023		18/04/2023	10:41	Sparrowhawk	1	dry calcareous heath and conifer plantation, flight/carrying prey, 10m	suitable nesting habitat; possible breeder	MS
SH028		16/08/2023	16:30	Sparrowhawk	1	conifer plantation, mobbing Hen Harrier, female	suitable nesting habitat; possible breeder	JG

# Figure 7-5-24 Confidential Map Redacted

# Figure 7-5-25 Confidential Map Redacted

# Figure 7-5-26 Confidential Map Redacted

# Figure 7-5-27 Confidential Map Redacted