

# Appendix 7-1

## MKO Bird Survey Report

**Coillte**  
**Bird Surveys 2016-2018**  
**Carrownagowan, Co. Clare**  
**Survey Report**



Planning & Environmental Consultants

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## Table of Contents

<b>1</b>	<b>Introduction.....</b>	<b>3</b>
1.1.1	Statement of Authority.....	4
<b>2</b>	<b>Desk Study &amp; Consultation .....</b>	<b>5</b>
2.1.1	Desk Study.....	5
2.1.2	Consultation .....	5
2.1.3	Method for Identification of Target Species.....	5
2.1.4	Field Surveys .....	5
2.1.5	Survey Justification .....	8
2.2	<b>Baseline Conditions and Receptor Evaluation .....</b>	<b>9</b>
2.2.1	Desk study Results.....	9
<b>3</b>	<b>Field Survey Results .....</b>	<b>15</b>
3.1	<b>Introduction .....</b>	<b>15</b>
3.2	<b>Vantage Point Surveys Results .....</b>	<b>15</b>
3.2.1	Golden Plover ( <i>Pluvialis apricaria</i> ).....	15
3.2.2	Hen Harrier ( <i>Circus cyaneus</i> ).....	15
3.2.3	Peregrine ( <i>Falco peregrinus</i> ).....	16
3.2.4	Red Grouse ( <i>Lagopus lagopus</i> ).....	16
3.2.5	Woodcock ( <i>Scolopax rusticola</i> ).....	16
3.2.6	Buzzard ( <i>Buteo buteo</i> ).....	16
3.2.7	Kestrel ( <i>Falco tinnunculus</i> ).....	16
3.2.8	Sparrowhawk ( <i>Accipiter nisus</i> ).....	16
3.2.9	Cormorant ( <i>Phalacrocorax carbo</i> ).....	17
3.2.10	Merlin ( <i>Falco columbarius</i> ).....	17
3.3	<b>Hen Harrier Roost Survey Results.....</b>	<b>17</b>
3.4	<b>Red Grouse Survey Results .....</b>	<b>17</b>
3.5	<b>Waterfowl Survey Results .....</b>	<b>17</b>
3.6	<b>Winter Walkover Survey Results .....</b>	<b>19</b>
3.7	<b>Breeding Raptor Survey Results.....</b>	<b>20</b>
3.7.1	Peregrine Falcon ( <i>Falco peregrinus</i> ).....	20
3.7.2	Hen Harrier ( <i>Circus cyaneus</i> ).....	20
3.7.3	Buzzard ( <i>Buteo buteo</i> ).....	20
3.7.4	Sparrowhawk ( <i>Accipiter nisus</i> ).....	21
3.7.5	Kestrel ( <i>Falco tinnunculus</i> ).....	21
3.8	<b>Breeding Walkover Survey Results .....</b>	<b>21</b>
3.8.1	Meadow Pipit.....	21
3.8.2	Red Grouse.....	21
<b>4</b>	<b>Discussion .....</b>	<b>22</b>
4.1	<b>Golden Plover .....</b>	<b>22</b>
4.2	<b>Hen Harrier.....</b>	<b>22</b>
4.3	<b>Peregrine.....</b>	<b>23</b>
4.4	<b>Red Grouse .....</b>	<b>23</b>
4.5	<b>Woodcock .....</b>	<b>23</b>
4.6	<b>Buzzard.....</b>	<b>24</b>



4.7	Kestrel.....	24
4.8	Sparrowhawk.....	24
4.9	Merlin .....	24
4.10	Cormorant .....	24
4.11	Meadow Pipit .....	25
4.12	Waterfowl Surveys.....	25
<b>5</b>	<b>CONCLUSIONS.....</b>	<b>26</b>
<b>6</b>	<b>REFERENCES .....</b>	<b>27</b>

**Appendices**

- 1 Curricula vitae and consultation responses
- 2 Redacted (non-sensitive species) birds technical appendix
- 3 Figures (non-sensitive species)
- 4 Confidential Annex
- 5 Confidential birds technical appendix

# 1 INTRODUCTION

McCarthy Keville O’Sullivan (MKO) was appointed to carry out ornithological survey works by Coillte in Autumn 2016 at Carrownagowan, Co. Clare. The survey period is inclusive of the winter seasons of 2016/2017 and 2017/2018 as well as the breeding seasons of 2017 and 2018.

The site is located north of Carrownagowan (Grid Ref: R 162029 177501), northeast of Broadford, Co. Clare This report has been compiled to provide information regarding the ecological status of bird populations at the site. The site is composed predominately of stands of conifer plantation, with a few areas of scrub and heath. Upland areas surrounding the site are dominated by areas of blanket bog. The total study area is approximately 1,132ha in size.

This report describes the ornithological survey methods and survey data collected at Carrownagowan, Co. Clare for the period from August 2016 to September 2018. This report also contains information from desktop studies. Attention has been paid to species of conservation importance and identified target species.

This report is supported by appendices 1-5;

- Appendix 1 contains all CVs and consultation responses
- Appendix 2 and 3 contain raw data and maps of all species excluding hen harrier and breeding peregrine recorded over the two-year survey period. This appendix includes the full survey effort for the two-year survey period. This includes detail on survey times, weather conditions, surveyors, survey results and other additional information. Where entries have identified breeding territories or nest sites of sensitive species the data has been copied to appendix 5 and the sensitive information redacted from appendix 3.
- Appendix 4 contains the confidential annex describing in more detail the raw data relating to sensitive species contained in Appendix 5 which are not available for public viewing
- Appendix 5 contains the raw data of all confidential records and maps of sensitive species recorded over the two-year survey period. Raw data and maps of sensitive species have been redacted from appendices 2 and 3 respectively. This includes detail on survey times, weather conditions, surveyors, survey results and other additional information. All hen harrier observations have been included in this confidential appendix as many of the observed flights, relating to food pass, displaying behaviour and agitated birds can inadvertently indicate the locations of nests, breeding territories and roost sites.

The report is structured as follows:

- An introduction providing a description of the background and statement of authority regarding ornithological works.
- A description of the desktop study and consultation carried out with regards to the site.
- A comprehensive description of the ornithological surveys carried out.
- A full description of results for all ornithological surveys carried out.

The following defines terms used in this report

- “Zones of Influence” (ZOI) for potential ornithological receptors refers to the zone within which potential effects are anticipated. ZOIs were assigned following best available guidance (SNH 2016 and McGuinness et.al 2015).

### **1.1.1 Statement of Authority**

This survey report has been prepared by Mr. Tom Ryan (B.Sc. (Hons) Environmental & Natural Resource Management) an Ornithologist with MKO and reviewed by Project Director, Dervla O’Dowd (B.Sc. Environmental Science) and Padraig Cregg (M. Sc.), Senior Ornithologist. The field surveys were also undertaken during the study period 2016-2018 by Mr Tom Ryan (B.Sc. Environmental & Natural Resource Management), with assistance from Mr. John Hehir (B.Sc. Wildlife Biology), Mr. Ciaran McKenna (B.Sc. (Hons) Wildlife Biology), Mr. John Meade (B.Sc. Ecology), Mr. Patrick Manley (Bachelor of Science (Hons) Geology), Ms. Julie O’Sullivan (MSc. Ecological Assessment) and Mr. John Curtin (B.Sc. Environmental Science). All surveyors are suitably qualified to undertake the required bird surveys. CVs are included in Appendix 1.

## 2 DESK STUDY & CONSULTATION

### 2.1.1 Desk Study

A comprehensive desk study was undertaken by MKO prior to surveys beginning in August 2016 to search for any relevant information on species of conservation concern which may potentially make use of the study area. The assessment included a thorough review of the available ornithological data including:

- Review of online web-mappers: National Parks and Wildlife Service (NPWS), National Biodiversity Data Centre (NBDC), Irish Wetland Bird Survey I-Webs.
- Review of Bird Atlases: (Sharrock, 1976; Lack, 1986; Gibbons et al., 1993; Balmer et al., 2013).
- Review of Birds of Conservation Concern in Ireland (BoCCI) 2014-2019 (Colhoun & Cummins, 2013)
- Review of specially requested records from the NPWS Rare and Protected Species Database.
- Review of the 2015 National Survey of Breeding Hen Harrier in Ireland Report (Ruddock et al. 2016).

### 2.1.2 Consultation

MKO undertook a consultation exercise during preparation of this report. Table 2.1 provides a list of the organisations consulted and notes where responses have been received. Consultation responses are included in Appendix 1 and discussed in section 2.2.1 below.

**Table 2.1 Scoping Response Summary**

No.	Consultee	Response to Consultation
1	Bird Watch Ireland	Response received 11/06/2018
2	National Parks & Wildlife Services	Response received 18/06/2018
3	Irish Raptor Study Group	No response received to date

### 2.1.3 Method for Identification of Target Species

Following a comprehensive desk study and initial site visit, a list of “Target species” likely to occur at the site was compiled. The observation/survey work carried out on the site was specifically designed to survey for these identified target species in accordance with SNH guidance (2014). The target species list was drawn from:

- Bird species that are susceptible to impacts from this type of development.
- Annex I of the Birds Directive.
- Special Conservation Interests (SCI) of Special Protection Areas (SPA) within the zone of likely significant effects
- Species protected under the fourth schedule of the Wildlife Acts 1976-2012.
- Red-listed birds of Conservation Concern.

### 2.1.4 Field Surveys

This section of the report describes the various field survey methodologies employed and survey rationale for the various survey methods undertaken. Field surveys were undertaken from August 2016 – September 2018. The data provided with this report is robust and will allow clear, precise and definitive conclusions to be made with regard to the likely significant effects on avian receptors identified within the study area. Field

survey methodologies have been devised to survey the bird species that are likely to occur within the study area.

#### **2.1.4.1 Initial Site Assessment**

Based on the results of the desk study and reconnaissance site visits, the likely importance of the study area for bird species was determined. Based on the collated information available from the above preliminary assessment and adopting a precautionary approach, a site-specific scope for the ornithological surveys was developed.

#### **2.1.4.2 Vantage Point Survey**

Vantage point surveys were undertaken in accordance with SNH guidance from eight fixed vantage point locations from September 2016 – September 2018. The existing eight MKO vantage point locations surveyed in August 2016 were continued throughout the entire survey period for consistent analysis.

Data on bird observations and flight activity was collected from a scanning arc of 180° and a two kilometre radius by an observer at each fixed location for six hours per month. The timing of vantage point surveys was tailored to the ecology of the target species present onsite, and include the morning, day and evening surveys. In this manner an even spread of survey effort was achieved through daylight hours and across the season.

Details on vantage point watch surveys are presented in Appendix 2, Table 3 to this report. This includes full details of dates, times, survey locations, survey duration and weather conditions for each survey. Appendix 3, Figure 2.1 shows the locations of vantage points and technical data is provided in Appendix 2, Tables 3, 4 and 5.

Flight activity was divided into distinct height bands. The flight bands were chosen in relation to the dimensions of likely turbine models for the site and the resulting potential collision height. Bands are split into 0-10m, 10-25m, 25m-175m and 175m+. Taking a precautionary approach 25-175m is considered potential collision height (PCH).

#### **Viewshed Analysis**

Viewshed analysis was carried out to inform coverage of the study area from fixed vantage point locations (VP1a, VP2, VP3, VP4a, VP5a, VP7a, VP8a and VP9) prior to the commencement of surveys in September 2016. Viewsheds were calculated using Resoft Wind Farm ZTV (Zone of Theoretical Visibility) software in combination with MapInfo Professional (Version 10.0) using a notional and precautionary layer suspended at 25m, which is 10 metres below the lowermost height passed through by the rotor blade tips of a typical modern turbine model. While the relevance of being able to view as much of the site to ground level is acknowledged, the SNH guidance emphasises the importance of visibility of the 'collision risk volume' when the data is to be used to estimate the risk of collision with turbines by birds.

The viewshed analysis involved testing each VP location for its visibility coverage by creating a view shed point two metres in height (to represent the height of observer) on a map using 10 metre contours terrain data. Using the ZTV software, a viewshed of 360 degrees was produced calculating an area 10 metres from ground level up to a two-kilometre radius. The resulting viewshed image was then cropped to 180 degrees to give the viewshed from each VP location in line with SNH (2014, 2017). A 500m buffer was applied to the likely maximum viable area of the site for a wind energy development in line with SNH's recommendation to undertake surveys to 500m from

the outermost turbines of a proposed wind farm site (SNH, 2014, 2017). The viewshed analysis offers maximum views of the study area with adequate coverage of the proposed turbine layout. As described above, the predicted collision risk height band that was used in the current assessment (>25m) is considered to be precautionary and highly conservative and in line with previous recommended height bands advocated in SNH (2005) guidance documents. Appendix 3, Figure 2.2 shows the modelled viewshed analysis.

#### **2.1.4.3 Hen Harrier Roost Survey**

Potential hen harrier roost sites within 2km of the study area (as per SNH 2017 recommendations) were surveyed for the presence of hen harrier during both winter seasons. Survey work was undertaken in accordance with methods described by Hardey et al. (2013) and the 'Irish Hen Harrier Winter Roost Survey' (unpublished document coordinated by members of NPWS). Surveys were carried out throughout the entirety of both non-breeding seasons (Oct 2016 – Mar 2017 & Oct 2017 – Mar 2018).

Survey effort, including details of survey duration and weather condition, is presented in Appendix 2. Figure 2.3 in Appendix 3 shows the location of the hen harrier roost survey VPs.

#### **2.1.4.4 Red Grouse Survey**

Red Grouse surveys were undertaken during March 2017 and March 2018. The methodology was derived from that described in Bibby et al. (2000) and the survey methods for the most recent national Red Grouse survey (2006/2007 to 2007/2008) coordinated by BirdWatch Ireland and submitted to the NPWS (Murray et al., 2013). The survey area extended 500m beyond the site boundary, where access allowed. The survey consisted of tape luring transects.

Survey effort, including details of survey duration and weather condition, is presented in Appendix 2. Figure 2.4 in Appendix 3 shows the transect route locations.

The surveys were carried out under NPWS License Number 025/2017 and 021/2018 respectively.

#### **2.1.4.5 Waterfowl Survey**

Wetland sites within 8km of the study area were surveyed for waterbird populations (i.e. waders, waterfowl, gulls, grebes and rails). The survey area extended to 8km as Greenland White-fronted Geese was identified as a potential target species within the wider surroundings of the proposed development. The core foraging range from winter night roosts for this species is 8km as outlined by SNH (SNH 2016). The survey area extended approximately 8km outside the site boundary which exceeds the 500m recommendation stipulated in current SNH Guidance (SNH, 2014, 2017). The extensive surveys aimed to provide contextual information for the hinterland surrounding the proposed study area. Count methodology was in line with survey methodology guidelines issued by SNH (2014) and BirdWatch Ireland (2015). Monthly counts were undertaken at each target wetland site to cover the winter season. Counts were conducted during daylight hours (ideally at dawn or before dusk) from suitable vantage points at the wetland sites. Survey effort is presented in Appendix 2. Figure 2.5 in Appendix 3 shows the wetland site survey locations.

#### **2.1.4.6 Winter Walkover Survey**

Winter transect surveys were conducted to determine the presence of bird species of high conservation concern within area of potential suitable habitat within the study

area. The survey area extended 500m outside the study area boundary, as per SNH guidance (SNH, 2014, 2017).

Transect routes were devised to ensure coverage of different habitat complexes within the study area. The methodology was broadly based on methods described in Bibby et al. (2000). Target species were raptors, waterbirds, gulls and ground birds of conservation interest. Along with target species, all additional species observed were recorded to inform the evaluation of supporting habitat.

Walkover surveys were carried out during the months of October, December, January and March for the 2017/2017 and 2017/2018 winter periods, with the site being visited twice per month for this survey.

Survey effort, including details of survey duration and weather condition, is presented in Appendix 2. Figure 2.6 in Appendix 3 shows the transect route locations.

#### **2.1.4.7 Breeding Raptor Survey**

SNH (2017) states that breeding raptor surveys should be undertaken onsite and to a radius of 2km from the bird survey study area for a duration of two years. A key target species at this site was hen harrier, draft Irish guidelines for survey this species recommend surveying an area covering a 5km radius from the outer most turbines by means of vantage point watches (Wilson et al 2015). This approach was adopted, i.e. breeding raptor surveys were undertaken onsite and to a 5km radius from the bird survey study area. This approach was therefore compliant with SNH (2017) and emergent Irish guidelines for breeding raptor/ hen harrier surveying at proposed wind farm sites. Survey effort, including details of survey duration and weather conditions is presented in Appendix 2. Figure 2.9 in Appendix 3 shows the total area surveyed.

#### **2.1.4.8 Breeding Walkover Survey**

Breeding walkover surveys were undertaken during both breeding seasons to detect the presence of breeding birds on site. The survey area extended to 500m outside the site boundary as specified by SNH (2014, 2017). Upland bog areas were surveyed using the adapted Brown and Shepherd method, as described by Gilbert et al (1998). This survey method is primarily used to detect the presence of breeding waders, such as curlew, golden plover, snipe and lapwing. However, this survey method was adapted to include the recording of breeding territories of all target species.

Breeding walkover surveys were carried out during the months of April, May, June and July for the 2017 and 2018 breeding season. All (accessible) areas of the site were visited once per month for these surveys. Survey effort including details of survey duration and weather conditions can be found in Appendix 2. Figure 2.10 in Appendix 3 shows the quadrats surveyed during these surveys.

#### **2.1.5 Survey Justification**

A comprehensive suite of bird surveys was undertaken at the site between August 2016 and September 2018, as detailed in this report. Results from the survey period of 2016 to 2018 are derived from continuous surveying over the two-year period in strict accordance with SNH guidelines. The surveys undertaken provide the information necessary to allow a complete, comprehensive and robust assessment of the potential impacts of proposed developments on avian receptors.

## 2.2 Baseline Conditions and Receptor Evaluation

### 2.2.1 Desk study Results

#### 2.2.1.1 Identification of Designated Sites within Potential Connectivity Distance of the Proposed Development Area

Using GIS software, sites designated for nature conservation within connectivity distance of the proposed wind farm development were identified.

In addition, and in the absence of any specific European or Irish guidance, the Scottish Natural Heritage (SNH) Guidance, *'Assessing Connectivity with Special Protection Areas (SPA)'* (2016) was consulted. This document provides guidance in relation to the identification of connectivity between proposed development proposals and Special Protection Areas. The guidance takes into consideration the distances some species may travel beyond the boundary of their SPAs and outlines information on dispersal and foraging ranges of bird species which are frequently encountered when considering plans and projects.

Assessing connectivity with a designated site utilised a precautionary approach, i.e. sites that were not designated for bird species but contain target species were also considered. Designated sites located within potential connectivity distance are listed below in Table 2.2 and illustrated in Appendix 3, Figure 2.7.

**Table 2.2 Designated sites within potential connectivity distance of the proposed development area.**

Designated site and code	Distance from proposed works (km)
<b>Special Protection Areas (SPA)</b>	
Lough Derg (Shannon) (004058)	2.34
Slieve Aughty Mountains (004168)	6.26
Slievefelim to Silvermines Mountains (004165)	14.28
<b>Special Areas of Conservation (SAC)</b>	
Slieve Bernagh Bog (002312)	0.00
Lower River Shannon (002165)	5.92
<b>Natural Heritage Area (NHA)</b>	
Doon Lough (000337)	1.29
<b>Proposed Natural Heritage Area (pNHA)</b>	
Lough Derg (000011)	2.40
Lough O'Grady (001019)	3.13

#### 2.2.1.2 Breeding and Winter Bird Atlas Records

*Bird Atlas 2007-11: The breeding and wintering birds of Britain and Ireland'* (Balmer et al., 2013) is the most recent comprehensive work on wintering and breeding birds in Ireland.

The entire study area lies within hectad R57 and R67. Table 2.3 presents a list of species of ornithological interest recorded within the hectads.



**Table 2.3 Bird atlas data for relevant hectads**

Species Name	Winter Atlas 07-11 Hectad (R57, R67)	Breeding Atlas 07-11 Hectad (R57, R67)	Conservation Status
Golden Plover ( <i>Pluvialis apricaria</i> )	Present	Absent	Annex I EU Birds Directive, BOCCI Red Listed
Corncrake ( <i>Crex crex</i> )	Absent	Present	Annex I EU Birds Directive, BOCCI Red Listed
Hen Harrier ( <i>Circus cyaneus</i> )	Present	Probable	Annex I EU Birds Directive, SCI of SPA within Zone of Influence
Common Tern ( <i>Sterna hirundo</i> )	Absent	Confirmed	Annex I EU Birds Directive, SCI of SPA within Zone of Influence
Whooper swan ( <i>Cygnus cygnus</i> )	Present	Absent	Annex I EU Birds Directive
Peregrine Falcon ( <i>Falco peregrinus</i> )	Absent	Possible	Annex I EU Birds Directive
Dunlin ( <i>Calidris alpina schinzii</i> )	Present	Absent	Annex I EU Birds Directive
Kingfisher ( <i>Alcedo atthis</i> )	Present	Probable	Annex I EU Birds Directive
Goldeneye ( <i>Bucephala clangula</i> )	Present	Present	BOCCI Red Listed, SCI of SPA within Zone of Influence
Tufted Duck ( <i>Aythya fuligula</i> )	Present	Probable	BOCCI Red Listed, SCI of SPA within Zone of Influence
Lapwing ( <i>Vanellus vanellus</i> )	Present	Absent	BOCCI Red Listed
Black-headed Gull ( <i>Larus ridibundus</i> )	Present	Present	BOCCI Red Listed
Herring Gull ( <i>Larus argentatus</i> )	Absent	Present	BOCCI Red Listed
Curlew ( <i>Numenius arquata</i> )	Present	Absent	BOCCI Red Listed
Woodcock ( <i>Scolopax rusticola</i> )	Present	Absent	BOCCI Red Listed
Redshank ( <i>Tringa totanus</i> )	Present	Absent	BOCCI Red Listed
Red Grouse ( <i>Lagopus lagopus</i> )	Present	Probable	BOCCI Red Listed
Pochard ( <i>Aythya ferina</i> )	Present	Absent	BOCCI Red Listed
Shoveler ( <i>Anas clypeata</i> )	Present	Absent	BOCCI Red Listed
Grey Wagtail ( <i>Motacilla cinerea</i> )	Present	Confirmed	BOCCI Red Listed
Meadow Pipit ( <i>Anthus pratensis</i> )	Present	Confirmed	BOCCI Red Listed

Twenty-one species listed in either Annex I of the EU Birds Directive or on the BoCCI red list have been recorded within the two relevant ten-kilometre square hectads during surveys for the most recent breeding and wintering bird atlases.

### 2.2.1.3 Irish Wetland Bird Survey (IWeBS) Records

Three IWeBS sites are listed within the potential zone of interest for the site. Lough O’Grady, Scarriff Bay and Derg South are the named IWeBS sites within 15km of the site, see Figure 2.8. Datasets for the three IWeBS sites were downloaded from <https://f1.caspio.com/dp.asp?AppKey=f4db3000060acbd80db9403f857c> and reviewed. Summary tables for the species recorded at these sites in previous years of IWeBS surveys are provided below. IWeBS summary data for Lough Derg incorporate all IWeBS data for the entire lake and is not just the southern part of the lake.

**Table 2.4. Lough O’Grady IWeBS Summary Data (OH013)**

Species	1% National	1% International	2007/08	2008/09	2009/10	2015/16	Mean
Mute Swan	90		3	2	2	2	2
Whooper Swan	150	270	32	10			
Greylag Goose	50	980			2		
Wigeon	630	15000	120	100	110	56	56
Teal	340	5000				40	40
Mallard	290	20000	30	10	42		
Tufted Duck	310	12000			4		
Goldeneye	60	11500			4		
Little Grebe	20	4000	3				
Great Crested Grebe	40	3500	2	7	5	3	3
Cormorant	120	1200	9	6	8	3	3
Grey Heron	25	2700	2	3	4	3	3
Coot	220	17500			2		
Golden Plover	1200	9300	100*	40	30	40*	
Lapwing	1100	20000	100*	100	115	26	26
Snipe		20000	1*		1		
Curlew	350	8400	30	1	6	62	62
Greenshank	20	2300				15	15
Black-headed Gull		20000			25	23	23
Common Gull		16400		25			

**Table 2.5. Scarriff Bay IWeBS Summary Data (OHS20)**

Species	1% National	1% International	2007/08	2008/09	2009/10	2015/16	Mean
Mute Swan	90					33	33
Whooper Swan	150	270	47		30	23	23
Greylag Goose	50	980				44	44
Tufted Duck	310	12000				12	12
Lapwing	1100	20000	30		90		
Curlew	350	8400	20				

**Table 2.6. Lough Derg IWeBS Summary Data (0J008)**

Species	1% National	1% Inter-national	2010/11	2011/12	2013/14	2014/15	2015/16	Mean
Mute Swan	90		209	101	171	79	62	103
Whooper Swan	150	270	116	13	55	46	23	34
Greylag Goose	50	980	30	48	46	20	48	40
Shelduck	120	3000						
Wigeon	630	15000	102	176		20	2	66
Gadwall	20	600	7	8		2		5
Teal	340	5000	122	72	15	64	2	38
Mallard	290	20000	298	261	66	96	78	125
Pintail	20	600	14	10				10
Shoveler	30	400	7	89				89
Pochard	160	3000	112	90	22	7		40
Tufted Duck	310	12000	1976	1785	1196	932	339	1063
Scaup	65	3100	5	21				21
Long-tailed Duck		17250	2					
Goldeneye	60	11500	64	23	14	6	13	14
Black-throated Diver		3750				1		1
Great Northern Diver	20	50		1				1
Little Grebe	20	4000	88	24	32	18	18	23
Great Crested Grebe	40	3500	171	41	41	61	22	41
Cormorant	120	1200	149	62	116	153	163	124
Little Egret	20	1300			1			1
Grey Heron	25	2700	8	4	3	4	3	4
Water Rail			7	1	2			2
Moorhen		20000	17	13	9	8		10
Coot	220	17500	1348	857	286	296	70	377
Golden Plover	1200	9300	200		339		47	193
Lapwing	1100	20000	891	738	1037	426	76	569
Snipe		20000	5	6	8	5		6
Curlew	350	8400	72		38		15	26
Greenshank	20	2300					2	2
Black-headed Gull		20000	758	271	275	511	65	280
Common Gull		16400	1*		4			4
Lesser Black-backed Gull		5500	7	3	3	1		2
Herring Gull		10200		1	1	1		1
Great Black-backed Gull		4200	2	8	4	2		5
Kingfisher			2	1	1	1		1

Inclusive of all IWeBS data for Lough Derg

#### 2.2.1.4 Identification of potential waterfowl habitat

A search for suitable waterfowl roost habitat using ortho-base maps and ordnance survey maps of the study area was undertaken alongside reconnaissance surveys within an eight-kilometre radius of the site. Suitable areas capable of supporting wintering and migratory bird species within this eight-kilometre radius of the study

area were identified and surveyed continuously throughout the winter season. The areas surveyed during these wintering waterfowl surveys can be seen in Figure 2.5, Appendix 3.

#### **2.2.1.5 The 2015 National Survey of Breeding Hen Harrier in Ireland**

The results from the 2015 national hen harrier survey report was consulted to determine the proximity of known hen harrier breeding sites within relevant 10km hectads. The following hectads were located within 5km of the Carrownagowan study area; R57, R58, R67, R68 and R77. The following records were reported from the relevant 10km hectads;

R57 – Possible Breeding in 2015

R67 – Confirmed Breeding in 2015, Confirmed Breeding in 2010

R77 – Confirmed Breeding in 2015, Possible Breeding in 2005

#### **2.2.1.6 National Parks & Wildlife Services Consultation Response**

On the 18<sup>th</sup> of June 2018 a response was received from NPWS regarding the request of specific bird data records within 5km of the Carrownagowan site. NPWS held the following records on breeding hen harrier or other breeding raptors within 5km of the site. Due to the confidentiality of these records exact distances or locations could not be obtained.

Hen harrier were confirmed breeding within the study area during 2015 and 2010. While there was one possible breeding record within the bird survey study area in both 2015 and 2002. There was one confirmed breeding record within one kilometre of the study area in 2015. In addition to this there was eight sightings of hen harrier within one kilometre of the study area in 2005. In the area between three and five kilometres of the study area there was one confirmed breeding record from 2015.

In addition, the NPWS confirmed by email on the 21<sup>st</sup> June 2018 that the Carrownagowan windfarm site lies within a Non-designated Regional Zone for Hen Harrier based on the 2015 National Hen Harrier Survey.

Also reported by NPWS were two occupied Peregrine nest sites, recorded during 2017 surveys. One site was located in an area between one and three kilometres of the study area, while the other lay between three and five kilometres of the study area.

In addition to this Shapefiles were also provided for Red Grouse breeding records and Greenland White-fronted Goose winter roost records.

There were two separate breeding sites for Red Grouse within 500m of the study area. Both territories were occupied in both 2007 and 2008. The next nearest record was on the southern slopes of Moylussa, a breeding territory occupied in 2007 and 2008, roughly one kilometre from the study area. All records of red grouse breeding territories were located to the south of the proposed study area.

Historic Greenland White-fronted Geese records were provided. Geese were recorded at ten separate locations between the winters of 1982/83 and 2000/2001. The vast majority of all of the observations occurred between the early 1980s and early 1990s. Seven of the ten locations were from Lough O'Grady over three kilometres north of the study area. At Ballymalone just over 2km to the northeast of the study area during the winter of 1983/1984. Roughly 5km to the northeast there was also a record at Scarriff from the same year. The final record was over the 4.5km to the south of the study area at Kilcolman bog during the same winter in 1983/1984.

### **2.2.1.7 Birdwatch Ireland Consultation Response**

On the 11<sup>th</sup> of June 2018 a response was received from Birdwatch Ireland regarding the request of specific bird data records within the relevant 10km hectads of the Carrownagowan site. We were informed that Birdwatch Ireland, being a voluntary organisation, do not have the staff or resources to process large data requests. They instead asked that we consult with the most recent 2007-2011 Bird Atlas data set through the NBDC website. This had already been consulted and reported on. The results for the winter and breeding bird atlas from this period is presented in section 2.2.1.2 above.

## 3 FIELD SURVEY RESULTS

### 3.1 Introduction

A comprehensive list of all bird species recorded within the study area is provided in Appendix 2, Table 1. This list also provides the conservation status of each species.

The following target species were recorded during the ornithological surveys during the 2016-2018 survey period and observations are described in the sections below:

- Golden Plover
- Hen Harrier
- Peregrine
- Red Grouse
- Woodcock
- Buzzard
- Kestrel
- Sparrowhawk
- Cormorant
- Merlin

The following sections describe the observations of each target species under the individual survey headings. Text relating to sensitive species such as hen harrier and peregrine has been removed from the main body of this report and can be found in Appendix 4.

Raw data and maps are provided in Appendix 2 and Appendix 3 respectively. Maps and raw data concerning sensitive information are included in Confidential Appendix 5.

### 3.2 Vantage Point Surveys Results

#### 3.2.1 Golden Plover (*Pluvialis apricaria*)

This species was observed in flight on 21 occasions, six of which were at potential collision height (PCH), during the 2016-2018 survey period. Many of the observed flights occurred during the migration period for this species. Numbers ranged from a single bird to a flock of 450 birds. A map showing the results of the vantage point surveys is provided as Figure 3.1.1 in Appendix 3.

#### 3.2.2 Hen Harrier (*Circus cyaneus*)

This species was observed in flight on 124 occasions during the entire survey period. Fifty-three of these flights occurred at PCH (see Figure 1, Confidential Appendix 5). Most flights were observed during the breeding season between April and September 39 of which occurred during the 2017 breeding season while there were 61 observation of hen harrier during VP surveys within the 2018 breeding season. Only twenty-four

flights were recorded outside of the breeding season during the winter period (October-March) of both years.

Confidential Appendix 5 contains further information including raw data and figures for all hen harrier observations relating to breeding or roosting birds.

### **3.2.3 Peregrine (*Falco peregrinus*)**

Peregrine was observed in flight on three occasions over the entire two-year period, two of which were recorded within potential collision height (PCH). One of the observations was of a pair of peregrine in a courtship display flight on the 21<sup>st</sup> March 2018. The two remaining observed flights in December and February related to a single bird travelling and hunting respectively, see Appendix 3 Figure 3.1.2.

Confidential Appendix 5 contains further information including raw data and figures for all hen harrier observations relating to breeding or roosting birds.

### **3.2.4 Red Grouse (*Lagopus lagopus*)**

This species was recorded on 100 occasions during vantage point surveys for the entire survey period. Only nineteen of these observations related to observed flight activity, while 81 were records of calling birds with no visual observations. All the observed flights were recorded below potential collision height (PCH). Numbers ranged from one to two birds, see Appendix 3 Figure 3.1.3.

### **3.2.5 Woodcock (*Scolopax rusticola*)**

This species was recorded in flight on seven occasions during vantage point surveys over the study period. All flights were below PCH. Another observation of a bird calling was also recorded, this bird was not observed in flight, see Appendix 3 Figure 3.1.4.

### **3.2.6 Buzzard (*Buteo buteo*)**

This species was observed in flight on 23 occasions throughout the entire survey period, sixteen of which were at potential collision height (PCH). Most flights were observed during the breeding season period with birds typically recorded as hunting or soaring, see Appendix 3 Figure 3.1.5.

### **3.2.7 Kestrel (*Falco tinnunculus*)**

This species was observed in flight on 144 occasions throughout the entire survey period, sixty-six of which were at PCH. This is one of the most frequently encountered species on site and observations were recorded throughout the study period. Most observations were of a single bird either travelling or hunting on site. The maximum number of birds observed together was two, see Appendix 3 Figure 3.1.6.

### **3.2.8 Sparrowhawk (*Accipiter nisus*)**

This species was observed in flight on forty-nine occasions throughout the entire survey period, only four of these flights were at PCH. Observations were dispersed throughout the study period. Most flights were of individual birds either travelling or hunting. Breeding activity was also recorded during vantage point surveys in the breeding season of 2018, with fledged chicks and adults carrying prey observed on a few occasions on site. See breeding territory maps and Appendix 3 Figure 3.1.7.

### 3.2.9 Cormorant (*Phalacrocorax carbo*)

This species was recorded only once during the entire survey period on the 27<sup>th</sup> of March 2018. The flight was recorded above potential collision height (PCH) and was of an individual bird travelling, see Appendix 3 Figure 3.1.8.

### 3.2.10 Merlin (*Falco columbarius*)

This species was observed on two occasions in April and May 2017. Both observations were below PCH and were of an individual bird in low flight. See Appendix 3 Figure 3.1.9.

## 3.3 Hen Harrier Roost Survey Results

Hen harrier were observed on five occasions during hen harrier roost surveys over the two winter periods surveyed. Two of the observations were recorded from the same location on the 23<sup>rd</sup> of March 2017. One observation was recorded going to roost on the 26<sup>th</sup> February 2018. The two remaining observations were recorded in March 2018 with a roost site confirmed on the 29<sup>th</sup> March 2018. Hen harrier flights and roost location can be seen in the Confidential Appendix 5 Figure 3, accompanying this report.

## 3.4 Red Grouse Survey Results

Red grouse was observed on 25 occasions in total during dedicated red grouse surveys at Carrownagowan in March 2017 and March 2018. All observations were of single birds, with the exception of a pair observed flying together on the 23<sup>rd</sup> of March 2017. Fifteen observations were of birds calling in response to the tape lure, while the other seven observations were birds that were flushed by the surveyor.

Six of the observations were recorded during March 2017, while only one of these displayed breeding behaviour. A pair flew calling in response to the tape lure on the 23<sup>rd</sup> of March, indicating breeding behaviour.

There were 19 observations of red grouse during March 2018, 14 of which were birds calling in response to the tape lure, indicating breeding behaviour, see Appendix 3 Figure 3.4.1. Details on data recorded can be found in Appendix 2 Table 7.

Breeding activity was recorded on a number of occasions during breeding walkover surveys including a female incubating and a clutch of fledged chicks on the 21<sup>st</sup> of June 2018. See Appendix 3 Figure 3.8.3.

## 3.5 Waterfowl Survey Results

Waterfowl distribution surveys were conducted within an 8km buffer of the site boundary, exceeding the 500m recommendation stipulated in SNH Guidance (2014,2017) for foraging wildfowl and one kilometre for roosting birds. The extensive surveys aimed to provide contextual information from within the hinterland of the proposed study area.

Below is a breakdown of Red-listed (BoCCI), Annex I or SCI species for the most proximal SPAs observed during these surveys. More detail on survey results can be found in Appendix 2 Table 8.

- **Golden Plover (Annex I, red-listed BoCCI):**

This species was observed on twelve occasions during winter waterfowl surveys throughout the study period. The species was observed on Lough Derg but also on



different areas of wet grassland within the eight-kilometre site hinterland. Flock sizes ranged from twenty-two to one hundred and ninety-eight birds.

- **Whooper Swan (Annex I):**

This species was observed on 49 occasions during winter waterfowl surveys. Flock sizes ranged from one to 67 birds. Observations were predominately around the Lough Derg area but also on other wet grassland areas and lakes.

- **Kingfisher (Annex I):**

This species was observed on five occasions during winter waterfowl surveys. Four observations occurred on Lough Derg while one observation occurred on Lough Bridget. All observations were of individual birds.

- **Little Egret (Annex I):**

This species was observed 37 times during winter waterfowl surveys, 31 observations were on Lough Derg. The remaining birds were recorded on smaller lakes. Most observations were of individual birds. The maximum flock was of nine birds at Lough Derg.

- **Tufted Duck (Red Listed, SCI species for Lough Derg SPA):**

This species was observed on 226 occasions over the entire study period and was one of the most frequently encountered species. Flock sizes ranged from one to 244 birds. Most of the observations were from Lough Derg.

- **Goldeneye (Red Listed, SCI species for Lough Derg SPA):**

This species was observed on 21 occasions during waterfowl surveys. Most of the observations occurred on Lough Derg with only one observation recorded at Ballynahinch Lough in January 2017. Flock sizes ranged from one to nine birds.

- **Black-headed Gull (Red Listed):**

Observed on 320 occasions during waterfowl surveys throughout the study period. Flock size ranged from one to 320 birds. The vast majority of the observations occurred at Lough Derg but there were also flocks recorded at Lough O'Grady and surrounding lakes.

- **Curlew (BoCCI red-listed):**

This species was observed on 24 occasions during winter waterfowl surveys and was recorded at various locations. Flock sizes ranged from five to 40 birds.

- **Wigeon (BoCCI red-listed):**

This species was observed on 35 occasions during winter waterfowl surveys. Flock sizes ranged from three to 130 birds. Birds were predominantly recorded on Lough Derg and Lough O'Grady.

- **Lapwing (BoCCI red-listed):**

This species was observed on 42 occasions during winter waterfowl surveys, at various lakes; peak flock size was recorded at Lough O'Grady. Flock size ranged from five to 283 birds.

- **Shoveler (BoCCI red-listed):**

This species was only observed once during winter waterfowl surveys, when an individual bird was observed on Lough Derg in February 2018.

- **Cormorant (SCI species for Lough Derg SPA):**

This species was observed on 371 occasions during winter waterfowl surveys on various lakes including Lough Derg. Flock sizes ranged from one to 65 birds.

- **Common Tern (Annex I, SCI species for Lough Derg SPA)**

This species was recorded on eight occasions throughout the study period. One observation was made at Lough O'Grady in May 2017, the remaining observations were made at Lough Derg.

- **Common Pochard (BoCCI red-listed)**

There were eight recordings of this species throughout the study period. Flock size ranged from two to five birds. All records were taken at Lough Derg.

- **Common Redshank (BoCCI red-listed)**

There was only one observation of this species during waterfowl surveys. This was of an individual bird at Lough O' Grady in March 2017.

- **Dunlin (Annex I, BoCCI red-listed)**

This species was recorded once during waterfowl surveys at Lough O' Grady in December 2016. This was an individual bird.

- **Herring Gull (BoCCI red-listed)**

This species was observed on twenty-three occasions during the study period. Flock size ranged from one to 60 birds.

- **White-Tailed Eagle (Annex I, BoCCI red-listed)**

This species was observed once during waterfowl surveys at Lough Derg in January 2017. The observation was of a single bird roosting at the edge of the river over 8km south of the study area, between O'Brien's Bridge and Killaloe.

### 3.6 Winter Walkover Survey Results

Winter Walkover Surveys were undertaken following Bibby et al. (2000). Due to the nature of the habitat on site, much of the site proved inaccessible. The site is considered to be of limited value to many target species (e.g. wintering water birds), as it is dominated by conifer plantation and only interspersed with smaller areas of bog.

The findings from these walkover surveys were as follows.

- Woodcock was observed twice during walkovers. The first observation was a pair flushed by the surveyor in March 2018, while the second was an individual bird observed in December 2017. There are also four incidental records from February 2018 of birds being flushed from forest roadways on site, outside of the survey period.
- Hen harrier was observed once during winter walkovers in December 2017, this was an individual male hunting.
- Red Grouse was observed only once during this survey type, travelling off site.
- Sparrowhawk was observed once, flushed by surveyor.
- Kestrel was observed on five occasions.
- Snipe was observed on six occasions.

- A usual assemblage of passerines were also observed during this survey.

### 3.7 Breeding Raptor Survey Results

Breeding Raptor surveys were carried out following the guidance of Hardy et al (2013). All breeding raptor species were surveyed to a 2km radius from the study area. Furthermore, hen harrier surveys extended a further 3km beyond the 2km used during breeding raptor surveys in order to account for observed hen harrier foraging distances from nests recorded in Ireland (Wilson et al 2015).

Below is a breakdown of the results from breeding raptor surveys carried out during the breeding seasons of 2017 and 2018. Results are shown for all breeding raptors. Further details on breeding and territorial behaviour can be seen in Appendix 2 Table 11. Breeding territory maps for each species (with the exception of hen harrier and peregrine) can be seen in Appendix 3 Figures 3.7.1-3.7.5.

Breeding territory maps and raw data for hen harrier and peregrine can be viewed in Confidential Appendix 5.

#### 3.7.1 Peregrine Falcon (*Falco peregrinus*)

Two Peregrine territories were identified during breeding raptor surveys in 2017 and 2018. Both breeding territories were recorded more than 2km from the bird survey study area.

More information on these breeding territories can be found in Confidential Appendices 4 and 5 of this report.

#### 3.7.2 Hen Harrier (*Circus cyaneus*)

Four breeding territories and two nest sites were identified during the 2017 breeding season. Three breeding territories were within the bird survey study area and one was between 2km and 5km from the study area boundary. Of the two confirmed hen harrier nest sites, one confirmed nest site was found within the study area and one was within the territory mentioned above within a 2-5km distance of the study area boundary.

During the 2018 breeding season two breeding territories were identified. One territory was recorded within the study area in the same general area as one of the confirmed nest sites recorded in 2017. A nest was confirmed in this location and four chicks were fledged successfully. The other territory was in the same area as the confirmed nest site located between 2km and 5km from the study area boundary recorded in 2017. However, no nest was located, and the breeding attempt was deemed to be unsuccessful.

Confidential Appendices 4 and 5 that accompany this report provide further information relating to hen harrier observations recorded.

#### 3.7.3 Buzzard (*Buteo buteo*)

Four territories were recorded for this species during both breeding seasons. These territories were identified by the observation of territorial displays and calls of adult birds. No breeding attempt was observed, however breeding activity was recorded at BZ03 in 2018 where fresh nesting material was observed. This species may decorate previous nest sites in this manner without breeding every year. See Appendix 3 Figure 3.7.1.

### 3.7.4 Sparrowhawk (*Accipiter nisus*)

Eight territories were observed for this species. Breeding was confirmed in 2017 at SH01 where an adult female was observed carrying prey towards a nesting area. During the 2018 breeding season an active nest and fledged young were observed on site at SH06. Begging young were also heard from a VP survey at SH08, confirming successful breeding at this area also. See Appendix 3 Figure 3.7.2.

### 3.7.5 Kestrel (*Falco tinnunculus*)

Nine territories were recorded for this species during the survey period. Two of these territories (K05&K06) are located outside the 2km buffer and are thus not considered to be of significance to the development. In 2018 breeding was confirmed within the study area at K07 where adults were observed carrying prey towards a nesting area. One fledged chick was also observed in July. A juvenile bird was also observed during a VP survey in 2017, confirming breeding in the wider area of the study area. Other territories were identified via the presence of adult pairs on several separate occasions during the breeding season, however no further confirmed breeding activity was detected. See Appendix 3 Figure 3.7.3.

## 3.8 Breeding Walkover Survey Results

Breeding Walkover surveys were carried out on site and within the 500 meter buffer of the study area. The method used was adapted Brown & Shepherd as described in Gilbert et al (1998) and adapted for moorland breeding birds by SNH (2014). Forested areas on site were surveyed using a consistent transect each month. This section describes the results of surveys carried out during the breeding season of 2017 and 2018. Further details can be found in Appendix 2 Table 12 and Appendix 3 Figure 3.8.1 & 3.8.2.

### 3.8.1 Meadow Pipit

This species was abundant in the upland bog areas surrounding the study area. One hundred and forty-five territories were identified throughout the study period. Observations of displaying and alarming birds, as well as the presence of individuals on nests and carrying nesting material were used to identify breeding activity. See Appendix 3 Figure 3.8.1.

### 3.8.2 Red Grouse

This species was recorded in ten different locations during breeding walkover surveys. Four breeding territories were identified in 2017 and six territories were identified in 2018. All territories were identified outside of the study area but within 500m. Incubating females and clutches of young were observed at RG09 and RG08, respectively. Other breeding territories consisted of either calling birds or pairs seen together in areas of suitable breeding habitat, i.e. heather dominated habitats, adjacent to the site. See Appendix 3 Figure 3.8.2.

## 4 DISCUSSION

The following provides a synopsis of the findings of the surveys undertaken during two-year study period for each of the target species recorded.

### 4.1 Golden Plover

During the study period golden plover were observed on twenty-one occasions flying over the site. The species was also recorded on twelve occasions during winter waterfowl surveys up to several kilometres from the site. Observed flights are most likely to comprise birds passing through the site as there is limited suitable wintering habitat present on the site, i.e. the majority of the proposed development area is made up of coniferous plantation. The absence of the species during winter walkover surveys supports this conclusion. Observations of flocks during the waterfowl surveys were made several kilometres from the site boundary, primarily at Lough Derg. Observations were also made at smaller lakes, particularly wet grassland at Errinagh and Lough O'Grady.

In summary, the habitats of the proposed development area are considered sub-optimal for this species, this therefore limits the potential for ecologically significant effects to result from the proposed development.

### 4.2 Hen Harrier

This species is a Special Conservation Interest of the Slieve Aughty SPA and is listed on Annex I of the EC Habitat Directive. The SPA is located c. 6km to the north of the study area. Hen harrier from the SPA are unlikely to regularly visit Carrownagowan given the separation distance between the SPA and the proposed development area. This site is of importance for hen harrier, as highlighted in previous reports. The species was observed during vantage point surveys on 124 occasions, 53 of these flights were observed at possible collision height (PCH). One roost location was also observed during dedicated roost surveys during the winter. Numbers at the identified roost site did not exceed a single individual.

The results of two breeding season surveys suggest that the study area and wider surroundings are important for breeding hen harrier. Six territories were recorded in total, between the two breeding seasons surveyed. Of these, three nests were located. In 2017, two nest sites were noted; one within the study area and another within 5km of the bird survey study area. Neither of the two breeding attempts in 2017 proved to be successful. In 2018, a nest within the bird survey study area fledged four chicks.

Research carried out by University College Cork (Irwin et al 2012) links the selection of second rotation pre-thicket habitats as nesting areas with low levels of breeding success. The three nest sites recorded within the study area at Carrownagowan were all situated within young forestry. Predation is considered to have been a factor in both (failed) breeding attempts in 2017. Of the two (2017) nests, only one chick was fledged, and this chick disappeared before it reached independence. Although the 2018 nest site was location in similar habitat, this nest was successful. Therefore, a third of the nests identified within the study area were successful.

A map that provides further location details on the hen harrier breeding territory and roost site is presented in a Confidential Appendix 5 that accompanies this report. This Confidential Appendix contains sensitive information, i.e. MKO recommend that this information should not be subject to general circulation.

### 4.3 Peregrine

This species was only observed on three occasions during vantage point surveys with observations confined to the winter period of 2017/2018. The species' use of the study area was low and is likely to be used occasionally as a hunting ground, with a courting pair also observed during vantage point surveys. There is little or no suitable breeding habitat for this species within the study area.

During 2017 and 2018 breeding season surveys a pair successfully fledged young at a breeding site, at a distance slightly in excess of 2km from the bird survey study area. A second occupied territory was recorded in 2017 and again in 2018, however no breeding behaviour was noted. This territory was located in excess of 2km from the bird survey study area. The absence of the species during all other surveys on site suggests that the site is little used by this species.

A map that provides further location details on the breeding territory can be viewed in Confidential Appendix 5 that accompanies this report. This Confidential Appendix contains sensitive information, i.e. MKO recommend that this information should not be subject to general circulation.

### 4.4 Red Grouse

This species was observed on nineteen occasions in flight during Vantage Point surveys. Eight-one observations were also made of birds calling. All flights were recorded below PCH.

Twenty-five observations of this species were made during dedicated Red Grouse Surveys in March of 2017 and 2018. The majority of these observations were birds responding to the tape lure. Confirmed breeding territories were detected during breeding walkover surveys in 2017 and 2018 where incubating adults and juvenile birds were recorded. Breeding activity was primarily located to the south of the site between the study area and the 500m buffer area in heather dominated blanket bog habitat which is favoured by this species when breeding.

In addition to the evidence provided by MKO surveys, in response to a data request, National Parks and Wildlife Services have confirmed a single breeding territory which was recorded in 2007/08. This territory is approximately 500m south of the study area. This species should be considered a key receptor in any future assessment of the site, given this species was recorded to have utilised the study area for breeding and foraging.

### 4.5 Woodcock

This species was observed seven times during VP surveys and twice during winter walkover surveys throughout the survey period. Breeding woodcock are a red listed (BoCCI) species in Ireland. The four flights recorded during the breeding season were of birds in travelling flight and were most likely passing through the site. Although species specific surveys were not undertaken at the site, spring vantage point surveys encompassed the dusk period when display flights are most in evidence. No roding (displaying) flights was recorded during dusk surveys in either 2017 or 2018. The lack of sightings during breeding walkover surveys and the overall low numbers recorded throughout the study period indicate that the study area does not support a large population of this species.

#### **4.6 Buzzard**

This species is green-listed in Ireland and has spread its range considerably in Ireland over recent years. Buzzard were recorded 23 times during Vantage Point surveys and four territories were identified through breeding and territorial behaviour during breeding raptor surveys. The species has not been recorded breeding within the site boundary or within the two kilometre hinterland of the site. Potential breeding habitat and nest decorating has been recorded within one of the territories mentioned in Section 3.7.3, within the 2km breeding raptor study area. There is a lack of optimal breeding habitat within the confines of the site boundary as the species favours mature stands of broadleaved forest for nesting. It is possible that the species will breed within the study area, particularly in the area of broadleaved woodland identified in Section 3.7. The species favourable conservation status limits the potential for ecologically significant effects to result from the proposed development.

#### **4.7 Kestrel**

This species was the most frequently recorded species on site with 144 flights recorded during vantage point surveys. Observations were made during both seasons on a regular basis. Breeding activity has also been recorded in both years. Kestrel have a widespread distribution in Ireland and was frequently observed at Carrownagowan. Given its use of the study area for breeding and foraging this species requires further consideration.

#### **4.8 Sparrowhawk**

This species has been recorded breeding within the study area in both of the breeding seasons surveyed. It was also recorded regularly during Vantage Point surveys with 49 flights recorded throughout the study period. As this is a difficult bird to detect due to its hunting behaviour and elusive nature, the data suggests that it is a regular user of the site. This is not surprising given the optimal habitat in the area for this species. This is a widespread species in Ireland and its presence is not of major concern.

#### **4.9 Merlin**

This species is a Special Conservation Interest of the Slieve Aughty SPA and is listed on Annex I of the EC Habitat Directive. The SPA is located c. 6km to the north of the proposed development area. The core foraging range of merlin is c. 5km, as per SNH (2016), therefore merlin from this SPA are unlikely to regularly visit the proposed development area. The species was only recorded twice throughout the entire study period. Despite extensive breeding raptor surveys of the surrounding habitat, no breeding activity was recorded, outside of the two observations made in April and May 2017. Impacts resulting from the proposed development on this species are considered of low concern, given the site is little visited by this species.

#### **4.10 Cormorant**

During the two-year study period this species was only observed once during vantage point surveys, an individual bird flying above PCH.

This species is a Special Conservation Interest of Lough Derg SPA. The habitats onsite are not considered suitable for breeding or foraging cormorant. Therefore, this species cannot be considered to be dependent on the habitats of the site. Impacts resulting from the proposed development on this species are considered of low concern.

#### **4.11 Meadow Pipit**

The data from breeding walkover surveys at Carrownagowan, particularly in 2018, show that the species is thriving in the upland bog habitat adjacent to the site. This species is red-listed on the Birds of conservation concern in Ireland 2014-2019 list (BOCCI). The listing of this species as of high conservation concern is due to a large decline in population following the unusually cold winters of 2009/2010. According to BirdWatch Ireland, the species has undergone a significant recovery since that period and is not of any concern for the proposed development.

#### **4.12 Waterfowl Surveys**

A number of species were identified during the winter waterfowl surveys on lakes, wet grasslands and other waterbodies up to 8km from the study area. These extensive surveys aimed to provide contextual information on the hinterland of the proposed study area.

With the exception of golden plover, none of these species have been recorded during any of the comprehensive survey types on or near the study area. This highlights that the study area and its surrounding areas does not support feeding, roosting or commuting wintering waders or waterbirds.



## 5 CONCLUSIONS

The bird survey data collected at Carrownagowan over the two-year survey period has highlighted some issues which require further consideration. Key impacts resulting from the proposed development for local avian receptors could include habitat loss, disturbance displacement and collision risk. With the exception of collision risk, these potential impacts are discussed in further detail below, as appropriate. Collision risk should be a key consideration at the assessment stage for many of the target species noted at Carrownagowan. However, until the collision risk analysis is undertaken, this impact cannot be considered in any detail.

Of the target species recorded at Carrownagowan, the key species requiring further consideration was the hen harrier. The key hen harrier observations at the site were firstly the three (confirmed) hen harrier breeding attempts and secondly roosting hen harrier.

Impacts from the proposed development on breeding hen harrier should be considered a key consideration at the assessment stage given that this species was confirmed as having bred within the study area and its wider hinterland during the consecutive breeding seasons of 2017 and 2018. The proposed development could result in habitat loss and disturbance displacement impacts for breeding hen harrier. These potential impacts should be considered in greater detail at the assessment stage.

In addition, the surrounding areas are of importance for wintering hen harrier as roosts were identified during the 2017/2018 winter season and the previous 2016/2017 winter season. The potential impact on these roost sites should be considered in greater detail at the assessment stage.

Red grouse have also been recorded breeding on site. High numbers were recorded during dedicated surveys, particularly in March 2018. Breeding activity has also been recorded during breeding walkover surveys in 2017 and 2018 with breeding areas identified during both breeding seasons. Impacts from the proposed development could include habitat loss and indirect habitat loss (disturbance displacement) for this species. These impacts should be considered a key consideration at the assessment stage.

Two occupied peregrine falcon territories were recorded in consecutive years with the hinterland of Carrownagowan. These sites were both recorded more than 2km from the bird survey study area. Although these two territories were within commuting distance from the proposed development area, very few sightings were recorded onsite. It is therefore reasonable to conclude that the site is not favoured by foraging peregrine falcon. Given the low frequency of observations within the study area and the lack of suitable nesting sites therein, impacts from the proposed development on this species are considered of low concern.

Kestrel and sparrowhawk were both recorded to utilise the proposed development area for foraging and breeding. The proposed development could result in habitat loss and disturbance displacement impacts for these species. These potential impacts should be considered in greater detail at the assessment stage. Given the high frequency of kestrel observations at the site, collision risk is likely to be a key consideration for this species, however the magnitude of this impact will only be understood following the collision risk analysis.

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## CURRICULUM VITAE

Dervla O'Dowd is Project Director with MKO's Ornithology Team with fourteen years of experience in environmental consultancy as a Senior Ecologist and Project Manager. Dervla joined Keville O'Sullivan Associates in 2005. Dervla's key strengths and areas of expertise are in project management, project strategy, business development and survey co-ordination to ensure the efficient operation of the Ornithology team's field survey schedule.

Current Role	Project Director (Ornithology)
Qualifications	<ul style="list-style-type: none"> <li>➤ B.Sc. (Environmental Science) (2005) National University of Ireland, Galway</li> </ul>
Years of Experience	<ul style="list-style-type: none"> <li>➤ 14 years post graduate experience in environmental consultancy.</li> </ul>
Relevant Experience	<ul style="list-style-type: none"> <li>➤ <b>Team Management:</b> Responsible for the management of c. 25 field staff undertaking bird surveys nationwide at the sites of 20+ renewable energy projects &amp; delivery of compiled, processed bird survey data based on highest industry standards.</li> <li>➤ <b>Project Management:</b> Co-ordination of the ecological component of over 20 Wind Farm projects nationwide at various stages of the planning process. Defining the scope of the ecological works required at each stage, scheduling all works, coordinating and managing a team of up to twenty field staff/sub-consultants and overseeing the ecological inputs into all stages of these projects (2014-2016).</li> <li>➤ <b>Senior Ecologist:</b> Senior Ecologist and Project Manager on the following large-scale sample projects: <ul style="list-style-type: none"> <li>○ Habitat mapping for Waterways Ireland (Royal Canal and Barrow Navigation 2010-2013).</li> <li>○ Article 6(3) Screening Review of entire OPW Drainage Maintenance Programme 2011.</li> <li>○ OPW Channel Maintenance Assessments 2009/2010: Co-ordination and completion of assessment of impacts of channel maintenance works within designated sites nationwide.</li> <li>○ N59 Moycullen Bypass Preliminary Ecological Assessment/Appropriate Assessments, responsible for all ecological surveys, 2009.</li> <li>○ N17 Tuam Bypass; 2009; Design/pre-planning stage; Environmental Report. Responsible for ecological inputs e.g. survey requirements, habitat mapping and AA screening.</li> <li>○ Group Water Scheme Bundles (Galway, Mayo, Roscommon, Clare); 2005 to 2010; Preliminary design through to construction sign off; Assessment of 75+ sites; liaison with statutory consultees, development of approved working methods &amp; construction supervision in most sensitive sites within or adjacent to SACs/SPAs/NHAs with significant constraints.</li> </ul> </li> </ul>
Practical Skills & Aptitudes	<ul style="list-style-type: none"> <li>➤ Currently responsible for the management of MKO Ornithology Team, delivery of bird surveying services to clients, in particular within the renewable energy sector, nationwide.</li> </ul>
Interpersonal & Communication Skills	<ul style="list-style-type: none"> <li>➤ High level of project and team management skills.</li> <li>➤ Experienced field ecologist with extensive experience in the scoping, writing and delivery of high-quality assessments for large-scale infrastructural projects.</li> </ul>
Licenses Held	<ul style="list-style-type: none"> <li>➤ Full clean driver's license.</li> <li>➤ Current Safe Pass holder.</li> <li>➤ Full member of the Chartered Institute of Ecology &amp; Environmental Management.</li> </ul>





## CURRICULUM VITAE

Padraig Cregg is employed as a Senior Ornithologist with MKO. Padraig has over seven years' experience working in both the UK and Ireland in designing, executing and project managing ecological assessments, primarily in the renewable industry. Padraig has worked on wind and solar projects in both Ireland and the UK. Padraig joined MKO in 2018.

Current Role	Senior Ornithologist
Qualifications	<ul style="list-style-type: none"> <li>➤ M.Sc Evolutionary and Behavioural Ecology (University of Exeter, 2008).</li> <li>➤ B.Sc Zoology (National University of Ireland, Galway, 2007).</li> </ul>
Years of Experience	<ul style="list-style-type: none"> <li>➤ Padraig has over seven years' experience working in both the UK and Ireland in designing, executing and project managing ecological assessments, primarily in the renewable industry.</li> </ul>
Relevant Experience	<p>Padraig holds the position as Senior Ornithologist.</p> <ul style="list-style-type: none"> <li>➤ He has worked on over 40 wind farm projects in both Ireland and the UK. From his time working in the UK, Padraig provides expert experience in interpreting and implementing Scottish ornithological guidance documents (SNH, 2014) for the surveying of wind farms in an Irish context. Padraig's key responsibilities included: managing the in-house team and sub-consultants, directly liaising with the client and landowner, consulting with the Planning Departments and the Development Applications Unit (DAU), writing sections of and reviewing the Environmental Impact Assessment Reports and Appropriate Assessment (AA) Screening and Natura Impact Statements (NIS) Reports (as appropriate), reviewing GIS mapping and Planning Application drawings.</li> <li>➤ He has acted as Senior Ecologist and Project Manager for several Solar Farm Planning Applications.</li> <li>➤ He has acted as Senior Ornithologist for several large infrastructure projects, e.g. Water Supply Project Eastern and Midlands Region (Irish Water).</li> <li>➤ Padraig was the Natura Impact Statement Expert Witness at Boliden Tara Mines Oral Hearing for a tailings extension and integrated constructed wetland for which Planning Permission was partially granted.</li> </ul>
Key Strengths & Areas of Expertise	<ul style="list-style-type: none"> <li>➤ Padraig has a strong technical background in ornithology and ecology surveying and in writing Natura Impact Statements (NIS) and the Biodiversity chapter of Environmental Impact Assessment Reports (EIAR) to accompany planning applications.</li> </ul>
Practical Skills & Aptitudes	<p><b>Field Skills:</b></p> <ul style="list-style-type: none"> <li>➤ Padraig's ornithological experience has involved carrying out a diverse catalogue of bird surveys throughout Ireland including multi-year studies (breeding, migratory and winter) for various environmental projects. In Scotland he spent two and a half years implementing bird surveys using Scottish Natural Heritage guidance documents to complete his survey work to best scientific practice. Many of his studies involved designing surveys to capture the seasonal change in avian communities at a site. Examples of this include; Breeding Raptor Surveys (following SNH &amp; Hardey methods for species including Hen Harrier, Merlin, Peregrine, Barn Owl, White-tailed Eagle &amp; Golden Eagle), Breeding Wader Surveys (following SNH, Brown &amp; Shepherd and O'Brien &amp; Smith for species including Golden Plover, Curlew, Lapwing, Dunlin &amp; Snipe), Breeding Woodcock (following Gilbert methods), Migratory/Wintering Waterfowl (Following SNH and I-WeBS methods for species including (but not limited to) Whooper Swan, Greenland White-fronted Goose and wintering waders), Red Grouse Tape Lure Survey (following NPWS &amp; BWI methods) Breeding diver species (following SNH &amp; Gilbert methods) Woodland and Coastal species (following SNH and Gilbert methods).</li> </ul>





## CURRICULUM VITAE

Tom Ryan is an Ornithologist with MKO with extensive practical experience in field research and surveying. At MKO, Tom has undertaken a broad range of bird surveys as part of proposed wind farm developments and strategic infrastructure planning. Tom holds a BSc (Hons) in Environmental & Natural Resource Management. Tom's key strengths and areas of expertise are in bird ecology & identification, GIS, project planning, mammal ecology & identification and fieldwork skills.

Current Role	Ornithologist
Qualifications	<ul style="list-style-type: none"> <li>➤ B.Sc. (Hons) Environmental &amp; Natural Resource Management</li> </ul>
Years of Experience	<ul style="list-style-type: none"> <li>➤ 2016 – Present, Ornithologist MKO.</li> </ul>
Relevant Experience	<ul style="list-style-type: none"> <li>➤ Planning and carrying out ornithological surveys.</li> <li>➤ Working Independently and effectively in the field.</li> <li>➤ Planning surveys with sub-contractors and management.</li> <li>➤ Reporting to clients</li> <li>➤ Data presentation.</li> <li>➤ Mapping.</li> <li>➤ Adhering to required guidelines and SOP's on bird survey methodologies.</li> </ul>
Practical Skills & Aptitudes	<ul style="list-style-type: none"> <li>➤ Ornithologist on several wind energy developments as part of Environmental Impact Assessment.</li> <li>➤ Management of Bird surveys on specific projects.</li> <li>➤ Bird ecology &amp; identification.</li> <li>➤ Project planning.</li> <li>➤ GIS.</li> </ul>
Physical / Other	<ul style="list-style-type: none"> <li>➤ Breeding bird surveys – Locating exact nesting sites of target species within planned developments. (Hen Harrier, Peregrine).</li> <li>➤ 1:1 grade and ENRM student of the year (LIT, 2016).</li> </ul>



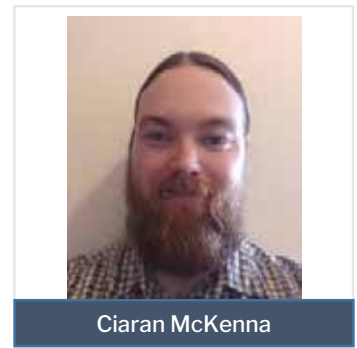


John Hehir

## CURRICULUM VITAE

John Hehir is an Ornithologist with MKO. John has 10 years of experience working on a number of conservation projects in Ireland. John took up his position with MKO in November 2016. Prior to joining MKO John worked as an intern ecologist for Westmeath County Council. John also has over four years of experience working as a conservation support worker for Birdwatch Ireland. John's key strengths include bird identification, various field surveying methodologies, data management and report writing. In his time with MKO, John has performed bird surveys for nine different windfarm applications.

Current Role	Ornithologist
Qualifications	<ul style="list-style-type: none"> <li>&gt; BSc. Wildlife Biology, Institute of Technology, Tralee, Co. Kerry (2015)</li> </ul>
Years of Experience	<ul style="list-style-type: none"> <li>&gt; 2016 – Present, Ornithologist, MKO.</li> <li>&gt; 2016 – Intern Ecologist, Westmeath, Co. Council.</li> <li>&gt; 2015 – Conservation Support Worker, Birdwatch Ireland.</li> <li>&gt; 2014 – Conservation Support Worker, Irish Grey Partridge Conservation Trust.</li> <li>&gt; 2008 - 2011 – Conservation Support Worker, Birdwatch Ireland.</li> </ul>
Relevant Experience	<p><b>Ornithologist on a number of energy infrastructure projects:</b></p> <ul style="list-style-type: none"> <li>&gt; Cloncreen Windfarm.</li> <li>&gt; Timahoe Solar Panel Farm.</li> <li>&gt; Garryhinch Windfarm.</li> <li>&gt; Cullenagh Windfarm.</li> <li>&gt; Carrownagowan Windfarm</li> <li>&gt; Shannon / Fergus Estuary.</li> <li>&gt; Coole Windfarm.</li> </ul>
Key Strengths & Areas of Expertise	<ul style="list-style-type: none"> <li>&gt; Ornithology.</li> <li>&gt; Bird Identification.</li> <li>&gt; Data collation and analysis.</li> <li>&gt; GIS / Map Info.</li> <li>&gt; Presentation Skills.</li> <li>&gt; Organizing and managing staff training events.</li> <li>&gt; Compiled a bi-weekly article on biodiversity and important ecological issues</li> </ul>
Interpersonal & Communication Skills	<ul style="list-style-type: none"> <li>&gt; Strong interpersonal skills.</li> <li>&gt; Organizing and managing staff training events.</li> <li>&gt; Compiled a by-weekly article on biodiversity and important ecological issues</li> </ul>
Licenses Held	<ul style="list-style-type: none"> <li>&gt; Full clean driving license.</li> </ul>



## CURRICULUM VITAE

Ciarán is an Ornithologist with MKO with over 3 years of experience in ecology consultancy. Ciarán holds BA (Hons) in Wildlife Biology. Prior to taking up his position with MKO in March 2018, Ciarán worked as a graduate ecologist with Malachy Walsh and Partners, and was a freelance ecology consultant. Ciarán has knowledge of an array of ecological survey techniques including; mammal, bat, bird, and habitat. Ciarán's key strengths are in the area of ornithological surveys and he has training and experience for rough upland terrain.

Current Role	Ornithologist
Qualifications	<ul style="list-style-type: none"> <li>➤ BSc. (Hons) Wildlife Biology</li> </ul>
Years of Experience	<ul style="list-style-type: none"> <li>➤ 3 years</li> </ul>
Relevant Experience	<ul style="list-style-type: none"> <li>➤ Carries out a variety of survey types including; vantage point, breeding raptor, breeding walker, and breeding waterfowl.</li> <li>➤ Also digitizes survey data, including mapping flight paths of target bird species.</li> <li>➤ Has extensive knowledge of field survey techniques and methodologies, ornithological surveys, and Appropriate Assessment.</li> <li>➤ Extensive experience with ornithological surveys in particular vantage point surveys, in pre, post, during construction of wind farms, and operational phase.</li> <li>➤ Completed pre-construction night time bat surveys for proposed wind farms.</li> <li>➤ Completed several screenings for Appropriate Assessment, stage 1.</li> <li>➤ Managed and conducted the winter 2016/2017 ornithology surveys for the Galway Wind Park as well as completing the first draft of the associated assessment report and doing all the GIS drawings for the survey and report.</li> <li>➤ Outdoor skills module including the safe working at night and night navigation over rough terrain.</li> </ul>
Practical Skills & Aptitudes	<ul style="list-style-type: none"> <li>➤ Small Boat Handling Training.</li> <li>➤ Mountain Skills 1 &amp; 2 (Mountaineering Ireland).</li> <li>➤ Canoeing Skills (Level I) (Canoeing Ireland).</li> <li>➤ Leave No Trace Training Programme (Leave No Trace Ireland).</li> <li>➤ Personal Survival Techniques (PST) Sea survival training for working at sea.</li> <li>➤ Full clean Irish driving license.</li> <li>➤ Safe Pass.</li> <li>➤ Manual handling.</li> </ul>





Patrick Manley

## CURRICULUM VITAE

Patrick Manley is an Ornithologist at MKO. He attended University College Dublin where he completed a BSc (Hons) in Geology. Prior to joining the company Patrick worked as part of the conservation team in BirdWatch Ireland, on projects such as the Dublin bay birds project, Kilcoole Little Tern conservation project and the results based agri-environmental scheme for breeding waders. He has extensive experience surveying birds through other projects such as the Irish wetlands bird survey, the Inishmurray all-island breeding birds survey, the national Hen Harrier survey and the countryside bird survey

Current Role	Ornithologist
Qualifications	<ul style="list-style-type: none"> <li>➤ Bachelor of Science (Hons) Geology, UCD (2013).</li> </ul>
Years of Experience	<ul style="list-style-type: none"> <li>➤ Ornithologist, MKO (2016-present).</li> <li>➤ Agri-Environmental Liaison Officer, BirdWatch Ireland (2016).</li> <li>➤ Conservation Team Intern, BirdWatch Ireland (2016).</li> <li>➤ Field Ornithologist, BirdWatch Ireland (2015-2016).</li> <li>➤ Field Assistant, BirdWatch Ireland (2014-2015).</li> </ul>
Relevant Experience	<ul style="list-style-type: none"> <li>➤ Bird surveying for a wide range of projects, including wind farms and solar farms. Survey methods include vantage point surveys, breeding walkover surveys, waterbird surveys and breeding raptor surveys.</li> <li>➤ Data management including entry and upkeep of project data from surveys in excel, digitizing flight and breeding data in MapInfo for use in reports.</li> </ul>
Key Strengths & Areas of Expertise	<ul style="list-style-type: none"> <li>➤ <b>Bird surveying:</b> Experienced in a wide range of bird survey methods, including Countryside Bird Survey, Irish Wetlands Birds Survey, Hen Harrier surveys, vantage point surveys, flush count surveys and radio-tracking/GSM surveys.</li> <li>➤ <b>Data Management:</b> Experience in collecting, collation and analysis of large data sets, writing of weekly reports and full technical reports for projects and with the ecological applications of GIS and MapInfo software.</li> <li>➤ <b>Project Management:</b> Experience managing field sites for conservation and coordinating large and small teams of surveyors and volunteers for both survey work and site maintenance work.</li> </ul>







## CURRICULUM VITAE

Julie is an Ecologist with MKO Ltd and has over four years professional experience. Julie holds a B.Sc. (Hons) in Biology and an M.Sc. In Ecological Assessment. Julie has extensive experience in conducting multidisciplinary ecological surveys and plays a large role in preparing Ecological Impact Assessment reports and Stage 1 and Stage 2 Appropriate Assessment reports.

Current Role	Ecologist
Qualifications	<ul style="list-style-type: none"> <li>&gt; MSc. Ecological Assessment, University College Cork, 2014.</li> <li>&gt; BSc. (Hons) Biology, University College London, 2009.</li> </ul>
Years of Experience	<ul style="list-style-type: none"> <li>&gt; Ecologist / Ornithologist with MKO (July 2016 – present).</li> <li>&gt; Peatland Restoration trainee with the RSPB/Cumbria Wildlife Trust, Cumbria, UK (July - December 2015).</li> <li>&gt; Residential Warden with the RSPB at Portmore Lough, Northern Ireland (January - July 2015).</li> <li>&gt; Ecologist with Westmeath County Council (Sept 2012 - July 2013).</li> </ul>
Relevant Experience	<ul style="list-style-type: none"> <li>&gt; Producing comprehensive Appropriate Assessment Screening Reports and providing essential inputs to Environmental Impact Statements.</li> <li>&gt; Planning and carrying out ornithological surveys in accordance with required Scottish Natural Heritage standards as part of the ornithology team.</li> <li>&gt; Vegetation surveys, plant identification and habitat mapping.</li> <li>&gt; Providing oversight and advice in the form of Ecological Clerk of Works.</li> <li>&gt; Carrying out multi-disciplinary field surveys for a range of species including Bat, Badger, Otter, Freshwater Pearl Mussel and Marsh Fritillary</li> <li>&gt; Data collation and digitization.</li> </ul>
Key Strengths & Areas of Expertise	<ul style="list-style-type: none"> <li>&gt; Field surveys: Bird ecology &amp; identification. Ornithologist on renewable energy developments</li> <li>&gt; Habitat surveys (terrestrial and aquatic).</li> <li>&gt; Mammal Surveys (Bat, Badger, Otter).</li> <li>&gt; Geographic Information Systems: Flight line mapping, database analysis and management</li> <li>&gt; Data Management: Data collation</li> </ul>
Licences Held	<ul style="list-style-type: none"> <li>&gt; Current Safe Pass Holder</li> <li>&gt; Full Clean Driving License</li> </ul>





## CURRICULUM VITAE

Ian Hynes is a Graduate Ecologist with MKO. Ian Graduated with an Honours Degree in Environmental Science from National University of Ireland, Galway in 2017 and joined the Ornithology team in December of the same year. Ian has a broad knowledge of ecology ranging from invertebrate sampling and identification, habitat classification and vegetation surveys. In his time with MKO he has developed a broad understanding of SNH Guidance and its application to bird surveys for wind farm developments. Ian has over two years of experience in using GIS software. Ian has also gained experience in report writing through his final year thesis and assisting in the production of EIARs and ornithological reports.

Current Role	Ecologist
Qualifications	<ul style="list-style-type: none"> <li>➤ B.Sc. (Hons) Environmental Science from National University of Ireland, Galway</li> </ul>
Years of Experience	<ul style="list-style-type: none"> <li>➤ 1-2 years</li> </ul>
Relevant Experience	<ul style="list-style-type: none"> <li>➤ Graduate Ecologist since December 2017.</li> <li>➤ Collating field data and creating maps for use in final reports relating to wind farms.</li> <li>➤ Assisting in the preparation of monthly survey schedules for over 20 surveyors.</li> <li>➤ Preparation of desk study, data tables and maps for use in the bird's chapter of EIAR.</li> <li>➤ Preparation of ornithological reports for clients involved in wind energy projects.</li> </ul>
Practical Skills & Aptitudes	<ul style="list-style-type: none"> <li>➤ Proficient in using ArcGIS software to produce maps representing ecological data, also has extensive experience in QGIS and Map Info.</li> <li>➤ Proficient in Microsoft Office programs (Word, Excel, PowerPoint, Visio).</li> <li>➤ Experience in invertebrate sampling and identification, habitat classification and plant identification.</li> <li>➤ Experience in producing a Habitat Management Plan.</li> <li>➤ Good knowledge of EIS/EIAR and Appropriate Assessment.</li> <li>➤ Bat surveys – acoustic sampling and analysis of results.</li> <li>➤ Involved in the preparation of desk study's, GIS maps and bird data for use in ornithology reports/EIARs.</li> <li>➤ Experience in using 'Windfarm' and ZVI to produce Viewshed Analysis on Vantage Points and ground truthing Vantage Points in the field.</li> </ul>
Interpersonal & Communication Skills	<ul style="list-style-type: none"> <li>➤ Presented findings of final year thesis to members of staff at National University of Ireland, Galway in 2016.</li> <li>➤ Liaised with members of the AranLIFE project and local landowners on Inis Oirr, Aran Islands over the course of his final year thesis.</li> <li>➤ Works as part of a multi-disciplinary team within MKO and regularly liaises with surveyors/clients and other in-house teams daily.</li> </ul>
Licenses Held	<ul style="list-style-type: none"> <li>➤ Current Safe Pass Holder.</li> <li>➤ Current Driver's Learner Permit holder.</li> <li>➤ Member of Bat Conservation Ireland.</li> <li>➤ Member of Birdwatch Ireland</li> </ul>



## ECOLOGICAL CONSULTANT

I am an experience ecologist with a high skillset over several disciplines. Primarily a field worker with experience in ornithological surveys & monitoring, botanical & habitat identification and mammal surveys. I have also completed season long bat surveys for several large scale wind farm projects. In addition, I have prepared numerous stage 1 and 2 Natura Impact Statements and Environmental Impact Statements.

## EDUCATION

- **B.Sc., Environmental Science** [1<sup>st</sup> class honors] NUIG 2004 – 2009  
Dissertation: *Investigations into the wetland plant communities of the Burren National Park*
- **Outdoor Pursuits**, FETAC, Achill Island OEC 1999 – 2000  
Mountain leader, Kayaking level 2 coach, orienteering, windsurfing

## MEMBERSHIP

- **Bat Conservation Ireland Council Member** 2017– Present
- **Botanical Society of Britain & Ireland**

## VOLUNTEERING

- **I-WeBS counts – Galway Bay Counts** 2015
- **Bat Conservation Ireland**  
Daubenton's Bat Waterway Survey, 2014 – 2015  
Brown long-eared bat roost monitoring scheme & BATLAS 2020
- **Galway Bat Group**  
Guided walk Kinvara
- **Hen Harrier Survey** 2015
- **Moyglass Group Water Scheme - Assistant Secretary**

## PRESENT OCCUPATION

- Self-employed ecologist 2009 – Present

## CONTRACTS UNDERTAKEN FOR:

- ((MKOS) McCarthy Keville O' Sullivan; *Block 1 G.F.S.C., Moneenageisha Rd. Galway, Co. Galway*
- BCI; *Ulex House, Drumheel, Lisduff, Virginia, Co. Cavan*
- Scott Cawley; *College House, 71-73, Rock Road, Blackrock, Co. Dublin*
- Moore Group; *Corporate House, Ballybrit Business Park, Galway*
- Planning Consultancy Services; *Gray Office Park, Galway Retail Park, Headford Road, Galway City*
- RPS Engineering; *Lyrr Building IDA Business & Technology Park Mervue Galway*

## EMPLOYMENT HISTORY

### - ORNITHOLOGICAL SURVEYS

The windfarm industry rightly requires exhaustive ornithological surveys prior and post construction in order to assess the potential risks to birds. John has taken an active role in such surveys since 2014. He has in-depth experience covering a variety of species and methodologies including; Breeding bird Surveys, Wintering Birds, Hen Harrier Surveys, Red Grouse Tape Lure Surveys, and Waterbird point counts.

### - BAT SURVEYS

Over 60 nights of bat surveys since 2012 including wind farms, industrial developments, hotels, period homes and one off houses. Includes; roost identification, dawn and dusk transects and erection of static detectors. Also experienced in call analysis and report writing. Successfully applied for derogation licenses for counts, destruction and modification to roosts. Performed as Ecological clerk of works.

### - HABITAT & BOTANICAL SURVEYS

Numerous surveys since 2010 for projects ranging from screening assessments, windfarm sites, road schemes, industrial developments and community biodiversity. Habitats surveyed include woodland, peatland, grasslands, intertidal. Identification of Annex I habitats. Species surveys completed for presence of *Vicia orobus* (Apple Data Centre site, Athenry 2014) & *Eriophorum gracile* (R336 road widening 2012).

### - NATURA IMPACT STATEMENTS

Over 40 Stage 1 and 2 Natura Impact Statements since 2010 alongside Environmental Impact Statements and rEIA's for quarry sites.

## KEY SKILLS

**Ornithological Surveys** | Breeding Bird transects, Brown & Shepard Upland Breeding Wader, Hen Harrier Breeding & Winter Roost Surveys, Vantage Point, Tape Lure Surveys for Red Grouse under license.

**Bat survey** | Roost identification, dusk & dawn surveys for windfarms, EIA's and AA's

**Windfarm Collision Searches** | Searches conducted with trained dog. GPS routes logged

**Habitat survey** | Annex I habitats, Fossitt (Irl), NVC (UK)

**Report writing** | Appropriate Assessment Screening, Bat report, Biodiversity report

**Mapping** | Mapinfo, GPS

**Other** | Plant identification, mammal tracks, Marsh Fritillary (*Euphydryas aurinia*)

## COMPUTER LITERACY & EQUIPMENT

**Microsoft** | Word, Excel, PowerPoint

**Environmental Software** | Mapinfo 10.0, Kaleidoscope Pro, GPS, R

**Equipment** | EM3 Bat Detector, SM3 Static Detector, Night Vision Camcorder, Infra-red camera, Garmin GPS, Nikon Monarch 5 8x42 Binoculars, Leica Televid 77 20-60x 80mm Spotting Scope

## REFEREES

### - Professional,

Dervla O Dowd, McCarthy Keville O' Sullivan [091 735611 dodowd@mccarthykos.ie]

### - Academic,

Dr Micheline Sheehy Skeffington [091 492682 michelinesheehy@gmail.com]

# JOHN J. MEADE

55 Belmont Ave. ▪ Monfieldstown ▪ Rochestown ▪ Cork ▪ 087-647-6295 ▪ johnjmeade@gmail.com

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## ECOLOGICAL BACKGROUND

### Environmental Ecologist 2004-Present

- Carry out regular ornithological surveys at windfarms, road upgrades and power plants for over ten years.
- Complete many road and infrastructural environmental surveys including bird and ecology surveys along the Ennis Bypass route and the N11/M11 20km linear upgrade for BAM between Arklow and Rathnew in County Wicklow and many others.
- Undertake numerous bird, mammal, aquatic and ecology surveys throughout Ireland each year.

## BIRD SURVEY EXPERIENCE: Including but not limited to

October 2014 - January 2017

**Breeding Bird Surveys**

### **Windfarm Survey**

- Breeding and wintering bird surveys were carried out close to Ballydesmond Co. Cork for all birds with particular focus on Hen Harrier, Short-eared owl and Red Grouse activity. Hen Harrier flight paths were modelled and mapped using both OS and habitat photographs. Survey methods included the countryside bird survey 1km transect method, vantage point survey methods plus Brown & Shepherd Upland Bird surveys of the area under survey.

April - July 2013

**Breeding Bird and Ecology Surveys**

### **Linear Motorway 1km bird transect surveys**

- This road survey was carried out for Bam Contractors along the N11 in Co. Wicklow preceding motorway upgrade. This involved mapping the breeding bird population and detailed ecological mapping of the terrestrial, aquatic and semi-aquatic habitats using a CAD format. Using 1km transects of linear highway, sections were classified according to species found and importance of habitats and designated sites along the 20km route.

May - July 2011

**Breeding Bird and Ecology Survey**

### **Reservoir Survey**

- A breeding bird survey was conducted in Garryhinch, Co. Offally. The survey consisted of six vantage point surveys and a series of transects. These transect surveys included terrestrial and semi-aquatic habitats using BTO waterways breeding bird survey techniques.

March - July 2010

**Seabird Surveys**

### **For PHES (Proposed Hydroelectric Energy Storage) Plant in North Mayo**

- This consisted of a bird survey, conducted using common and farmland bird census techniques, a twice survey for rare species known to breed at the site, and counting of seabird colonies along the cliffs in Glinsk, Co. Mayo. The survey consisted of two vantage points (including offshore, surveying seabirds and seabird colonies) and a series of transects for terrestrial bird species surveys.

August 2009 - August 2010

**Breeding Bird and Habitat Survey**

### **Windfarm Surveys**

- This involved conducting winter bird assessments at two survey areas at Drinagh Co. Cork and

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Cordal, Co. Kerry employing transect and vantage point surveys to assess the breeding birds as well as winter farmland bird survey techniques both in and around the survey area as well as vantage point survey techniques to survey winter roosting Hen Harriers.

## WORK EXPERIENCE

### Principal/Owner/Project Manager, Rathlus Ecology Services, Co. Cork, 2008-Present

- Carry out bird and ecology surveys at e.g. upland and wetland sites throughout Ireland and N. Ireland.
- Provide input into final site layouts for EIA and EIS, based on ecological and planning constraints.
- Carry out wildlife education for protected sites throughout Ireland.

### Project Manager/Ecologist, Gaelectric, Clogheen, Co. Cork 2006-08.

- Performed surveys, monitoring and reporting on ornithological issues at many windfarms and energy storage projects in Ireland and NI simultaneously.
- Produced habitat maps, flight maps and data analysis within reports.
- Carried out training in NI with RSPB on Hen Harrier and Breeding Wader Field Methods.
- Also compiled and prepared assessments on wind farm ventures in Ireland and NI from start to finish.

### Project Manager/Ornithologist, Inis Environmental, Ennis, Co. Clare 2004-06.

- Brought on board to survey, monitor and report on ecology issues at sites all over Munster including Shannon Estuary surveys and Ennis Bypass Environmental Impact Assessment.
- Produced EIS reports with habitat maps, flight maps and data analysis with recommendations.

### Environmental Consultant, Energetics, Washington D.C., USA, 2001-2003

- Advised clients on new provisions of the National Environmental Policy Act.
- Specialised in organising, implementing and conducting projects for government wildlife services.

## EDUCATION

University College Cork – Primary Degree,

BSc (Biol) Zoology (Result: 2H1) including Applied Ecology, Environmental Management, Ecotoxicology and Ecological Field Methods.

University College Cork – Postgraduate Diplomas

HDip Business and Financial Information Systems (Result: 2H2).

HDip Geographic Information Systems (Result: 2H1).

## OTHER SKILLS

Memberships: IWDG, BWI, IPCC, IRSG.

Driving: Full clean unendorsed Irish & US driving licence for 15 years.

Computer Skills: Proficient in Microsoft Word, Excel, Access, PowerPoint, Adobe Photoshop, ArcView and CAD.

### Voluntary Surveys:

- Carry out monthly winter wildfowl and wader wetland counts for IWebs at Cork Harbour for last 10 years including low tide counts for NPWS and extra Cormorant, Geese and Merganser specific surveys.
- Carry out regular Countryside Bird Surveys, Hen Harrier winter roost surveys, Garden Bird and also Bird Atlas surveys for BirdWatch Ireland. Worked as Biological Advisor on Marine Institute Celtic Explorer surveying whales & dolphins plus marine birds off the North-West coast of Ireland. Extensive experience in all types of bird monitoring methods.

## David Naughton

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**From:** Jochen Roller <Jochen.Roller@chg.gov.ie>  
**Sent:** 18 June 2018 16:30  
**To:** Aoife Crowe  
**Cc:** David Naughton  
**Subject:** FW: Bird data requests 160628c Carrownagowan  
**Attachments:** RG\_Records\_2000\_08\_subset\_Carrownagowan.zip; GWFG\_Database\_Spring\_2015\_subset\_Carrownagowan.zip

Dear Aoife,

We have the following **Hen Harrier** nest sites recorded in and around the Carrownagowan site for the different survey years:

Within site:

2015: 1 confirmed, 1 possible breeding site  
2010: 1 confirmed breeding site; 1 additional sighting  
2005: 1 sighting  
2002: 1 possible breeding site

0-1km around the site:

2015: 1 confirmed breeding site  
2005: 8 sightings

1-3km around the site:

2010: 2 sightings  
2005: 1 sighting

3-5km around the site:

2015: 1 confirmed breeding site

Two occupied **Peregrine Falcon** nest sites have been recorded in the area during the 2017 survey; one within 1-3km around the site and another within 3-5km around the site.

Please find shapefiles with NPWS-held **Red Grouse** records for the supplied 5km buffer around the site– the Red Grouse survey report can be downloaded from the NPWS website as Irish Wildlife Manual no. 50. A shapefile with **Greenland White-fronted Goose** records is also attached.

The Irish Raptor Study Group (contact: [monitoring@irsg.ie](mailto:monitoring@irsg.ie)) may have additional information on birds of prey in the area.

Can we also point you to Birdwatch Ireland to interrogate Bird Atlas and other initiatives.

Bird distribution data from the recent Article 12 reporting submission to the EU can be downloaded from our website at <http://www.npws.ie/maps-and-data/habitat-and-species-data/article-12-data>

NPWS Regional Management (see <http://www.npws.ie/sites/default/files/general/Regional%20contacts%20Sept.2013.pdf> for contact list) may have additional information for the area.

With best regards,

Jochen

Jochen Roller | National Parks & Wildlife Service | 90 North King Street, Arran Quay, Dublin 7, D07 N7CV  
[Jochen.Roller@chg.gov.ie](mailto:Jochen.Roller@chg.gov.ie) | Tel: +353-1-8883073

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**From:** Nature Conservation  
**Sent:** 30 May 2018 07:47  
**To:** Jochen Roller  
**Subject:** FW: Bird data requests 160628c Carrownagowan

Hi Jochen,

Another one from Aoife.

Regards,

*Michael O'Donnell*

**Michael O'Donnell**

Designations Unit  
National Parks and Wildlife Service  
Department of Culture, Heritage and the Gaeltacht  
90 King Street North  
Dublin 7  
D07 N7CV

An tAonad Ainmniúchán  
An tSeirbhís Páirceanna Náisiúnta agus Fiadhúlra  
An Roinn Cultúir, Oidhreachta agus Gaeltachta  
90 Sráid an Rí Thuaidh  
Baile Átha Cliath 7  
D07 N7CV

**Ph: 01-8883263**

**E-mail: [michael.odonnell@chg.gov.ie](mailto:michael.odonnell@chg.gov.ie)**



An Roinn  
Cultúir, Oidhreachta agus Gaeltachta  
Department of  
Culture, Heritage and the Gaeltacht

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**From:** Aoife Crowe [<mailto:acrowe@mccarthykos.ie>]  
**Sent:** 29 May 2018 18:07  
**To:** Nature Conservation  
**Cc:** Dervla O'Dowd; David Naughton; Ian Hynes  
**Subject:** Bird data requests 160628c Carrownagowan

Hi Jochen,

Please find attached a completed data request form for a site in Clare (Carrownagowan). We are currently carrying out bird surveys at this site for Coillte. While the site has potential for wind farm development, no proposal has yet been made as we are conducting bird surveys at an informative stage for the client. As such any information you could provide us on any protected bird species on or within proximity of the site would be very helpful to us and provide a more contextual analysis of the findings from our surveys.

A map is provided of the study area. We are conducting raptor surveys out to the 5km buffer so we will be interested in any records of raptors in this wider area. We would be interested in all records of birds of conservation interest within the hectads provided also.



## David Naughton

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**From:** Jochen Roller <Jochen.Roller@chg.gov.ie>  
**Sent:** 21 June 2018 10:57  
**To:** Aoife Crowe  
**Cc:** David Naughton  
**Subject:** Hen Harrier info - follow up to eight previous data requests

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Hi Aoife,

Following up on your recent requests for birds data, can I highlight that five of the submitted sites overlap with Non-designated Regional Zones for Hen Harriers, based on the 2015 National Hen Harrier survey.

The five sites are

- Cahermurphy
- Carrownagowan
- Violet Hill
- Tullintowell
- Lissinagroagh

Best regards,  
Jochen

Jochen Roller | National Parks & Wildlife Service | 90 North King Street, Arran Quay, Dublin 7, D07 N7CV  
[Jochen.Roller@chg.gov.ie](mailto:Jochen.Roller@chg.gov.ie) | Tel: +353-1-8883073

\*\*\*\*\*

Is faoi rún agus chun úsáide an té nó an aonán atá luaite leis, a sheoltar an ríomhphost seo agus aon comhad atá nasctha leis. Má bhfuair tú an ríomhphost seo trí earráid, déan teagmháil le bhainisteoir an chórais.

Deimhnítear leis an bhfo-nóta seo freisin go bhfuil an teachtaireacht ríomhphoist seo scuabtha le bogearraí frithvíorais chun víorais ríomhaire a aimsiú.

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## David Naughton

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**From:** Brian Caffrey <bcaffrey@birdwatchireland.ie>  
**Sent:** 11 June 2018 12:24  
**To:** David Naughton  
**Subject:** RE: Bird Data Request

Hi David,

Thanks for the e-mail.

I would suggest that the best source of data for this request will be the Bird Atlas 2007-11 data set. This is for both the winter and breeding season. It provides comprehensive species lists for each 10-km square in the country.

As the Atlas project is now finished, we don't have staff to service big data requests for this, so we have supplied all the data to NBDC so that's it's openly available. So, can I suggest that you seek this data from NBDC either through their online system or directly. If you have any problems, do come back to me, but I assume they will be able to provide you with what you need.

All the best,

Brian

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**From:** [info@birdwatchireland.ie](mailto:info@birdwatchireland.ie)  
**Sent:** 07 June 2018 12:57  
**To:** Lesley Lewis <[ljlewis@birdwatchireland.ie](mailto:ljlewis@birdwatchireland.ie)>  
**Subject:** FW: Bird Data Request

Hi  
Not sure if you can help here .

Regards,  
Michelle Kavanagh,  
Membership Department.  
BirdWatch Ireland  
Unit 20 Block D | Bullford Business Campus | Kilcoole | Greystones | A63 RW83 | Co.Wicklow | Ireland  
Tel: +353 (0)1 281 9878 email: [mkavanagh@birdwatchireland.ie](mailto:mkavanagh@birdwatchireland.ie)  
Website: [www.birdwatchireland.ie](http://www.birdwatchireland.ie)

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***BirdWatch Ireland - protecting birds and biodiversity***

***Cairde Éanlaith Éireann - ag caomhnú éin agus bithéagsúlacht***

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# Appendix 2

Redacted (non-sensitive) birds technical appendix

**Table 1: Species List**

Species	Latin Name	Conservation Status	Target Spp. (Y/N)
Golden Plover	<i>Pluvialis apricaria</i>	Annex I, EU Birds Directive, BOCCI Red Listed	Y
Hen Harrier	<i>Circus cyaneus</i>	Annex I, EU Birds Directive, SCI species of SPA within Zone of Influence	Y
Peregrine	<i>Falco peregrinus</i>	Annex I, EU Birds Directive	Y
Red Grouse	<i>Lagopus lagopus</i>	BOCCI Red Listed	Y
Woodcock	<i>Scolopax rusticola</i>	BOCCI Red Listed	Y
Buzzard	<i>Buteo buteo</i>	BOCCI Green Listed	Y
Kestrel	<i>Falco tinnunculus</i>	BOCCI Amber Listed	Y
Sparrowhawk	<i>Accipiter nisus</i>	BOCCI Green Listed	Y
Cormorant	<i>Phalacrocorax carbo</i>	BOCCI Amber Listed, SCI species of SPA within Zone of Influence	Y
Meadow Pipit	<i>Anthus pratensis</i>	BOCCI Red Listed	N
Snipe	<i>Gallinago gallinago</i>	BOCCI Amber Listed	N
Mallard	<i>Anas platyrhynchos</i>	BOCCI Green Listed	N
Grey Heron	<i>Ardea cinerea</i>	BOCCI Green Listed	N
Raven	<i>Corvus corax</i>	BOCCI Green Listed	N
Chaffinch	<i>Fringilla coelebs</i>	BOCCI Green Listed	N
Wren	<i>Troglodytes troglodytes</i>	BOCCI Green Listed	N
Coal Tit	<i>Parus ater</i>	BOCCI Green Listed	N
Robin	<i>Erithacus rubecula</i>	BOCCI Green Listed	N
Goldcrest	<i>Regulus regulus</i>	BOCCI Green Listed	N
Wood Pigeon	<i>Columba palumbus</i>	BOCCI Green Listed	N
Hooded Crow	<i>Corvus cornix</i>	BOCCI Green Listed	N
Blue Tit	<i>Parus caeruleus</i>	BOCCI Green Listed	N
Stonechat	<i>Saxicola torquata</i>	BOCCI Green Listed	N
Long-tailed Tit	<i>Aegithalus caudatus</i>	BOCCI Green Listed	N
Rook	<i>Corvus frugilegus</i>	BOCCI Green Listed	N
Bullfinch	<i>Pyrrhula pyrrhula</i>	BOCCI Green Listed	N
Dunnock	<i>Prunella modularis</i>	BOCCI Green Listed	N
Blackbird	<i>Turdus merula</i>	BOCCI Green Listed	N
Goldfinch	<i>Carduelis carduelis</i>	BOCCI Green Listed	N
Jay	<i>Garrulus glandarius</i>	BOCCI Green Listed	N
Siskin	<i>Carduelis spinus</i>	BOCCI Green Listed	N
Song Thrush	<i>Turdus philomelos</i>	BOCCI Green Listed	N

**Table 1: Species List**

Species	Latin Name	Conservation Status	Target Spp. (Y/N)
Mistle Thrush	<i>Turdus viscivorus</i>	BOCCI Green Listed	N
Grey Wagtail	<i>Motacilla cinerea</i>	BOCCI Green Listed	N
Skylark	<i>Alauda arvensis</i>	BOCCI Green Listed	N
Willow Warbler	<i>Phylloscopus trochilus</i>	BOCCI Green Listed	N
Reed Bunting	<i>Emberiza schoeniclus</i>	BOCCI Green Listed	N
Treecreeper	<i>Certhia familiaris</i>	BOCCI Green Listed	N
Pheasant	<i>Phasianus colchicus</i>	BOCCI Green Listed	N
Cuckoo	<i>Cuculidae</i>	BOCCI Green Listed	N
Lesser Black-backed Gull	<i>Larus fuscus</i>	BOCCI Amber Listed	N
Oystercatcher	<i>Haematopus ostralegus</i>	BOCCI Amber Listed	N
Blackcap	<i>Sylvia atricapilla</i>	BOCCI Green Listed	N
Chiffchaff	<i>Phylloscopus collybita</i>	BOCCI Green Listed	N
Fieldfare	<i>Turdus pilaris</i>	BOCCI Green Listed	N
Grasshopper Warbler	<i>Locustella naevia</i>	BOCCI Amber Listed	N
Lesser Redpoll	<i>Carduelis flammea cabaret</i>	BOCCI Green Listed	N
Pied Wagtail	<i>Motacilla alba yarrellii</i>	BOCCI Green Listed	N
Magpie	<i>Pica pica</i>	BOCCI Green Listed	N
Swift	<i>Apus apus</i>	BOCCI Amber Listed	N
Starling	<i>Sturnus vulgaris</i>	BOCCI Green Listed	N

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
10/08/2016	Breeding	Waterfowl Survey	Lakes	02:30 starting at 12:00	wind speed and direction:Calm, ; visibility:Good (>2km); Rain: Heavy Rain; Frost: ; Snow:	Doorus Lough, Doon North, Doon South, Lough Avuddig and Lough Avoher surveyed on 10/08/2016 (Lakes overlap with project 150942, Oatfield)
11/08/2016	Breeding	Waterfowl Survey	Lough Derg/Lakes	04:00 starting at 08:00	wind speed and direction:Calm, ; visibility: Good (>2km); Rain: Light Showers; Frost: ; Snow:	Overcast. Occasional light showers throughout the day.
05/09/2016	Breeding	Waterfowl Survey	Lough Derg	08:36 starting at 08:36	wind speed and direction:Calm, ; visibility: Good (>2km); Rain: Frost: ; Snow:	
12/09/2016	Breeding	Vantage Point Survey	8a	03:00 starting at 14:30	wind speed and direction:Calm, ; visibility: Poor (<km); Rain: Drizzle Mist; Frost: ; Snow:	Drizzle/misty showers sporadically throughout the survey. Rain stopped by 15:30. 15:55 misty rain. 16:45 visibility improves, rain becomes lighter.
12/09/2016	Breeding	Vantage Point Survey	8a	03:00 starting at 18:00	wind speed and direction:Calm, ; visibility: Limited (<500m); Rain: Drizzle Mist; Frost: ; Snow:	Occasional drizzle/misty showers, intersperced with heavier showers. 18:15 rain stops. 19:16 light shower. 19:55 rain gets heavier - visibility becomes poor. Sunset 19:58
13/09/2016	Breeding	Vantage Point Survey	4a	03:00 starting at 14:20	wind speed and direction:Calm, ; visibility: Good (>2km); Rain: None; Frost: ; Snow:	Sunny. Wind calm until 15:05, then a gentle breeze from the NW. 16:08 Wind picks up to level 2. Sunset 19:55. 16:38 Cloud cover: 50%, Cloud height: 2, Visibility (good >2km), Wind: 3 moderate, S.
13/09/2016	Breeding	Vantage Point Survey	4a	03:05 starting at 17:50	wind speed and direction:Light Air, ; visibility: Good (>2km); Rain: None; Frost: ; Snow:	18:50 Cloud cover: 10%, Cloud height: 3, Wind: Calm, Visibility: good. 19:50 Cloud cover: 5%, Visibility: good, 2km. No rain. Calm. High levels of swallow activity throughout survey area for the duration of the survey. Many juveniles.
14/09/2016	Breeding	Vantage Point Survey	5a	03:00 starting at 14:20	wind speed and direction:Calm, ; visibility: Good (>2km); Rain: None; Frost: ; Snow:	Hour 2: Wind speed: 1, (S), Cloud height: 1, Cloud cover: 100%, Visibility: poor (<1km), no rain. Hour 3: Wind speed: 1, (S), Cloud height: 1, Cloud cover: 100%, Visibility: poor (<1km), no rain. Top of hill s/sw of VP is obscured by cloud. Slight haze. 4pm light mist, stopped by 16:05. Hour 3: Cloud cover 100%, cloud height: 1. Wind: calm. 16:26: fog - visibility becomes very poor. 16:40 visibility 500m. Very light mist. Survey stopped after three hours. During break fog becomes thicker and visibility is < 500m. No target species recorded.

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
14/09/2016	Breeding	Vantage Point Survey	5a	03:00 starting at 17:38	wind speed and direction:Gentle Breeze, NE; visibility: Good (>2km); Rain: None; Frost: ; Snow:	Kestrel observed on road on the way to site.
15/09/2016	Breeding	Vantage Point Survey	2	03:00 starting at 14:20	wind speed and direction:Light Air, N; visibility: Good (>2km); Rain: None; Frost: ; Snow:	17:10 light rain shower, fog/mist drifts in from the west Visibility becomes moderate (1km). Two kestrels observed on drive to VP. Band 2, flew 30 seons, one perched on mature conifer, one flew into plantation out of view.
15/09/2016	Breeding	Vantage Point Survey	2	03:00 starting at 17:50	wind speed and direction:Calm, NE; visibility: Good (>2km); Rain: None; Frost: ; Snow:	19:39 Mist shrouds hills, visibility becomes limited 9500m). Misty rain.
16/09/2016	Breeding	Vantage Point Survey	7a	03:00 starting at 14:08	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: ; Frost: ; Snow:	Continuous swallow activity throughout viewshed over the course of the three hour survey.
16/09/2016	Breeding	Vantage Point Survey	7a	03:00 starting at 17:48	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: ; Frost: ; Snow:	Visibility limited from 19:15 due to glare from sun (1-2km)
19/09/2016	Breeding	Vantage Point Survey	3	03:00 starting at 14:10	wind speed and direction:Calm, ; visibility: Good (>2km); Rain: None; Frost: ; Snow:	Sunset 19:41. Incidentals: 19:45 Pipistrelle bat flies over river/bog.
19/09/2016	Breeding	Vantage Point Survey	3	03:01 starting at 17:40	wind speed and direction:Calm, ; visibility: Good (>2km); Rain: None; Frost: ; Snow:	Overcast.
21/09/2016	Breeding	Vantage Point Survey	1a	03:00 starting at 14:06	wind speed and direction:Light Breeze, SE; visibility: Poor (<km); Rain: Drizzle Mist; Frost: ; Snow:	Heavy rain just before survey. Light rain around 14:00, stopped bt 14:05. Foggy. 14:54 Mist/fog - visibility <500m. 15:06 fog clears - visibility approx 1km, light rain. 15:40 Mist drifts in from the south west, visibility <500m. 15:50 thick fog; visibility < 500m. 16:00 fogs clears. 14:41 Visibility good (2km). 16:46 sunny, cloud cover 100%, 500m, visibility good, wind calm/slight breeze (SE).
21/09/2016	Breeding	Vantage Point Survey	1a	03:00 starting at 17:36	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: ; Snow:	Sunny for remaining three hours of survey. Rain holds off.

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
23/09/2016	Breeding	Vantage Point Survey	9	03:00 starting at 14:00	wind speed and direction:Strong Breeze, NE; visibility: Moderate (1-2km); Rain: Heavy Showers; Frost: ; Snow:	By hour three visibility becomes poor due to heavy rain. Survey ended after 3 hours. Red squirrel recorded on road to site.
30/09/2016	Breeding	Vantage Point Survey	9	03:00 starting at 17:10	wind speed and direction:Light Air, W; visibility: Good (>2km); Rain: Light Showers; Frost: ; Snow:	Part two of survey from 23/09/16. No target species recorded. Weather overcast. Hour 2: Cloud cover 100%, cloud height 2km, visibility: 2km, Wind 2, NW, Rain none/occasional drizzle. Hour three: cloud height 500m; wind calm, no rain, visibility: 2km. Fog drifts over the hill SW of vp toward the end of hour three.
30/09/2016	Breeding	Waterfowl Survey	Lough Derg/Lakes	06:00:00 starting at 08:00	wind speed and direction:Light Air, W; visibility: Good (>2km); Rain: Light Showers; Frost: ; Snow:	
05/10/2016	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 06:44	wind speed and direction:Gentle Breeze, SE; visibility: Moderate (1-2km); Rain: None; Frost: None ; Snow: None	
05/10/2016	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 07:44	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
05/10/2016	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 08:44	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
05/10/2016	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 10:14	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
05/10/2016	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 11:14	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
05/10/2016	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 12:14	wind speed and direction:Moderate Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
06/10/2016	Non-Breeding	Vantage Point Survey	2	01:00 starting at 06:47	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
06/10/2016	Non-Breeding	Vantage Point Survey	2	01:00 starting at 07:47	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
06/10/2016	Non-Breeding	Vantage Point Survey	2	01:00 starting at 08:47	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
06/10/2016	Non-Breeding	Vantage Point Survey	2	01:00 starting at 10:17	wind speed and direction:Moderate Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
06/10/2016	Non-Breeding	Vantage Point Survey	2	01:00 starting at 11:17	wind speed and direction:Moderate Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
06/10/2016	Non-Breeding	Vantage Point Survey	2	01:00 starting at 12:17	wind speed and direction:Moderate Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
07/10/2016	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 06:47	wind speed and direction:Light Breeze, SE; visibility: Moderate (1-2km); Rain: Light Showers; Frost: None ; Snow: None	
07/10/2016	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 07:47	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
07/10/2016	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 08:47	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
07/10/2016	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 10:17	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
07/10/2016	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 11:17	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
07/10/2016	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 12:17	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
10/10/2016	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 06:54	wind speed and direction:Light Air, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
10/10/2016	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 07:54	wind speed and direction:Light Air, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
10/10/2016	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 08:54	wind speed and direction:Calm, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
10/10/2016	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 10:24	wind speed and direction:Calm, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
10/10/2016	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 11:24	wind speed and direction:Calm, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
10/10/2016	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 12:24	wind speed and direction:Calm, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
11/10/2016	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 06:54	wind speed and direction:Moderate Breeze, E; visibility: Moderate (1-2km); Rain: None; Frost: None ; Snow: None	
11/10/2016	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 07:54	wind speed and direction:Moderate Breeze, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
11/10/2016	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 08:54	wind speed and direction:Fresh Breeze, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
11/10/2016	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 10:24	wind speed and direction:Fresh Breeze, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
11/10/2016	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 11:24	wind speed and direction:Fresh Breeze, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
11/10/2016	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 12:24	wind speed and direction:Fresh Breeze, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
13/10/2016	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 06:58	wind speed and direction:Light Breeze, NE; visibility: Moderate (1-2km); Rain: None; Frost: None ; Snow: None	Slight Fog
13/10/2016	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 07:58	wind speed and direction:Light Breeze, NE; visibility: Moderate (1-2km); Rain: None; Frost: None ; Snow: None	Slight Fog
13/10/2016	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 08:58	wind speed and direction:Light Breeze, NE; visibility: Moderate (1-2km); Rain: None; Frost: None ; Snow: None	Slight Fog
13/10/2016	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 10:28	wind speed and direction:Light Breeze, NE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
13/10/2016	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 11:28	wind speed and direction:Light Breeze, NE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
13/10/2016	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 12:28	wind speed and direction:Light Breeze, NE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
14/10/2016	Non-Breeding	Vantage Point Survey	3	01:00 starting at 07:02	wind speed and direction:Light Air, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
14/10/2016	Non-Breeding	Vantage Point Survey	3	01:00 starting at 08:02	wind speed and direction:Light Air, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
14/10/2016	Non-Breeding	Vantage Point Survey	3	01:00 starting at 09:02	wind speed and direction:Light Air, E; visibility: Moderate (1-2km); Rain: None; Frost: None ; Snow: None	Slight Fog
14/10/2016	Non-Breeding	Vantage Point Survey	3	01:00 starting at 10:32	wind speed and direction:Light Air, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
14/10/2016	Non-Breeding	Vantage Point Survey	3	01:00 starting at 11:32	wind speed and direction:Light Air, E; visibility: Moderate (1-2km); Rain: None; Frost: None ; Snow: None	Slight Fog
14/10/2016	Non-Breeding	Vantage Point Survey	3	01:00 starting at 12:32	wind speed and direction:Light Air, E; visibility: Moderate (1-2km); Rain: None; Frost: None ; Snow: None	Slight Fog
18/10/2016	Non-Breeding	Vantage Point Survey	9	01:00 starting at 07:06	wind speed and direction:Light Air, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
18/10/2016	Non-Breeding	Vantage Point Survey	9	01:00 starting at 08:06	wind speed and direction:Light Air, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
18/10/2016	Non-Breeding	Vantage Point Survey	9	01:00 starting at 09:06	wind speed and direction:Light Air, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
18/10/2016	Non-Breeding	Vantage Point Survey	9	01:00 starting at 10:36	wind speed and direction:Light Air, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
18/10/2016	Non-Breeding	Vantage Point Survey	9	01:00 starting at 11:36	wind speed and direction:Light Air, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
18/10/2016	Non-Breeding	Vantage Point Survey	9	01:00 starting at 12:36	wind speed and direction:Light Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
18/10/2016	Non-Breeding	Winter Walkover		08:25 starting at 08:40	wind speed and direction:Light Breeze, ; visibility: Good (>2km); Rain: Drizzle Mist; Frost: None ; Snow: None	None
24/10/2016	Non-Breeding	Hen Harrier Roost Survey	HH1	03:00 starting at 16:20	wind speed and direction:Light Breeze, NE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	None

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
25/10/2016	Non-Breeding	Hen Harrier Roost Survey	HH2	03:00 starting at 16:19	wind speed and direction:Light Breeze, NE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	None
26/10/2016	Non-Breeding	Hen Harrier Roost Survey	HH3	03:00 starting at 16:07	wind speed and direction:Gentle Breeze, E; visibility: Moderate (1-2km); Rain: Light Showers; Frost: None ; Snow: None	None
27/10/2016	Non-Breeding	Hen Harrier Roost Survey	HH4	03:00 starting at 16:05	wind speed and direction:Gentle Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	None
28/10/2016	Non-Breeding	Hen Harrier Roost Survey	HH5	03:00 starting at 16:03	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	None
02/11/2016	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 11:30	wind speed and direction:Light Air, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
02/11/2016	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 12:30	wind speed and direction:Light Air, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
02/11/2016	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 13:30	wind speed and direction:Light Air, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
02/11/2016	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 15:00	wind speed and direction:Light Air, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
02/11/2016	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 16:00	wind speed and direction:Light Air, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
02/11/2016	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 17:00	wind speed and direction:Light Air, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
03/11/2016	Non-Breeding	Vantage Point Survey	2	01:00 starting at 11:28	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
03/11/2016	Non-Breeding	Vantage Point Survey	2	01:00 starting at 12:28	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
03/11/2016	Non-Breeding	Vantage Point Survey	2	01:00 starting at 13:28	wind speed and direction:Light Breeze, SE; visibility: Moderate (1-2km); Rain: Drizzle Mist; Frost: None ; Snow: None	
03/11/2016	Non-Breeding	Vantage Point Survey	2	01:00 starting at 14:58	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
03/11/2016	Non-Breeding	Vantage Point Survey	2	01:00 starting at 15:58	wind speed and direction:Light Breeze, SE; visibility: Moderate (1-2km); Rain: Heavy Showers; Frost: None ; Snow: None	
07/11/2016	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 11:21	wind speed and direction:Light Breeze, N; visibility: Good (>2km); Rain: None; Frost: On site; Snow: None	
07/11/2016	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 12:21	wind speed and direction:Light Breeze, N; visibility: Good (>2km); Rain: None; Frost: On site; Snow: None	
07/11/2016	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 13:21	wind speed and direction:Light Breeze, N; visibility: Good (>2km); Rain: None; Frost: On site; Snow: None	
07/11/2016	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 14:51	wind speed and direction:Light Breeze, N; visibility: Good (>2km); Rain: None; Frost: On site; Snow: None	
07/11/2016	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 15:51	wind speed and direction:Light Breeze, N; visibility: Good (>2km); Rain: None; Frost: On site; Snow: None	
07/11/2016	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 16:51	wind speed and direction:Light Breeze, N; visibility: Good (>2km); Rain: None; Frost: On site; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
09/11/2016	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 11:18	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
09/11/2016	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 12:18	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
09/11/2016	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 13:18	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
09/11/2016	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 14:48	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
09/11/2016	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 15:48	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
09/11/2016	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 16:48	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
10/11/2016	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 11:16	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
10/11/2016	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 12:16	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
10/11/2016	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 13:16	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
10/11/2016	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 14:46	wind speed and direction:Gentle Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
10/11/2016	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 15:46	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
10/11/2016	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 16:46	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
11/11/2016	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 11:15	wind speed and direction:Fresh Breeze, SE; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
11/11/2016	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 12:15	wind speed and direction:Strong Breeze, SE; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	Survey stopped due to weather conditions



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
15/11/2016	Non-Breeding	Vantage Point Survey	3	01:00 starting at 14:39	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
15/11/2016	Non-Breeding	Vantage Point Survey	3	01:00 starting at 15:39	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
15/11/2016	Non-Breeding	Vantage Point Survey	3	01:00 starting at 16:39	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
15/11/2016	Non-Breeding	Vantage Point Survey	3	01:00 starting at 11:07	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
15/11/2016	Non-Breeding	Vantage Point Survey	3	01:00 starting at 12:07	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
15/11/2016	Non-Breeding	Vantage Point Survey	3	01:00 starting at 15:50	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
16/11/2016	Non-Breeding	Vantage Point Survey	9	01:00 starting at 11:07	wind speed and direction:Fresh Breeze, NW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
16/11/2016	Non-Breeding	Vantage Point Survey	9	01:00 starting at 12:07	wind speed and direction:Strong Breeze, NW; visibility: Moderate (1-2km); Rain: Heavy Showers; Frost: None ; Snow: None	Survey stopped due to weather conditions
16/11/2016	Non-Breeding	Vantage Point Survey	2	01:00 starting at 15:50	wind speed and direction:Moderate Breeze, NW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
17/11/2016	Non-Breeding	Vantage Point Survey	8a	01:36 starting at 13:03	wind speed and direction:Gentle Breeze, SW; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	Survey paused at times due to weather, an hour's watch involved.
17/11/2016	Non-Breeding	Vantage Point Survey	8a	01:09 starting at 14:39	wind speed and direction:Gentle Breeze, SW; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	Survey paused at times due to weather, an hour's watch involved.
17/11/2016	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 16:20	wind speed and direction:Gentle Breeze, SW; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
20/11/2016	Non-Breeding	Hen Harrier Roost Survey	HH1	03:00 starting at 14:32	wind speed and direction:Light Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	None
21/11/2016	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 09:50	wind speed and direction:Moderate Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
21/11/2016	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 10:50	wind speed and direction:Gentle Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
21/11/2016	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 11:50	wind speed and direction:Gentle Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
21/11/2016	Non-Breeding	Waterfowl Survey	Lakes	01:10 starting at 13:50	wind speed and direction:Gentle Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	Lakes 2.1,2.3,2.5,2.6,2.7,4.1,4.2,5,9 and 11 no birds.
22/11/2016	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 10:00	wind speed and direction:Light Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
22/11/2016	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 11:00	wind speed and direction:Light Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
22/11/2016	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 12:00	wind speed and direction:Light Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
22/11/2016	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 13:00	wind speed and direction:Light Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
22/11/2016	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 14:00	wind speed and direction:Gentle Breeze, N; visibility: Good (>2km); Rain: Drizzle Mist; Frost: On site; Snow: Ground	
22/11/2016	Non-Breeding	Waterfowl Survey	Lakes	00:45 starting at 15:00	wind speed and direction:Gentle Breeze, N; visibility: Good (>2km); Rain: Light Showers; Frost: Heavy; Snow: All Day	
24/11/2016	Non-Breeding	Hen Harrier Roost Survey	HH2	03:00 starting at 14:16	wind speed and direction:Light Breeze, NE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	None
25/11/2016	Non-Breeding	Hen Harrier Roost Survey	HH4	03:00 starting at 14:18	wind speed and direction:Gentle Breeze, NE; visibility: Poor (<km); Rain: None; Frost: On site; Snow: None	None
29/11/2016	Non-Breeding	Vantage Point Survey	9	01:00 starting at 12:53	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
29/11/2016	Non-Breeding	Vantage Point Survey	9	01:00 starting at 13:53	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
29/11/2016	Non-Breeding	Vantage Point Survey	9	01:00 starting at 15:23	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
29/11/2016	Non-Breeding	Vantage Point Survey	9	01:00 starting at 16:23	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
30/11/2016	Non-Breeding	Vantage Point Survey	9	01:00 starting at 12:46	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: On site; Snow: None	
30/11/2016	Non-Breeding	Hen Harrier Roost Survey	HH5	03:00 starting at 14:23	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: On site; Snow: None	None
01/12/2016	Non-Breeding	Hen Harrier Roost Survey	HH3	03:00 starting at 14:22	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	None
05/12/2016	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 07:31	wind speed and direction:Gentle Breeze, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
05/12/2016	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 08:31	wind speed and direction:Gentle Breeze, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
05/12/2016	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 09:31	wind speed and direction:Moderate Breeze, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
05/12/2016	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 11:01	wind speed and direction:Light Breeze, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
05/12/2016	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 12:01	wind speed and direction:Gentle Breeze, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
05/12/2016	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 13:01	wind speed and direction:Gentle Breeze, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
05/12/2016	Non-Breeding	Vantage Point Survey	9	01:00 starting at 07:30	Wind Speed and Direction:Gentle Breeze, E; Visibility: Limited (<500m); Cloud Height: 150-500m; Cloud Cover %: 95 Rain: None; Frost: None ; Snow: None	Partial fog to N
05/12/2016	Non-Breeding	Vantage Point Survey	9	01:00 starting at 08:30	Wind Speed and Direction:Light Breeze, E; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 100 Rain: None; Frost: None ; Snow: None	Rolling fog partially obstructing view
05/12/2016	Non-Breeding	Vantage Point Survey	9	01:00 starting at 09:30	Wind Speed and Direction:Light Air, E; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 100 Rain: None; Frost: None ; Snow: None	Rolling fog partially obstructing view
05/12/2016	Non-Breeding	Vantage Point Survey	9	01:00 starting at 11:00	Wind Speed and Direction:Light Breeze, E; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 95 Rain: None; Frost: None ; Snow: None	Rolling fog partially obstructing view

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
05/12/2016	Non-Breeding	Vantage Point Survey	9	01:00 starting at 12:00	Wind Speed and Direction:Light Air, E; Visibility: Poor (<km); Cloud Height: 150-500m; Cloud Cover %: 95 Rain: None; Frost: None ; Snow: None	Rolling fog partially obstructing view
05/12/2016	Non-Breeding	Vantage Point Survey	9	01:00 starting at 13:00	Wind Speed and Direction:Light Air, E; Visibility: Poor (<km); Cloud Height: 150-500m; Cloud Cover %: 100 Rain: None; Frost: None ; Snow: None	Overall very little activity with occassional sound of GR.
06/12/2016	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 07:32	wind speed and direction:Moderate Breeze, SE; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
06/12/2016	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 08:32	wind speed and direction:Moderate Breeze, SE; visibility: Moderate (1-2km); Rain: Light Showers; Frost: None ; Snow: None	
06/12/2016	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 09:32	wind speed and direction:Moderate Breeze, SE; visibility: Moderate (1-2km); Rain: Light Showers; Frost: None ; Snow: None	
06/12/2016	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 11:02	wind speed and direction:Moderate Breeze, SE; visibility: Moderate (1-2km); Rain: Light Showers; Frost: None ; Snow: None	
06/12/2016	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 12:02	wind speed and direction:Moderate Breeze, SE; visibility: Moderate (1-2km); Rain: Light Showers; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
06/12/2016	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 13:02	wind speed and direction:Moderate Breeze, SE; visibility: Poor (<km); Rain: Light Showers; Frost: None ; Snow: None	
06/12/2016	Non-Breeding	Vantage Point Survey	3	01:00 starting at 09:30	Wind Speed and Direction:Light Air, E; Visibility: Limited (<500m); Cloud Height: >500m; Cloud Cover %: 100 Rain: Drizzle Mist; Frost: None ; Snow: None	limited view due to rolling clouds and patches of fog - stopped survey as conditions worsen
06/12/2016	Non-Breeding	Vantage Point Survey	3	#REF!	#REF!	Again, limited view due to rolling clouds and patches of fog
06/12/2016	Non-Breeding	Vantage Point Survey	3	01:00 starting at 07:30	Wind Speed and Direction:Light Air, E; Visibility: Limited (<500m); Cloud Height: >500m; Cloud Cover %: 100 Rain: Drizzle Mist; Frost: None ; Snow: None	Again, limited view due to rolling clouds and patches of fog
06/12/2016	Non-Breeding	Vantage Point Survey	3	01:00 starting at 08:30	Wind Speed and Direction:Light Air, E; Visibility: Poor (<km); Cloud Height: >500m; Cloud Cover %: 100 Rain: Drizzle Mist; Frost: None ; Snow: None	limited view due to rolling clouds and patches of fog
06/12/2016	Non-Breeding	Vantage Point Survey	3	01:00 starting at 09:30	Wind Speed and Direction:Light Air, E; Visibility: Limited (<500m); Cloud Height: >500m; Cloud Cover %: 100 Rain: Drizzle Mist; Frost: None ; Snow: None	limited view due to rolling clouds and patches of fog - stopped survey as conditions worsen
07/12/2016	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 07:33	wind speed and direction:Moderate Breeze, SE; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
07/12/2016	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 08:33	wind speed and direction:Moderate Breeze, SW; visibility: Poor (<km); Rain: Light Showers; Frost: None ; Snow: None	
07/12/2016	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 10:15	wind speed and direction:Moderate Breeze, S; visibility: Moderate (1-2km); Rain: Light Showers; Frost: None ; Snow: None	
07/12/2016	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 11:15	wind speed and direction:Moderate Breeze, S; visibility: Good (>2km); Rain: Drizzle Mist; Frost: None ; Snow: None	
07/12/2016	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 12:15	wind speed and direction:Moderate Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
07/12/2016	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 13:45	wind speed and direction:Moderate Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
08/12/2016	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 09:30	wind speed and direction:Light Breeze, S; visibility: No Visibility; Rain: None; Frost: None ; Snow: None	
08/12/2016	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 10:30	wind speed and direction:Light Breeze, S; visibility: Limited (<500m); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
08/12/2016	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 11:30	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
08/12/2016	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 12:30	wind speed and direction:Light Breeze, S; visibility: Poor (<km); Rain: None; Frost: None ; Snow: None	
08/12/2016	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 13:30	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
08/12/2016	Non-Breeding	Waterfowl Survey	Lough Derg	00:30 starting at 14:30	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
09/12/2016	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 09:00	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
09/12/2016	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 10:00	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
09/12/2016	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 11:00	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
09/12/2016	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 12:00	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
09/12/2016	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 13:00	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
09/12/2016	Non-Breeding	Waterfowl Survey	Lakes	00:10 starting at 14:00	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
12/12/2016	Non-Breeding	Hen Harrier Roost Survey	HH4	01:00 starting at 14:18	wind speed and direction:Gentle Breeze, SE; visibility: Moderate (1-2km); Rain: Heavy Showers; Frost: None ; Snow: None	None
12/12/2016	Non-Breeding	Hen Harrier Roost Survey	HH4	01:00 starting at 15:18	wind speed and direction:Gentle Breeze, SE; visibility: Poor (<km); Rain: Heavy Rain; Frost: None ; Snow: None	None
12/12/2016	Non-Breeding	Hen Harrier Roost Survey	HH4	01:00 starting at 16:18	wind speed and direction:Gentle Breeze, SE; visibility: Poor (<km); Rain: Heavy Showers; Frost: None ; Snow: None	None
13/12/2016	Non-Breeding	Winter Walkover		01:00 starting at 09:10	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	None

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
13/12/2016	Non-Breeding	Winter Walkover		01:00 starting at 10:10	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	None
13/12/2016	Non-Breeding	Winter Walkover		01:00 starting at 11:10	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	None
13/12/2016	Non-Breeding	Winter Walkover		01:00 starting at 12:10	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	None
13/12/2016	Non-Breeding	Winter Walkover		01:00 starting at 13:10	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	None
14/12/2016	Non-Breeding	Winter Walkover		01:00 starting at 09:50	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	None
14/12/2016	Non-Breeding	Winter Walkover		01:00 starting at 10:50	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	None
14/12/2016	Non-Breeding	Winter Walkover		00:30 starting at 11:50	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	None

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
14/12/2016	Non-Breeding	Hen Harrier Roost Survey	HH5	01:00 starting at 14:18	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	None
14/12/2016	Non-Breeding	Hen Harrier Roost Survey	HH5	01:00 starting at 15:18	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	None
14/12/2016	Non-Breeding	Hen Harrier Roost Survey	HH5	01:00 starting at 16:18	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	None
15/12/2016	Non-Breeding	Hen Harrier Roost Survey	HH2	01:00 starting at 14:18	wind speed and direction:Light Breeze, S; visibility: Moderate (1-2km); Rain: Heavy Rain; Frost: None ; Snow: None	None
15/12/2016	Non-Breeding	Hen Harrier Roost Survey	HH2	01:00 starting at 15:18	wind speed and direction:Light Breeze, S; visibility: Moderate (1-2km); Rain: Heavy Rain; Frost: None ; Snow: None	None
15/12/2016	Non-Breeding	Hen Harrier Roost Survey	HH2	01:00 starting at 16:18	wind speed and direction:Light Breeze, S; visibility: Moderate (1-2km); Rain: Heavy Showers; Frost: None ; Snow: None	None
15/12/2016	Non-Breeding	Vantage Point Survey	3	01:00 starting at 08:05	Wind Speed and Direction:Light Breeze, S; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 80 Rain: None; Frost: None ; Snow: None	Small patch of mist to far S, clear elsewhere, sound of grouse

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
15/12/2016	Non-Breeding	Vantage Point Survey	3	01:00 starting at 09:05	Wind Speed and Direction:Gentle Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 70 Rain: None; Frost: None ; Snow: None	Only flight observed was from Raven
15/12/2016	Non-Breeding	Vantage Point Survey	3	01:00 starting at 10:05	Wind Speed and Direction:Light Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 95 Rain: None; Frost: None ; Snow: None	
15/12/2016	Non-Breeding	Vantage Point Survey	3	01:00 starting at 08:05	Wind Speed and Direction:Light Breeze, S; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 80 Rain: None; Frost: None ; Snow: None	Small patch of mist to far S, clear elsewhere, sound of grouse
15/12/2016	Non-Breeding	Vantage Point Survey	3	01:00 starting at 09:05	Wind Speed and Direction:Gentle Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 70 Rain: None; Frost: None ; Snow: None	Only flight observed was from Raven
15/12/2016	Non-Breeding	Vantage Point Survey	3	01:00 starting at 10:05	Wind Speed and Direction:Light Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 95 Rain: None; Frost: None ; Snow: None	Poor conditions. Fog would lift from time to time but not for extended periods
16/12/2016	Non-Breeding	Vantage Point Survey	2	01:00 starting at 07:42	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
16/12/2016	Non-Breeding	Vantage Point Survey	2	01:00 starting at 08:42	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
16/12/2016	Non-Breeding	Vantage Point Survey	2	01:00 starting at 09:42	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
16/12/2016	Non-Breeding	Vantage Point Survey	2	01:00 starting at 11:12	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
16/12/2016	Non-Breeding	Vantage Point Survey	2	01:00 starting at 12:12	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
16/12/2016	Non-Breeding	Vantage Point Survey	2	01:00 starting at 13:12	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
19/12/2016	Non-Breeding	Hen Harrier Roost Survey	HH3	01:00 starting at 14:19	wind speed and direction:Light Breeze, NW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	None
19/12/2016	Non-Breeding	Hen Harrier Roost Survey	HH3	01:00 starting at 15:19	wind speed and direction:Light Breeze, NW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	None
19/12/2016	Non-Breeding	Hen Harrier Roost Survey	HH3	01:00 starting at 16:19	wind speed and direction:Light Breeze, NW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	None

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
21/12/2016	Non-Breeding	Hen Harrier Roost Survey	HH1	01:00 starting at 14:20	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	None
21/12/2016	Non-Breeding	Hen Harrier Roost Survey	HH1	01:00 starting at 15:20	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	None
21/12/2016	Non-Breeding	Hen Harrier Roost Survey	HH1	01:00 starting at 16:20	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	None
22/12/2016	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 09:30	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
22/12/2016	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 10:30	wind speed and direction:Gentle Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
22/12/2016	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 11:30	wind speed and direction:Gentle Breeze, S; visibility: Moderate (1-2km); Rain: None; Frost: None ; Snow: None	
22/12/2016	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 12:30	wind speed and direction:Gentle Breeze, S; visibility: Moderate (1-2km); Rain: None; Frost: None ; Snow: None	



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
22/12/2016	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 13:30	wind speed and direction:Gentle Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
22/12/2016	Non-Breeding	Waterfowl Survey	Lough Derg	00:30 starting at 14:30	wind speed and direction:Gentle Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
23/12/2016	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 09:30	wind speed and direction:Moderate Breeze, S; visibility: Good (>2km); Rain: Heavy Showers; Frost: None ; Snow: None	
23/12/2016	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 10:30	wind speed and direction:Moderate Breeze, S; visibility: Good (>2km); Rain: Heavy Rain; Frost: None ; Snow: None	
23/12/2016	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 11:30	wind speed and direction:Moderate Breeze, S; visibility: Good (>2km); Rain: Heavy Showers; Frost: None ; Snow: None	
23/12/2016	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 12:30	wind speed and direction:Gentle Breeze, S; visibility: Good (>2km); Rain: Heavy Showers; Frost: None ; Snow: None	
23/12/2016	Non-Breeding	Waterfowl Survey	Lakes	00:10 starting at 13:30	wind speed and direction:Gentle Breeze, S; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
28/12/2016	Non-Breeding	Vantage Point Survey	4a	03:00 starting at 07:46	Wind Speed and Direction: Moderate Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
28/12/2016	Non-Breeding	Vantage Point Survey	4a	03:00 starting at 11:16	Wind Speed and Direction: Gentle Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
29/12/2016	Non-Breeding	Vantage Point Survey	8a	03:00:00 starting at 07:46	Wind Speed and Direction: Gentle Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
29/12/2016	Non-Breeding	Vantage Point Survey	8a	03:00 starting at 11:16	Wind Speed and Direction: Moderate Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
03/01/2017	Non-Breeding	Hen Harrier Roost Survey	HH1	01:00 starting at 14:31	wind speed and direction: Light Air, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
03/01/2017	Non-Breeding	Hen Harrier Roost Survey	HH1	01:00 starting at 15:31	wind speed and direction: Light Air, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
03/01/2017	Non-Breeding	Hen Harrier Roost Survey	HH1	01:00 starting at 16:31	wind speed and direction: Light Air, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
04/01/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 11:02	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
04/01/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 12:02	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
04/01/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 13:02	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
04/01/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 14:32	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
04/01/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 15:32	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
04/01/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 16:32	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
05/01/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 09:20	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
05/01/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 10:20	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
05/01/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 11:20	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
05/01/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 12:20	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
05/01/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 13:20	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
05/01/2017	Non-Breeding	Waterfowl Survey	Lakes	00:25 starting at 14:20	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
06/01/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 09:30	wind speed and direction:Light Breeze, S; visibility: Moderate (1-2km); Rain: None; Frost: None ; Snow: None	
06/01/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 10:30	wind speed and direction:Gentle Breeze, S; visibility: Moderate (1-2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
06/01/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 11:30	wind speed and direction:Gentle Breeze, S; visibility: Moderate (1-2km); Rain: Light Showers; Frost: None ; Snow: None	
06/01/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 12:30	wind speed and direction:Gentle Breeze, S; visibility: Poor (<km); Rain: Heavy Showers; Frost: None ; Snow: None	
06/01/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 13:30	wind speed and direction:Gentle Breeze, S; visibility: Poor (<km); Rain: Heavy Showers; Frost: None ; Snow: None	
06/01/2017	Non-Breeding	Waterfowl Survey	Lough Derg	00:15 starting at 14:30	wind speed and direction:Gentle Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
09/01/2017	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 11:09	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
09/01/2017	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 12:09	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
09/01/2017	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 13:09	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
09/01/2017	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 14:39	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
09/01/2017	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 15:39	wind speed and direction:Moderate Breeze, W; visibility: Good (>2km); Rain: Heavy Showers; Frost: None ; Snow: None	
09/01/2017	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 16:39	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: Heavy Showers; Frost: None ; Snow: None	
10/01/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 11:11	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
10/01/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 12:11	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
10/01/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 13:11	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
10/01/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 14:41	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
10/01/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 15:41	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
10/01/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 16:41	wind speed and direction:Gentle Breeze, W; visibility: Poor (<km); Rain: Drizzle Mist; Frost: None ; Snow: None	
11/01/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 11:12	wind speed and direction:Moderate Breeze, NW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
11/01/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 12:12	wind speed and direction:Fresh Breeze, NW; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
11/01/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 13:12	wind speed and direction:Fresh Breeze, NW; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
11/01/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 14:42	wind speed and direction:Fresh Breeze, NW; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
11/01/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 15:42	wind speed and direction:Moderate Breeze, NW; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
11/01/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 16:42	wind speed and direction: Moderate Breeze, NW; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
12/01/2017	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 11:14	wind speed and direction: Light Breeze, NW; visibility: Good (>2km); Rain: None; Frost: On site; Snow: All Day	
12/01/2017	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 12:14	wind speed and direction: Light Breeze, NW; visibility: Good (>2km); Rain: None; Frost: On site; Snow: All Day	
12/01/2017	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 13:14	wind speed and direction: Light Breeze, NW; visibility: Good (>2km); Rain: None; Frost: On site; Snow: All Day	
12/01/2017	Non-Breeding	Vantage Point Survey	8a	02:00 starting at 13:44	wind speed and direction: Gentle Breeze, NW; visibility: Good (>2km); Rain: None; Frost: On site; Snow: All Day	
12/01/2017	Non-Breeding	Vantage Point Survey	8a	00:30 starting at 15:44	wind speed and direction: Gentle Breeze, NW; visibility: Moderate (1-2km); Rain: None; Frost: On site; Snow: All Day	
16/01/2017	Non-Breeding	Hen Harrier Roost Survey	HH2	01:00 starting at 14:50	wind speed and direction: Light Breeze, SW; visibility: Poor (<km); Rain: None; Frost: None ; Snow: None	None



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
16/01/2017	Non-Breeding	Hen Harrier Roost Survey	HH2	01:00 starting at 15:50	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	None
16/01/2017	Non-Breeding	Hen Harrier Roost Survey	HH2	01:00 starting at 16:50	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	None
17/01/2017	Non-Breeding	Vantage Point Survey	3	01:00 starting at 11:22	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
17/01/2017	Non-Breeding	Vantage Point Survey	3	01:00 starting at 12:22	wind speed and direction:Light Breeze, SE; visibility: Moderate (1-2km); Rain: Drizzle Mist; Frost: None ; Snow: None	
17/01/2017	Non-Breeding	Vantage Point Survey	3	01:00 starting at 13:22	wind speed and direction:Light Breeze, SE; visibility: Moderate (1-2km); Rain: Drizzle Mist; Frost: None ; Snow: None	
17/01/2017	Non-Breeding	Vantage Point Survey	3	01:00 starting at 14:52	wind speed and direction:Light Breeze, SE; visibility: Moderate (1-2km); Rain: Drizzle Mist; Frost: None ; Snow: None	
17/01/2017	Non-Breeding	Vantage Point Survey	3	01:00 starting at 15:52	wind speed and direction:Light Breeze, SE; visibility: Moderate (1-2km); Rain: Drizzle Mist; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
17/01/2017	Non-Breeding	Vantage Point Survey	3	01:00 starting at 16:52	wind speed and direction:Light Breeze, SE; visibility: Moderate (1-2km); Rain: Drizzle Mist; Frost: None ; Snow: None	
18/01/2017	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 11:23	wind speed and direction:Gentle Breeze, SW; visibility: Poor (<km); Rain: None; Frost: None ; Snow: None	
18/01/2017	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 12:23	wind speed and direction:Light Breeze, SW; visibility: Moderate (1-2km); Rain: None; Frost: None ; Snow: None	
18/01/2017	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 13:23	wind speed and direction:Gentle Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
18/01/2017	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 14:53	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
18/01/2017	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 15:53	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
18/01/2017	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 16:53	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
19/01/2017	Non-Breeding	Vantage Point Survey	9	01:00 starting at 11:25	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
19/01/2017	Non-Breeding	Vantage Point Survey	9	01:00 starting at 12:25	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
19/01/2017	Non-Breeding	Vantage Point Survey	9	01:00 starting at 13:25	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
19/01/2017	Non-Breeding	Vantage Point Survey	9	01:00 starting at 14:55	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
19/01/2017	Non-Breeding	Vantage Point Survey	9	01:00 starting at 15:55	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
19/01/2017	Non-Breeding	Vantage Point Survey	9	01:00 starting at 16:55	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
20/01/2017	Non-Breeding	Winter Walkover		01:00 starting at 09:20	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: On site; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
20/01/2017	Non-Breeding	Winter Walkover		01:00 starting at 10:20	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: On site; Snow: None	
20/01/2017	Non-Breeding	Winter Walkover		01:00 starting at 11:20	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
20/01/2017	Non-Breeding	Winter Walkover		01:00 starting at 12:20	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
20/01/2017	Non-Breeding	Winter Walkover		00:40 starting at 13:20	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
23/01/2017	Non-Breeding	Hen Harrier Roost Survey	HH5	01:00 starting at 15:02	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
23/01/2017	Non-Breeding	Hen Harrier Roost Survey	HH5	01:00 starting at 16:02	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
23/01/2017	Non-Breeding	Hen Harrier Roost Survey	HH5	01:00 starting at 17:02	wind speed and direction:Gentle Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
23/01/2017	Non-Breeding	Winter Walkover		01:00 starting at 11:30	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
23/01/2017	Non-Breeding	Winter Walkover		01:00 starting at 12:30	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
23/01/2017	Non-Breeding	Winter Walkover		00:15 starting at 13:30	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
24/01/2017	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 13:00	wind speed and direction:Moderate Breeze, S; visibility: Good (>2km); Rain: None; Frost: ; Snow: None	
24/01/2017	Non-Breeding	Vantage Point Survey	8a	00:30 starting at 14:00	wind speed and direction:Gentle Breeze, S; visibility: Poor (<km); Rain: Light Showers; Frost: None ; Snow: None	
24/01/2017	Non-Breeding	Hen Harrier Roost Survey	HH4	01:00 starting at 15:04	wind speed and direction:Moderate Breeze, S; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
24/01/2017	Non-Breeding	Hen Harrier Roost Survey	HH4	01:00 starting at 16:04	wind speed and direction:Moderate Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
24/01/2017	Non-Breeding	Hen Harrier Roost Survey	HH4	01:00 starting at 17:04	wind speed and direction:Moderate Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
25/01/2017	Non-Breeding	Hen Harrier Roost Survey	HH3	01:00 starting at 15:06	wind speed and direction:Strong Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
25/01/2017	Non-Breeding	Hen Harrier Roost Survey	HH3	01:00 starting at 16:06	wind speed and direction:Strong Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
25/01/2017	Non-Breeding	Hen Harrier Roost Survey	HH3	01:00 starting at 17:06	wind speed and direction:Strong Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
26/01/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 09:20	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
26/01/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 10:20	wind speed and direction:Fresh Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
26/01/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 11:20	wind speed and direction:Fresh Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
26/01/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 12:20	wind speed and direction:Fresh Breeze, SE; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
26/01/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 13:20	wind speed and direction:Fresh Breeze, SE; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
26/01/2017	Non-Breeding	Waterfowl Survey	Lakes	00:30 starting at 14:20	wind speed and direction:Fresh Breeze, SE; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
27/01/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 09:30	wind speed and direction:Gentle Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
27/01/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 10:30	wind speed and direction:Gentle Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
27/01/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 11:30	wind speed and direction:Gentle Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
27/01/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 12:30	wind speed and direction:Gentle Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
27/01/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 13:30	wind speed and direction:Gentle Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
27/01/2017	Non-Breeding	Waterfowl Survey	Lough Derg	00:20 starting at 14:30	wind speed and direction:Gentle Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
01/02/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 07:18	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
01/02/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 08:18	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
01/02/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 09:18	wind speed and direction:Moderate Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
01/02/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 10:48	wind speed and direction:Fresh Breeze, SE; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
01/02/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 11:48	wind speed and direction:Fresh Breeze, SE; visibility: Moderate (1-2km); Rain: Light Showers; Frost: None ; Snow: None	



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
01/02/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 12:48	wind speed and direction:Fresh Breeze, SE; visibility: Moderate (1-2km); Rain: Light Showers; Frost: None ; Snow: None	
02/02/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 07:16	wind speed and direction:Moderate Breeze, SE; visibility: Good (>2km); Rain: Heavy Showers; Frost: None ; Snow: None	
02/02/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 08:16	wind speed and direction:Moderate Breeze, SE; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
02/02/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 09:16	wind speed and direction:Moderate Breeze, SE; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
02/02/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 10:46	wind speed and direction:Fresh Breeze, SE; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
02/02/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 11:46	wind speed and direction:Fresh Breeze, SE; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
02/02/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 12:46	wind speed and direction:Fresh Breeze, SE; visibility: Good (>2km); Rain: Heavy Showers; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
07/02/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 09:20	wind speed and direction:Gentle Breeze, N; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
07/02/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 10:20	wind speed and direction:Light Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
07/02/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 11:20	wind speed and direction:Light Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
07/02/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 12:20	wind speed and direction:Light Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
07/02/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 13:20	wind speed and direction:Light Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
07/02/2017	Non-Breeding	Waterfowl Survey	Lakes	00:40 starting at 14:20	wind speed and direction:Light Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
08/02/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 09:40	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: Heavy; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
08/02/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 10:40	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: Heavy; Snow: None	
08/02/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 11:40	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
08/02/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 12:40	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
08/02/2017	Non-Breeding	Waterfowl Survey	Lough Derg	00:50 starting at 13:40	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
09/02/2017	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 07:04	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
09/02/2017	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 08:04	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
09/02/2017	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 09:04	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
09/02/2017	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 10:34	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
09/02/2017	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 11:34	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
09/02/2017	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 12:34	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
10/02/2017	Non-Breeding	Vantage Point Survey	3	01:00 starting at 07:02	wind speed and direction:Light Breeze, NE; visibility: Good (>2km); Rain: None; Frost: On site; Snow: None	
10/02/2017	Non-Breeding	Vantage Point Survey	3	01:00 starting at 08:02	wind speed and direction:Light Breeze, NE; visibility: Good (>2km); Rain: None; Frost: On site; Snow: None	
10/02/2017	Non-Breeding	Vantage Point Survey	3	01:00 starting at 09:02	wind speed and direction:Light Breeze, NE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
10/02/2017	Non-Breeding	Vantage Point Survey	3	01:00 starting at 10:32	wind speed and direction:Light Breeze, NE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
10/02/2017	Non-Breeding	Vantage Point Survey	3	01:00 starting at 11:32	wind speed and direction:Light Breeze, NE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
10/02/2017	Non-Breeding	Vantage Point Survey	3	01:00 starting at 12:32	wind speed and direction:Light Breeze, NE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
13/02/2017	Non-Breeding	Hen Harrier Roost Survey	HH5	01:00 starting at 15:42	wind speed and direction:Light Breeze, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
13/02/2017	Non-Breeding	Hen Harrier Roost Survey	HH5	01:00 starting at 16:42	wind speed and direction:Light Breeze, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
13/02/2017	Non-Breeding	Hen Harrier Roost Survey	HH5	01:00 starting at 17:42	wind speed and direction:Light Breeze, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
14/02/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 06:54	wind speed and direction:Gentle Breeze, E; visibility: Poor (<km); Rain: Light Showers; Frost: None ; Snow: None	
14/02/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 07:54	wind speed and direction:Gentle Breeze, E; visibility: Moderate (1-2km); Rain: Light Showers; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
14/02/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 08:54	wind speed and direction:Gentle Breeze, E; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
14/02/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 10:24	wind speed and direction:Gentle Breeze, E; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
14/02/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 11:24	wind speed and direction:Gentle Breeze, E; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
14/02/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 12:24	wind speed and direction:Gentle Breeze, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
15/02/2017	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 06:52	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
15/02/2017	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 07:52	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
15/02/2017	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 08:52	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
15/02/2017	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 10:32	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
15/02/2017	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 11:32	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
15/02/2017	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 12:32	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
16/02/2017	Non-Breeding	Vantage Point Survey	9	01:00 starting at 06:50	wind speed and direction:Moderate Breeze, S; visibility: Moderate (1-2km); Rain: Light Showers; Frost: None ; Snow: None	
16/02/2017	Non-Breeding	Vantage Point Survey	9	01:00 starting at 07:50	wind speed and direction:Moderate Breeze, S; visibility: Poor (<km); Rain: Light Showers; Frost: None ; Snow: None	
16/02/2017	Non-Breeding	Vantage Point Survey	9	01:00 starting at 08:50	wind speed and direction:Moderate Breeze, S; visibility: Limited (<500m); Rain: Light Showers; Frost: None ; Snow: None	
17/02/2017	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 06:48	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
17/02/2017	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 07:48	wind speed and direction: Moderate Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
17/02/2017	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 08:48	wind speed and direction: Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
17/02/2017	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 10:18	wind speed and direction: Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
17/02/2017	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 11:18	wind speed and direction: Gentle Breeze, SE; visibility: Poor (<km); Rain: Light Showers; Frost: None ; Snow: None	
17/02/2017	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 12:18	wind speed and direction: Gentle Breeze, SE; visibility: Poor (<km); Rain: None; Frost: None ; Snow: None	
20/02/2017	Non-Breeding	Hen Harrier Roost Survey	HH2	00:50 starting at 15:55	wind speed and direction: Gentle Breeze, SW; visibility: Poor (<km); Rain: Heavy Showers; Frost: None ; Snow: None	
21/02/2017	Non-Breeding	Hen Harrier Roost Survey	HH1	01:00 starting at 15:57	wind speed and direction: Light Breeze, SW; visibility: Poor (<km); Rain: Light Showers; Frost: None ; Snow: None	



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
21/02/2017	Non-Breeding	Hen Harrier Roost Survey	HH1	01:00 starting at 16:57	wind speed and direction:Light Breeze, SW; visibility: Poor (<km); Rain: Light Showers; Frost: None ; Snow: None	
21/02/2017	Non-Breeding	Hen Harrier Roost Survey	HH1	01:00 starting at 17:57	wind speed and direction:Light Breeze, SW; visibility: Limited (<500m); Rain: Light Showers; Frost: None ; Snow: None	
22/02/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 09:15	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: Heavy Showers; Frost: None ; Snow: None	
22/02/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 10:15	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: Heavy Showers; Frost: None ; Snow: None	
22/02/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 11:15	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: Heavy Showers; Frost: None ; Snow: None	
22/02/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 12:15	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
22/02/2017	Non-Breeding	Waterfowl Survey	Lakes	00:15 starting at 13:15	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
23/02/2017	Non-Breeding	Hen Harrier Roost Survey	HH3	01:00 starting at 16:01	wind speed and direction:Moderate Breeze, NW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
23/02/2017	Non-Breeding	Hen Harrier Roost Survey	HH3	01:00 starting at 17:01	wind speed and direction:Moderate Breeze, NW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
23/02/2017	Non-Breeding	Hen Harrier Roost Survey	HH3	01:00 starting at 18:01	wind speed and direction:Moderate Breeze, NW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
24/02/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 09:30	wind speed and direction:Light Breeze, S; visibility: Moderate (1-2km); Rain: None; Frost: None ; Snow: None	
24/02/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 10:30	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
24/02/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 11:30	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
24/02/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 12:30	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
24/02/2017	Non-Breeding	Waterfowl Survey	Lough Derg	00:45 starting at 13:30	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
27/02/2017	Non-Breeding	Hen Harrier Roost Survey	HH2	01:00 starting at 16:09	wind speed and direction:Light Breeze, NW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
27/02/2017	Non-Breeding	Hen Harrier Roost Survey	HH2	01:00 starting at 17:09	wind speed and direction:Light Breeze, NW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
27/02/2017	Non-Breeding	Hen Harrier Roost Survey	HH2	01:00 starting at 18:09	wind speed and direction:Light Breeze, NW; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
28/02/2017	Non-Breeding	Vantage Point Survey	9	01:00 starting at 12:10	wind speed and direction:Moderate Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: Ground	
28/02/2017	Non-Breeding	Vantage Point Survey	9	01:00 starting at 13:10	wind speed and direction:Fresh Breeze, N; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: Ground	
28/02/2017	Non-Breeding	Vantage Point Survey	9	01:00 starting at 14:10	wind speed and direction:Fresh Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: Ground	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
28/02/2017	Non-Breeding	Hen Harrier Roost Survey	HH4	01:00 starting at 16:11	wind speed and direction:Fresh Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
28/02/2017	Non-Breeding	Hen Harrier Roost Survey	HH4	01:00 starting at 17:11	wind speed and direction:Fresh Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
28/02/2017	Non-Breeding	Hen Harrier Roost Survey	HH4	01:00 starting at 18:11	wind speed and direction:Fresh Breeze, N; visibility: Moderate (1-2km); Rain: Light Showers; Frost: None ; Snow: None	
02/03/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 12:44	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
02/03/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 13:44	wind speed and direction:Light Breeze, S; visibility: Moderate (1-2km); Rain: Heavy Showers; Frost: None ; Snow: None	
02/03/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 14:44	wind speed and direction:Light Breeze, S; visibility: Poor (<km); Rain: Heavy Rain; Frost: None ; Snow: None	
06/03/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 12:52	wind speed and direction:Light Breeze, NW; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
06/03/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 13:52	wind speed and direction:Light Breeze, NW; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
06/03/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 14:52	wind speed and direction:Light Breeze, NW; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
06/03/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 16:22	wind speed and direction:Light Breeze, NW; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
06/03/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 17:22	wind speed and direction:Light Breeze, NW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
06/03/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 18:22	wind speed and direction:Light Breeze, NW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
07/03/2017	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 12:54	wind speed and direction:Gentle Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
07/03/2017	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 13:54	wind speed and direction:Gentle Breeze, S; visibility: Poor (<km); Rain: Light Showers; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
07/03/2017	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 14:54	wind speed and direction:Gentle Breeze, S; visibility: Poor (<km); Rain: Light Showers; Frost: None ; Snow: None	
07/03/2017	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 16:24	wind speed and direction:Gentle Breeze, S; visibility: Poor (<km); Rain: Light Showers; Frost: None ; Snow: None	Survey stopped due to loss of visibility
08/03/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 12:55	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
08/03/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 13:55	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
08/03/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 14:55	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
08/03/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 16:25	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
08/03/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 17:25	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
08/03/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 18:25	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
09/03/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 09:15	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
09/03/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 10:15	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
09/03/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 11:15	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
09/03/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 12:15	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
09/03/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 13:15	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
09/03/2017	Non-Breeding	Waterfowl Survey	Lakes	00:05 starting at 14:15	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
10/03/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 09:45	wind speed and direction:Gentle Breeze, S; visibility: Moderate (1-2km); Rain: Drizzle Mist; Frost: None ; Snow: None	
10/03/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 10:45	wind speed and direction:Gentle Breeze, S; visibility: Moderate (1-2km); Rain: Light Showers; Frost: None ; Snow: None	
10/03/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 11:45	wind speed and direction:Gentle Breeze, S; visibility: Poor (<km); Rain: None; Frost: None ; Snow: None	
10/03/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 12:45	wind speed and direction:Gentle Breeze, S; visibility: Moderate (1-2km); Rain: None; Frost: None ; Snow: None	
10/03/2017	Non-Breeding	Waterfowl Survey	Lough Derg	00:55 starting at 13:45	wind speed and direction:Gentle Breeze, S; visibility: Moderate (1-2km); Rain: None; Frost: None ; Snow: None	
13/03/2017	Non-Breeding	Vantage Point Survey	3	01:00 starting at 13:05	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
13/03/2017	Non-Breeding	Vantage Point Survey	3	01:00 starting at 14:05	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
13/03/2017	Non-Breeding	Vantage Point Survey	3	01:00 starting at 15:05	wind speed and direction:Light Breeze, SW; visibility: Poor (<km); Rain: Light Showers; Frost: None ; Snow: None	
13/03/2017	Non-Breeding	Vantage Point Survey	3	01:00 starting at 16:35	wind speed and direction:Light Breeze, SW; visibility: Poor (<km); Rain: Light Showers; Frost: None ; Snow: None	
13/03/2017	Non-Breeding	Vantage Point Survey	3	01:00 starting at 17:35	wind speed and direction:Light Breeze, SW; visibility: Poor (<km); Rain: Light Showers; Frost: None ; Snow: None	
13/03/2017	Non-Breeding	Vantage Point Survey	3	01:00 starting at 18:35	wind speed and direction:Light Breeze, SW; visibility: Poor (<km); Rain: Light Showers; Frost: None ; Snow: None	
14/03/2017	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 13:06	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
14/03/2017	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 14:06	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
14/03/2017	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 15:06	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
14/03/2017	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 16:36	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
14/03/2017	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 17:36	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
14/03/2017	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 18:36	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
15/03/2017	Non-Breeding	Hen Harrier Roost Survey	HH5	01:00 starting at 16:38	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
15/03/2017	Non-Breeding	Hen Harrier Roost Survey	HH5	01:00 starting at 17:38	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
15/03/2017	Non-Breeding	Hen Harrier Roost Survey	HH5	01:00 starting at 18:38	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
15/03/2017	Non-Breeding	Winter Walkover		01:00 starting at 13:15	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
15/03/2017	Non-Breeding	Winter Walkover		01:00 starting at 14:15	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
15/03/2017	Non-Breeding	Winter Walkover		00:15 starting at 15:15	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
16/03/2017	Non-Breeding	Winter Walkover		01:00 starting at 09:15	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
16/03/2017	Non-Breeding	Winter Walkover		01:00 starting at 10:15	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
16/03/2017	Non-Breeding	Winter Walkover		01:00 starting at 11:15	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
16/03/2017	Non-Breeding	Winter Walkover		01:00 starting at 12:15	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
20/03/2017	Non-Breeding	Hen Harrier Roost Survey	HH4	01:00 starting at 16:47	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: Heavy Showers; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
20/03/2017	Non-Breeding	Hen Harrier Roost Survey	HH4	01:00 starting at 17:47	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
20/03/2017	Non-Breeding	Hen Harrier Roost Survey	HH4	01:00 starting at 18:47	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
21/03/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 09:30	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
21/03/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 10:30	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
21/03/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 11:30	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
21/03/2017	Non-Breeding	Waterfowl Survey	Lakes	03:00 starting at 06:55	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
21/03/2017	Non-Breeding	Waterfowl Survey	Lakes	03:00 starting at 10:20	wind speed and direction:Light Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
22/03/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 09:50	wind speed and direction:Light Breeze, N; visibility: Poor (<km); Rain: None; Frost: None ; Snow: None	
22/03/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 10:50	wind speed and direction:Moderate Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
22/03/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 11:50	wind speed and direction:Moderate Breeze, N; visibility: Poor (<km); Rain: None; Frost: None ; Snow: None	
22/03/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 12:50	wind speed and direction:Moderate Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
22/03/2017	Non-Breeding	Waterfowl Survey	Lough Derg	00:50 starting at 13:50	wind speed and direction:Moderate Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
22/03/2017	Non-Breeding	Red Grouse Survey	1	01:37 starting at 11:00	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	R/61380/79355 to R/61038/79190. No Grouse Observed
22/03/2017	Non-Breeding	Red Grouse Survey	2	00:21 starting at 13:10	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	R/61284/79859 to R/61519/80137. No Grouse Observed

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
22/03/2017	Non-Breeding	Red Grouse Survey	3	00:20 starting at 14:22	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	R/62417/77569 to R/62155/78081. No Grouse Observed
22/03/2017	Non-Breeding	Red Grouse Survey	4	00:19 starting at 15:10	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	R/62671/77650 to R/62403/78165. No Grouse Observed
22/03/2017	Non-Breeding	Red Grouse Survey	5	00:48 starting at 16:30	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	R/64294/78024 to R/63354/78933. No Grouse Observed
23/03/2017	Non-Breeding	Hen Harrier Roost Survey	HH1	01:00 starting at 16:52	wind speed and direction:Light Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
23/03/2017	Non-Breeding	Hen Harrier Roost Survey	HH1	01:00 starting at 17:52	wind speed and direction:Light Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
23/03/2017	Non-Breeding	Hen Harrier Roost Survey	HH1	01:00 starting at 18:52	wind speed and direction:Light Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
23/03/2017	Non-Breeding	Red Grouse Survey	6	00:16 starting at 07:35	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	R/61615/77702 to R/62025/77535. No Grouse Observed

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
23/03/2017	Non-Breeding	Red Grouse Survey	7	02:11 starting at 08:41	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	R/62713/76247 to R/62827/76173. Observed 5 Birds
23/03/2017	Non-Breeding	Red Grouse Survey	8	00:15 starting at 11:08	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	R/62845/76123 to R/62436/76294. Observed No Grouse
23/03/2017	Non-Breeding	Red Grouse Survey	9	00:32 starting at 12:30	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	R/14755/34765 to R/14877/35450. One Bird Flushed
23/03/2017	Non-Breeding	Red Grouse Survey	10	00:11 starting at 13:45	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	R/60886/77473 to R/60530/77520. Observed No Grouse
23/03/2017	Non-Breeding	Red Grouse Survey	11	00:16 starting at 14:35	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	R/59572/77494 to R/59409/77089. Observed No Grouse
23/03/2017	Non-Breeding	Red Grouse Survey	12	00:10 starting at 15:00	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	R/59685/77124 to R/59519/76832. Observed No Grouse
23/03/2017	Non-Breeding	Red Grouse Survey	13	00:39 starting at 16:00	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	R/59604/76617 to R/59498/75946. Observed No Grouse

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
23/03/2017	Non-Breeding	Red Grouse Survey	14	01:02 starting at 17:15	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	R/59613/75795 to R/61591/75251. No Grouse Observed
27/03/2017	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 15:15	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
27/03/2017	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 16:15	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
27/03/2017	Non-Breeding	Hen Harrier Roost Survey	HH2	01:00 starting at 17:00	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
27/03/2017	Non-Breeding	Hen Harrier Roost Survey	HH2	01:00 starting at 18:00	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
27/03/2017	Non-Breeding	Hen Harrier Roost Survey	HH2	01:00 starting at 19:00	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
28/03/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 14:15	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
28/03/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 15:15	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
28/03/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 16:15	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
28/03/2017	Non-Breeding	Hen Harrier Roost Survey	HH3	01:00 starting at 18:01	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
28/03/2017	Non-Breeding	Hen Harrier Roost Survey	HH3	01:00 starting at 19:01	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
28/03/2017	Non-Breeding	Hen Harrier Roost Survey	HH3	01:00 starting at 20:01	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
28/03/2017	Non-Breeding	Vantage Point Survey	9	01:00 starting at 14:30	Wind Speed and Direction:Fresh Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	Male Sparrowhawk observed in flight for 2 mins
28/03/2017	Non-Breeding	Vantage Point Survey	9	01:00 starting at 15:30	Wind Speed and Direction:Fresh Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
28/03/2017	Non-Breeding	Vantage Point Survey	9	01:00 starting at 16:30	Wind Speed and Direction:Fresh Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
28/03/2017	Non-Breeding	Vantage Point Survey	9	01:00 starting at 18:00	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
28/03/2017	Non-Breeding	Vantage Point Survey	9	01:00 starting at 19:00	Wind Speed and Direction:Fresh Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
28/03/2017	Non-Breeding	Vantage Point Survey	9	01:00 starting at 20:00	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
29/03/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 10:00	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
29/03/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 11:00	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
29/03/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 12:00	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
29/03/2017	Non-Breeding	Waterfowl Survey	Lakes	01:00 starting at 13:00	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
29/03/2017	Non-Breeding	Waterfowl Survey	Lakes	00:45 starting at 14:00	wind speed and direction:Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
29/03/2017	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 14:30	Wind Speed and Direction:Gentle Breeze, S ; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	
29/03/2017	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 15:30	Wind Speed and Direction:Gentle Breeze, S; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	
29/03/2017	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 16:30	Wind Speed and Direction:Gentle Breeze, S; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
29/03/2017	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 18:00	Wind Speed and Direction:Moderate Breeze, S; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	
29/03/2017	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 19:00	Wind Speed and Direction:Moderate Breeze, S; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
29/03/2017	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 20:00	Wind Speed and Direction: Moderate Breeze, S; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	
30/03/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 09:30	wind speed and direction: Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
30/03/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 10:30	wind speed and direction: Gentle Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
30/03/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 11:30	wind speed and direction: Gentle Breeze, SE; visibility: Poor (<km); Rain: None; Frost: None ; Snow: None	
30/03/2017	Non-Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 12:30	wind speed and direction: Gentle Breeze, SE; visibility: Poor (<km); Rain: None; Frost: None ; Snow: None	
30/03/2017	Non-Breeding	Waterfowl Survey	Lough Derg	00:30 starting at 13:30	wind speed and direction: Moderate Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
03/04/2017	Breeding	Vantage Point Survey	5a	03:00 starting at 06:00	Wind Speed and Direction: Moderate Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	Mallard, male hen harrier display, male sparrowhawk

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
03/04/2017	Breeding	Vantage Point Survey	5a	03:00 starting at 09:30	Wind Speed and Direction: Moderate Breeze, S; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	Mallard female, possibly breeding
04/04/2017	Breeding	Vantage Point Survey	7a	03:00 starting at 09:30	Wind Speed and Direction: Moderate Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Hen Harriers observed in four separate flightlines. Adult female observed in hunting flight.
04/04/2017	Breeding	Vantage Point Survey	7a	03:00 starting at 06:00	Wind Speed and Direction: Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	No target species observed
05/04/2017	Breeding	Vantage Point Survey	8a	03:00 starting at 05:55	Wind Speed and Direction: Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Woodcock, roding call
05/04/2017	Breeding	Vantage Point Survey	8a	03:00 starting at 09:25	Wind Speed and Direction: Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	No target species observed
06/04/2017	Breeding	Vantage Point Survey	3	03:00 starting at 05:55	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Mallard calling, travelling
06/04/2017	Breeding	Vantage Point Survey	3	03:00 starting at 09:25	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
07/04/2017	Breeding	Vantage Point Survey	4a	03:00 starting at 05:50	Wind Speed and Direction:Light Air, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	red grouse calling off site
07/04/2017	Breeding	Vantage Point Survey	4a	03:00 starting at 09:20	Wind Speed and Direction:Light Air, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
10/04/2017	Breeding	Waterfowl Survey	Lough Derg & Inland lakes	08:00 starting at 08:30	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
11/04/2017	Breeding	Breeding Raptor Survey	Cragnamurra - Lackeragh	07:00 starting at 11:00	Wind Speed and Direction:Moderate Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Kestrel hunting
12/04/2017	Breeding	Breeding Raptor Survey	Ballydonaghan - Kiluran More	08:30 starting at 09:00	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
13/04/2017	Breeding	Breeding Raptor Survey	Kilokennedy - Cloonaheen - Carrownagown	08:30 starting at 09:00	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
14/04/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 05:50	Wind Speed and Direction:Light Breeze, W; Visibility: Poor (<km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
14/04/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 06:50	Wind Speed and Direction:Light Breeze, W; Visibility: Poor (<km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
14/04/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 07:50	Wind Speed and Direction:Light Breeze, W; Visibility: Poor (<km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
14/04/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 09:20	Wind Speed and Direction:Light Breeze, W; Visibility: Poor (<km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
14/04/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 10:20	Wind Speed and Direction:Light Breeze, W; Visibility: Poor (<km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
14/04/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 11:20	Wind Speed and Direction:Light Breeze, W; Visibility: Poor (<km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
18/04/2017	Breeding	Breeding Raptor Survey	Coolreagh - Illaunamuck	07:30 starting at 09:00	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
19/04/2017	Breeding	Breeding Raptor Survey	Feenlea mtn. - Ballykidea mtn.	07:00 starting at 09:00	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Female Sparrowhawk

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
19/04/2017	Breeding	Breeding Walkover	1	00:25 starting at 13:20	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
19/04/2017	Breeding	Breeding Walkover	2	01:04 starting at 14:16	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
19/04/2017	Breeding	Vantage Point Survey	2	01:00 starting at 05:40	Wind Speed and Direction:Calm, NW; Visibility: Poor (<km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Fog on tops of hills lifted by 09:50
19/04/2017	Breeding	Vantage Point Survey	2	01:00 starting at 06:40	Wind Speed and Direction:Calm, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
19/04/2017	Breeding	Vantage Point Survey	2	01:00 starting at 07:40	Wind Speed and Direction:Calm, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
19/04/2017	Breeding	Vantage Point Survey	2	01:00 starting at 09:10	Wind Speed and Direction:Calm, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
19/04/2017	Breeding	Vantage Point Survey	2	01:00 starting at 10:10	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
19/04/2017	Breeding	Vantage Point Survey	2	01:00 starting at 11:10	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
20/04/2017	Breeding	Waterfowl Survey	Lough Derg & Inland lakes	08:30 starting at 09:00	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
20/04/2017	Breeding	Breeding Walkover	3	01:35 starting at 15:20	Wind Speed and Direction:Light Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
20/04/2017	Breeding	Breeding Walkover	4	00:44 starting at 18:06	Wind Speed and Direction:, S; Visibility: Good (>2km); Cloud Height: ; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
21/04/2017	Breeding	Breeding Raptor Survey	Kilokennedy - Violethill	09:00 starting at 08:00	Wind Speed and Direction:Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Buzzard pair observed displaying over mature woodland, possible nesting area
21/04/2017	Breeding	Breeding Walkover	5	04:40 starting at 12:00	Wind Speed and Direction:Gentle Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
21/04/2017	Breeding	Vantage Point Survey	9	01:00 starting at 05:25	Wind Speed and Direction:Calm, S; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 33-65 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
21/04/2017	Breeding	Vantage Point Survey	9	01:00 starting at 06:25	Wind Speed and Direction:Calm, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
21/04/2017	Breeding	Vantage Point Survey	9	01:00 starting at 07:25	Wind Speed and Direction:Light Air, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
21/04/2017	Breeding	Vantage Point Survey	9	01:00 starting at 08:55	Wind Speed and Direction:Light Air, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
21/04/2017	Breeding	Vantage Point Survey	9	01:00 starting at 09:55	Wind Speed and Direction:Light Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
21/04/2017	Breeding	Vantage Point Survey	9	01:00 starting at 10:55	Wind Speed and Direction:Light Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
22/04/2017	Breeding	Breeding Walkover	6	02:17 starting at 11:55	Wind Speed and Direction:Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
22/04/2017	Breeding	Breeding Walkover	7	01:20 starting at 15:20	Wind Speed and Direction:Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
24/04/2017	Breeding	Breeding Walkover	8	03:15 starting at 12:40	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Some disturbance from digger and tractor to NW
24/04/2017	Breeding	Breeding Walkover	9	00:35 starting at 16:35	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
26/04/2017	Breeding	Breeding Raptor Survey	Coumnagun - Carrownagown	08:00 starting at 12:00	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Light Showers; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
27/04/2017	Breeding	Breeding Raptor Survey	Ballybran - Raheen	08:00 starting at 10:00	Wind Speed and Direction:Moderate Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Light Showers; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
28/04/2017	Breeding	Waterfowl Survey	Lough Derg & Inland lakes	06:40 starting at 09:20	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Light Showers; Frost: None ; Snow: None	Whimbrel at three separate locations. Flocks ranging from 30 - 70 individuals. 1 whooper swan.
28/04/2017	Breeding	Breeding Walkover	10	02:20 starting at 08:45	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
28/04/2017	Breeding	Breeding Walkover	11	01:33 starting at 11:35	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-65 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
28/04/2017	Breeding	Breeding Walkover	12	01:32 starting at 13:40	Wind Speed and Direction:Calm, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-65 Rain: None; Frost: None ; Snow: None	
28/04/2017	Breeding	Breeding Walkover	13	01:05 starting at 15:35	Wind Speed and Direction:Calm, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
02/05/2017	Breeding	Breeding Walkover	Killokennedy	07:00 starting at 09:30	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Male HH hunting, Female HH hunting
03/05/2017	Breeding	Breeding Walkover	Inchalughoge - Knockalass	07:00 starting at 09:00	Wind Speed and Direction:Moderate Breeze, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
04/05/2017	Breeding	Breeding Walkover	Knocknalecka	06:30 starting at 09:00	Wind Speed and Direction:Moderate Breeze, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	Kestrel observed in hunting flight
05/05/2017	Breeding	Breeding Raptor Survey	Carrownagown - Sliebh Bearnach	06:00 starting at 09:30	Wind Speed and Direction:Moderate Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
08/05/2017	Breeding	Breeding Raptor Survey	Cragnamurragh - Lackeragh Mtn.	08:40 starting at 09:00	Wind Speed and Direction:Gentle Breeze, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
08/05/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 15:40	Wind Speed and Direction:Light Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-35 Rain: None; Frost: None ; Snow: None	
08/05/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 16:40	Wind Speed and Direction:Light Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-35 Rain: None; Frost: None ; Snow: None	
08/05/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 17:40	Wind Speed and Direction:Gentle Breeze, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-35 Rain: None; Frost: None ; Snow: None	
08/05/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 19:10	Wind Speed and Direction:Gentle Breeze, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-35 Rain: None; Frost: None ; Snow: None	
08/05/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 20:10	Wind Speed and Direction:Gentle Breeze, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-35 Rain: None; Frost: None ; Snow: None	A bit hazy to W
08/05/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 21:10	Wind Speed and Direction:Moderate Breeze, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-35 Rain: None; Frost: None ; Snow: None	
09/05/2017	Breeding	Breeding Raptor Survey	Lackeragh Beg - Feenlea Mtn.	07:00 starting at 09:00	Wind Speed and Direction:Light Air, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
09/05/2017	Breeding	Vantage Point Survey	9	01:00 starting at 15:40	Wind Speed and Direction:Light Air, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 36-65 Rain: None; Frost: None ; Snow: None	
09/05/2017	Breeding	Vantage Point Survey	9	01:00 starting at 16:40	Wind Speed and Direction:Light Air, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 36-65 Rain: None; Frost: None ; Snow: None	
09/05/2017	Breeding	Vantage Point Survey	9	01:00 starting at 17:40	Wind Speed and Direction:Calm, ; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 36-65 Rain: None; Frost: None ; Snow: None	
09/05/2017	Breeding	Vantage Point Survey	9	01:00 starting at 19:10	Wind Speed and Direction:Calm, ; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 36-65 Rain: None; Frost: None ; Snow: None	Haze to W
09/05/2017	Breeding	Vantage Point Survey	9	01:00 starting at 20:10	Wind Speed and Direction:Calm, ; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 36-65 Rain: None; Frost: None ; Snow: None	
09/05/2017	Breeding	Vantage Point Survey	9	01:00 starting at 21:10	Wind Speed and Direction:Calm, ; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 36-65 Rain: None; Frost: None ; Snow: None	
10/05/2017	Breeding	Breeding Raptor Survey	Broadford - Formoyle - Croaghmagower	07:00 starting at 09:00	Wind Speed and Direction:Light Air, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
10/05/2017	Breeding	Vantage Point Survey	2	01:00 starting at 15:40	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 36-65 Rain: None; Frost: None ; Snow: None	
10/05/2017	Breeding	Vantage Point Survey	2	01:00 starting at 16:40	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 36-65 Rain: None; Frost: None ; Snow: None	
10/05/2017	Breeding	Vantage Point Survey	2	01:00 starting at 17:40	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 36-65 Rain: None; Frost: None ; Snow: None	
10/05/2017	Breeding	Vantage Point Survey	2	01:00 starting at 19:10	Wind Speed and Direction:Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 36-65 Rain: None; Frost: None ; Snow: None	Machine gathering timber near area of prethicket where HH spotted previously
10/05/2017	Breeding	Vantage Point Survey	2	01:00 starting at 20:10	Wind Speed and Direction:Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 36-65 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
10/05/2017	Breeding	Vantage Point Survey	2	01:00 starting at 21:10	Wind Speed and Direction:Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 36-65 Rain: None; Frost: None ; Snow: None	20:03 shooting up on slope to W on bog.
11/05/2017	Breeding	Breeding Raptor Survey	Inchalughoge - Ballydonaghan - Killokenedy	08:00 starting at 09:30	Wind Speed and Direction:Light Breeze, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Buzzard hunting

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
15/05/2017	Breeding	Breeding Walkover	Carrownagown site forested area	07:30 starting at 12:00	Wind Speed and Direction: Moderate Breeze, S; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	No target species observed
16/05/2017	Breeding	Waterfowl Survey	Lough Derg & Inland lakes	07:30 starting at 09:00	Wind Speed and Direction: Light Air, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 10 Rain: Light Showers; Frost: None ; Snow: None	
16/05/2017	Breeding	Vantage Point Survey	3	01:00 starting at 16:20	Wind Speed and Direction: Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 36-65 Rain: None; Frost: None ; Snow: None	
16/05/2017	Breeding	Vantage Point Survey	3	01:00 starting at 17:20	Wind Speed and Direction: Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 36-65 Rain: None; Frost: None ; Snow: None	
16/05/2017	Breeding	Vantage Point Survey	3	01:00 starting at 18:20	Wind Speed and Direction: Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 36-65 Rain: None; Frost: None ; Snow: None	
16/05/2017	Breeding	Vantage Point Survey	3	01:00 starting at 19:50	Wind Speed and Direction: Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 36-65 Rain: None; Frost: None ; Snow: None	
16/05/2017	Breeding	Vantage Point Survey	3	01:00 starting at 20:50	Wind Speed and Direction: Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-35 Rain: None; Frost: None ; Snow: None	



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
16/05/2017	Breeding	Vantage Point Survey	3	01:00 starting at 21:50	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-35 Rain: None; Frost: None ; Snow: None	
17/05/2017	Breeding	Breeding Raptor Survey	Feenlea - Gortmagy	07:00 starting at 12:00	Wind Speed and Direction:Fresh Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Light Showers; Frost: None ; Snow: None	No target species observed
17/05/2017	Breeding	Vantage Point Survey	4a	01:00 starting at 15:50	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 36-65 Rain: None; Frost: None ; Snow: None	
17/05/2017	Breeding	Vantage Point Survey	4a	01:00 starting at 16:50	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 36-65 Rain: None; Frost: None ; Snow: None	
17/05/2017	Breeding	Vantage Point Survey	4a	01:00 starting at 17:50	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 36-65 Rain: None; Frost: None ; Snow: None	
17/05/2017	Breeding	Vantage Point Survey	4a	01:00 starting at 19:20	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 36-65 Rain: None; Frost: None ; Snow: None	
17/05/2017	Breeding	Vantage Point Survey	4a	01:00 starting at 20:20	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 36-65 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
17/05/2017	Breeding	Vantage Point Survey	4a	01:00 starting at 21:20	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
22/05/2017	Breeding	Breeding Walkover	Coumnagun	06:30 starting at 12:00	Wind Speed and Direction:Fresh Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: Light Showers; Frost: None ; Snow: None	Woodcock flushed by surveyor, Kestrel hunting, 2 Red Grouse flushed from perch
23/05/2017	Breeding	Breeding Raptor Survey	Lackeragh Beg	02:00 starting at 07:00	Wind Speed and Direction:Light Air, W; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
23/05/2017	Breeding	Breeding Walkover	Moylussa	02:45 starting at 10:15	Wind Speed and Direction:Light Breeze, W; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	Red grouse flushed by surveyor
24/05/2017	Breeding	Breeding Raptor Survey	Inchalogue - Ballybran	07:00 starting at 07:00	Wind Speed and Direction:Light Air, SE; Visibility: Limited (<500m); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Male kestrel
26/05/2017	Breeding	Breeding Raptor Survey	VP	01:00 starting at 09:00	Wind Speed and Direction:Light Breeze, E; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	No activity observed for HH
26/05/2017	Breeding	Breeding Raptor Survey	VP	01:00 starting at 10:00	Wind Speed and Direction:Light Breeze, E; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	No activity observed for HH

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
26/05/2017	Breeding	Breeding Raptor Survey	VP	01:00 starting at 11:00	Wind Speed and Direction:Light Breeze, E; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	No activity observed for HH. K flying south over survey area. BZ observed hunting and spiralling on wind
26/05/2017	Breeding	Breeding Raptor Survey	VP	01:00 starting at 12:30	Wind Speed and Direction:Light Breeze, E; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	No activity observed for HH
26/05/2017	Breeding	Breeding Raptor Survey	VP	01:00 starting at 13:30	Wind Speed and Direction:Light Breeze, E; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	No activity observed for HH
26/05/2017	Breeding	Breeding Raptor Survey	VP	01:00 starting at 14:30	Wind Speed and Direction:Light Breeze, E; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	No activity observed for HH
26/05/2017	Breeding	Breeding Raptor Survey	Inchalughoge	07:00 starting at 12:00	Wind Speed and Direction:Light Breeze, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	Sparrowhawk observed over conifer area carrying prey
27/05/2017	Breeding	Vantage Point Survey	7a	01:00 starting at 16:15	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
27/05/2017	Breeding	Vantage Point Survey	7a	01:00 starting at 17:15	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
27/05/2017	Breeding	Vantage Point Survey	7a	01:00 starting at 18:15	wind speed and direction:Light Breeze, NW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
27/05/2017	Breeding	Vantage Point Survey	7a	01:00 starting at 19:45	wind speed and direction:Light Breeze, NW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
27/05/2017	Breeding	Vantage Point Survey	7a	01:00 starting at 20:45	wind speed and direction:Light Breeze, NW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
27/05/2017	Breeding	Vantage Point Survey	7a	01:00 starting at 21:45	wind speed and direction:Light Air, NW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
29/05/2017	Breeding	Breeding Raptor Survey	VP	01:00 starting at 09:10	Wind Speed and Direction:Light Breeze, W; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	No activity observed for HH
29/05/2017	Breeding	Breeding Raptor Survey	VP	01:00 starting at 10:10	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	No activity observed for HH
29/05/2017	Breeding	Breeding Raptor Survey	VP	01:00 starting at 11:10	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	No activity observed for HH. BZ observed hunting and spiralling on wind

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
29/05/2017	Breeding	Breeding Raptor Survey	VP	01:00 starting at 12:40	Wind Speed and Direction:Light Breeze, W; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	No activity observed for HH
29/05/2017	Breeding	Breeding Raptor Survey	VP	01:00 starting at 13:40	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	No activity observed for HH
29/05/2017	Breeding	Breeding Raptor Survey	VP	01:00 starting at 14:40	Wind Speed and Direction:Light Breeze, W; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	No activity observed for HH
29/05/2017	Breeding	Breeding Walkover	Kiluran More - Killokennedy	04:00 starting at 12:00	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
30/05/2017	Breeding	Breeding Raptor Survey	VP	01:00 starting at 09:00	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Moderate (1-2km); Cloud Height: <150m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	No activity observed for HH
30/05/2017	Breeding	Breeding Raptor Survey	VP	01:00 starting at 10:00	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Moderate (1-2km); Cloud Height: <150m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	Male HH observed hunting
30/05/2017	Breeding	Breeding Raptor Survey	VP	01:00 starting at 11:00	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Male HH observed hunting

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
30/05/2017	Breeding	Breeding Raptor Survey	VP	01:00 starting at 12:30	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	No activity observed for HH
30/05/2017	Breeding	Breeding Raptor Survey	VP	01:00 starting at 13:30	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Female HH observed hunting
30/05/2017	Breeding	Breeding Raptor Survey	VP	01:00 starting at 14:30	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	No activity observed for HH
30/05/2017	Breeding	Waterfowl Survey	Lough Derg & Inland lakes	07:20 starting at 09:00	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Light Showers; Frost: None ; Snow: None	
30/05/2017	Breeding	Vantage Point Survey	5a	01:00 starting at 16:15	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
30/05/2017	Breeding	Vantage Point Survey	5a	01:00 starting at 17:15	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
30/05/2017	Breeding	Vantage Point Survey	5a	01:00 starting at 18:15	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
30/05/2017	Breeding	Vantage Point Survey	5a	01:00 starting at 19:45	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
30/05/2017	Breeding	Vantage Point Survey	5a	01:00 starting at 20:45	wind speed and direction:Calm, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
30/05/2017	Breeding	Vantage Point Survey	5a	01:00 starting at 21:45	wind speed and direction:Calm, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
31/05/2017	Breeding	Vantage Point Survey	8a	01:00 starting at 16:18	wind speed and direction:Gentle Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
31/05/2017	Breeding	Vantage Point Survey	8a	01:00 starting at 17:18	wind speed and direction:Gentle Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
31/05/2017	Breeding	Vantage Point Survey	8a	01:00 starting at 18:18	wind speed and direction:Gentle Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
31/05/2017	Breeding	Vantage Point Survey	8a	01:00 starting at 19:48	wind speed and direction:Gentle Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
31/05/2017	Breeding	Vantage Point Survey	8a	01:00 starting at 20:48	wind speed and direction:Moderate Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
31/05/2017	Breeding	Vantage Point Survey	8a	01:00 starting at 21:48	wind speed and direction:Moderate Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
02/06/2017	Breeding	Breeding Walkover	Croaghmagower-Knockalass	07:00 starting at 07:00	Wind Speed and Direction:, SW; Visibility: ; Cloud Height: ; Cloud Cover %: 0-33 Rain: ; Frost: ; Snow:	No target species observed
02/06/2017	Breeding	Vantage Point Survey	2	01:00 starting at 09:30	wind speed and direction:Light Air, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
02/06/2017	Breeding	Vantage Point Survey	2	01:00 starting at 10:30	wind speed and direction:Light Air, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
02/06/2017	Breeding	Vantage Point Survey	2	01:00 starting at 11:30	wind speed and direction:Light Air, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
02/06/2017	Breeding	Vantage Point Survey	2	01:00 starting at 13:00	wind speed and direction:Gentle Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
02/06/2017	Breeding	Vantage Point Survey	2	01:00 starting at 14:00	wind speed and direction:Gentle Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
02/06/2017	Breeding	Vantage Point Survey	2	01:00 starting at 15:00	wind speed and direction:Gentle Breeze, SW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
06/06/2017	Breeding	Breeding Walkover	Killokenedy-Knockalass	06:30 starting at 09:00	Wind Speed and Direction:, SW; Visibility: ; Cloud Height: ; Cloud Cover %: 66-100 Rain: ; Frost: ; Snow:	No target species observed
07/06/2017	Breeding	Breeding Walkover	Gortatrasa-Inchalughoge	07:00 starting at 08:00	Wind Speed and Direction:, SW; Visibility: ; Cloud Height: ; Cloud Cover %: 66-100 Rain: ; Frost: ; Snow:	No target species observed
08/06/2017	Breeding	Breeding Walkover	Forested area on site	07:30 starting at 08:00	Wind Speed and Direction:, SW; Visibility: ; Cloud Height: ; Cloud Cover %: 66-100 Rain: ; Frost: ; Snow:	-See confidential appendix 5 for redacted text relating to sensitive species
09/06/2017	Breeding	Breeding Raptor Survey	Broadford-Ogonnelloe	07:00 starting at 09:30	Wind Speed and Direction:, SW; Visibility: ; Cloud Height: ; Cloud Cover %: 33-66 Rain: ; Frost: ; Snow:	-See confidential appendix 5 for redacted text relating to sensitive species
09/06/2017	Breeding	Vantage Point Survey	3	01:00 starting at 08:30	wind speed and direction:Gentle Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
09/06/2017	Breeding	Vantage Point Survey	3	01:00 starting at 09:30	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
09/06/2017	Breeding	Vantage Point Survey	3	01:00 starting at 10:30	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
09/06/2017	Breeding	Vantage Point Survey	3	01:00 starting at 12:00	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
09/06/2017	Breeding	Vantage Point Survey	3	01:00 starting at 13:00	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
09/06/2017	Breeding	Vantage Point Survey	3	01:00 starting at 14:00	wind speed and direction:Light Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
12/06/2017	Breeding	Breeding Raptor Survey	Inchalughoge - Feenlea	07:20 starting at 09:00	Wind Speed and Direction:, SW; Visibility: ; Cloud Height: ; Cloud Cover %: 66-100 Rain: ; Frost: ; Snow:	-See confidential appendix 5 for redacted text relating to sensitive species
13/06/2017	Breeding	Breeding Raptor Survey	Killokennedy - Carrownagowan	07:45 starting at 12:00	Wind Speed and Direction:, SW; Visibility: ; Cloud Height: ; Cloud Cover %: 33-66 Rain: ; Frost: ; Snow:	-See confidential appendix 5 for redacted text relating to sensitive species

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
14/06/2017	Breeding	Breeding Walkover	Coumnagun - Knockalass	07:00 starting at 09:30	Wind Speed and Direction:, S; Visibility: ; Cloud Height: ; Cloud Cover %: 0-33 Rain: ; Frost: ; Snow:	3 red grouse flushed by surveyor at Coumnagun
15/06/2017	Breeding	Breeding Raptor Survey	Glenvagalliagh Mtn. - Lackereagh Beg	07:00 starting at 09:30	Wind Speed and Direction:, SW; Visibility: ; Cloud Height: ; Cloud Cover %: 66-100 Rain: ; Frost: ; Snow:	-See confidential appendix 5 for redacted text relating to sensitive species
16/06/2017	Breeding	Breeding Raptor Survey	Carrownagowan river	07:00 starting at 07:30	Wind Speed and Direction:, SW; Visibility: ; Cloud Height: ; Cloud Cover %: 66-100 Rain: ; Frost: ; Snow:	-See confidential appendix 5 for redacted text relating to sensitive species
19/06/2017	Breeding	Breeding Walkover	Killokennedy	01:15 starting at 14:15	Wind Speed and Direction:, NW; Visibility: ; Cloud Height: ; Cloud Cover %: 33-66 Rain: ; Frost: ; Snow:	No target species observed
20/06/2017	Breeding	Breeding Raptor Survey	Coumnagun	07:00 starting at 12:00	Wind Speed and Direction:, NE; Visibility: ; Cloud Height: ; Cloud Cover %: 0-33 Rain: ; Frost: ; Snow:	Sparrowhawk observed in a hunting flight over knockalass bog area
21/06/2017	Breeding	Breeding Raptor Survey	Croaghmagower - Carnagoe	03:00 starting at 14:00	Wind Speed and Direction:, W; Visibility: ; Cloud Height: ; Cloud Cover %: 33-66 Rain: ; Frost: ; Snow:	Kestrel pair observed hunting over bog and scrub area
26/06/2017	Breeding	Breeding Raptor Survey	Kiluran More - Knockbrack	04:00 starting at 09:00	Wind Speed and Direction:, E; Visibility: ; Cloud Height: ; Cloud Cover %: 66-100 Rain: ; Frost: ; Snow:	Male kestrel hunting and perching, Buzzard hunting

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
26/06/2017	Breeding	Vantage Point Survey	7a	01:00 starting at 06:25	wind speed and direction:Calm, ; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
26/06/2017	Breeding	Vantage Point Survey	7a	01:00 starting at 07:25	wind speed and direction:Calm, ; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
26/06/2017	Breeding	Vantage Point Survey	7a	01:00 starting at 08:25	wind speed and direction:Calm, ; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
26/06/2017	Breeding	Vantage Point Survey	7a	01:00 starting at 09:55	wind speed and direction:Light Air, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
26/06/2017	Breeding	Vantage Point Survey	7a	01:00 starting at 10:55	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
26/06/2017	Breeding	Vantage Point Survey	7a	01:00 starting at 11:55	wind speed and direction:Light Breeze, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
27/06/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 10:30	wind speed and direction:Gentle Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
27/06/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 11:30	wind speed and direction:Gentle Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
27/06/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 12:30	wind speed and direction:Gentle Breeze, S; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
27/06/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 14:00	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
27/06/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 15:00	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
27/06/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 16:00	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
27/06/2017	Breeding	Breeding Raptor Survey	Lackereagh Mtn. - Ballybran	07:00 starting at 10:30	Wind Speed and Direction:, SW; Visibility: ; Cloud Height: ; Cloud Cover %: 33-66 Rain: ; Frost: ; Snow:	-See confidential appendix 5 for redacted text relating to sensitive species
28/06/2017	Breeding	Vantage Point Survey	8a	01:00 starting at 06:10	wind speed and direction:Calm, ; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
28/06/2017	Breeding	Vantage Point Survey	8a	01:00 starting at 07:10	wind speed and direction:Calm, ; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
28/06/2017	Breeding	Vantage Point Survey	8a	01:00 starting at 08:10	wind speed and direction:Calm, ; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
28/06/2017	Breeding	Vantage Point Survey	8a	01:00 starting at 09:40	wind speed and direction:Light Air, NW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
28/06/2017	Breeding	Vantage Point Survey	8a	01:00 starting at 10:40	wind speed and direction:Light Air, NW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
28/06/2017	Breeding	Vantage Point Survey	8a	01:00 starting at 11:40	wind speed and direction:Light Air, NW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
29/06/2017	Breeding	Vantage Point Survey	5a	01:00 starting at 07:00	wind speed and direction:Gentle Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
29/06/2017	Breeding	Vantage Point Survey	5a	01:00 starting at 08:00	wind speed and direction:Gentle Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
29/06/2017	Breeding	Vantage Point Survey	5a	01:00 starting at 09:00	wind speed and direction:Gentle Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
29/06/2017	Breeding	Vantage Point Survey	5a	01:00 starting at 10:30	wind speed and direction:Moderate Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
29/06/2017	Breeding	Vantage Point Survey	5a	01:00 starting at 11:30	wind speed and direction:Moderate Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
29/06/2017	Breeding	Vantage Point Survey	5a	01:00 starting at 12:30	wind speed and direction:Moderate Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
30/06/2017	Breeding	Vantage Point Survey	4a	01:00 starting at 07:45	wind speed and direction:Gentle Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
30/06/2017	Breeding	Vantage Point Survey	4a	01:00 starting at 08:45	wind speed and direction:Moderate Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
30/06/2017	Breeding	Vantage Point Survey	4a	01:00 starting at 09:45	wind speed and direction:Moderate Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
30/06/2017	Breeding	Vantage Point Survey	4a	01:00 starting at 11:15	wind speed and direction:Moderate Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
30/06/2017	Breeding	Vantage Point Survey	4a	01:00 starting at 12:15	wind speed and direction:Moderate Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
30/06/2017	Breeding	Vantage Point Survey	4a	01:00 starting at 13:15	wind speed and direction:Moderate Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
03/07/2017	Breeding	Breeding Raptor Survey	Carrownagown	07:00 starting at 11:00	Wind Speed and Direction:Light Air, SE; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
03/07/2017	Breeding	Vantage Point Survey	9	01:00 starting at 09:15	wind speed and direction:Light Breeze, NW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	JUNE SURVEY
03/07/2017	Breeding	Vantage Point Survey	9	01:00 starting at 10:15	wind speed and direction:Light Breeze, NW; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	JUNE SURVEY
03/07/2017	Breeding	Vantage Point Survey	9	01:00 starting at 11:15	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	JUNE SURVEY



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
03/07/2017	Breeding	Vantage Point Survey	9	01:00 starting at 12:45	wind speed and direction:Light Breeze, NW; visibility: Moderate (1-2km); Rain: Drizzle Mist; Frost: None ; Snow: None	JUNE SURVEY
03/07/2017	Breeding	Vantage Point Survey	9	01:00 starting at 13:45	wind speed and direction:Calm, ; visibility: Good (>2km); Rain: Drizzle Mist; Frost: None ; Snow: None	JUNE SURVEY
03/07/2017	Breeding	Vantage Point Survey	9	01:00 starting at 14:45	wind speed and direction:Calm, ; visibility: Good (>2km); Rain: Drizzle Mist; Frost: None ; Snow: None	JUNE SURVEY
04/07/2017	Breeding	Breeding Walkover	Knockalass - Kiluran More	07:00 starting at 09:00	Wind Speed and Direction:Light Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	Female Sparrowhawk carrying prey over conifer area beside bog area. Kestrel heard repeating alarm call.
05/07/2017	Breeding	Breeding Walkover	Killokennedy - Croaghmagower	07:00 starting at 09:00	Wind Speed and Direction:Light Breeze, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	Red grouse adult pair and 2 juveniles flushed by surveyor
06/07/2017	Breeding	Breeding Walkover	Forested area on site	07:00 starting at 13:00	Wind Speed and Direction:Gentle Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: Light Showers; Frost: None ; Snow: None	No target species observed
07/07/2017	Breeding	Breeding Walkover	Coumnagun - Carrrownakilly	06:30 starting at 10:00	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	Red Grouse flushed by surveyor

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
10/07/2017	Breeding	Breeding Walkover	Knockalass - Gortatrassa	07:00 starting at 11:00	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Light Showers; Frost: None ; Snow: None	No target species observed
11/07/2017	Breeding	Breeding Raptor Survey	Lackereagh Beg - Ballybran	07:00 starting at 11:00	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
11/07/2017	Breeding	Vantage Point Survey	5a	01:00 starting at 09:30	wind speed and direction:Calm, ; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
11/07/2017	Breeding	Vantage Point Survey	5a	01:00 starting at 10:30	wind speed and direction:Calm, ; visibility: Good (>2km); Rain: Drizzle Mist; Frost: None ; Snow: None	
11/07/2017	Breeding	Vantage Point Survey	5a	01:00 starting at 11:30	wind speed and direction:Calm, ; visibility: Good (>2km); Rain: Drizzle Mist; Frost: None ; Snow: None	
11/07/2017	Breeding	Vantage Point Survey	5a	01:00 starting at 13:00	wind speed and direction:Calm, ; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
11/07/2017	Breeding	Vantage Point Survey	5a	01:00 starting at 14:00	wind speed and direction:Calm, ; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
11/07/2017	Breeding	Vantage Point Survey	5a	01:00 starting at 15:00	wind speed and direction:Calm, ; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
12/07/2017	Breeding	Breeding Raptor Survey	Ballybran	05:00 starting at 13:00	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
13/07/2017	Breeding	Breeding Raptor Survey	Carrownagown river - Lackerreagh	07:00 starting at 10:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
14/07/2017	Breeding	Breeding Raptor Survey	Glenvagalliagh mtn. - Lackereagh Beg - Broadford - Ballybran	06:00 starting at 10:00	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
14/07/2017	Breeding	Vantage Point Survey	2	01:00 starting at 10:30	wind speed and direction:Light Air, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
14/07/2017	Breeding	Vantage Point Survey	2	01:00 starting at 11:30	wind speed and direction:Light Air, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
14/07/2017	Breeding	Vantage Point Survey	2	01:00 starting at 12:30	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	34 goats on bog hilltop

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
14/07/2017	Breeding	Vantage Point Survey	2	01:00 starting at 14:00	wind speed and direction:Light Air, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	Noise from machine to NE
14/07/2017	Breeding	Vantage Point Survey	2	01:00 starting at 15:00	wind speed and direction:Light Air, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
14/07/2017	Breeding	Vantage Point Survey	2	01:00 starting at 16:00	wind speed and direction:Light Air, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
17/07/2017	Breeding	Breeding Raptor Survey	Killokennedy-Ballybroghan-Ballydonaghan	07:00 starting at 09:30	Wind Speed and Direction:Light Air, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Buzzard observed carrying prey over conifer area. Female Kestrel observed travelling and perching. Female kestrel in hunting flight.
17/07/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 10:00	wind speed and direction:Light Air, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
17/07/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 11:00	wind speed and direction:Light Air, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
17/07/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 12:00	wind speed and direction:Light Air, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
17/07/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 13:30	wind speed and direction:Light Breeze, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
17/07/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 14:30	wind speed and direction:Light Air, SE; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
17/07/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 15:30	wind speed and direction:Light Air, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
18/07/2017	Breeding	Breeding Raptor Survey		01:00 starting at 08:30	Wind Speed and Direction:Light Air, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
18/07/2017	Breeding	Breeding Raptor Survey		01:00 starting at 09:30	Wind Speed and Direction:Light Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
18/07/2017	Breeding	Breeding Raptor Survey		01:00 starting at 10:30	Wind Speed and Direction:Light Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
18/07/2017	Breeding	Breeding Raptor Survey		01:00 starting at 12:00	Wind Speed and Direction:Light Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
18/07/2017	Breeding	Breeding Raptor Survey		01:00 starting at 13:00	Wind Speed and Direction:Gentle Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
18/07/2017	Breeding	Breeding Raptor Survey		01:00 starting at 14:00	Wind Speed and Direction:Gentle Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
18/07/2017	Breeding	Breeding Raptor Survey	Knockalass - Inchalughoge	03:00 starting at 14:00	Wind Speed and Direction:Gentle Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	HH male observed on 2 hunting flights over bog and conifer areas. Kestrel in hunting flight
18/07/2017	Breeding	Vantage Point Survey	3	01:00 starting at 10:00	wind speed and direction:Light Air, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
18/07/2017	Breeding	Vantage Point Survey	3	01:00 starting at 11:00	wind speed and direction:Calm, ; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
18/07/2017	Breeding	Vantage Point Survey	3	01:00 starting at 12:00	wind speed and direction:Calm, ; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
18/07/2017	Breeding	Vantage Point Survey	3	01:00 starting at 13:30	wind speed and direction:Light Air, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
18/07/2017	Breeding	Vantage Point Survey	3	01:00 starting at 14:30	wind speed and direction:Light Air, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
18/07/2017	Breeding	Vantage Point Survey	3	01:00 starting at 15:30	wind speed and direction:Light Air, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
20/07/2017	Breeding	Vantage Point Survey	7a	01:00 starting at 09:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Heavy Rain; Frost: None ; Snow: None	
20/07/2017	Breeding	Vantage Point Survey	7a	01:00 starting at 10:30	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
20/07/2017	Breeding	Vantage Point Survey	7a	01:00 starting at 11:30	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
20/07/2017	Breeding	Vantage Point Survey	7a	01:00 starting at 13:00	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
20/07/2017	Breeding	Vantage Point Survey	7a	01:00 starting at 14:00	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
20/07/2017	Breeding	Vantage Point Survey	7a	01:00 starting at 15:00	Wind Speed and Direction: Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
20/07/2017	Breeding	Vantage Point Survey	4a	01:00 starting at 12:00	wind speed and direction: Light Breeze, N; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
20/07/2017	Breeding	Vantage Point Survey	4a	01:00 starting at 13:00	wind speed and direction: Light Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
20/07/2017	Breeding	Vantage Point Survey	4a	01:00 starting at 14:00	wind speed and direction: Light Breeze, N; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
20/07/2017	Breeding	Vantage Point Survey	4a	01:00 starting at 15:30	wind speed and direction: Gentle Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
20/07/2017	Breeding	Vantage Point Survey	4a	01:00 starting at 16:30	wind speed and direction: Gentle Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
20/07/2017	Breeding	Vantage Point Survey	4a	01:00 starting at 17:30	wind speed and direction: Gentle Breeze, N; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
24/07/2017	Breeding	Vantage Point Survey	8a	01:00 starting at 08:45	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
24/07/2017	Breeding	Vantage Point Survey	8a	01:00 starting at 09:45	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
24/07/2017	Breeding	Vantage Point Survey	8a	01:00 starting at 10:45	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
24/07/2017	Breeding	Vantage Point Survey	8a	01:00 starting at 12:15	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
24/07/2017	Breeding	Vantage Point Survey	8a	01:00 starting at 13:15	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
24/07/2017	Breeding	Vantage Point Survey	8a	01:00 starting at 14:15	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
25/07/2017	Breeding	Vantage Point Survey	9	01:00 starting at 09:30	Wind Speed and Direction:Light Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
25/07/2017	Breeding	Vantage Point Survey	9	01:00 starting at 10:30	Wind Speed and Direction:Light Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
25/07/2017	Breeding	Vantage Point Survey	9	01:00 starting at 11:30	Wind Speed and Direction:Light Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
25/07/2017	Breeding	Vantage Point Survey	9	01:00 starting at 13:00	Wind Speed and Direction:Light Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
25/07/2017	Breeding	Vantage Point Survey	9	01:00 starting at 14:00	Wind Speed and Direction:Light Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
25/07/2017	Breeding	Vantage Point Survey	9	01:00 starting at 15:00	Wind Speed and Direction:Light Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
27/07/2017	Breeding	Breeding Raptor Survey		01:00 starting at 09:00	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
27/07/2017	Breeding	Breeding Raptor Survey		01:00 starting at 10:00	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
27/07/2017	Breeding	Breeding Raptor Survey		01:00 starting at 11:00	Wind Speed and Direction: Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
27/07/2017	Breeding	Breeding Raptor Survey		01:00 starting at 12:30	Wind Speed and Direction: Fresh Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	
27/07/2017	Breeding	Breeding Raptor Survey		01:00 starting at 13:30	Wind Speed and Direction: Fresh Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	
27/07/2017	Breeding	Breeding Raptor Survey		01:00 starting at 14:30	Wind Speed and Direction: Fresh Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	
08/08/2017	Breeding	Waterfowl Survey	Lough Derg	07:00 starting at 09:00	Wind Speed and Direction: Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Heavy Showers; Frost: None ; Snow: None	
09/08/2017	Breeding	Waterfowl Survey	LAKES	06:00 starting at 10:30	Wind Speed and Direction: Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
10/08/2017	Breeding	Vantage Point Survey	7a	03:00 starting at 05:08	Wind Speed and Direction: Light Air, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
10/08/2017	Breeding	Vantage Point Survey	7a	03:00 starting at 08:38	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	Kestrel female observed in hunting flights
11/08/2017	Breeding	Vantage Point Survey	3	01:00 starting at 11:00	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	No target species observed
14/08/2017	Breeding	Vantage Point Survey	8a	01:00 starting at 05:05	wind speed and direction:Gentle Breeze, W; visibility: Limited (<500m); Rain: None; Frost: None ; Snow: None	
14/08/2017	Breeding	Vantage Point Survey	8a	01:00 starting at 06:05	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
14/08/2017	Breeding	Vantage Point Survey	8a	01:00 starting at 07:05	wind speed and direction:Gentle Breeze, W; visibility: Moderate (1-2km); Rain: Drizzle Mist; Frost: None ; Snow: None	
14/08/2017	Breeding	Vantage Point Survey	8a	01:00 starting at 08:35	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
14/08/2017	Breeding	Vantage Point Survey	8a	01:00 starting at 09:35	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
14/08/2017	Breeding	Vantage Point Survey	8a	01:00 starting at 10:35	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
15/08/2017	Breeding	Vantage Point Survey	1a	03:00 starting at 05:16	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	Red Grouse, Sparrowhawk
15/08/2017	Breeding	Vantage Point Survey	1a	03:00 starting at 08:46	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Light Showers; Frost: None ; Snow: None	Snipe observed flying over
16/08/2017	Breeding	Vantage Point Survey	3	03:00 starting at 05:19	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Poor (<km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	No target species observed
16/08/2017	Breeding	Vantage Point Survey	3	02:00 starting at 08:49	Wind Speed and Direction:Fresh Breeze, SW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	No target species observed
17/08/2017	Breeding	Vantage Point Survey	4a	03:00 starting at 05:19	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	No target species observed
17/08/2017	Breeding	Vantage Point Survey	4a	03:00 starting at 08:49	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	No target species observed

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
22/08/2017	Breeding	Waterfowl Survey	Lough Derg	06:15 starting at 10:00	Wind Speed and Direction:Light Air, S; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
23/08/2017	Breeding	Waterfowl Survey	Lakes	06:00 starting at 10:00	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
24/08/2017	Breeding	Vantage Point Survey	5a	03:00 starting at 05:27	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	woodcock
24/08/2017	Breeding	Vantage Point Survey	5a	03:00 starting at 08:57	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	sparrowhawk, kestrel
25/08/2017	Breeding	Vantage Point Survey	2	03:00 starting at 05:33	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	No target species observed
25/08/2017	Breeding	Vantage Point Survey	2	03:00 starting at 09:03	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	No target species observed
31/08/2017	Breeding	Vantage Point Survey	9	01:00 starting at 05:42	wind speed and direction:Light Breeze, W; visibility: Limited (<500m); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
31/08/2017	Breeding	Vantage Point Survey	9	01:00 starting at 06:42	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: Heavy Showers; Frost: None ; Snow: None	
31/08/2017	Breeding	Vantage Point Survey	9	01:00 starting at 07:42	wind speed and direction:Light Breeze, W; visibility: Moderate (1-2km); Rain: Light Showers; Frost: None ; Snow: None	
31/08/2017	Breeding	Vantage Point Survey	9	01:00 starting at 09:12	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
31/08/2017	Breeding	Vantage Point Survey	9	01:00 starting at 10:12	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
31/08/2017	Breeding	Vantage Point Survey	9	01:00 starting at 11:12	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
01/09/2017	Breeding	Vantage Point Survey	7a	03:00 starting at 11:00	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Kestrel, Buzzard
01/09/2017	Breeding	Vantage Point Survey	7a	03:00 starting at 14:30	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
06/09/2017	Breeding	Waterfowl Survey	Lough Derg	05:00 starting at 10:00	Wind Speed and Direction:Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: Light Showers; Frost: None ; Snow: None	
07/09/2017	Breeding	Vantage Point Survey	8a	03:00 starting at 14:39	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
07/09/2017	Breeding	Vantage Point Survey	8a	03:00 starting at 18:09	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Poor (<km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Heavy Rain; Frost: None ; Snow: None	
08/09/2017	Breeding	Waterfowl Survey	Lakes	04:30 starting at 10:00	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
11/09/2017	Breeding	Vantage Point Survey	3	03:00 starting at 14:28	Wind Speed and Direction:Moderate Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	Kestrel, Sparrowhawk
11/09/2017	Breeding	Vantage Point Survey	3	03:00 starting at 17:58	Wind Speed and Direction:Moderate Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Kestrel hunting
12/09/2017	Breeding	Vantage Point Survey	5a	02:00 starting at 14:27	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Heavy Rain; Frost: None ; Snow: None	No target species



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
13/09/2017	Breeding	Vantage Point Survey	5a	03:00 starting at 16:22	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Kestrels hunting
13/09/2017	Breeding	Vantage Point Survey	5a	01:00 starting at 19:52	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
18/09/2017	Breeding	Vantage Point Survey	9	03:00 starting at 14:12	Wind Speed and Direction:Gentle Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Kestrel hunting, Sparrowhawk, Hen Harrier male
18/09/2017	Breeding	Vantage Point Survey	9	03:00 starting at 17:42	Wind Speed and Direction:Gentle Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Kestrel hunting, sparrowhawk, Hen Harrier ringtail, Red Grouse
19/09/2017	Breeding	Vantage Point Survey	4a	03:00 starting at 14:11	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	No target species
19/09/2017	Breeding	Vantage Point Survey	4a	03:00 starting at 17:41	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	No target species
20/09/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 14:11	Wind Speed and Direction:Gentle Breeze, S; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 3 Rain: Heavy Rain; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
20/09/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 15:11	Wind Speed and Direction:Gentle Breeze, S; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 3 Rain: Heavy Showers; Frost: None ; Snow: None	
20/09/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 16:11	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 3 Rain: Heavy Showers; Frost: None ; Snow: None	
20/09/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 17:41	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 3 Rain: Heavy Showers; Frost: None ; Snow: None	
20/09/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 18:41	Wind Speed and Direction:Light Breeze, NW; Visibility: Limited (<500m); Cloud Height: <150m; Cloud Cover %: 3 Rain: Heavy Rain; Frost: None ; Snow: None	
20/09/2017	Breeding	Vantage Point Survey	1a	01:00 starting at 19:41	Wind Speed and Direction:Light Breeze, NW; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 3 Rain: Light Showers; Frost: None ; Snow: None	
21/09/2017	Breeding	Vantage Point Survey	2	01:00 starting at 14:06	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 3 Rain: Light Showers; Frost: None ; Snow: None	
21/09/2017	Breeding	Vantage Point Survey	2	01:00 starting at 15:06	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 3 Rain: Light Showers; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
21/09/2017	Breeding	Vantage Point Survey	2	01:00 starting at 16:06	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 3 Rain: Light Showers; Frost: None ; Snow: None	
21/09/2017	Breeding	Vantage Point Survey	2	01:00 starting at 17:36	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 3 Rain: None; Frost: None ; Snow: None	
21/09/2017	Breeding	Vantage Point Survey	2	01:00 starting at 18:36	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 3 Rain: Light Showers; Frost: None ; Snow: None	
21/09/2017	Breeding	Vantage Point Survey	2	01:00 starting at 19:36	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 2 Rain: None; Frost: None ; Snow: None	
02/10/2017	Non-Breeding	Vantage Point Survey	7a	03:00 starting at 06:35	Wind Speed and Direction:Fresh Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	No target species
02/10/2017	Non-Breeding	Vantage Point Survey	7a	03:00 starting at 10:05	Wind Speed and Direction:Fresh Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	No target species
03/10/2017	Non-Breeding	Vantage Point Survey	8a	03:00 starting at 06:39	Wind Speed and Direction:Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	No target species

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
03/10/2017	Non-Breeding	Vantage Point Survey	8a	03:00 starting at 10:09	Wind Speed and Direction:Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Light Showers; Frost: None ; Snow: None	Sparrowhawk
04/10/2017	Non-Breeding	Waterfowl Survey	Lough Derg	06:00 starting at 10:30	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
05/10/2017	Non-Breeding	Winter Walkover	WW01	07:30 starting at 09:30	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	Kestrel
06/10/2017	Non-Breeding	Waterfowl Survey	Lakes	04:45 starting at 10:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Light Showers; Frost: None ; Snow: None	
09/10/2017	Non-Breeding	Hen Harrier Roost Survey	HH3	02:50 starting at 16:50	Wind Speed and Direction:Fresh Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	No target species
09/10/2017	Non-Breeding	Winter Walkover	WW02	03:20 starting at 13:00	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	Snipe
10/10/2017	Non-Breeding	Vantage Point Survey	3	03:00 starting at 06:54	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Kestrel, Red Grouse

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
10/10/2017	Non-Breeding	Vantage Point Survey	3	03:00 starting at 10:24	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Kestrel
11/10/2017	Non-Breeding	Vantage Point Survey	5a	03:00 starting at 10:00	Wind Speed and Direction:Fresh Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	No target species
11/10/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 13:30	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	Sparrowhawk, Kestrel
12/10/2017	Non-Breeding	Vantage Point Survey	4a	03:00 starting at 06:55	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Red Grouse calling
12/10/2017	Non-Breeding	Vantage Point Survey	4a	03:00 starting at 10:25	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: Light Showers; Frost: None ; Snow: None	No target species
13/10/2017	Non-Breeding	Vantage Point Survey	9	02:00 starting at 06:57	Wind Speed and Direction:Strong Breeze, SW; Visibility: Limited (<500m); Cloud Height: <150m; Cloud Cover %: 66-100 Rain: Heavy Rain; Frost: None ; Snow: None	Golden Plover, Red Grouse
17/10/2017	Non-Breeding	Vantage Point Survey	5a	02:00 starting at 07:04	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Hen Harrier male

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
20/10/2017	Non-Breeding	Vantage Point Survey	9	03:00 starting at 09:45	Wind Speed and Direction:Gentle Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	Red Grouse Calling, Golden Plover travelling off site
20/10/2017	Non-Breeding	Vantage Point Survey	9	01:00 starting at 13:15	Wind Speed and Direction:Fresh Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	No target species
23/10/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 07:16	Wind Speed and Direction:Light Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
23/10/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 08:16	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
23/10/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 09:16	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
23/10/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 10:46	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
23/10/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 11:46	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
23/10/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 12:46	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
23/10/2017	Non-Breeding	Waterfowl Survey	Lough Derg	02:30 starting at 12:00	Wind Speed and Direction:Light Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
23/10/2017	Non-Breeding	Hen Harrier Roost Survey	HH4	03:00 starting at 16:18	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	No target species
24/10/2017	Non-Breeding	Waterfowl Survey	Lough Derg	02:30 starting at 12:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
24/10/2017	Non-Breeding	Hen Harrier Roost Survey	HH1	03:00 starting at 16:21	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	No target species
25/10/2017	Non-Breeding	Waterfowl Survey	Lakes	02:30 starting at 12:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
25/10/2017	Non-Breeding	Hen Harrier Roost Survey	HH5	03:00 starting at 16:17	Wind Speed and Direction:Light Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	No target species

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
26/10/2017	Non-Breeding	Waterfowl Survey	Lakes	02:30 starting at 12:00	Wind Speed and Direction:Light Breeze, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
26/10/2017	Non-Breeding	Hen Harrier Roost Survey	HH2	03:00 starting at 16:16	Wind Speed and Direction:Light Breeze, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	No target species
27/10/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 07:24	Wind Speed and Direction:Light Air, N; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
27/10/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 08:24	Wind Speed and Direction:Light Air, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
27/10/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 09:24	Wind Speed and Direction:Light Air, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 5 Rain: None; Frost: None ; Snow: None	
27/10/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 10:54	Wind Speed and Direction:Light Air, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
27/10/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 11:54	Wind Speed and Direction:Light Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
27/10/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 12:54	Wind Speed and Direction:Light Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
01/11/2017	Non-Breeding	Vantage Point Survey	7a	03:00 starting at 11:32	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Sparrowhawk, Kestrel
01/11/2017	Non-Breeding	Vantage Point Survey	7a	03:00 starting at 15:02	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Snipe
02/11/2017	Non-Breeding	Vantage Point Survey	8a	03:00 starting at 11:29	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	No target species
02/11/2017	Non-Breeding	Vantage Point Survey	8a	03:00 starting at 14:59	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	Sparrowhawk, Woodcock
03/11/2017	Non-Breeding	Vantage Point Survey	5a	03:00 starting at 11:30	Wind Speed and Direction:Light Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	No target species
03/11/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 15:00	Wind Speed and Direction:Gentle Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Kestrel

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
06/11/2017	Non-Breeding	Vantage Point Survey	3	03:00 starting at 11:22	Wind Speed and Direction: Fresh Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	No target species
06/11/2017	Non-Breeding	Vantage Point Survey	3	03:00 starting at 14:52	Wind Speed and Direction: Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Kestrel, Red Grouse off site
07/11/2017	Non-Breeding	Vantage Point Survey	4a	03:00 starting at 11:22	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	Red Grouse calling
07/11/2017	Non-Breeding	Vantage Point Survey	4a	03:00 starting at 14:52	Wind Speed and Direction: Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: Light Showers; Frost: None ; Snow: None	No target species
08/11/2017	Non-Breeding	Waterfowl Survey	Lough Derg	05:30 starting at 10:00	Wind Speed and Direction: Gentle Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
09/11/2017	Non-Breeding	Waterfowl Survey	Lakes	02:30 starting at 11:00	Wind Speed and Direction: Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
09/11/2017	Non-Breeding	Hen Harrier Roost Survey	HH3	02:00 starting at 15:50	Wind Speed and Direction: Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	No target species

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
10/11/2017	Non-Breeding	Waterfowl Survey	Lakes	03:00 starting at 11:00	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
10/11/2017	Non-Breeding	Hen Harrier Roost Survey	HH1	02:00 starting at 15:48	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	No target species
13/11/2017	Non-Breeding	Vantage Point Survey	2	03:00 starting at 11:13	Wind Speed and Direction:Gentle Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Light Showers; Frost: None ; Snow: None	Kestrel
13/11/2017	Non-Breeding	Vantage Point Survey	2	03:00 starting at 14:43	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	No target species
14/11/2017	Non-Breeding	Vantage Point Survey	5a	02:00 starting at 15:42	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	No target species
16/11/2017	Non-Breeding	Vantage Point Survey	1a	03:00 starting at 11:06	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Kestrel
16/11/2017	Non-Breeding	Vantage Point Survey	1a	03:00 starting at 14:36	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Red Grouse off site, Snipe off site

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
17/11/2017	Non-Breeding	Vantage Point Survey	9	03:00 starting at 11:07	Wind Speed and Direction: Moderate Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Red Grouse off site
17/11/2017	Non-Breeding	Vantage Point Survey	9	03:00 starting at 14:37	Wind Speed and Direction: Moderate Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	Golden Plover off site
21/11/2017	Non-Breeding	Hen Harrier Roost Survey	HH2	02:00 starting at 15:32	Wind Speed and Direction: Fresh Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	No target species
22/11/2017	Non-Breeding	Waterfowl Survey	Lough Derg	05:30 starting at 10:30	Wind Speed and Direction: Light Air, NW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	Whooper Swan feeding between LD1 and LD2
23/11/2017	Non-Breeding	Waterfowl Survey	Lakes	02:30 starting at 10:30	Wind Speed and Direction: Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Whooper Swans feeding at 14 Errinagh.
23/11/2017	Non-Breeding	Hen Harrier Roost Survey	HH5	02:00 starting at 15:29	Wind Speed and Direction: Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	No target species
24/11/2017	Non-Breeding	Waterfowl Survey	Lakes	02:30 starting at 11:00	Wind Speed and Direction: Moderate Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
24/11/2017	Non-Breeding	Hen Harrier Roost Survey	HH4	02:00 starting at 15:28	Wind Speed and Direction:Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: On site; Snow: None	No target species
01/12/2017	Non-Breeding	Winter Walkover	WW01	05:30 starting at 10:30	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: On site; Snow: None	Hen harrier male hunting
04/12/2017	Non-Breeding	Winter Walkover	WW02	02:45 starting at 13:00	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
05/12/2017	Non-Breeding	Hen Harrier Roost Survey	HH3	02:30 starting at 14:52	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	No target species
06/12/2017	Non-Breeding	Waterfowl Survey	Lough Derg	05:30 starting at 09:30	Wind Speed and Direction:Moderate Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	Whooper swan, Goldeneye
07/12/2017	Non-Breeding	Waterfowl Survey	Lakes	03:00 starting at 11:00	Wind Speed and Direction:Fresh Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Whooper swan, Lapwing
07/12/2017	Non-Breeding	Hen Harrier Roost Survey	HH2	02:09 starting at 14:51	Wind Speed and Direction:Moderate Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	No target species

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
08/12/2017	Non-Breeding	Waterfowl Survey	Lakes	03:00 starting at 10:45	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: On site; Snow: None	
08/12/2017	Non-Breeding	Hen Harrier Roost Survey	HH1	03:00 starting at 14:52	Wind Speed and Direction:Moderate Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	No target species
08/12/2017	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 07:25	wind speed and direction:Calm, ; visibility: Limited (<500m); Rain: None; Frost: None ; Snow: None	
08/12/2017	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 08:25	wind speed and direction:Light Air, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
08/12/2017	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 09:25	wind speed and direction:Light Air, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
08/12/2017	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 10:55	wind speed and direction:Light Air, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
08/12/2017	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 11:55	wind speed and direction:Light Air, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
08/12/2017	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 12:55	wind speed and direction:Light Air, E; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
12/12/2017	Non-Breeding	Hen Harrier Roost Survey	HH4	03:00 starting at 11:13	Wind Speed and Direction:Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Light Showers; Frost: None ; Snow: None	No target species
13/12/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 07:40	Wind Speed and Direction:Moderate Breeze, W; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 3 Rain: Light Showers; Frost: None ; Snow: None	
13/12/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 08:40	Wind Speed and Direction:Moderate Breeze, W; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 3 Rain: Light Showers; Frost: None ; Snow: None	
13/12/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 09:40	Wind Speed and Direction:Fresh Breeze, W; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 3 Rain: Drizzle Mist; Frost: None ; Snow: None	
13/12/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 11:10	Wind Speed and Direction:Moderate Breeze, W; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 3 Rain: None; Frost: None ; Snow: None	
13/12/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 12:10	Wind Speed and Direction:Moderate Breeze, W; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 3 Rain: Heavy Showers; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
13/12/2017	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 13:10	Wind Speed and Direction: Moderate Breeze, W; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 3 Rain: Heavy Rain; Frost: None ; Snow: None	
13/12/2017	Non-Breeding	Hen Harrier Roost Survey	HH5	03:00 starting at 14:43	Wind Speed and Direction: Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	No target species
13/12/2017	Non-Breeding	Vantage Point Survey	9	01:00 starting at 07:40	wind speed and direction: Moderate Breeze, W; visibility: Limited (<500m); Rain: Light Showers; Frost: None ; Snow: None	
13/12/2017	Non-Breeding	Vantage Point Survey	9	01:00 starting at 08:40	wind speed and direction: Moderate Breeze, W; visibility: Good (>2km); Rain: Heavy Showers; Frost: None ; Snow: None	
13/12/2017	Non-Breeding	Vantage Point Survey	9	01:00 starting at 09:40	wind speed and direction: Fresh Breeze, W; visibility: Good (>2km); Rain: Heavy Showers; Frost: None ; Snow: None	
13/12/2017	Non-Breeding	Vantage Point Survey	9	01:00 starting at 11:10	wind speed and direction: Strong Breeze, W; visibility: Moderate (1-2km); Rain: Heavy Showers; Frost: None ; Snow: All Day	Snow showers
13/12/2017	Non-Breeding	Vantage Point Survey	9	01:00 starting at 12:10	wind speed and direction: Moderate Breeze, W; visibility: Good (>2km); Rain: Heavy Showers; Frost: None ; Snow: All Day	Snow showers



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
13/12/2017	Non-Breeding	Vantage Point Survey	9	01:00 starting at 13:10	wind speed and direction:Moderate Breeze, W; visibility: Good (>2km); Rain: Heavy Showers; Frost: None ; Snow: All Day	Snow showers
14/12/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 07:41	Wind Speed and Direction:Moderate Breeze, W; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 3 Rain: Light Showers; Frost: None ; Snow: Ground	
14/12/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 08:41	Wind Speed and Direction:Moderate Breeze, W; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 3 Rain: Heavy Showers; Frost: None ; Snow: Ground	
14/12/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 09:41	Wind Speed and Direction:Fresh Breeze, W; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 3 Rain: Heavy Rain; Frost: None ; Snow: Ground	
14/12/2017	Non-Breeding	Waterfowl Survey	Lough Derg	06:00 starting at 10:00	Wind Speed and Direction:Fresh Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Rain; Frost: None ; Snow: Ground	Tufted duck, Whooper Swan
15/12/2017	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 07:40	wind speed and direction:Light Breeze, W; visibility: Limited (<500m); Rain: None; Frost: None ; Snow: None	
15/12/2017	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 08:40	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
15/12/2017	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 09:40	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
15/12/2017	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 11:10	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
15/12/2017	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 12:10	wind speed and direction:Gentle Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
15/12/2017	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 13:10	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
15/12/2017	Non-Breeding	Waterfowl Survey	Lakes	04:00 starting at 10:00	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Whooper Swan
20/12/2017	Non-Breeding	Vantage Point Survey	3	01:00 starting at 07:45	Wind Speed and Direction:Light Breeze, SW; Visibility: Poor (<km); Cloud Height: >500m; Cloud Cover %: 3 Rain: None; Frost: None ; Snow: None	
20/12/2017	Non-Breeding	Vantage Point Survey	3	01:00 starting at 08:45	Wind Speed and Direction:Light Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 2 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
20/12/2017	Non-Breeding	Vantage Point Survey	3	01:00 starting at 09:45	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 3 Rain: None; Frost: None ; Snow: None	
20/12/2017	Non-Breeding	Vantage Point Survey	3	01:00 starting at 11:15	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 3 Rain: None; Frost: None ; Snow: None	
20/12/2017	Non-Breeding	Vantage Point Survey	3	01:00 starting at 12:15	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 3 Rain: None; Frost: None ; Snow: None	
20/12/2017	Non-Breeding	Vantage Point Survey	3	01:00 starting at 13:15	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 3 Rain: None; Frost: None ; Snow: None	
21/12/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 11:00	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 3 Rain: None; Frost: None ; Snow: None	
21/12/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 12:00	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 3 Rain: Light Showers; Frost: None ; Snow: None	
21/12/2017	Non-Breeding	Vantage Point Survey	2	01:00 starting at 13:00	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Poor (<km); Cloud Height: <150m; Cloud Cover %: 3 Rain: Drizzle Mist; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
21/12/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 07:40	wind speed and direction:Light Air, W; visibility: Limited (<500m); Rain: None; Frost: None ; Snow: None	
21/12/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 08:40	wind speed and direction:Light Air, W; visibility: Moderate (1-2km); Rain: None; Frost: None ; Snow: None	
21/12/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 09:40	wind speed and direction:Light Air, W; visibility: Moderate (1-2km); Rain: None; Frost: None ; Snow: None	
21/12/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 11:10	wind speed and direction:Light Breeze, W; visibility: Moderate (1-2km); Rain: None; Frost: None ; Snow: None	
21/12/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 12:10	wind speed and direction:Light Air, W; visibility: Moderate (1-2km); Rain: None; Frost: None ; Snow: None	
21/12/2017	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 13:10	wind speed and direction:Light Air, W; visibility: Moderate (1-2km); Rain: None; Frost: None ; Snow: None	
22/12/2017	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 07:40	wind speed and direction:Light Air, W; visibility: Limited (<500m); Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
22/12/2017	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 08:40	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
22/12/2017	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 09:40	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
22/12/2017	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 11:10	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	Fog to SW doesn't cover vantage view
22/12/2017	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 12:10	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: Light Showers; Frost: None ; Snow: None	
22/12/2017	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 13:10	wind speed and direction:Light Breeze, W; visibility: Good (>2km); Rain: None; Frost: None ; Snow: None	
08/01/2018	Non-Breeding	Vantage Point Survey	2	03:00 starting at 10:37	Wind Speed and Direction:Gentle Breeze, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: On site; Snow: None	No target species
08/01/2018	Non-Breeding	Vantage Point Survey	2	03:00 starting at 14:07	Wind Speed and Direction:Light Breeze, E; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	No target species

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
09/01/2018	Non-Breeding	Vantage Point Survey	7a	03:00 starting at 11:09	Wind Speed and Direction: Fresh Breeze, S; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Heavy Rain; Frost: None ; Snow: None	No target species
10/01/2018	Non-Breeding	Vantage Point Survey	7a	03:00 starting at 14:40	Wind Speed and Direction: Light Air, SE; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	No target species
10/01/2018	Non-Breeding	Winter Walkover	WW01	02:30 starting at 11:00	Wind Speed and Direction: Light Air, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	No target species
11/01/2018	Non-Breeding	Winter Walkover	WW02	05:00 starting at 10:00	Wind Speed and Direction: Gentle Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Snipe, Kestrel
12/01/2018	Non-Breeding	Waterfowl Survey	Waterfowl Lough Derg	06:30 starting at 10:00	Wind Speed and Direction: Light Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	Whooper Swan, Tufted Duck
15/01/2018	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 11:20	Wind Speed and Direction: Gentle Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	
15/01/2018	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 12:20	Wind Speed and Direction: Moderate Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
15/01/2018	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 13:20	Wind Speed and Direction: Moderate Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	
15/01/2018	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 14:50	Wind Speed and Direction: Moderate Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	
15/01/2018	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 15:50	Wind Speed and Direction: Fresh Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	
15/01/2018	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 16:50	Wind Speed and Direction: Fresh Breeze, W; Visibility: Poor (<km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Rain; Frost: None ; Snow: None	
15/01/2018	Non-Breeding	Waterfowl Survey	Waterfowl Lakes	03:00 starting at 11:00	Wind Speed and Direction: Moderate Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	Whooper Swan, Lapwing
16/01/2018	Non-Breeding	Waterfowl Survey	Waterfowl Lakes	03:00 starting at 10:00	Wind Speed and Direction: Strong Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	Whooper Swan
17/01/2018	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 11:23	Wind Speed and Direction: Moderate Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: Ground	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
17/01/2018	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 12:23	Wind Speed and Direction: Moderate Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: Ground	
17/01/2018	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 13:23	Wind Speed and Direction: Fresh Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: Ground	
17/01/2018	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 14:53	Wind Speed and Direction: Fresh Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Rain; Frost: None ; Snow: None	
17/01/2018	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 15:53	Wind Speed and Direction: Fresh Breeze, SW; Visibility: Poor (<km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Heavy Rain; Frost: None ; Snow: None	
17/01/2018	Non-Breeding	Vantage Point Survey	5a	01:00 starting at 16:53	Wind Speed and Direction: Fresh Breeze, SW; Visibility: Poor (<km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Heavy Rain; Frost: None ; Snow: None	
18/01/2018	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 11:25	Wind Speed and Direction: Gentle Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
18/01/2018	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 12:25	Wind Speed and Direction: Moderate Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
18/01/2018	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 13:25	Wind Speed and Direction: Moderate Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
18/01/2018	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 14:55	Wind Speed and Direction: Moderate Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
18/01/2018	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 15:55	Wind Speed and Direction: Fresh Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
18/01/2018	Non-Breeding	Vantage Point Survey	4a	01:00 starting at 16:55	Wind Speed and Direction: Fresh Breeze, W; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
18/01/2018	Non-Breeding	Hen Harrier Roost Survey	HH2	02:22 starting at 15:23	Wind Speed and Direction: Moderate Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: Light Showers; Frost: On site; Snow: None	No target species
19/01/2018	Non-Breeding	Vantage Point Survey	3	01:00 starting at 11:27	Wind Speed and Direction: Gentle Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: Ground	
19/01/2018	Non-Breeding	Vantage Point Survey	3	01:00 starting at 12:27	Wind Speed and Direction: Moderate Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: Ground	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
19/01/2018	Non-Breeding	Vantage Point Survey	3	01:00 starting at 13:27	Wind Speed and Direction: Moderate Breeze, W; Visibility: Poor (<km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: All Day	
19/01/2018	Non-Breeding	Hen Harrier Roost Survey	HH1	02:15 starting at 15:25	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: Ground	No target species
22/01/2018	Non-Breeding	Hen Harrier Roost Survey	HH5	02:20 starting at 15:30	Wind Speed and Direction: Fresh Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	No target species
23/01/2018	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 11:30	Wind Speed and Direction: Fresh Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
23/01/2018	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 12:30	Wind Speed and Direction: Fresh Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
23/01/2018	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 13:30	Wind Speed and Direction: Fresh Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
23/01/2018	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 15:00	Wind Speed and Direction: Fresh Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
23/01/2018	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 16:00	Wind Speed and Direction: Fresh Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	
23/01/2018	Non-Breeding	Vantage Point Survey	8a	01:00 starting at 17:00	Wind Speed and Direction: Fresh Breeze, SW; Visibility: Poor (<km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
23/01/2018	Non-Breeding	Hen Harrier Roost Survey	HH4	02:15 starting at 15:30	Wind Speed and Direction: Gentle Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Light Showers; Frost: None ; Snow: None	No target species
24/01/2018	Non-Breeding	Vantage Point Survey	3	01:00 starting at 15:06	Wind Speed and Direction: Fresh Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
24/01/2018	Non-Breeding	Vantage Point Survey	3	01:00 starting at 16:06	Wind Speed and Direction: Fresh Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
24/01/2018	Non-Breeding	Vantage Point Survey	3	01:00 starting at 17:06	Wind Speed and Direction: Fresh Breeze, SW; Visibility: Poor (<km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	
24/01/2018	Non-Breeding	Hen Harrier Roost Survey	HH3	02:25 starting at 15:25	Wind Speed and Direction: Moderate Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	No target species

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
29/01/2018	Non-Breeding	Waterfowl Survey	Waterfowl Lough Derg	05:00 starting at 11:00	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Curllew, Goldeneye, Tufted Duck
30/01/2018	Non-Breeding	Vantage Point Survey	9	01:00 starting at 11:47	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
30/01/2018	Non-Breeding	Vantage Point Survey	9	01:00 starting at 12:47	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
30/01/2018	Non-Breeding	Vantage Point Survey	9	01:00 starting at 13:47	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
30/01/2018	Non-Breeding	Vantage Point Survey	9	01:00 starting at 15:17	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
30/01/2018	Non-Breeding	Vantage Point Survey	9	01:00 starting at 16:17	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Poor (<km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	Low cloud - rstricted visibility
30/01/2018	Non-Breeding	Vantage Point Survey	9	01:00 starting at 17:17	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Limited (<500m); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	Low cloud - rstricted visibility

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
30/01/2018	Non-Breeding	Waterfowl Survey	Waterfowl Lakes	03:00 starting at 11:00	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Wigeon
31/01/2018	Non-Breeding	Waterfowl Survey	Waterfowl Lakes	02:30 starting at 11:30	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: Ground	BH Gull, Lapwing, Wigeon, Tufted Duck
05/02/2018	Non-Breeding	Vantage Point Survey	3	03:00 starting at 07:14	Wind Speed and Direction:Moderate Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: On site; Snow: None	No target species
05/02/2018	Non-Breeding	Vantage Point Survey	3	03:00 starting at 10:14	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	No target species
06/02/2018	Non-Breeding	Vantage Point Survey	4a	03:00 starting at 07:12	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: On site; Snow: Ground	Red Grouse calling
06/02/2018	Non-Breeding	Vantage Point Survey	4a	03:00 starting at 10:42	Wind Speed and Direction:Moderate Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: On site; Snow: Ground	No target species
07/02/2018	Non-Breeding	Vantage Point Survey	5a	03:00 starting at 12:20	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: Ground	No target species

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
07/02/2018	Non-Breeding	Hen Harrier Roost Survey	HH4	02:19 starting at 16:01	Wind Speed and Direction: Moderate Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	No target species
08/02/2018	Non-Breeding	Vantage Point Survey	8a	03:00 starting at 07:08	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	No target species
08/02/2018	Non-Breeding	Vantage Point Survey	8a	03:00 starting at 10:38	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	No target species
12/02/2018	Non-Breeding	Waterfowl Survey	Lough Derg	06:00 starting at 10:30	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: On site; Snow: Ground	Curlew, Greylag, Lapwing, Golden Plover, Whooper Swan in vicinity of Lough Derg.
13/02/2018	Non-Breeding	Waterfowl Survey	Lakes	02:30 starting at 11:30	Wind Speed and Direction: Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: On site; Snow: Ground	Wigeon, Whooper swan, Golden Plover
13/02/2018	Non-Breeding	Hen Harrier Roost Survey	HH3	02:19 starting at 15:56	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: On site; Snow: Ground	No target species
14/02/2018	Non-Breeding	Waterfowl Survey	Lakes	03:25 starting at 10:45	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	Whooper swan (Outside buffer)

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
14/02/2018	Non-Breeding	Hen Harrier Roost Survey	HH5	02:08 starting at 16:07	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: On site; Snow: Ground	No target species
15/02/2018	Non-Breeding	Vantage Point Survey	5a	03:00 starting at 06:54	Wind Speed and Direction:Fresh Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: Heavy Showers; Frost: None ; Snow: Ground	Buzzard display
16/02/2018	Non-Breeding	Vantage Point Survey	1a	03:00 starting at 06:52	Wind Speed and Direction:Fresh Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: On site; Snow: Ground	Red Grouse calling, Snipe
16/02/2018	Non-Breeding	Vantage Point Survey	1a	03:00 starting at 10:22	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Light Showers; Frost: None ; Snow: None	Sparrowhawk display
20/02/2018	Non-Breeding	Vantage Point Survey	9	03:00 starting at 06:43	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: Ground	Sparrowhawk travelling on site. Red Grouse and Golden Plover off site.
20/02/2018	Non-Breeding	Vantage Point Survey	9	03:00 starting at 10:13	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Peregrine hunting on site
21/02/2018	Non-Breeding	Vantage Point Survey	2	01:00 starting at 06:40	Wind Speed and Direction:Light Breeze, S; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: On site; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
21/02/2018	Non-Breeding	Vantage Point Survey	2	01:00 starting at 07:40	Wind Speed and Direction:Gentle Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: On site; Snow: None	
21/02/2018	Non-Breeding	Vantage Point Survey	2	01:00 starting at 08:40	Wind Speed and Direction:Gentle Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: On site; Snow: None	
21/02/2018	Non-Breeding	Vantage Point Survey	2	01:00 starting at 10:10	Wind Speed and Direction:Gentle Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: On site; Snow: None	
21/02/2018	Non-Breeding	Vantage Point Survey	2	01:00 starting at 11:10	Wind Speed and Direction:Gentle Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
21/02/2018	Non-Breeding	Vantage Point Survey	2	01:00 starting at 12:10	Wind Speed and Direction:Gentle Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
22/02/2018	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 06:38	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
22/02/2018	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 07:38	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
22/02/2018	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 08:38	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
22/02/2018	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 10:08	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
22/02/2018	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 11:08	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
22/02/2018	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 12:08	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
26/02/2018	Non-Breeding	Waterfowl Survey	Lough Derg	02:30 starting at 12:30	Wind Speed and Direction:Light Air, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Tufted Duck, Goldeneye
26/02/2018	Non-Breeding	Hen Harrier Roost Survey	HH1 - Knockalass Bog	02:03 starting at 16:37	Wind Speed and Direction:Light Air, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: On site; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
27/02/2018	Non-Breeding	Waterfowl Survey	Lough Derg/Lakes	05:10 starting at 10:05	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Whooper swan, Greylag, Golden Plover at Lough Derg

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
28/02/2018	Non-Breeding	Waterfowl Survey	Lakes	02:00 starting at 11:30	Wind Speed and Direction: Fresh Breeze, NE; Visibility: Poor (<km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: On site; Snow: Ground	
05/03/2018	Non-Breeding	Hen Harrier Roost Survey	HH1	#REF!	#REF!	No target species observed
05/03/2018	Non-Breeding	Winter Walkover	WW02	#REF!	#REF!	Snipe and woodcock
06/03/2018	Non-Breeding	Winter Walkover	WW02	#REF!	#REF!	Snipe and Sparrowhawk
07/03/2018	Non-Breeding	Vantage Point Survey	8a	#REF!	#REF!	No target species observed
07/03/2018	Non-Breeding	Vantage Point Survey	8a	#REF!	#REF!	Sparrowhawk
08/03/2018	Non-Breeding	Vantage Point Survey	2	#REF!	#REF!	No target species observed

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
08/03/2018	Non-Breeding	Vantage Point Survey	2	#REF!	#REF!	Kestrel hunting, Red Grouse calling off site
09/03/2018	Non-Breeding	Vantage Point Survey	3	#REF!	#REF!	No target species observed
09/03/2018	Non-Breeding	Vantage Point Survey	3	#REF!	#REF!	No target species observed
12/03/2018	Non-Breeding	Vantage Point Survey	4a	#REF!	#REF!	Red Grouse calling, Hen Harrier, mallard pair
12/03/2018	Non-Breeding	Vantage Point Survey	4a	#REF!	#REF!	No target species observed
13/03/2018	Non-Breeding	Waterfowl Survey	Lough Derg	#REF!	#REF!	Whooper Swan, Curlew, BH Gull, Greylag
13/03/2018	Non-Breeding	Red Grouse Survey	1	03:29 starting at 10:01	Wind Speed and Direction:Light Air, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 3 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
13/03/2018	Non-Breeding	Red Grouse Survey	2	00:15 starting at 13:50	Wind Speed and Direction:Light Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 3 Rain: None; Frost: None ; Snow: None	
13/03/2018	Non-Breeding	Red Grouse Survey	3	00:15 starting at 14:15	Wind Speed and Direction:Light Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 3 Rain: None; Frost: None ; Snow: None	
13/03/2018	Non-Breeding	Red Grouse Survey	4	03:10 starting at 15:00	Wind Speed and Direction:Light Air, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 3 Rain: None; Frost: None ; Snow: None	
14/03/2018	Non-Breeding	Hen Harrier Roost Survey	HH 5	#REF!	#REF!	No target species observed
14/03/2018	Non-Breeding	Waterfowl Survey	Lakes	#REF!	#REF!	Lapwing, Golden Plover
20/03/2018	Non-Breeding	Vantage Point Survey	5a	#REF!	#REF!	No target species observed
20/03/2018	Non-Breeding	Vantage Point Survey	5a	#REF!	#REF!	Kestrel hunting before travelling on

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
21/03/2018	Non-Breeding	Vantage Point Survey	9	#REF!	#REF!	-See confidential appendix 5 for redacted text relating to sensitive species
21/03/2018	Non-Breeding	Vantage Point Survey	9	#REF!	#REF!	Golden Plover, Mallard, Red Grouse calling
22/03/2018	Non-Breeding	Hen Harrier Roost Survey	HH 1	#REF!	#REF!	Hen Harrier male observed in low flight
27/03/2018	Non-Breeding	Waterfowl Survey	Lough Derg	#REF!	#REF!	Greylag goose, BH Gull, Tufted duck
27/03/2018	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 14:30	Wind Speed and Direction: Moderate Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
27/03/2018	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 15:30	Wind Speed and Direction: Fresh Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
27/03/2018	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 16:30	Wind Speed and Direction: Fresh Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
27/03/2018	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 18:00	Wind Speed and Direction:Fresh Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
27/03/2018	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 19:00	Wind Speed and Direction:Moderate Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
27/03/2018	Non-Breeding	Vantage Point Survey	1a	01:00 starting at 20:00	Wind Speed and Direction:Gentle Breeze, W; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
28/03/2018	Non-Breeding	Waterfowl Survey	Lakes	#REF!	#REF!	Lapwing Displaying at Errinagh,
28/03/2018	Non-Breeding	Hen Harrier Roost Survey	HH-Ballybroghan	#REF!	#REF!	No target species observed
28/03/2018	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 14:33	Wind Speed and Direction:Moderate Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
28/03/2018	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 15:33	Wind Speed and Direction:Moderate Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
28/03/2018	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 16:33	Wind Speed and Direction: Moderate Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
28/03/2018	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 18:03	Wind Speed and Direction: Moderate Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
28/03/2018	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 19:03	Wind Speed and Direction: Gentle Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
28/03/2018	Non-Breeding	Vantage Point Survey	7a	01:00 starting at 20:03	Wind Speed and Direction: Gentle Breeze, W; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
29/03/2018	Non-Breeding	Hen Harrier Roost Survey	HH1	#REF!	#REF!	-See confidential appendix 5 for redacted text relating to sensitive species
30/03/2018	Non-Breeding	Red Grouse Survey	5	01:15 starting at 08:05	Wind Speed and Direction: Light Breeze, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 3 Rain: None; Frost: None ; Snow: None	
30/03/2018	Non-Breeding	Red Grouse Survey	6	00:15 starting at 09:50	Wind Speed and Direction: Gentle Breeze, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 3 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
30/03/2018	Non-Breeding	Red Grouse Survey	7	00:50 starting at 10:20	Wind Speed and Direction:Light Breeze, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 3 Rain: None; Frost: None ; Snow: None	
30/03/2018	Non-Breeding	Red Grouse Survey	8	00:10 starting at 11:30	Wind Speed and Direction:Light Breeze, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 2 Rain: None; Frost: None ; Snow: None	
30/03/2018	Non-Breeding	Red Grouse Survey	9	00:40 starting at 12:00	Wind Speed and Direction:Gentle Breeze, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 3 Rain: None; Frost: None ; Snow: None	
30/03/2018	Non-Breeding	Red Grouse Survey	10	01:45 starting at 13:10	Wind Speed and Direction:Light Breeze, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 2 Rain: None; Frost: None ; Snow: None	
30/03/2018	Non-Breeding	Red Grouse Survey	11	01:25 starting at 14:20	Wind Speed and Direction:Light Air, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 3 Rain: None; Frost: None ; Snow: None	
03/04/2018	Breeding	VP	3	03:00 starting at 06:00	Wind Speed and Direction:Light Air, SE; Visibility: Limited (<500m); Cloud Height: <150m; Cloud Cover %: 100 Rain: Drizzle Mist; Frost: None ; Snow: None	Fog for the first hour of the VP
03/04/2018	Breeding	VP	3	03:00 starting at 09:30	Wind Speed and Direction:Light Air, SE; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 100 Rain: Heavy Showers; Frost: None ; Snow: None	



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
03/04/2018	Breeding	Breeding Raptor Survey		06:30 starting at 10:00	Wind Speed and Direction:Light Air, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
04/04/2018	Breeding	VP	8a	03:00 starting at 06:00	Wind Speed and Direction:Light Air, NNE; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 100 Rain: None; Frost: None ; Snow: None	Low visibility for the first hour
04/04/2018	Breeding	VP	8a	03:00 starting at 09:30	Wind Speed and Direction:Light Breeze, N; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 100 Rain: None; Frost: None ; Snow: None	
04/04/2018	Breeding	Breeding Raptor Survey	Ballybran - Carrownagowan - Inchalughoge	06:30 starting at 10:30	Wind Speed and Direction:Fresh Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Light Showers; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
05/04/2018	Breeding	Breeding Walkover		06:00 starting at 09:40	Wind Speed and Direction:Light Air, N; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 100 Rain: None; Frost: None ; Snow: None	
05/04/2018	Breeding	Breeding Raptor Survey	Lackareagh - Croaghmagower	06:30 starting at 10:00	Wind Speed and Direction:Moderate Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Light Showers; Frost: None ; Snow: None	Sparrowhawk outside 2km
06/04/2018	Breeding	Breeding Raptor Survey	Broadford, Knockalass, Barn Owl Suitable sites	06:00 starting at 08:00	Wind Speed and Direction:Fresh Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Rain; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
09/04/2018	Breeding	Breeding Walkover		07:00 starting at 09:00	Wind Speed and Direction:Light Air, N; Visibility: Limited (<500m); Cloud Height: 150-500m; Cloud Cover %: 100 Rain: Drizzle Mist; Frost: None ; Snow: None	
09/04/2018	Breeding	Breeding Raptor Survey	Broadford - Slieve Bearnagh	06:30 starting at 13:00	Wind Speed and Direction:Moderate Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Light Showers; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
10/04/2018	Breeding	Breeding Walkover		03:00 starting at 09:50	Wind Speed and Direction:Gentle Breeze, NE; Visibility: Poor (<km); Cloud Height: 150-500m; Cloud Cover %: 100 Rain: None; Frost: None ; Snow: None	
10/04/2018	Breeding	Breeding Raptor Survey		06:40 starting at 10:30	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: Light Showers; Frost: None ; Snow: None	SH female (15:00) Displaying mobbed . WD4. HH male at (16:20-16:40) display flight at PB2. The same individual male observed on both flights on site probably breeding territory. K female hunting at carrownagowan site
11/04/2018	Breeding	winter waterfowl	Lough Derg	06:30 starting at 09:00	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
12/04/2018	Breeding	winter waterfowl	Lakes	06:30 starting at 09:00	Wind Speed and Direction:Gentle Breeze, E; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
13/04/2018	Breeding	Breeding Raptor Survey		06:30 starting at 09:00	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	3 Buzzards displaying off site (10:30) 1 BZ displaying. 1 HH males aggressive towards BZ before display and travelling on. 1 Kestral display aggressive towards BZ. Hunting also. 1 Sparrowhawk travelling.1 Buzzard call and display over mature woodland

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
14/04/2018	Breeding	Breeding Raptor Survey		06:30 starting at 09:00	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	male HH hunting at Moyassa. Kestral calling Coamnagun. Kestral in flight probable breeding territory. Fresh GP kill site x 2 at Moylassa. Probable PE kill. (Off site) just outside 500m. Golden plover x 90 in flight at Coamnagun- Moylassa. Within 500m boundary.
16/04/2018	Breeding	vantage point	7a	03:00 starting at 05:33	Wind Speed and Direction:Moderate Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	Grey Heron travelling. Hen Harrier male in display flights. No females present. No skydiving or calling.
16/04/2018	Breeding	vantage point	7A	04:10 starting at 08:33	Wind Speed and Direction:Fresh Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
17/04/2018	Breeding	vantage point	2	02:00 starting at 05:32	Wind Speed and Direction:Moderate Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	Hen harrier , male
17/04/2018	Breeding	vantage point	2	01:00 starting at 07:32	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
17/04/2018	Breeding	vantage point	2	02:00 starting at 08:32	Wind Speed and Direction:Moderate Breeze, s; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
17/04/2018	Breeding	vantage point	2	13:28 starting at 10:32	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Heavy Showers; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
18/04/2018	Breeding	vantage point	1a	01:00 starting at 05:30	Wind Speed and Direction: Moderate Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	No target species. Poor conditions for bird activity
18/04/2018	Breeding	vantage point	1a	01:00 starting at 06:30	Wind Speed and Direction: Moderate Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
18/04/2018	Breeding	vantage point	1a	01:00 starting at 07:30	Wind Speed and Direction: Fresh Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
18/04/2018	Breeding	vantage point	1a	01:00 starting at 08:30	Wind Speed and Direction: Fresh Breeze, SW; Visibility: Limited (<500m); Cloud Height: <150m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
18/04/2018	Breeding	vantage point	1a	01:00 starting at 09:30	Wind Speed and Direction: Fresh Breeze, SW; Visibility: Limited (<500m); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	
18/04/2018	Breeding	vantage point	1a	01:30 starting at 10:30	Wind Speed and Direction: Fresh Breeze, SW; Visibility: Poor (<km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
19/04/2018	Breeding	vantage point	9	01:00 starting at 05:27	Wind Speed and Direction: Moderate Breeze, S; Visibility: Limited (<500m); Cloud Height: <150m; Cloud Cover %: 100 Rain: None; Frost: None ; Snow: None	Golden Plover travelling, Red Grouse calling

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
19/04/2018	Breeding	vantage point	9	01:00 starting at 06:27	Wind Speed and Direction:Gentle Breeze, S; Visibility: Poor (<km); Cloud Height: 150-500m; Cloud Cover %: 100 Rain: None; Frost: None ; Snow: None	Low cloud moved up to Vp4a
19/04/2018	Breeding	vantage point	9	01:00 starting at 07:27	Wind Speed and Direction:Gentle Breeze, S; Visibility: Poor (<km); Cloud Height: 150-500m; Cloud Cover %: 100 Rain: None; Frost: None ; Snow: None	
19/04/2018	Breeding	vantage point	4a	01:00 starting at 09:15	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	Mallards on site
19/04/2018	Breeding	vantage point	4a	01:00 starting at 10:15	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
19/04/2018	Breeding	vantage point	4a	01:00 starting at 11:15	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
20/04/2018	Breeding	VP	5a	03:00 starting at 05:25	Wind Speed and Direction:Light Air, S; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 100 Rain: None; Frost: None ; Snow: None	
20/04/2018	Breeding	VP	5a	03:00 starting at 08:55	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 100 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
20/04/2018	Breeding	VP	9	03:00 starting at 12:30	Wind Speed and Direction:Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 25 Rain: None; Frost: None ; Snow: None	
23/04/2018	Breeding	VP	4	03:00 starting at 05:20	Wind Speed and Direction:Light Air, SW; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 100 Rain: Heavy Showers; Frost: None ; Snow: None	
23/04/2018	Breeding	Breeding Walkover		06:00 starting at 08:30	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Poor (<km); Cloud Height: 150-500m; Cloud Cover %: 100 Rain: Heavy Rain; Frost: None ; Snow: None	
25/04/2018	Breeding	winter waterfowl	Lough Derg	06:30 starting at 09:00	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Heavy Showers; Frost: None ; Snow: None	
26/04/2018	Breeding	winter waterfowl	Lakes	06:30 starting at 09:00	Wind Speed and Direction:Moderate Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Drizzle Mist; Frost: None ; Snow: None	
01/05/2018	Breeding	Breeding Walkover Survey (CBC)		03:00 starting at 15:00	Wind Speed and Direction:Light Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	Male Sparrowhawk observed carrying prey into suitable breeding habitat
02/05/2018	Breeding	Breeding Walkover Survey (CBC)		03:00 starting at 11:00	Wind Speed and Direction:Moderate Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: Light Showers; Frost: None ; Snow: None	Kestrel in hunting flight

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
02/05/2018	Breeding	Breeding Walkover Survey (CBC)		03:00 starting at 14:30	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	Male Sparrowhawk observed carrying prey into suitable breeding habitat, kestrel in hunting flight
03/05/2018	Breeding	Breeding Walkover Survey (CBC)		03:00 starting at 11:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Poor (<km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Heavy Rain; Frost: None ; Snow: None	No target species observed
04/05/2018	Breeding	Breeding Raptor Survey	Cragnamurragh-Lackareagh	06:30 starting at 11:00	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 33-66 Rain: Drizzle Mist; Frost: None ; Snow: None	Buzzard defending territory and hunting. Kestrel observed in aggressive flight in suitable breeding habitat and hunting. Male HH observed in brief low flight at Lackareagh.
08/05/2018	Breeding	Vantage Point Survey	7a	01:00 starting at 15:46	Wind Speed and Direction:Fresh Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
08/05/2018	Breeding	Vantage Point Survey	7a	01:00 starting at 16:46	Wind Speed and Direction:Moderate Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
08/05/2018	Breeding	Vantage Point Survey	7a	01:00 starting at 17:46	Wind Speed and Direction:Gentle Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
08/05/2018	Breeding	Vantage Point Survey	7a	01:00 starting at 19:16	Wind Speed and Direction:Moderate Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
08/05/2018	Breeding	Vantage Point Survey	7a	01:00 starting at 20:16	Wind Speed and Direction:Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
08/05/2018	Breeding	Vantage Point Survey	7a	01:00 starting at 21:16	Wind Speed and Direction:Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
09/05/2018	Breeding	Breeding Raptor Survey	Ballybran-Lackareagh-Knocknalecka	06:30 starting at 14:30	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Light Showers; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
10/05/2018	Breeding	Breeding Raptor Survey	Cragnamurragh-Inchalughoge	06:30 starting at 09:00	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: Light Showers; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
11/05/2018	Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 11:00	Wind Speed and Direction:Light Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Rain; Frost: None ; Snow: None	
11/05/2018	Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 12:00	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
11/05/2018	Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 13:00	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
11/05/2018	Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 14:00	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
11/05/2018	Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 15:00	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height:	



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
					>500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
14/05/2018	Breeding	Waterfowl Survey	Lakes	01:00 starting at 09:30	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
14/05/2018	Breeding	Waterfowl Survey	Lakes	01:00 starting at 10:30	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
14/05/2018	Breeding	Waterfowl Survey	Lakes	01:00 starting at 11:30	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
14/05/2018	Breeding	Waterfowl Survey	Lakes	01:00 starting at 12:30	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
14/05/2018	Breeding	Waterfowl Survey	Lakes	01:00 starting at 13:30	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
14/05/2018	Breeding	Waterfowl Survey	Lakes	01:00 starting at 14:30	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
15/05/2018	Breeding	Breeding Raptor Survey	Lackareagh	01:00 starting at 10:30	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Poor (<km); Cloud Height: <150m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
15/05/2018	Breeding	Breeding Raptor Survey	Lackareagh	01:00 starting at 11:30	Wind Speed and Direction: Moderate Breeze, NW; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
15/05/2018	Breeding	Breeding Raptor Survey	Lackareagh	01:00 starting at 12:30	Wind Speed and Direction: Moderate Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	Male Hen Harrier observed in flight
15/05/2018	Breeding	Breeding Raptor Survey	Lackareagh	01:00 starting at 14:00	Wind Speed and Direction: Moderate Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Heavy Showers; Frost: None ; Snow: None	
15/05/2018	Breeding	Breeding Raptor Survey	Lackareagh	01:00 starting at 15:00	Wind Speed and Direction: Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
15/05/2018	Breeding	Breeding Raptor Survey	Lackareagh	01:00 starting at 16:00	Wind Speed and Direction: Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: Heavy Showers; Frost: None ; Snow: None	
16/05/2018	Breeding	Vantage Point Survey	9	01:00 starting at 15:57	Wind Speed and Direction: Gentle Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Kestrel hunting
16/05/2018	Breeding	Vantage Point Survey	9	01:00 starting at 16:57	Wind Speed and Direction: Gentle Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
16/05/2018	Breeding	Vantage Point Survey	9	01:00 starting at 17:57	Wind Speed and Direction: Gentle Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
16/05/2018	Breeding	Vantage Point Survey	9	01:00 starting at 19:27	Wind Speed and Direction:Gentle Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
16/05/2018	Breeding	Vantage Point Survey	9	01:00 starting at 20:27	Wind Speed and Direction:Gentle Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
16/05/2018	Breeding	Vantage Point Survey	9	01:00 starting at 21:27	Wind Speed and Direction:Gentle Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Red Grouse calling
16/05/2018	Breeding	VP	8	03:00 starting at 15:55	Wind Speed and Direction:Light Air, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 5 Rain: None; Frost: None ; Snow: None	
16/05/2018	Breeding	VP	8	03:00 starting at 19:25	Wind Speed and Direction:Light Air, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 5 Rain: None; Frost: None ; Snow: None	
17/05/2018	Breeding	Breeding Raptor Survey	Kilokennedy-Inchalogoge	01:00 starting at 11:00	Wind Speed and Direction:Gentle Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
17/05/2018	Breeding	Breeding Raptor Survey	Kilokennedy-Inchalogoge	01:00 starting at 12:00	Wind Speed and Direction:Gentle Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
17/05/2018	Breeding	Breeding Raptor Survey	Kilokennedy-Inchalogoge	01:00 starting at 13:00	Wind Speed and Direction:Gentle Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	HH hunting and landing at Kilokennedy. 2 Kestrel hunting, 2 Buzzard hunting.
17/05/2018	Breeding	Breeding Raptor Survey	Kilokennedy-Inchalogoge	01:00 starting at 14:30	Wind Speed and Direction:Gentle Breeze, SE; Visibility: Good (>2km); Cloud Height:	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
					>500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
17/05/2018	Breeding	Breeding Raptor Survey	Kilokennedy-Inchalogoge	01:00 starting at 15:30	Wind Speed and Direction:Moderate Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
17/05/2018	Breeding	Breeding Raptor Survey	Kilokennedy-Inchalogoge	01:00 starting at 16:30	Wind Speed and Direction:Moderate Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
17/05/2018	Breeding	VP	3	03:00 starting at 15:55	Wind Speed and Direction:Light Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 50 Rain: None; Frost: None ; Snow: None	
17/05/2018	Breeding	VP	3	03:00 starting at 19:25	Wind Speed and Direction:Light Air, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 50 Rain: None; Frost: None ; Snow: None	
18/05/2018	Breeding	Breeding Raptor Survey	Broadford-Ballybran	01:00 starting at 10:00	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
18/05/2018	Breeding	Breeding Raptor Survey	Broadford-Ballybran	01:00 starting at 11:00	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
18/05/2018	Breeding	Breeding Raptor Survey	Broadford-Ballybran	01:00 starting at 12:00	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
18/05/2018	Breeding	Breeding Raptor Survey	Broadford-Ballybran	01:00 starting at 13:30	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
18/05/2018	Breeding	Breeding Raptor Survey	Broadford-Ballybran	01:00 starting at 14:30	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
18/05/2018	Breeding	Breeding Raptor Survey	Broadford-Ballybran	01:00 starting at 15:30	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
22/05/2018	Breeding	Breeding Raptor Survey	Ballydonaghan-Drummin	01:00 starting at 11:00	Wind Speed and Direction:Moderate Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
22/05/2018	Breeding	Breeding Raptor Survey	Ballydonaghan-Drummin	01:00 starting at 12:00	Wind Speed and Direction:Moderate Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Female Sparrowhawk
22/05/2018	Breeding	Breeding Raptor Survey	Ballydonaghan-Drummin	01:00 starting at 13:00	Wind Speed and Direction:Moderate Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Buzzard in flight
22/05/2018	Breeding	Breeding Raptor Survey	Ballydonaghan-Drummin	01:00 starting at 14:30	Wind Speed and Direction:Moderate Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
22/05/2018	Breeding	Breeding Raptor Survey	Ballydonaghan-Drummin	01:00 starting at 15:30	Wind Speed and Direction:Moderate Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
22/05/2018	Breeding	Breeding Raptor Survey	Ballydonaghan-Drummin	01:00 starting at 16:30	Wind Speed and Direction:Moderate Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Kestrel carrying prey - confirmed breeding. Male Hen Harrier in hunting flight.
22/05/2018	Breeding	VP	5	03:00 starting at 16:05	Wind Speed and Direction:Light Air, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 5 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
22/05/2018	Breeding	VP	5	03:00 starting at 19:35	Wind Speed and Direction:Light Air, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 5 Rain: None; Frost: None ; Snow: None	
23/05/2018	Breeding	Breeding Raptor Survey	Moylussa-Coumnagun-Cragnamurragh	01:00 starting at 07:00	Wind Speed and Direction:Light Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Male Hen Harrier observed in hunting flight
23/05/2018	Breeding	Breeding Raptor Survey	Moylussa-Coumnagun-Cragnamurragh	01:00 starting at 08:00	Wind Speed and Direction:Light Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
23/05/2018	Breeding	Breeding Raptor Survey	Moylussa-Coumnagun-Cragnamurragh	01:00 starting at 09:00	Wind Speed and Direction:Light Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Ringtail Hen Harrier observed in hunting flight
23/05/2018	Breeding	Breeding Raptor Survey	Moylussa-Coumnagun-Cragnamurragh	01:00 starting at 10:30	Wind Speed and Direction:Light Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Adult pair of Buzzard displaying and interacting in flight
23/05/2018	Breeding	Breeding Raptor Survey	Moylussa-Coumnagun-Cragnamurragh	01:00 starting at 11:30	Wind Speed and Direction:Light Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Kestrel hunting, 4 Buzzards (2 displaying adults)
23/05/2018	Breeding	Breeding Raptor Survey	Moylussa-Coumnagun-Cragnamurragh	01:30 starting at 12:30	Wind Speed and Direction:Light Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Male Hen Harrier, Female Sparrowhawk travelling
24/05/2018	Breeding	Vantage Point Survey	2	01:00 starting at 16:09	Wind Speed and Direction:Light Air, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Kestrel territorial behaviour. Hen Harrier ringtail.
24/05/2018	Breeding	Vantage Point Survey	2	01:00 starting at 17:09	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	Sparrowhawk female in flight

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
24/05/2018	Breeding	Vantage Point Survey	2	01:00 starting at 18:09	Wind Speed and Direction:Light Breeze, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	Red Grouse calling
24/05/2018	Breeding	Vantage Point Survey	2	01:00 starting at 19:39	Wind Speed and Direction:Light Breeze, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
24/05/2018	Breeding	Vantage Point Survey	2	01:00 starting at 20:39	Wind Speed and Direction:Light Breeze, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
24/05/2018	Breeding	Vantage Point Survey	2	01:00 starting at 21:39	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	3 woodcock in travelling flight
25/05/2018	Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 08:00	Wind Speed and Direction:Gentle Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
25/05/2018	Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 09:00	Wind Speed and Direction:Gentle Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
25/05/2018	Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 10:00	Wind Speed and Direction:Gentle Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
25/05/2018	Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 11:30	Wind Speed and Direction:Gentle Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
25/05/2018	Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 12:30	Wind Speed and Direction:Gentle Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
25/05/2018	Breeding	Waterfowl Survey	Lough Derg	01:00 starting at 13:30	Wind Speed and Direction:Gentle Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
28/05/2018	Breeding	Vantage Point Survey	1a	01:00 starting at 16:14	Wind Speed and Direction:Light Air, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
28/05/2018	Breeding	Vantage Point Survey	1a	01:00 starting at 17:14	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
28/05/2018	Breeding	Vantage Point Survey	1a	01:00 starting at 18:14	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Hen Harrier male travelling. Kestrel in hunting flight.
28/05/2018	Breeding	Vantage Point Survey	1a	01:00 starting at 19:44	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Kestrel in hunting flight
28/05/2018	Breeding	Vantage Point Survey	1a	01:00 starting at 20:44	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Hen Harrier ringtail travelling
28/05/2018	Breeding	Vantage Point Survey	1a	01:00 starting at 21:44	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	Red Grouse calling



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
29/05/2018	Breeding	Waterfowl Survey	Lakes	01:00 starting at 11:00	Wind Speed and Direction:Light Breeze, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
29/05/2018	Breeding	Waterfowl Survey	Lakes	01:00 starting at 12:00	Wind Speed and Direction:Light Breeze, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
29/05/2018	Breeding	Waterfowl Survey	Lakes	01:00 starting at 13:00	Wind Speed and Direction:Light Breeze, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
29/05/2018	Breeding	Waterfowl Survey	Lakes	01:00 starting at 14:00	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
29/05/2018	Breeding	Waterfowl Survey	Lakes	01:00 starting at 15:00	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
29/05/2018	Breeding	VP	4	03:00 starting at 16:15	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 5 Rain: None; Frost: None ; Snow: None	
29/05/2018	Breeding	VP	4	03:00 starting at 19:45	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 5 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
01/06/2018	Breeding	Breeding Walkover Survey	Forested area on site	01:00 starting at 07:00	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Cuckoo, Sparrowhawk, Mallard
01/06/2018	Breeding	Breeding Walkover Survey	Forested area on site	01:00 starting at 08:00	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
01/06/2018	Breeding	Breeding Walkover Survey	Forested area on site	01:00 starting at 09:00	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Active SH nest located on site
01/06/2018	Breeding	Breeding Walkover Survey	Forested area on site	01:00 starting at 10:30	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
01/06/2018	Breeding	Breeding Walkover Survey	Forested area on site	01:00 starting at 11:30	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
01/06/2018	Breeding	Breeding Walkover Survey	Forested area on site	01:30 starting at 12:30	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
04/06/2018	Breeding	VP	3	03:00 starting at 13:30	Wind Speed and Direction:Light Air, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 100 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
04/06/2018	Breeding	VP	3	03:00 starting at 17:00	Wind Speed and Direction:Light Air, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 75 Rain: None; Frost: None ; Snow: None	
05/06/2018	Breeding	VP	8	03:00 starting at 08:00	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 5 Rain: None; Frost: None ; Snow: None	
05/06/2018	Breeding	VP	8	03:00 starting at 11:30	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33 Rain: None; Frost: None ; Snow: None	
06/06/2018	Breeding	VP	7a	01:00 starting at 09:45	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
06/06/2018	Breeding	VP	7a	01:00 starting at 11:45	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
06/06/2018	Breeding	VP	7a	01:00 starting at 13:15	Wind Speed and Direction:Light Air, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
06/06/2018	Breeding	VP	7a	01:00 starting at 14:15	Wind Speed and Direction:Light Air, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
06/06/2018	Breeding	VP	7a	01:00 starting at 15:15	Wind Speed and Direction:Calm, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
06/06/2018	Breeding	VP	7a	01:00 starting at 10:45	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
07/06/2018	Breeding	VP	9	01:00 starting at 10:00	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	Red Grouse calling
07/06/2018	Breeding	VP	9	01:00 starting at 11:00	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
07/06/2018	Breeding	VP	9	01:00 starting at 12:00	Wind Speed and Direction:Gentle Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
07/06/2018	Breeding	VP	9	01:00 starting at 13:30	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
07/06/2018	Breeding	VP	9	01:00 starting at 14:30	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
07/06/2018	Breeding	VP	9	01:00 starting at 15:30	Wind Speed and Direction:Gentle Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
08/06/2018	Breeding	Breeding Walkover Survey	Forested area on site	01:00 starting at 09:00	Wind Speed and Direction:Light Air, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	cuckoo in flight
08/06/2018	Breeding	Breeding Walkover Survey	Forested area on site	01:00 starting at 10:00	Wind Speed and Direction:Gentle Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
08/06/2018	Breeding	Breeding Walkover Survey	Forested area on site	01:00 starting at 11:00	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
08/06/2018	Breeding	Breeding Walkover Survey	Forested area on site	01:00 starting at 12:30	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
08/06/2018	Breeding	Breeding Walkover Survey	Forested area on site	01:00 starting at 13:30	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
08/06/2018	Breeding	Breeding Walkover Survey	Forested area on site	01:00 starting at 14:30	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
11/06/2018	Breeding	VP	2	01:00 starting at 09:30	Wind Speed and Direction:Gentle Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
11/06/2018	Breeding	VP	2	01:00 starting at 10:30	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
11/06/2018	Breeding	VP	2	01:00 starting at 11:30	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
11/06/2018	Breeding	VP	2	01:00 starting at 13:00	Wind Speed and Direction:Light Breeze, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
11/06/2018	Breeding	VP	2	01:00 starting at 14:00	Wind Speed and Direction:Light Breeze, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
11/06/2018	Breeding	VP	2	01:00 starting at 15:00	Wind Speed and Direction:Light Breeze, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
12/06/2018	Breeding	VP	1a	01:00 starting at 10:30	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
12/06/2018	Breeding	VP	1a	01:00 starting at 11:30	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
12/06/2018	Breeding	VP	1a	01:00 starting at 12:30	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	HH juvenile in display type flight
12/06/2018	Breeding	VP	1a	01:00 starting at 14:00	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
12/06/2018	Breeding	VP	1a	01:00 starting at 15:00	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
12/06/2018	Breeding	VP	1a	01:00 starting at 16:00	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Sparrowhawk female begging call. Snipe pair in flight
13/06/2018	Breeding	Breeding Raptor Survey	Inchalughoge	01:00 starting at 09:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Poor (<km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
13/06/2018	Breeding	Breeding Raptor Survey	Inchalughoge	01:00 starting at 10:30	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
13/06/2018	Breeding	Breeding Raptor Survey	Inchalughoge	01:00 starting at 11:30	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
13/06/2018	Breeding	Breeding Raptor Survey	Inchalughoge	01:00 starting at 13:00	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
13/06/2018	Breeding	Breeding Raptor Survey	Inchalughoge	01:00 starting at 14:00	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
13/06/2018	Breeding	Breeding Raptor Survey	Inchalughoge	01:00 starting at 15:00	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
14/06/2018	Breeding	Breeding Walkover Survey	Knockalass-Croaghmagower	01:00 starting at 10:30	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Light Showers; Frost: None ; Snow: None	Cuckoo, Kestrel, HH in flight
14/06/2018	Breeding	Breeding Walkover Survey	Knockalass-Croaghmagower	01:00 starting at 11:30	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
14/06/2018	Breeding	Breeding Walkover Survey	Knockalass-Croaghmagower	01:00 starting at 12:30	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
14/06/2018	Breeding	Breeding Walkover Survey	Knockalass-Croaghmagower	01:00 starting at 14:00	Wind Speed and Direction:Gentle Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
14/06/2018	Breeding	Breeding Walkover Survey	Knockalass-Croaghmagower	01:00 starting at 15:00	Wind Speed and Direction:Gentle Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
14/06/2018	Breeding	Breeding Walkover Survey	Knockalass-Croaghmagower	01:00 starting at 16:00	Wind Speed and Direction:Moderate Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
15/06/2018	Breeding	Breeding Raptor Survey	Inchalughoge	01:00 starting at 08:00	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
15/06/2018	Breeding	Breeding Raptor Survey	Inchalughoge	01:00 starting at 09:00	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
15/06/2018	Breeding	Breeding Raptor Survey	Inchalughoge	01:00 starting at 10:00	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	
15/06/2018	Breeding	Breeding Raptor Survey	Inchalughoge	01:00 starting at 11:30	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
15/06/2018	Breeding	Breeding Raptor Survey	Inchalughoge	01:00 starting at 12:30	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
15/06/2018	Breeding	Breeding Raptor Survey	Inchalughoge	01:00 starting at 13:30	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
18/06/2018	Breeding	Breeding Raptor Survey	Broadford	01:00 starting at 14:30	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Poor (<km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
18/06/2018	Breeding	Breeding Raptor Survey	Broadford	01:00 starting at 15:30	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Poor (<km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
18/06/2018	Breeding	Breeding Raptor Survey	Inchalughoge	01:00 starting at 16:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
18/06/2018	Breeding	Breeding Raptor Survey	Inchalughoge	01:00 starting at 17:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
18/06/2018	Breeding	Breeding Raptor Survey	Inchalughoge	00:30 starting at 18:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
18/06/2018	Breeding	Breeding Walkover Survey	Killuran More	01:00 starting at 11:30	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: <150m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
18/06/2018	Breeding	Breeding Walkover Survey	Killuran More	01:00 starting at 12:30	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
18/06/2018	Breeding	Breeding Walkover Survey	Killuran More	00:30 starting at 13:30	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
19/06/2018	Breeding	Breeding Raptor Survey	Lackereagh-Ballydonaghan	01:00 starting at 09:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
19/06/2018	Breeding	Breeding Raptor Survey	Lackereagh-Ballydonaghan	01:00 starting at 10:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
19/06/2018	Breeding	Breeding Raptor Survey	Lackereagh-Ballydonaghan	01:00 starting at 11:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
19/06/2018	Breeding	Breeding Raptor Survey	Lackereagh-Ballydonaghan	01:00 starting at 13:00	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	2 Kestrel territorial behaviour, Kestrel hunting

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
19/06/2018	Breeding	Breeding Raptor Survey	Lackereagh-Ballydonaghan	01:00 starting at 14:00	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	4 Buzzards inc pair displaying with tallon grasp mid air
19/06/2018	Breeding	Breeding Raptor Survey	Lackereagh-Ballydonaghan	01:00 starting at 15:00	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
19/06/2018	Breeding	VP	4	03:00 starting at 13:10	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 100 Rain: Light Showers; Frost: None ; Snow: None	
19/06/2018	Breeding	VP	4	03:00 starting at 16:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 100 Rain: None; Frost: None ; Snow: None	
20/06/2018	Breeding	Breeding Raptor Survey	Knockagower-Ballyvannan-Clongaheen West	01:00 starting at 08:45	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
20/06/2018	Breeding	Breeding Raptor Survey	Knockagower-Ballyvannan-Clongaheen West	01:00 starting at 09:45	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
20/06/2018	Breeding	Breeding Raptor Survey	Knockagower-Ballyvannan-Clongaheen West	01:00 starting at 10:45	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
20/06/2018	Breeding	Breeding Raptor Survey	Knockagower-Ballyvannan-Clongaheen West	01:00 starting at 12:15	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
20/06/2018	Breeding	Breeding Raptor Survey	Knockagower-Ballyvannan-Clongaheen West	01:00 starting at 13:15	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
20/06/2018	Breeding	Breeding Raptor Survey	Knockagower-Ballyvannan-Clongaheen West	01:15 starting at 14:15	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
20/06/2018	Breeding	VP	5	03:00 starting at 09:00	Wind Speed and Direction:Gentle Breeze, NNW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 90 Rain: None; Frost: None ; Snow: None	
20/06/2018	Breeding	VP	5	03:00 starting at 12:30	Wind Speed and Direction:Light Air, NNW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 90 Rain: None; Frost: None ; Snow: None	
21/06/2018	Breeding	Breeding Walkover Survey	Coumnagun-Moylussa	01:00 starting at 09:00	Wind Speed and Direction:Light Breeze, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Breeding Red Grouse on nest, Red grouse clutch, Snipe
21/06/2018	Breeding	Breeding Walkover Survey	Coumnagun-Moylussa	01:00 starting at 10:00	Wind Speed and Direction:Light Breeze, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
21/06/2018	Breeding	Breeding Walkover Survey	Coumnagun-Moylussa	01:00 starting at 11:00	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
21/06/2018	Breeding	Breeding Walkover Survey	Coumnagun-Moylussa	01:00 starting at 12:00	Wind Speed and Direction:Gentle Breeze, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
21/06/2018	Breeding	Breeding Walkover Survey	Coumnagun-Moylussa	01:00 starting at 13:00	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
21/06/2018	Breeding	Breeding Walkover Survey	Coumnagun-Moylussa	01:00 starting at 14:30	Wind Speed and Direction:Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
22/06/2018	Breeding	Breeding Walkover Survey	Killokennedy	01:00 starting at 09:45	Wind Speed and Direction:Light Air, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Hen Harrier, Kestrel, Red Grouse, Mallard
22/06/2018	Breeding	Breeding Walkover Survey	Killokennedy	01:00 starting at 10:45	Wind Speed and Direction:Light Air, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
22/06/2018	Breeding	Breeding Walkover Survey	Killokennedy	01:00 starting at 11:45	Wind Speed and Direction:Light Air, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
22/06/2018	Breeding	Breeding Walkover Survey	Killokenedy	01:00 starting at 12:45	Wind Speed and Direction:Light Air, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
22/06/2018	Breeding	Breeding Walkover Survey	Killokenedy	00:45 starting at 13:45	Wind Speed and Direction:Light Air, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
25/06/2018	Breeding	Breeding Raptor Survey	Slieve Bernagh-Lackereagh	01:00 starting at 09:00	Wind Speed and Direction:Light Air, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
25/06/2018	Breeding	Breeding Raptor Survey	Slieve Bernagh-Lackereagh	01:00 starting at 10:00	Wind Speed and Direction:Light Air, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
25/06/2018	Breeding	Breeding Raptor Survey	Slieve Bernagh-Lackereagh	01:00 starting at 11:00	Wind Speed and Direction:Light Air, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
25/06/2018	Breeding	Breeding Raptor Survey	Slieve Bernagh-Lackereagh	01:00 starting at 12:30	Wind Speed and Direction:Light Air, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
25/06/2018	Breeding	Breeding Raptor Survey	Slieve Bernagh-Lackereagh	01:00 starting at 13:30	Wind Speed and Direction:Light Air, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
25/06/2018	Breeding	Breeding Raptor Survey	Slieve Bernagh-Lackereagh	02:00 starting at 14:30	Wind Speed and Direction:Light Air, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
26/06/2018	Breeding	Breeding Raptor Survey	Cragnamurragh-Carrowmagowan-Inchalughoge	01:00 starting at 10:30	Wind Speed and Direction:Light Air, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
26/06/2018	Breeding	Breeding Raptor Survey	Cragnamurragh-Carrowmagowan-Inchalughoge	01:00 starting at 11:30	Wind Speed and Direction:Light Air, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
26/06/2018	Breeding	Breeding Raptor Survey	Cragnamurragh-Carrowmagowan-Inchalughoge	01:00 starting at 12:30	Wind Speed and Direction:Light Air, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
26/06/2018	Breeding	Breeding Raptor Survey	Cragnamurragh-Carrowmagowan-Inchalughoge	01:00 starting at 14:00	Wind Speed and Direction:Calm, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
26/06/2018	Breeding	Breeding Raptor Survey	Cragnamurragh-Carrowmagowan-Inchalughoge	01:00 starting at 15:00	Wind Speed and Direction:Calm, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
26/06/2018	Breeding	Breeding Raptor Survey	Cragnamurragh-Carrowmagowan-Inchalughoge	01:00 starting at 16:00	Wind Speed and Direction:Calm, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
26/06/2018	Breeding	Breeding Raptor Survey	Cragnamurragh-Carrowagowan-Inchalughoge	01:00 starting at 17:00	Wind Speed and Direction:Calm, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
27/06/2018	Breeding	Breeding Raptor Survey	Slieve Bernagh-Drimeenagun (Violethill)	01:00 starting at 10:30	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Buzzard in flight
27/06/2018	Breeding	Breeding Raptor Survey	Slieve Bernagh-Drimeenagun (Violethill)	01:00 starting at 11:30	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Hen Harrier male in hunting flight, 2 buzzards in high flight, Kestrel in hunting flight
27/06/2018	Breeding	Breeding Raptor Survey	Slieve Bernagh-Drimeenagun (Violethill)	01:00 starting at 12:30	Wind Speed and Direction:Light Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
27/06/2018	Breeding	Breeding Raptor Survey	Slieve Bernagh-Drimeenagun (Violethill)	01:00 starting at 14:00	Wind Speed and Direction:Light Air, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
27/06/2018	Breeding	Breeding Raptor Survey	Slieve Bernagh-Drimeenagun (Violethill)	01:00 starting at 15:00	Wind Speed and Direction:Calm, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
27/06/2018	Breeding	Breeding Raptor Survey	Slieve Bernagh-Drimeenagun (Violethill)	01:30 starting at 16:00	Wind Speed and Direction:Calm, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
28/06/2018	Breeding	Breeding Raptor Survey	Moylussa - Lackereagh Beg-Feenlea	01:00 starting at 09:30	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
28/06/2018	Breeding	Breeding Raptor Survey	Moylussa - Lackereagh Beg-Feenlea	01:00 starting at 10:30	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
28/06/2018	Breeding	Breeding Raptor Survey	Moylussa - Lackereagh Beg-Feenlea	01:00 starting at 11:30	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
28/06/2018	Breeding	Breeding Raptor Survey	Moylussa - Lackereagh Beg-Feenlea	01:00 starting at 13:00	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
28/06/2018	Breeding	Breeding Raptor Survey	Moylussa - Lackereagh Beg-Feenlea	01:00 starting at 14:00	Wind Speed and Direction:Calm, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
28/06/2018	Breeding	Breeding Raptor Survey	Moylussa - Lackereagh Beg-Feenlea	01:00 starting at 15:00	Wind Speed and Direction:Calm, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
09/07/2018	Breeding	Breeding Raptor Survey	Inchalughoge	01:00 starting at 09:00	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
09/07/2018	Breeding	Breeding Raptor Survey	Inchalughog	01:00 starting at 10:00	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
09/07/2018	Breeding	Breeding Raptor Survey	Inchalughog	01:00 starting at 11:00	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
09/07/2018	Breeding	Breeding Raptor Survey	Inchalughog	01:00 starting at 13:00	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
09/07/2018	Breeding	Breeding Raptor Survey	Inchalughog	01:00 starting at 14:00	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	2 Kestrels hunting
09/07/2018	Breeding	Breeding Raptor Survey	Inchalughog	01:00 starting at 15:00	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
10/07/2018	Breeding	Breeding Raptor Survey	Broadford-Ballybran-Lackereagh	01:00 starting at 11:00	Wind Speed and Direction:Light Air, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	No activity observed at disused quarry, Ogonelloe (Ballybran). Non-Breeding area
10/07/2018	Breeding	Breeding Raptor Survey	Broadford-Ballybran-Lackereagh	01:00 starting at 12:00	Wind Speed and Direction:Light Air, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
10/07/2018	Breeding	Breeding Raptor Survey	Broadford-Ballybran-Lackereagh	01:00 starting at 13:00	Wind Speed and Direction:Light Air, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	no target species
10/07/2018	Breeding	Breeding Raptor Survey	Broadford-Ballybran-Lackereagh	01:00 starting at 14:30	Wind Speed and Direction:Light Air, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	no target species
10/07/2018	Breeding	Breeding Raptor Survey	Broadford-Ballybran-Lackereagh	01:00 starting at 15:30	Wind Speed and Direction:Light Air, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	no target species
10/07/2018	Breeding	Breeding Raptor Survey	Broadford-Ballybran-Lackereagh	01:00 starting at 16:30	Wind Speed and Direction:Light Air, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	no target species
10/07/2018	Breeding	VP	5	03:00 starting at 13:00	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
10/07/2018	Breeding	VP	5	03:00 starting at 17:00	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
11/07/2018	Breeding	Breeding Raptor Survey	Moylussa-Carrownakilly-Inchalughoge-Knockalass	01:00 starting at 11:00	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	2 Kestrels hunting

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
11/07/2018	Breeding	Breeding Raptor Survey	Moylussa-Carrownakilly-Inchalughoge-Knockalass	01:00 starting at 12:00	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	no target species
11/07/2018	Breeding	Breeding Raptor Survey	Moylussa-Carrownakilly-Inchalughoge-Knockalass	01:00 starting at 13:00	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	no target species
11/07/2018	Breeding	Breeding Raptor Survey	Moylussa-Carrownakilly-Inchalughoge-Knockalass	01:00 starting at 14:30	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
11/07/2018	Breeding	Breeding Raptor Survey	Moylussa-Carrownakilly-Inchalughoge-Knockalass	01:00 starting at 15:30	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
11/07/2018	Breeding	Breeding Raptor Survey	Moylussa-Carrownakilly-Inchalughoge-Knockalass	01:00 starting at 16:30	Wind Speed and Direction:Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	2 Kestrels hunting
11/07/2018	Breeding	VP	8	03:00 starting at 08:00	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
11/07/2018	Breeding	VP	8	03:00 starting at 12:00	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
12/07/2018	Breeding	Breeding Raptor Survey	Carrownagowan - Violethill (Drimeen)	01:00 starting at 12:00	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
12/07/2018	Breeding	Breeding Raptor Survey	Carrownagowan - Violethill (Drimeen)	01:00 starting at 13:00	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
12/07/2018	Breeding	Breeding Raptor Survey	Carrownagowan - Violethill (Drimeen)	01:00 starting at 14:00	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
12/07/2018	Breeding	Breeding Raptor Survey	Carrownagowan - Violethill (Drimeen)	01:00 starting at 15:30	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
12/07/2018	Breeding	Breeding Raptor Survey	Carrownagowan - Violethill (Drimeen)	01:00 starting at 16:30	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
12/07/2018	Breeding	Breeding Raptor Survey	Carrownagowan - Violethill (Drimeen)	01:00 starting at 17:30	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Buzzard present
12/07/2018	Breeding	VP	1	03:00 starting at 09:30	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
12/07/2018	Breeding	VP	1	03:00 starting at 14:00	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
13/07/2018	Breeding	Breeding Walkover Survey	Inchalughog	01:00 starting at 09:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
13/07/2018	Breeding	Breeding Walkover Survey	Inchalughog	01:00 starting at 10:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	Kestrel hunting
13/07/2018	Breeding	Breeding Walkover Survey	Inchalughog	01:00 starting at 11:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
13/07/2018	Breeding	Breeding Walkover Survey	Inchalughog	01:00 starting at 13:00	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
13/07/2018	Breeding	Breeding Walkover Survey	Inchalughog	01:00 starting at 14:00	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
13/07/2018	Breeding	Breeding Walkover Survey	Inchalughog	01:00 starting at 15:00	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
16/07/2018	Breeding	Vantage Point Survey	VP 7a	01:00 starting at 10:30	Wind Speed and Direction:Light Breeze, W; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	Sparrowhawk female
16/07/2018	Breeding	Vantage Point Survey	VP 7a	01:00 starting at 11:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
16/07/2018	Breeding	Vantage Point Survey	VP 7a	01:00 starting at 12:30	Wind Speed and Direction:Gentle Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	Hen Harrier male
16/07/2018	Breeding	Vantage Point Survey	VP 7a	01:00 starting at 14:00	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	Hen Harrier male high circling and hunting
16/07/2018	Breeding	Vantage Point Survey	VP 7a	01:00 starting at 15:00	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	Kestrel hunting
16/07/2018	Breeding	Vantage Point Survey	VP 7a	01:00 starting at 16:00	Wind Speed and Direction:Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Kestrel hunting, Sparrowhawk female carrying food
17/07/2018	Breeding	Vantage Point Survey	2	01:00 starting at 13:00	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
17/07/2018	Breeding	Vantage Point Survey	2	01:00 starting at 14:00	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
17/07/2018	Breeding	Vantage Point Survey	2	01:00 starting at 15:00	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
17/07/2018	Breeding	Vantage Point Survey	2	01:00 starting at 16:30	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
17/07/2018	Breeding	Vantage Point Survey	2	01:00 starting at 17:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
17/07/2018	Breeding	Vantage Point Survey	2	01:00 starting at 18:30	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
18/07/2018	Breeding	Breeding Walkover Survey	Coumnagun	01:00 starting at 09:00	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
18/07/2018	Breeding	Breeding Walkover Survey	Coumnagun	01:00 starting at 10:00	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
18/07/2018	Breeding	Breeding Walkover Survey	Coumnagun	01:00 starting at 11:00	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	Peregrine hunting
18/07/2018	Breeding	Breeding Walkover Survey	Coumnagun	01:00 starting at 12:30	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Hen Harrier in 2ND c.y plumage hunting. Red Grouse flushed
18/07/2018	Breeding	Breeding Walkover Survey	Coumnagun	01:00 starting at 13:30	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	Buzzard hunting
18/07/2018	Breeding	Breeding Walkover Survey	Coumnagun	01:00 starting at 14:30	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
19/07/2018	Breeding	Breeding Walkover Survey	Knockalass-Kiluran More	01:00 starting at 09:30	Wind Speed and Direction:Calm, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
19/07/2018	Breeding	Breeding Walkover Survey	Knockalass-Kiluran More	01:00 starting at 10:30	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
19/07/2018	Breeding	Breeding Walkover Survey	Knockalass-Kiluran More	01:00 starting at 11:30	Wind Speed and Direction:Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
19/07/2018	Breeding	Breeding Walkover Survey	Knockalass-Kiluran More	01:00 starting at 13:00	Wind Speed and Direction:Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
19/07/2018	Breeding	Breeding Walkover Survey	Knockalass-Kiluran More	01:00 starting at 14:00	Wind Speed and Direction:Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
19/07/2018	Breeding	Breeding Walkover Survey	Knockalass-Kiluran More	01:00 starting at 15:00	Wind Speed and Direction:Gentle Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
20/07/2018	Breeding	Breeding Raptor Survey	Broadford-Inchalughoge	01:00 starting at 10:00	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
20/07/2018	Breeding	Breeding Raptor Survey	Broadford-Inchalughoge	01:00 starting at 11:00	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
20/07/2018	Breeding	Breeding Raptor Survey	Broadford-Inchalughoge	01:00 starting at 12:00	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
20/07/2018	Breeding	Breeding Raptor Survey	Broadford-Inchalughoge	01:00 starting at 13:30	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
20/07/2018	Breeding	Breeding Raptor Survey	Broadford-Inchalughoge	01:00 starting at 14:30	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
20/07/2018	Breeding	Breeding Raptor Survey	Broadford-Inchalughoge	01:00 starting at 15:30	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
23/07/2018	Breeding	Breeding Walkover Survey	Killokennedy-Inchalughoge	01:00 starting at 10:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
23/07/2018	Breeding	Breeding Walkover Survey	Killokennedy-Inchalughoge	01:00 starting at 11:30	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
23/07/2018	Breeding	Breeding Walkover Survey	Killokennedy-Inchalughoge	01:00 starting at 12:30	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
23/07/2018	Breeding	Breeding Walkover Survey	Killokennedy-Inchalughoge	01:00 starting at 14:00	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
23/07/2018	Breeding	Breeding Walkover Survey	Killokennedy-Inchalughoge	01:00 starting at 15:00	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
23/07/2018	Breeding	Breeding Walkover Survey	Killokennedy-Inchalughoge	01:00 starting at 16:00	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
24/07/2018	Breeding	Breeding Walkover Survey	Croaghmagower - Inchalughoge	01:00 starting at 09:00	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
24/07/2018	Breeding	Breeding Walkover Survey	Croaghmagower - Inchalughoge	01:00 starting at 10:00	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
24/07/2018	Breeding	Breeding Walkover Survey	Croaghmagower - Inchalughoge	01:00 starting at 11:00	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
24/07/2018	Breeding	Breeding Walkover Survey	Croaghmagower - Inchalughoge	01:00 starting at 12:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
24/07/2018	Breeding	Breeding Walkover Survey	Croaghmagower - Inchalughoge	01:00 starting at 13:30	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
24/07/2018	Breeding	Breeding Walkover Survey	Croaghmagower - Inchalughoge	01:00 starting at 14:30	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Kestrel female hunting

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
24/07/2018	Breeding	VP	3	03:00 starting at 14:00	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	Male HH see twice
24/07/2018	Breeding	VP	3	03:00 starting at 18:00	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
25/07/2018	Breeding	Breeding Raptor Survey	Kiluran More - Knockbrack	01:00 starting at 13:00	Wind Speed and Direction:Light Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	Sparrowhawk female carrying prey, Kestrel male hunting
25/07/2018	Breeding	Breeding Raptor Survey	Kiluran More - Knockbrack	01:00 starting at 14:00	Wind Speed and Direction:Gentle Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
25/07/2018	Breeding	Breeding Raptor Survey	Kiluran More - Knockbrack	01:00 starting at 15:00	Wind Speed and Direction:Light Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
25/07/2018	Breeding	Breeding Raptor Survey	Kiluran More - Knockbrack	01:00 starting at 16:30	Wind Speed and Direction:Light Breeze, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
25/07/2018	Breeding	Breeding Raptor Survey	Kiluran More - Knockbrack	01:00 starting at 17:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
25/07/2018	Breeding	Breeding Raptor Survey	Kiluran More - Knockbrack	01:00 starting at 18:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
25/07/2018	Breeding	VP	4	03:00 starting at 08:00	Wind Speed and Direction:Light Air, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
25/07/2018	Breeding	VP	4	03:00 starting at 15:00	Wind Speed and Direction:Light Air, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
26/07/2018	Breeding	VP	9	03:00 starting at 08:00	Wind Speed and Direction:Moderate Breeze, S; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
26/07/2018	Breeding	VP	9	03:00 starting at 15:30	Wind Speed and Direction:Fresh Breeze, S; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	
27/07/2018	Breeding	Breeding Raptor Survey	Inchalughoge	01:00 starting at 09:30	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
27/07/2018	Breeding	Breeding Raptor Survey	Inchalughoge	01:00 starting at 10:30	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
27/07/2018	Breeding	Breeding Raptor Survey	Inchalughoge	01:00 starting at 11:30	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
27/07/2018	Breeding	Breeding Raptor Survey	Inchalughoge	01:00 starting at 13:00	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
27/07/2018	Breeding	Breeding Raptor Survey	Inchalughoge	01:00 starting at 14:00	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	
27/07/2018	Breeding	Breeding Raptor Survey	Inchalughoge	01:00 starting at 15:00	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
30/07/2018	Breeding	Breeding Raptor Survey	Drummin - Carnagnoe	01:00 starting at 14:00	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
30/07/2018	Breeding	Breeding Raptor Survey	Drummin - Carnagnoe	01:00 starting at 15:00	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
30/07/2018	Breeding	Breeding Raptor Survey	Drummin - Carnagnoe	01:00 starting at 16:00	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Light Showers; Frost: None ; Snow: None	Kestrel hunting



**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
30/07/2018	Breeding	Breeding Raptor Survey	Drummin - Carnagnoe	01:00 starting at 17:30	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
30/07/2018	Breeding	Breeding Raptor Survey	Drummin - Carnagnoe	01:00 starting at 18:30	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: Light Showers; Frost: None ; Snow: None	Hen Harrier, immature male hunting
30/07/2018	Breeding	Breeding Raptor Survey	Drummin - Carnagnoe	01:00 starting at 19:30	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
31/07/2018	Breeding	Breeding Raptor Survey		01:00 starting at 09:30	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
31/07/2018	Breeding	Breeding Raptor Survey		01:00 starting at 10:30	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Rain; Frost: None ; Snow: None	
31/07/2018	Breeding	Breeding Raptor Survey		02:00 starting at 11:30	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
31/07/2018	Breeding	Breeding Raptor Survey		02:30 starting at 13:30	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
07/08/2018	Breeding	VP	7a	01:00 starting at 09:00	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	2-3 Sparrowhawk fledged chicks present on site
07/08/2018	Breeding	VP	7a	01:00 starting at 10:00	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Sparrowhawk breeding female circling nest area, Hen Harrier fledling perched before flying
07/08/2018	Breeding	VP	7a	01:00 starting at 11:00	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	Kestrel hunting and feeding
07/08/2018	Breeding	VP	7a	01:00 starting at 12:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	Kestrel hunting
07/08/2018	Breeding	VP	7a	01:00 starting at 13:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	Kestrel hunting and carrying prey
07/08/2018	Breeding	VP	7a	01:00 starting at 14:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	Kestrel hunting, Sparrowhawk chicks begging call
08/08/2018	Breeding	VP	2	01:00 starting at 09:00	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	Sparrowhawk fledged chicks heard begging close to vp 2. Breeding area on site at [562180, 675700].

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
08/08/2018	Breeding	VP	2	01:00 starting at 10:00	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Light Showers; Frost: None ; Snow: None	
08/08/2018	Breeding	VP	2	01:00 starting at 11:00	Wind Speed and Direction:Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: Light Showers; Frost: None ; Snow: None	
08/08/2018	Breeding	VP	2	01:00 starting at 12:30	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Heavy Showers; Frost: None ; Snow: None	
08/08/2018	Breeding	VP	2	01:00 starting at 13:30	Wind Speed and Direction:Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: Light Showers; Frost: None ; Snow: None	
08/08/2018	Breeding	VP	2	01:00 starting at 14:30	Wind Speed and Direction:Gentle Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: Light Showers; Frost: None ; Snow: None	
09/08/2018	Breeding	VP	8a	01:00 starting at 09:00	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
09/08/2018	Breeding	VP	8a	01:00 starting at 10:00	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Hen Harrier female travelling

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
09/08/2018	Breeding	VP	8a	01:00 starting at 11:00	Wind Speed and Direction:Calm, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: Light Showers; Frost: None ; Snow: None	
09/08/2018	Breeding	VP	8a	01:00 starting at 12:30	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: Light Showers; Frost: None ; Snow: None	
09/08/2018	Breeding	VP	8a	01:00 starting at 13:30	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
09/08/2018	Breeding	VP	8a	01:00 starting at 14:30	Wind Speed and Direction:Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	
10/08/2018	Breeding	VP	5a	01:00 starting at 09:00	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	
10/08/2018	Breeding	VP	5a	01:00 starting at 10:00	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Kestrel hunting
10/08/2018	Breeding	VP	5a	01:00 starting at 11:00	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	Kestrel hunting, Buzzards circling and hunting
10/08/2018	Breeding	VP	5a	01:00 starting at 12:30	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	Kestrel hunting

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
10/08/2018	Breeding	VP	5a	01:00 starting at 13:30	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	-See confidential appendix 5 for redacted text relating to sensitive species
10/08/2018	Breeding	VP	5a	01:00 starting at 14:30	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	Kestrel hunting
13/08/2018	Breeding	VP	4a	01:00 starting at 10:00	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
13/08/2018	Breeding	VP	4a	01:00 starting at 11:00	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
13/08/2018	Breeding	VP	4a	01:00 starting at 12:00	Wind Speed and Direction:Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
13/08/2018	Breeding	VP	4a	01:00 starting at 13:30	Wind Speed and Direction:Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
13/08/2018	Breeding	VP	4a	01:00 starting at 14:30	Wind Speed and Direction:Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
13/08/2018	Breeding	VP	4a	01:00 starting at 15:30	Wind Speed and Direction:Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 33-66 Rain: None; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
14/08/2018	Breeding	VP	1a	01:00 starting at 11:00	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	HH female travelling and hunting
14/08/2018	Breeding	VP	1a	01:00 starting at 12:00	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
14/08/2018	Breeding	VP	1a	01:00 starting at 13:00	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
20/08/2018	Breeding	VP	3	01:00 starting at 09:45	Wind Speed and Direction:Light Breeze, SW; Visibility: Limited (<500m); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
20/08/2018	Breeding	VP	3	01:00 starting at 10:45	Wind Speed and Direction:Light Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
20/08/2018	Breeding	VP	3	01:00 starting at 11:45	Wind Speed and Direction:Light Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
20/08/2018	Breeding	VP	3	01:00 starting at 13:15	Wind Speed and Direction:Light Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
20/08/2018	Breeding	VP	3	01:00 starting at 14:15	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height:	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
					150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
20/08/2018	Breeding	VP	3	01:00 starting at 15:15	Wind Speed and Direction:Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	
21/08/2018	Breeding	VP	1a	01:00 starting at 09:45	Wind Speed and Direction:Moderate Breeze, SW; Visibility: Good (>2km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Drizzle Mist; Frost: None ; Snow: None	Kestrel travelling
21/08/2018	Breeding	VP	1a	01:00 starting at 10:45	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	
21/08/2018	Breeding	VP	1a	01:00 starting at 11:45	Wind Speed and Direction:Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 0-33 Rain: None; Frost: None ; Snow: None	Kestrel travelling
27/08/2018	Breeding	VP	9	01:00 starting at 10:00	Wind Speed and Direction:Fresh Breeze, NW; Visibility: Limited (<500m); Cloud Height: <150m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	
27/08/2018	Breeding	VP	9	01:00 starting at 11:00	Wind Speed and Direction:Fresh Breeze, NW; Visibility: Poor (<km); Cloud Height: 150-500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	
27/08/2018	Breeding	VP	9	01:00 starting at 12:00	Wind Speed and Direction:Fresh Breeze, NW; Visibility: Moderate (1-2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Heavy Showers; Frost: None ; Snow: None	

**Table 2: Survey Effort**

Date	Season	Survey Method	VP/ transect/ area number	Survey Duration	Weather Conditions	Comments
27/08/2018	Breeding	VP	9	01:00 starting at 13:30	Wind Speed and Direction: Moderate Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: Light Showers; Frost: None ; Snow: None	
27/08/2018	Breeding	VP	9	01:00 starting at 14:30	Wind Speed and Direction: Moderate Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	Kestrel travelling
27/08/2018	Breeding	VP	9	01:00 starting at 15:30	Wind Speed and Direction: Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 66-100 Rain: None; Frost: None ; Snow: None	



**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
BZ01	05/10/2016	VP7a	Buzzard	1	10:40:00	30	15	15			WD4, (Conifer plantation) Hunting	Perched for 5 seconds
BZ02	05/10/2016	VP7a	Buzzard	1	10:43:00	15		15			WD4, (Conifer plantation) Flying over forestry	
BZ03	19/04/2017	VP2	Buzzard	1	10:05:00	240		10	100	130	PB2, (Upland blanket bog) WD4, (Conifer plantation) WS5, (Recently-felled woodland) soaring, hunting, mobbed by RN off site	
BZ04	10/05/2017	VP2	Buzzard	1	19:42:00	300			100	200	WD4, (Conifer plantation) soaring, hunting, mobbed by RN off site	
BZ05	10/05/2017	VP2	Buzzard	1	20:36:00	50	20	30			WD4, (Conifer plantation) PB2, (Upland blanket bog) Hunting	
BZ06	27/05/2017	VP7a	Buzzard	1	20:05:00	45			45		WD4, (Conifer plantation)	
BZ07	30/05/2017	VP5a	Buzzard	2	18:08:00	180			100	80	WD4, (Conifer plantation) Soaring, mobbed by HC	
BZ08	30/05/2017	VP5a	Buzzard	1	19:59:00	150			110	40	WD4, (Conifer plantation) 2 birds	
BZ09	30/05/2017	VP5a	Buzzard	1	19:59:00	15			15		WD4, (Conifer plantation) 2nd birds flightline	
BZ10	24/07/2017	VP8a	Buzzard	1	14:28:00	160		28	132		PB2, (Upland blanket bog) Hunting and being mobbed by Kestrel	
BZ11	25/07/2017	VP9	Buzzard	1	10:49:00	46		46			PB2, (Upland blanket bog) Travelling	
BZ12	01/09/2017	VP7a	Buzzard	1	11:50:00	200	200				WD4, (Conifer plantation) Perching, hunting	
BZ13	15/02/2018	VP5a	Buzzard	1	08:25:00	45	10	5	30		WD4, (Conifer plantation) Soaring before landing in trees	

**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
BZ14	21/02/2018	VP2	Buzzard	1	12:43:00	2028			100	108	WD4, (Conifer plantation) PB2, (Upland blanket bog) Hunting and spiralling on Wind	
BZ15	27/03/2018	VP1a	Buzzard	1	15:02:00	260			260		WD4, (Conifer plantation) PB2, (Upland blanket bog) Hunting and Gliding on Wind	
BZ16	28/03/2018	VP7a	Buzzard	1	15:40:00	104		37	67		WD4, (Conifer plantation) PB2, (Upland blanket bog) Hunting and Gliding on wind	
BZ23	06/06/2018	7a	Buzzard	1	12:00:00	70		70			PB2, (Upland blanket bog) WD4, (Conifer plantation) passing through	
BZ17	11/06/2018	2	Buzzard	1	15:25:00	390					WD4, (Conifer plantation) travelling, mobbed by HC	
BZ18	11/07/2018	8	Buzzard	1	12:44:00	48			48		WD4, (Conifer plantation) Adult soaring and calling	Adult
BZ19	25/07/2018	4	Buzzard	3	11:12:00	90			60	30	PB2, (Upland blanket bog) WD4, (Conifer plantation) Family of Buzzards soaring and calling	Adult and 2 Juvs soaring and calling
BZ20	26/07/2018	9	Buzzard	1	10:05:00	45		35	10		WD4, (Conifer plantation) PB2, (Upland blanket bog) Adult soaring and calling	Adult
BZ21	10/08/2018	5a	Buzzard	2	11:50:00	600		300	300		WD4, (Conifer plantation) PB2, (Upland blanket bog) circling and hunting	
BZ22	10/08/2018	5a	Buzzard	2	13:21:00	400		200	200		WD4, (Conifer plantation) Hunting and travelling	
CA01	27/03/2018	VP1a	Cormorant	1	16:54:00	48				48	WD4, (Conifer plantation) PB2, (Upland blanket bog) Travelling	
2269	06/06/2018	7a	Cuckoo	1	14:10:00	12	12				WD4, (Conifer plantation) travelling	

**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
CK01	11/06/2018	2	Cuckoo	1	10:45:00	22				22	WD4, (Conifer plantation) travelling	
GP01	18/10/2016	VP9	Golden Plover	16	09:25:00	37			37		PB2, (Upland blanket bog) Travelling	
GP02	28/12/2016	VP4a	Golden Plover	450	09:21:00	75		15	45	15	Conifer plantation and Blanket bog Flying over habitat and appeared to land out of view on bog	
GP03	02/02/2017	VP1a	Golden Plover	36	09:21:00	53	53				PB2, (Upland blanket bog) Travelling	
GP04	13/10/2017	VP9	Golden Plover	6	07:27:00	10	10				PB2, (Upland blanket bog)	
GP05	13/10/2017	VP9	Golden Plover	25	08:55:00	25	10				PB2, (Upland blanket bog)	
GP06	20/10/2017	VP9	Golden Plover	30	11:27:00	15	5	10			PB2, (Upland blanket bog) Travelling	
GP07	20/10/2017	VP9	Golden Plover	9	11:50:00	20	20				PB2, (Upland blanket bog) Travelling	Male RG
GP08	20/10/2017	VP9	Golden Plover	1	12:15:00	7	7				PB2, (Upland blanket bog) Travelling	
GP09	20/10/2017	VP9	Golden Plover	1	12:35:00	15	15				PB2, (Upland blanket bog) Travelling	
GP10	17/11/2017	VP9	Golden Plover	48	15:15:00	1020				1020	PB2, (Upland blanket bog) Travelling, circling	
GP11	17/11/2017	VP9	Golden Plover	85	16:00:00	540		30	510		PB2, (Upland blanket bog) Travelling	
GP12	17/11/2017	VP9	Golden Plover	8	16:05:00	20	20				PB2, (Upland blanket bog) Travelling	
GP13	17/11/2017	VP9	Golden Plover	12	16:20:00	20	20				PB2, (Upland blanket bog) Travelling	
GP14	17/11/2017	VP9	Golden Plover	53	16:20:00	60	20	40			PB2, (Upland blanket bog) Travelling	

**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
GP15	20/02/2018	VP9	Golden Plover	45	07:25:00	185		20	165		PB2, (Upland blanket bog) circulating blanket bog area off site	
GP16	20/02/2018	VP9	Golden Plover	55	07:35:00	830		65	365	400	PB2, (Upland blanket bog) circulating blanket bog area off site	
GP17	20/02/2018	VP9	Golden Plover	220	08:25:00	420	150	70			PB2, (Upland blanket bog) circulating blanket bog area off site	
GP18	21/03/2018	VP9	Golden Plover	11	13:55:00	25	15	10			PB2, (Upland blanket bog)	
GP19	21/03/2018	VP9	Golden Plover	10	14:40:00	100			60	40	PB2, (Upland blanket bog) Travelling	
GP20	21/03/2018	VP9	Golden Plover	2	18:35:00	20	20				PB2, (Upland blanket bog)	
GP21	19/04/18	9	Golden Plover	5	07:30:00	28	28				PB2, (Upland blanket bog) travelling	
H01	20/09/2017	VP1a	Grey Heron	1	16:43:00	182		182			WD4, (Conifer plantation) PB2, (Upland blanket bog) GA1, (Improved agricultural grassland) Travelling	Two males and two females
H02	27/10/2017	VP2	Grey Heron	1	09:25:00	118			118		WD4, (Conifer plantation) PB2, (Upland blanket bog) Travelling	Adult no sex established
2334	04/09/2018	2	Grey Heron	1	12:10:00	10	10					
HH01	15/09/2016	VP2	Hen Harrier	1	16:45:00	60		60			PB2, (Upland blanket bog)	PB2, (Upland blanket bog) Flies over hill, NE, band 2, out of view.

**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
HH02	15/09/2016	VP2	Hen Harrier	1	16:47:00	300	270		30		WD4, (Conifer plantation) PB2, (Upland blanket bog)	Flies N (from over hill east of vp), over mature conifers and clearfell, band 3, then low over bog hunting (band 1) then flies east along brow of hill, then NE out of view.
HH03	15/09/2016	VP2	Hen Harrier	1	18:44:00	1440		120	1320		WD4, (Conifer plantation) PB2, (Upland blanket bog)	Soaring over bog and mature conifers, mainly band 3.
HH04	15/09/2016	VP2	Hen Harrier	1	19:14:00	60			60		WD4, (Conifer plantation) PB2, (Upland blanket bog)	Flies over mature conifers N of VP, drops down to band 2, hunting over bog, dropped down into heather.
HH05	15/09/2016	VP2	Hen Harrier	1	19:30:00	40	40				WD4, (Conifer plantation) PB2, (Upland blanket bog)	

**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
HH06	16/09/2016	VP7a	Hen Harrier	1	15:15:00	180			180		WD4, (Conifer plantation)	Flew S over VP, circled NW over conifers, soaring, followed by 3 RN, flew east over mature conifers then out of view.
HH07	21/09/2016	VP1a	Hen Harrier	1	18:30:00	50	50				WD4, (Conifer plantation) PB2, (Upland blanket bog)	Female. Flew W low over bog, along conifer treeline, NW then into conifers out of view.
HH08	05/10/2016	VP7a	Hen Harrier	1	07:41:00	5		5			WD4, (Conifer plantation) Flying low along forestry	
HH09	05/10/2016	VP7a	Hen Harrier	1	08:47:00	55		25	30		WD4, (Conifer plantation) Flying low along forestry	
HH10	05/10/2016	VP7a	Hen Harrier	1	10:55:00	43		43			WD4, (Conifer plantation) Hunting over second rotation forestry	Male
HH11	05/10/2016	VP7a	Hen Harrier	1	12:02:00	20		20			WD4, (Conifer plantation) Travelling	Ringtail
HH12	18/10/2016	VP9	Hen Harrier	1	08:36:00	12		12			PB2, (Upland blanket bog) Travelling	Ringtail
HH13	12/01/2017	VP8a	Hen Harrier	1	11:24:00	27	27				WD4, (Conifer plantation) PB2, (Upland blanket bog) Hunting	
HH14	17/02/2017	VP8a	Hen Harrier	1	08:42:00	16		16			PB2, (Upland blanket bog) WD4, (Conifer plantation) Travelling	

**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
HH15	06/03/2017	VP2	Hen Harrier	1	17:35:00	101		101			WD4, (Conifer plantation) Hunting	
HH16	14/03/2017	VP8a	Hen Harrier	1	15:10:00	9	9				PB2, (Upland blanket bog) WD4, (Conifer plantation) Travelling	
HH17	27/03/2017	VP7a	Hen Harrier	1	16:12:00	132		79	53		WD4, (Conifer plantation) Soaring	
HH18	03/04/2017	VP5a	Hen Harrier	1	08:40:00	18	10	8			-See confidential appendix 5 for redacted text relating to sensitive species	
HH19	03/04/2017	VP7a	Hen Harrier	1	10:43:00	15	15				WD4, (Conifer plantation) PB2, (Upland blanket bog) hunting	
HH20	03/04/2017	VP7a	Hen Harrier	1	11:35:00	110		110			WD4, (Conifer plantation) PB2, (Upland blanket bog) circling, travelling, non hunting flight	adult male
HH21	03/04/2017	VP7a	Hen Harrier	1	11:58:00	35	27				WD4, (Conifer plantation) hunting	adult male
HH22	04/04/2017	VP7a	Hen Harrier	1	10:35:00	230	15	18	212		WD4, (Conifer plantation) PB2, (Upland blanket bog) short circling in HB3 followed by long glide, non hunting flight	
HH23	06/04/2017	VP3	Hen Harrier	1	09:55:00	25	5	15	5		-See confidential appendix 5 for redacted text relating to sensitive species	
HH24	07/04/2017	VP4a	Hen Harrier	1	10:10:00	3		3			WD4, (Conifer plantation) female	
HH25	07/04/2017	VP4a	Hen Harrier	1	10:10:00	190		100	90		WD4, (Conifer plantation) female	
HH26	07/04/2017	VP4a	Hen Harrier	1	11:00:00	390		100	100	190	-See confidential appendix 5 for redacted text relating to sensitive species	

**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
HH27	19/04/2017	VP2	Hen Harrier	1	06:42:00	75	30	30	15		WD4, (Conifer plantation) PB, (Bogs) Male, Hunting, perched, lost in fog	
HH28	19/04/2017	VP2	Hen Harrier	1	07:41:00	5		5			WD4, (Conifer plantation) WS5, (Recently-felled woodland) Male hunting	
HH29	19/04/2017	VP2	Hen Harrier	1	11:48:00	110	30	30	50	20	PB2, (Upland blanket bog) Male quartering, soaring	
HH30	21/04/2017	VP9	Hen Harrier	1	08:58:00	360		20	220	120	WD4, (Conifer plantation) PB4, (Cutover bog) PB2, (Upland blanket bog) Quatering over WD4 then rose and flew E over WD4 to PB4. Whilst flying over bog another male HH mobbed him	
HH31	21/04/2017	VP9	Hen Harrier	1	09:01:00	30			30		PB4, (Cutover bog)	
HH32	21/04/2017	VP9	Hen Harrier	1	10:02:00	180	120	60			PF, (Fens and flushes) WS5, (Recently-felled woodland) WD4, (Conifer plantation) Circling around stream, landed in heather patch twice, perched, circled	
HH33	21/04/2017	VP9	Hen Harrier	1	10:31:00	240	30	160	50		PB, (Bogs) WD4, (Conifer plantation) WS5, (Recently-felled woodland) Hunting and traveling	
HH34	08/05/2017	VP1a	Hen Harrier	1	17:12:00	15	15				PB, (Bogs) Male traveling fast	JUNE SURVEY
HH35	09/05/2017	VP9	Hen Harrier	1	16:24:00	600	200	100	100	200	WD4, (Conifer plantation) PB, (Bogs) Hunting, soaring, food pass	



**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
HH36	10/05/2017	VP2	Hen Harrier	2	18:05:00	10	10				-See confidential appendix 5 for redacted text relating to sensitive species	
HH37	10/05/2017	VP2	Hen Harrier	1	18:05:00	220	20	20	160	20	-See confidential appendix 5 for redacted text relating to sensitive species	
HH38	10/05/2017	VP2	Hen Harrier	1	18:36:00	3		3			WD4, (Conifer plantation) Mobbed by HC	
HH39	16/05/2017	VP3	Hen Harrier	1	16:25:00	600	400	100	100		WD4, (Conifer plantation) WS5, (Recently-felled woodland) PB2, (Upland blanket bog) Hunting male	
HH40	16/05/2017	VP3	Hen Harrier	1	18:18:00	800	500		200	100	-See confidential appendix 5 for redacted text relating to sensitive species	
HH41	16/05/2017	VP3	Hen Harrier	1	18:44:00	30	20	10			WD4, (Conifer plantation) Hunting male	
HH42	16/05/2017	VP3	Hen Harrier	1	20:03:00	20	20				PB, (Bogs) Down into heather	
HH43	02/06/2017	VP2	Hen Harrier	1	10:57:00	50		30	20		WD4, (Conifer plantation) Male hunting	
HH44	02/06/2017	VP2	Hen Harrier		14:13:00	80	20	60			WD4, (Conifer plantation) Male traveling	
HH45	02/06/2017	VP2	Hen Harrier		14:46:00	60	5	10	45		WD4, (Conifer plantation) Male flies up and is attacked by female, both flying high.	

**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
HH46	02/06/2017	VP2	Hen Harrier		14:14:00	10		10			WD4, (Conifer plantation) Brief sight of female	
HH47	02/06/2017	VP2	Hen Harrier		14:47:00	35			35		-See confidential appendix 5 for redacted text relating to sensitive species	
HH48	02/06/2017	VP2	Hen Harrier	2	15:40:00	40	30	10			WD4, (Conifer plantation) Female flies west into treeline of remaining conifers	
HH49	29/06/2017	VP5a	Hen Harrier	1	11:16:00	45	25	20			WS5, (Recently-felled woodland) PB, (Bogs) up from perch and hunting	
HH50	03/07/2017	VP9	Hen Harrier	1	09:40:00	40	15	25			WD4, (Conifer plantation) Traveling	
HH51	18/07/2017	VP3	Hen Harrier	1	16:45:00	10		10			WD4, (Conifer plantation) Disturbed juvenile HH in valey on way out of site, flew over young WD4 SW	
HH52	25/07/2017	VP9	Hen Harrier	1	15:25:00	64	64				PB2, (Upland blanket bog) Male HH hunting and flying NE.	
HH53	25/07/2017	VP9	Hen Harrier	1	15:33:00	54	54				PB2, (Upland blanket bog) Male HH hunting and flying West.	
HH54	31/08/2017	VP9	Hen Harrier	1	10:24:00	70	15	15	40		WS5, (Recently-felled woodland) PB, (Bogs) Ringtail disturbed by a number of raven	
HH55	18/09/2017	VP9	Hen Harrier	1	16:10:00	50	50				PB2, (Upland blanket bog) male travelling, hunting	
HH56	18/09/2017	VP9	Hen Harrier	1	19:15:00	18	10	8			PB2, (Upland blanket bog) ringtail travelling	

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Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
HH57	17/10/2017	VP5a	Hen Harrier	1	07:55:00	10		10			WD4, (Conifer plantation) Travelling	
HH58	18/01/2018	VP4a	Hen Harrier	1	15:33:00	238	46	192			PB2, (Upland blanket bog) WD4, (Conifer plantation) Hunting and flying on	Female
HH59	12/03/2018	VP4a	Hen Harrier	1	13:55:00	50	40				WD4, (Conifer plantation) Travelling, male	
HH60	21/03/2018	VP9	Hen Harrier	1	15:35:00	10	10				PB2, (Upland blanket bog) WD4, (Conifer plantation) Hunting/Travelling female	
HH61	28/03/2018	VP7a	Hen Harrier	1	16:21:00	38	16	22			WD4, (Conifer plantation) WS5, (Recently-felled woodland) Male HH Travelling	Male
HH62	28/03/2018	VP7a	Hen Harrier	1	16:52:00	42	22	20			-See confidential appendix 5 for redacted text relating to sensitive species	Male
HH63	28/03/2018	VP7a	Hen Harrier	1	16:58:00	18	18				WD4, (Conifer plantation) WS5, (Recently-felled woodland) Male HH Travelling	Male
HH64	16/04/2018	7a	Hen Harrier	1	08:15:00	65	65		10	55	WD4, (Conifer plantation) WS, (Scrub/ transitional woodland) travelling	
HH65	16/04/2018	7a	Hen Harrier	1	10:12:00	30	30		30		WD4, (Conifer plantation) hunting	male
HH66	16/04/2018	7a	Hen Harrier	1	10:44:00	590	590		575	15	-See confidential appendix 5 for redacted text relating to sensitive species	male
HH67	16/04/2018	7a	Hen Harrier	1	11.13:00	14	14		14		WD4, (Conifer plantation) travelling	male
HH68	16/04/2018	7a	Hen Harrier	1	11.18: 00	20	20		5	5	WD4, (Conifer plantation) travelling	male

**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
HH69	16/04/2018	7a	Hen Harrier	1	11:35:00	125	125			125	-See confidential appendix 5 for redacted text relating to sensitive species	male
HH70	17/04/2018	2	Hen Harrier	1	07:13:00	38	38		10	28	WD4, (Conifer plantation) travelling	male
HH71	17/04/2018	2	Hen Harrier	1	10:50:00	55	55			55	WD4, (Conifer plantation) travelling	male
HH72	17/04/2018	2	Hen Harrier	2	12:00:00	140	130	10	30	110	WD4, (Conifer plantation)	1 plain adult, one 2nd winter plumage, travelling together
HH73	20/04/2018	5a	Hen Harrier	1	08:14:00	120	0	0	120	0	WD4, (Conifer plantation) Adult male flying through	
HH74	20/04/2018	5a	Hen Harrier	2	09:38:00	180	0	10	100	70	-See confidential appendix 5 for redacted text relating to sensitive species	
HH75	20/04/2018	5a	Hen Harrier	1	11:00:00	30	0	0	30	0	WD4, (Conifer plantation) Adult male flying through	
HH114	08/05/2018	7a	Hen Harrier	1	16:48:00	22	10	12			WD4, (Conifer plantation) Travelling	
HH115	08/05/2018	7a	Hen Harrier	1	16:53:00	85	50	35			WD4, (Conifer plantation) PB2, (Upland blanket bog) Hunting	
HH116	08/05/2018	7a	Hen Harrier	1	17:50:00	70	70				WD4, (Conifer plantation) PB2, (Upland blanket bog) Hunting	
HH117	08/05/2018	7a	Hen Harrier	1	21:00:00	20	20				WD4, (Conifer plantation) Travelling	
HH118	16/05/2018	9	Hen Harrier	1	17:20:00	70		50	20		WD4, (Conifer plantation) PB2, (Upland blanket bog) Display/Hunting	

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HH119	16/05/2018	9	Hen Harrier	1	17:25:00	120	120				Perched, possibly feeding, unclear.	
HH120	16/05/2018	9	Hen Harrier	1	17:27:00	540	500	40			WD4, (Conifer plantation) PB2, (Upland blanket bog) hunting before traveling on	
HH121	24/05/2018	2	Hen Harrier	1	16:23:00	110	110				WD4, (Conifer plantation) hunting/travelling	
HH122	28/05/2018	1a	Hen Harrier	1	18:50:00	10		10			WD4, (Conifer plantation) Travelling	
HH123	28/05/2018	1a	Hen Harrier	1	20:50:00	10	10				PB2, (Upland blanket bog) Travelling	
HH124	06/06/2018	7a	Hen Harrier	1	11:48:00	250		200	50		WD4, (Conifer plantation) PB2, (Upland blanket bog) circling before travelling on	
HH76	11/06/2018	2	Hen Harrier	1	11:05:00	85			30	55	WD4, (Conifer plantation) PB2, (Upland blanket bog) travelling/hunting	
HH77	11/06/2018	2	Hen Harrier	1	12:00:00	420			350	70	WD4, (Conifer plantation) travelling/hunting	
HH78	11/06/2018	2	Hen Harrier	1	15:40:00	45			45		WD4, (Conifer plantation) PB2, (Upland blanket bog) hunting	
HH79	12/06/2018	1a	Hen Harrier	1	12:05:00	90				90	WD4, (Conifer plantation) male travelling	
HH80	12/06/2018	1a	Hen Harrier	2	12:07:00	25			25		-See confidential appendix 5 for redacted text relating to sensitive species	Nest site
HH81	12/06/2018	1a	Hen Harrier	1	12:30:00	30			30		PB2, (Upland blanket bog) WD4, (Conifer plantation) male travelling, circling	

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HH82	12/06/2018	1a	Hen Harrier	1	13:10:00	200			10	10	WD4, (Conifer plantation) PB2, (Upland blanket bog) display, high circling	
HH83	20/06/2018	5	Hen Harrier	1	13:27:00	300	0	0	300	0	WD4, (Conifer plantation) Flying/hunting	Adult female
HH84	10/07/2018	5	Hen Harrier	1	15:33:00	50		50			-See confidential appendix 5 for redacted text relating to sensitive species	Adult male
HH85	10/07/2018	5	Hen Harrier	1	18:42:00	135	15	120			-See confidential appendix 5 for redacted text relating to sensitive species	Adult Female
HH86	11/07/2018	8	Hen Harrier	1	09:02:00	15		15				Adult Male
HH87	11/07/2018	8	Hen Harrier	1	09:06:00	30		30			-See confidential appendix 5 for redacted text relating to sensitive species	Adult Female
HH88	11/07/2018	8	Hen Harrier	2	14:54:00	75		30	45		-See confidential appendix 5 for redacted text relating to sensitive species	Male and Female
HH89	12/07/2018	1	Hen Harrier	2	09:40:00	115		45	70		-See confidential appendix 5 for redacted text relating to sensitive species	Male and Female
HH90	12/07/2018	1	Hen Harrier	1	10:12:00	35			35		WD4, (Conifer plantation) Male travelling	Adult Male
HH91	12/07/2018	1	Hen Harrier	2	11:09:00	125		60	65		-See confidential appendix 5 for redacted text relating to sensitive species	Male and Female
HH92	12/07/2018	1	Hen Harrier	1	14:12:00	300	20	180	100		-See confidential appendix 5 for redacted text relating to sensitive species	Adult Female
HH93	12/07/2018	1	Hen Harrier	2	14:33:00	120	10	110			-See confidential appendix 5 for redacted text relating to sensitive species	Adult Male and Adult Female

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Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
HH94	16/07/2018	7a	Hen Harrier	1	12:15:00	20	0	20				
HH95	16/07/2018	7a	Hen Harrier	1	12:35:00	25	25				WD4, (Conifer plantation) travelling low	
HH96	16/07/2018	7a	Hen Harrier	1	14:01:00	780	250	230	300		WD4, (Conifer plantation) high circling, hunting	
HH97	16/07/2018	7a	Hen Harrier	1	15:34:00	120	50	70			-See confidential appendix 5 for redacted text relating to sensitive species	
HH98	24/07/2018	3	Hen Harrier	1	15:03:00	38		38			WD4, (Conifer plantation) PB2, (Upland blanket bog) Male hunting and quartering	Adult Male
HH99	24/07/2018	3	Hen Harrier	1	20:14:00	74			74		-See confidential appendix 5 for redacted text relating to sensitive species	Adult Male
HH100	25/07/2018	4	Hen Harrier	1	09:42:00	50			50		-See confidential appendix 5 for redacted text relating to sensitive species	Adult Male
HH101	25/07/2018	4	Hen Harrier	2	10:11:00	87			87		-See confidential appendix 5 for redacted text relating to sensitive species	Adult Male and Adult Female
HH102	25/07/2018	4	Hen Harrier	1	15:00:00	21		21			WD4, (Conifer plantation) Adult Male traveling	Adult Male
HH103	26/07/2018	9	Hen Harrier	1	11:24:00	150		120	30		PB2, (Upland blanket bog) WD4, (Conifer plantation) Male hunting and quartering	Adult Male
HH104	07/08/2018	7a	Hen Harrier	1	10:15:00	30	30					
HH105	09/08/2018	8a	Hen Harrier	1	10:40:00	15		15			WD4, (Conifer plantation) Travelling	
HH106	10/08/2018	5a	Hen Harrier	1	10:20:00	25	25				WD4, (Conifer plantation) PB2, (Upland blanket bog) Perched before flying on	

**Table 3: Vantage Point (Target Species Data)**

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HH107	10/08/2018	5a	Hen Harrier	5	10:53:00	420	375	45			-See confidential appendix 5 for redacted text relating to sensitive species	
HH108	10/08/2018	5a	Hen Harrier	1	13:34:00	210	10	40	100	60	WD4, (Conifer plantation) PB2, (Upland blanket bog) travelling and high circling	
HH109	10/08/2018	5a	Hen Harrier	1	14:12:00	90	45	45			-See confidential appendix 5 for redacted text relating to sensitive species	
HH110	10/08/2018	5a	Hen Harrier	4	14:14:00	30	30				-See confidential appendix 5 for redacted text relating to sensitive species	
HH111	14/08/2018	1a	Hen Harrier	1	11:25:00	35	35				WD4, (Conifer plantation) hunting	
HH112	14/08/2018	1a	Hen Harrier	1	11:43:00	60		60			WD4, (Conifer plantation) travelling	
HH113	24/09/2018	7a	Hen Harrier	1	07:20:00	100		100			PB2, (Upland blanket bog) WD4, (Conifer plantation) Travelling	Female/juvenile type
K01	12/09/2016	VP8a	Kestrel	1	15:16:00	40		40			Commuting	Commuting along conifer edge and over bog.
K02	13/09/2016	VP4a	Kestrel	1	14:59:00	30			30		PB2, (Upland blanket bog) WS1, (Scrub/ transitional woodland) WS5, (Recently-felled woodland)	Flight band 3, flies south over VP (circles over willows) out of view (30 secs) behind conifers.



**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
K03	13/09/2016	VP4a	Kestrel	2	15:55:00						WD4, (Conifer plantation)	Hovering over conifers east of VP, band 2, 30 seconds, drop down into conifers out of view.
K04	13/09/2016	VP4a	Kestrel	1	16:02:00						WD4, (Conifer plantation)	Hunting over mature conifer plantation, north of VP. Band 3, Hovering and then dropped into conifers where aforementioned RN landed. Duration 2 minutes.
K05	13/09/2016	VP4a	Kestrel	1	16:09:00						WD4, (Conifer plantation)	Flies over mature conifers WNW of VP in SW direction, circles back. Band 3, 1 minute. Drops down into conifer forestry out of view.

**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
K06	13/09/2016	VP4a	Kestrel	1	16:56:00						WD4, (Conifer plantation)	NE of VP, hovering, band 2, lands in conifers out of view.
K07	13/09/2016	VP4a	Kestrel	1	19:16:00						WS5, (Recently-felled woodland)	Hunting over clearfell, NE of VP (20 secs), band 2. Dropped down into vegetation.
K08	14/09/2016	VP5a	Kestrel	1	19:20:00	20		20			WD4, (Conifer plantation)	Flying low over young conifers SE. Goes out of view into conifers.
K09	15/09/2016	VP2	Kestrel	1	15:42:00	180			180		WD4, (Conifer plantation) WS5, (Recently-felled woodland)	Hovering soaring over mature conifers and clearfell travelling east over crest of hill out of view.
K10	15/09/2016	VP2	Kestrel	1	16:47:00	240	90	135			PB2, (Upland blanket bog)	PB2, (Upland blanket bog) Soaring over hill, for 30 secs, lifts, soars band 2, flies off SE over hill out of view.

**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
K11	15/09/2016	VP2	Kestrel	1	17:03:00	120	20	90			PB2, (Upland blanket bog)	Flies over bog hunting , hovers over hill, NE of VP dropped down out of view.
K12	15/09/2016	VP2	Kestrel	1	17:14:00	10	10				PB2, (Upland blanket bog)	Briefly lifts, lands out of view, on bog.
K13	16/09/2016	VP7a	Kestrel	1	15:30:00	120			120		WD4, (Conifer plantation)	Band 3, hunting over conifers behind VP. Dropped down out of view.
K14	16/09/2016	VP7a	Kestrel	1	16:24:00	40		40			PB2, (Upland blanket bog)	Hunting over bog n of vp.
K15	16/09/2016	VP7a	Kestrel	1	16:30	120			120		WD4, (Conifer plantation) PB2, (Upland blanket bog)	Commuting over conifer and bog nw of vp, soars over hill, w of vp and out of view (with other K. at 16:32).
K16	16/09/2016	VP7a	Kestrel	1	16:32	40		40			WD4, (Conifer plantation) PB2, (Upland blanket bog)	Soaring over hill w of vp, out of view over crest of hill, with above individual.
K17	19/09/2016	VP3	Kestrel	1	19:17:00	170		15	150		WD4, (Conifer plantation)	

**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
K18	19/09/2016	VP3	Kestrel	1	18:41:00	64		64			WD4, (Conifer plantation)	Flies SW along the treeline/edge of conifers. Lands on conifers for approx 30 secs, continues flying sw and into conifer stand out of view.
K19	19/09/2016	VP3	Kestrel	1	16:57:00		60	15			WD4, (Conifer plantation)	
K20	07/10/2016	VP5a	Kestrel	1	10:44:00	48	4	44			WD4, (Conifer plantation) Perched on conifer for 11min20sec (mostly preening). Flew off perch to attack B. but missed and flew offsite	
K21	07/10/2016	VP5a	Kestrel	1	12:28:00	108	83	25			WD4, (Conifer plantation) Hunting. Landed onsite for 1min30sec	
K22	10/10/2016	VP8a	Kestrel	1	09:03:00	12			12		WD4, (Conifer plantation) Travelling	
K23	11/10/2016	VP1a	Kestrel	1	08:12:00	119			119		WD4, (Conifer plantation) Hunting	
K24	13/10/2016	VP4a	Kestrel	1	11:42:00	27			27		WD4, (Conifer plantation) Travelling	
K25	18/10/2016	VP9	Kestrel	1	13:13:00	439			439		PB2, (Upland blanket bog) Hunting	
K26	07/11/2016	VP1a	Kestrel	1	13:49:00				95		PB2, (Upland blanket bog) WD4, (Conifer plantation) Hunting	
K27	09/11/2016	VP5a	Kestrel	1	15:28:00			91			WD4 Hunting	
K28	09/11/2016	VP5a	Kestrel	1	16:28:00		45				WD4 Perched for 15 minutes	

**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
K29	10/11/2016	VP4a	Kestrel	1	11:37:00				377		WD4 Hunting	
K30	17/11/2016	VP8a	Kestrel	1	15:17:00	296					WD4, (Conifer plantation) Hunting	
K31	09/01/2017	VP7a	Kestrel	1	11:32:00	272			272		WD4, (Conifer plantation) PB2, (Upland blanket bog) Hunting	
K32	09/01/2017	VP7a	Kestrel	1	11:47:00	24			24		WD4, (Conifer plantation) Hunting	
K33	09/01/2017	VP7a	Kestrel	1	12:23:00	37			37		WD4, (Conifer plantation) Hunting	
K34	09/01/2017	VP7a	Kestrel	1	13:05:00	69			69		WD4, (Conifer plantation) Hunting	
K35	09/01/2017	VP7a	Kestrel	1	13:27:00	171			171		WD4, (Conifer plantation) PB2, (Upland blanket bog) Hunting	
K36	10/01/2017	VP2	Kestrel	1	13:24:00	16		16			WD4, (Conifer plantation) Hunting	
K37	10/01/2017	VP2	Kestrel	1	15:45:00	124			124		WD4, (Conifer plantation) Hunting	
K38	10/01/2017	VP2	Kestrel	1	16:22:00	122		17	105		WD4, (Conifer plantation) Hunting	
K39	17/01/2017	VP3	Kestrel	1	16:23:00	47			47		WD4, (Conifer plantation) Travelling	
K40	10/02/2017	VP3	Kestrel	1	10:48:00	10		10			WD4, (Conifer plantation) Travelling	
K41	13/03/2017	VP3	Kestrel	1	15:29:00	9			9		WD4, (Conifer plantation) Hunting	
K42	14/03/2017	VP8a	Kestrel	1	13:25:00	49		49			WD4, (Conifer plantation) Hunting	
K43	14/03/2017	VP8a	Kestrel	1	14:52:00	139			139		WD4, (Conifer plantation) PB2, (Upland blanket bog) Hunting	
K44	03/04/2017	VP7a	Kestrel	1	11:40:00	8	8				WD4, (Conifer plantation) travelling	adult female

**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
K45	27/06/2017	VP1a	Kestrel	1	15:12:00	40		10	30		WD4, (Conifer plantation) Hunting	
K46	29/06/2017	VP5a	Kestrel	1	12:29:00	30			30		WD4, (Conifer plantation) Hunting	
K47	11/07/2017	VP5a	Kestrel	1	11:46:00	15		15			PB, (Bogs) Flew off perch over bog	
K48	11/07/2017	VP5a	Kestrel	1	12:35:00	30			30		WD4, (Conifer plantation) Hunting	
K49	11/07/2017	VP5a	Kestrel	1	15:02:00	20		20			WD4, (Conifer plantation) Hunting	
K50	11/07/2017	VP5a	Kestrel	2	15:46:00	100		40	60		WD4, (Conifer plantation) Hunting	
K51	14/07/2017	VP2	Kestrel	1	11:58:00	25	10		15		WD4, (Conifer plantation) PB, (Bogs) Hinting	
K52	17/07/2017	VP1a	Kestrel	1	14:51:00	25	15	10			WD4, (Conifer plantation) PB, (Bogs) Flew from perch	
K53	20/07/2017	VP7a	Kestrel	1	11:49:00	160	40	120			PB2, (Upland blanket bog) WD4, (Conifer plantation) Hunting, hovering and flying on.	
K54	20/07/2017	VP7a	Kestrel	1	15:36:00	78		78			WD4, (Conifer plantation) Hunting, hovering and flying on.	
K55	20/07/2017	VP7a	Kestrel	1	15:47:00	39	9	30			WD4, (Conifer plantation) Hunting and hovering.	
K56	24/07/2017	VP8a	Kestrel	1	10:36:00	55		55			WD4, (Conifer plantation) Hunting and flying on.	
K57	24/07/2017	VP8a	Kestrel	1	10:57:00	328		328			WD4, (Conifer plantation) WS5, (Recently-felled woodland) Hunting, hovering and flying on.	
K58	24/07/2017	VP8a	Kestrel	1	11:16:00	51		51			WS5, (Recently-felled woodland) Hunting, hovering and flying on.	

**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
K59	24/07/2017	VP8a	Kestrel	1	12:36:00	146		114	32		WD4, (Conifer plantation) Hunting, hovering and flying on.	
K60	24/07/2017	VP8a	Kestrel	1	12:47:00	44		44			WD4, (Conifer plantation) Travelling	
K61	24/07/2017	VP8a	Kestrel	1	13:08:00	334		334			PB2, (Upland blanket bog) Hunting, hovering and flying on.	
K62	24/07/2017	VP8a	Kestrel	2	14:06:00	181		38	143		WD4, (Conifer plantation) GA1, (Improved agricultural grassland) Travelling	
K63	24/07/2017	VP8a	Kestrel	1	14:16:00	280		280			PB2, (Upland blanket bog) Hunting, hovering and flying on.	
K64	24/07/2017	VP8a	Kestrel	1	14:28:00	40		28	12		PB2, (Upland blanket bog) Mobbing Buzzard	
K65	24/07/2017	VP8a	Kestrel	1	14:46:00	231		26	205		PB2, (Upland blanket bog) WD4, (Conifer plantation) Hunting and travelling on	
K66	24/07/2017	VP8a	Kestrel	1	14:56:00	74		74			PB2, (Upland blanket bog) Hunting, hovering and flying on.	
K67	10/08/2017	VP7a	Kestrel	1	09:30:00	35		35			WD4, (Conifer plantation) Hunting, female	
K68	10/08/2017	VP7a	Kestrel	1	10:05:00	100	10	10	80		WD4, (Conifer plantation) Hunting, female	
K69	10/08/2017	VP7a	Kestrel	1	10:35:00	120		20	100		WD4, (Conifer plantation) Hunting, female	
K70	10/08/2017	VP7a	Kestrel	1	10:40:00	200	40	30	130		WD4, (Conifer plantation) Hunting, female	
K71	24/08/2017	VP5a	Kestrel	1	11:15:00	45		45			WD4, (Conifer plantation) hunting	
K72	31/08/2017	VP9	Kestrel	1	08:53:00	5	5				PB, (Bogs) WD4, (Conifer plantation) Female flew into tree	

**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
K73	01/09/2017	VP7a	Kestrel	1	12:00:00	18		18			WD4, (Conifer plantation) male, perched and travelling	
K74	11/09/2017	VP3	Kestrel	1	16:55:00	420		20	400		WD4, (Conifer plantation) hunting	Male
K75	11/09/2017	VP3	Kestrel	1	19:22:00	540		60	480		WD4, (Conifer plantation) hunting, male	
K76	11/09/2017	VP3	Kestrel	1	19:45:00	45			45		WD4, (Conifer plantation) hunting	
K77	11/09/2017	VP3	Kestrel	1	15:30:00	840	40	100	700		PB2, (Upland blanket bog) WD4, (Conifer plantation) Hunting, aggressive	
K78	13/09/2017	VP5a	Kestrel	1	17:07:00	660			660		WD4, (Conifer plantation) hunting	
K79	13/09/2017	VP5a	Kestrel	1	17:11:00	250			250		WD4, (Conifer plantation) hunting	
K80	13/09/2017	VP5a	Kestrel	2	17:30:00	45			45		WD4, (Conifer plantation) travelling	
K81	13/09/2017	VP5a	Kestrel	1	17:55:00	170			170		WD4, (Conifer plantation) hunting	Male
K82	13/09/2017	VP5a	Kestrel	1	18:40:00	30			30		WD4, (Conifer plantation) hunting	
K83	13/09/2017	VP5a	Kestrel	1	19:58:00	1440			1440		WD4, (Conifer plantation) PB2, (Upland blanket bog) hunting	
K84	18/09/2017	VP9	Kestrel	1	14:50:00	20			20		WD4, (Conifer plantation) hunting	
K85	18/09/2017	VP9	Kestrel	1	16:15:00	200			200		PB2, (Upland blanket bog) WD4, (Conifer plantation) hunting	
K86	18/09/2017	VP9	Kestrel	1	18:10:00	220		100	120		PB2, (Upland blanket bog) WD4, (Conifer plantation) hunting	



**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
K87	18/09/2017	VP9	Kestrel	1	18:25:00	740		200	540		PB2, (Upland blanket bog) WD4, (Conifer plantation) hunting	
K88	18/09/2017	VP9	Kestrel	1	18:55:00	300			300		PB2, (Upland blanket bog) hunting	
K89	18/09/2017	VP9	Kestrel	1	17:00:00	510			510		PB2, (Upland blanket bog) WD4, (Conifer plantation) hunting	
K90	18/09/2017	VP9	Kestrel	1	18:35:00	550			550		PB2, (Upland blanket bog) hunting	
K91	21/09/2017	VP2	Kestrel	1	16:18:00	38		38			WD4, (Conifer plantation) Hunting, hovering and flying on	Male
K92	21/09/2017	VP2	Kestrel	1	16:43:00	69		69			WD4, (Conifer plantation) Hunting, hovering and flying on	Male
K93	10/10/2017	VP3	Kestrel	1	08:05:00	70			70		WD4, (Conifer plantation)	
K94	10/10/2017	VP3	Kestrel	1	08:43:00	190			190		WD4, (Conifer plantation)	
K95	10/10/2017	VP3	Kestrel	1	11:15:00	520		20	500		WD4, (Conifer plantation)	
K96	10/10/2017	VP3	Kestrel	1	12:45:00	80	10	10	60		WD4, (Conifer plantation)	
K97	11/10/2017	VP5a	Kestrel	2	13:55:00	60			60		WD4, (Conifer plantation) pair hunting	
K98	27/10/2017	VP2	Kestrel	1	12:52:00	200		24	176		WD4, (Conifer plantation) Hunting, hovering and landing in WD4	
K99	01/11/2017	VP7a	Kestrel	1	13:30:00	45	20	25			WD4, (Conifer plantation) Hunting	
K100	03/11/2017	VP5a	Kestrel	1	15:10:00	150			150		WD4, (Conifer plantation) PB2, (Upland blanket bog) Hunting	
K101	06/11/2017	VP3	Kestrel	1	15:55:00	90					WD4, (Conifer plantation) Hunting	
K102	07/11/2017	VP4a	Kestrel	1	12:10:00	120	20	80	20		PB2, (Upland blanket bog) Hunting	

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K103	07/11/2017	VP4a	Kestrel	1	13:45:00	15	15				WD4, (Conifer plantation) Travelling	
K104	13/11/2017	VP2	Kestrel	1	12:55:00	30	30				WD4, (Conifer plantation)	
K105	16/11/2017	VP1a	Kestrel	1	13:00:00	30	30				WD4, (Conifer plantation) PB2, (Upland blanket bog) Travelling. Male	
K106	13/12/2017	VP9	Kestrel	1	12:16:00	10		10			WD4, (Conifer plantation) Flying	
K107	14/12/2017	VP2	Kestrel	1	10:13:00	26		26				
K108	17/01/2018	VP5a	Kestrel	1	13:46:00	260		260			WD4, (Conifer plantation) Hunting, hovering and flying on.	Male
K109	08/03/2018	VP2	Kestrel	1	16:40:00	560		560			PB2, (Upland blanket bog) WD4, (Conifer plantation) hunting off site	
K110	20/03/2018	VP5a	Kestrel	1	18:50:00	38	12	15	11		WD4, (Conifer plantation) Hunting	
K111	27/03/2018	VP1a	Kestrel	1	19:03:00	178		120	58			
K112	28/03/2018	VP7a	Kestrel	1	15:18:00	62	10	52			WD4, (Conifer plantation) WS5, (Recently-felled woodland) Hunting and Hovering	Female
K113	28/03/2018	VP7a	Kestrel	1	15:23:00	119		22	97		WD4, (Conifer plantation) WS5, (Recently-felled woodland) Hunting and Hovering	Male
K114	28/03/2018	VP7a	Kestrel	1	15:29:00	45		45			WD4, (Conifer plantation) WS5, (Recently-felled woodland) Travelling	Male
K115	28/03/2018	VP7a	Kestrel	1	17:21:00	215		215			WD4, (Conifer plantation) WS5, (Recently-felled woodland) Hunting and Hovering	Female

**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
K116	20/04/2018	9	Kestrel	1	15:04:00	30	2	5	23		PB4, (Cutover bog) WD4, (Conifer plantation) Adult male flying through	
K141	16/05/2018	9	Kestrel	1	16:10:00	40		40			WD4, (Conifer plantation) PB2, (Upland blanket bog) Hunting	
K142	24/05/2018	2	Kestrel	2	16:20:00	80		80			WD4, (Conifer plantation) territorial behaviour (attacking hh)	
K143	28/05/2018	1a	Kestrel	1	18:54:00	190		20	170		WD4, (Conifer plantation) hunting	
K144	28/05/2018	1a	Kestrel	1	20:10:00	70	70				PB2, (Upland blanket bog) hunting/travelling	
K117	16/07/2018	7a	Kestrel	1	13:03:00	15	15				WD4, (Conifer plantation) travelling	
K118	16/07/2018	7a	Kestrel	1	15:20:00	70		70			WD4, (Conifer plantation) hunting	
K119	16/07/2018	7a	Kestrel	1	15:40:00	420	420				WD4, (Conifer plantation) Hunting	
K120	16/07/2018	7a	Kestrel	1	16:30:00	5	5				WD4, (Conifer plantation)	
K121	16/07/2018	7a	Kestrel	1	16:46:00	600	60	300	240		WD4, (Conifer plantation) hunting	
K122	07/08/2018	7a	Kestrel	1	11:00:00	690	60	600	30		WD4, (Conifer plantation) hunting and feeding	
K123	07/08/2018	7a	Kestrel	1	11:45:00	110		110			WD4, (Conifer plantation) hunting	
K124	07/08/2018	7a	Kestrel	1	12:46:00	40		40			WD4, (Conifer plantation) hunting	
K125	07/08/2018	7a	Kestrel	1	13:00:00	90	80	10			WD4, (Conifer plantation) hunting and carrying prey	
K126	07/08/2018	7a	Kestrel	2	14:00:00	360	60	300			WD4, (Conifer plantation) hunting	

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K127	07/08/2018	7a	Kestrel	2	14:30:00	280		280			WD4, (Conifer plantation) hunting	
K128	10/08/2018	5a	Kestrel	1	10:25:00	130	20	100	10		WD4, (Conifer plantation) hunting	
K129	10/08/2018	5a	Kestrel	1	10:43:00	100		100			WD4, (Conifer plantation) hunting	
K130	10/08/2018	5a	Kestrel	1	11:35:00	360	360				WD4, (Conifer plantation) hunting	
K131	10/08/2018	5a	Kestrel	1	11:40:00	60	60				WD4, (Conifer plantation) hunting	
K132	10/08/2018	5a	Kestrel	1	12:51:00	370	70	300			PB2, (Upland blanket bog) hunting	
K133	10/08/2018	5a	Kestrel	2	13:11:00	430		430			WD4, (Conifer plantation) PB2, (Upland blanket bog) Hunting and mobbing Buzzard	
K134	10/08/2018	5a	Kestrel	1	14:34:00	530		530			WD4, (Conifer plantation) hunting	
K135	21/08/2018	1a	Kestrel	1	10:40:00	30	30				WD4, (Conifer plantation) travelling	
K136	21/08/2018	1a	Kestrel	1	12:20:00	25		25			WD4, (Conifer plantation) travelling	
K137	27/08/2018	9	Kestrel	1	14:40:00	12	12				WD4, (Conifer plantation) travelling	
K138	04/09/2018	7a	Kestrel	1	11:08:00	12	12				WD4, (Conifer plantation) Travelling	
K139	04/09/2018	7a	Kestrel	1	11:28:00	50	20	30			WD4, (Conifer plantation) hunting	
K140	28/09/2018	2	Kestrel	1	08:10:00	70		60	10		WD4, (Conifer plantation) PB2, (Upland blanket bog) Mobbing HC, hunting, travelling	

**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
LB01	13/09/2016	VP4a	Lesser Black-backed Gull	1	16:34:00						WD4, (Conifer plantation) WS5, (Recently-felled woodland)	Band 3, 60 secs, flies from E, over mature conifers and clearfell, W, over VP, then S behind conifers out of view.
MA01	03/04/2017	VP5a	Mallard	2	06:40:00	3	3				WD4, (Conifer plantation) travelling	adult male
MA02	03/04/2017	VP5a	Mallard	2	08:35:00	38	10	10	18		WD4, (Conifer plantation) circulating, 2 male	
MA03	03/04/2017	VP5a	Mallard	1	09:30:00	10	10				WD4, (Conifer plantation) Flushed from small water pool by surveyor	
MA04	03/04/2017	VP5a	Mallard	2	10:45:00	12			12		WD4, (Conifer plantation) travelling	
MA05	03/04/2017	VP5a	Mallard	1	12:30:00	20	15	5			WD4, (Conifer plantation) female, flushed	
MA06	03/04/2017	VP7a	Mallard	1	10:52:00	10		10			WD4, (Conifer plantation) travelling	
MA07	06/04/2017	VP3	Mallard	3	06:40:00	18			18		WD4, (Conifer plantation) PB2, (Upland blanket bog) travelling, calling	
MA08	06/04/2017	VP3	Mallard	1	06:50:00	7			7		WD4, (Conifer plantation) PB2, (Upland blanket bog) travelling, calling	
MA09	06/04/2017	VP3	Mallard	2	07:45:00	22	5	2	15		WD4, (Conifer plantation) FW1, (Eroding/upland rivers) adult male and female	

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Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
MA10	21/04/2017	VP9	Mallard	1	07:02:00	25			25		WD4, (Conifer plantation) Traveling	
MA11	27/05/2017	VP7a	Mallard	2	16:15:00	20	10	10			FW, (Watercourses) WD4, (Conifer plantation)	
MA12	09/06/2017	VP3	Mallard	2	12:20:00	35		35			WD4, (Conifer plantation)	
MA13	12/03/2018	VP4a	Mallard	2	15:30:00	10	10				WD4, (Conifer plantation) Travelling, pair	
MA14	21/03/2018	VP9	Mallard	1	19:00:00	18		18			PB2, (Upland blanket bog) WD4, (Conifer plantation) Drake travelling	
MA15	21/03/2018	VP9	Mallard	1	19:18:00	12		12			PB2, (Upland blanket bog) Drake travelling	
MA16	27/03/2018	VP1a	Mallard	6	19:16:00	34	4	30			WD4, (Conifer plantation) PB2, (Upland blanket bog) Landing on wet area of PB2	
MA17	28/03/2018	VP7a	Mallard	1	18:51:00	20	6	14			WD4, (Conifer plantation) WS5, (Recently-felled woodland) Landing in drainage ditch	
MA18	28/03/2018	VP7a	Mallard	1	19:46:00	38	8	30			WD4, (Conifer plantation) WS5, (Recently-felled woodland) Landing in drainage ditch	
MA19	03/04/2018	3	Mallard	1	08:43:00	30	20	10			WD4, (Conifer plantation) Travelling	Adult Male
MA20	04/04/2018	8a	Mallard	2	10:03:00	5			5		WD4, (Conifer plantation) Pair of adults (male and female) spotted briefly through a gap in the trees	
MA001	19/04/18	4a	Mallard	2	09:50:00	28		28			WD4, (Conifer plantation) travelling	
MA002	19/04/18	4a	Mallard	1	10:30:00	23		23			WD4, (Conifer plantation) travelling	

**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
MA21	20/04/2018	5a	Mallard	2	09:11:00	10		10			WD4, (Conifer plantation) Breeding pair flying through	
2251	08/05/2018	7a	Mallard	1	20:00:00	65		10	55		WD4, (Conifer plantation) Travelling	
2252	08/05/2018	7a	Mallard	3	20:58:00	25			25		WD4, (Conifer plantation) Travelling	
MA22	17/05/2018	3	Mallard	1	21:50:00	10			10		WD4, (Conifer plantation) Flying	
MA23	17/05/2018	3	Mallard	2	22:01:00	5			5			
MA24	17/05/2018	3	Mallard	1	22:17:00	3			3		WD4, (Conifer plantation) Flying	
ML01	19/04/2017	VP2	Merlin	1	11:20:00	3	3				WD4, (Conifer plantation) brief view	
ML02	08/05/2017	VP1a	Merlin	1	20:19:00	25	25				PB, (Bogs) WS5, (Recently-felled woodland) WD4, (Conifer plantation) Flew from bog to perch on stump. Mobbed by MP before flying off through conifers	
OC01	28/03/2017	VP9	Oystercatcher	3	20:30:00	20			20		PB2, (Upland blanket bog) WD4, (Conifer plantation) Flying and calling over VP9	
PE01	13/12/2017	VP1a	Peregrine Falcon	1	10:20:00	56		56			PB2, (Upland blanket bog) WD4, (Conifer plantation) Travelling	
PE02	20/02/2018	VP9	Peregrine Falcon	1	12:15:00	350	25	30	60	135	PB2, (Upland blanket bog) WD4, (Conifer plantation) Hunting	
PE03	21/03/2018	VP9	Peregrine Falcon	2	14:40:00	245		190	55		PB2, (Upland blanket bog) Displaying	
RG01	18/10/2016	VP9	Red Grouse	1	07:39:00	5	5				PB2, (Upland blanket bog) Travelling	At least 2 more calling at the same time

**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
RG02	28/03/2017	VP9	Red Grouse	1	20:07:00	5	5				PB2, (Upland blanket bog) Calling and flying low across heather	Ringtail
RG03	29/03/2017	VP4a	Red Grouse	1	20:00:00	120	120				PB2, (Upland blanket bog) WD4, (Conifer plantation) Calling and flying low across heather	Male
RG04	21/04/2017	VP9	Red Grouse	1	07:06:00	10	10				PB2, (Upland blanket bog) Traveling	
RG05	08/05/2017	VP1a	Red Grouse	1	15:40:00	5	5				PB, (Bogs) Flew away calling	
RG06	27/06/2017	VP1a	Red Grouse	1	11:30:00	10	10				PB2, (Upland blanket bog) Disturbed, flew, calling	Female
RG07	27/06/2017	VP1a	Red Grouse	1	11:30:00	10	10				PB2, (Upland blanket bog) Disturbed, flew, calling	
RG08	15/08/2017	VP1a	Red Grouse	2	08:58:00	8	8				WD4, (Conifer plantation) PB2, (Upland blanket bog) travelling	
RG09	18/09/2017	VP9	Red Grouse	1	19:35:00	10	10				PB2, (Upland blanket bog) travelling, landing	
RG10	20/09/2017	VP1a	Red Grouse	4	16:05:00	42	42				PB2, (Upland blanket bog) Flying from behind VP location and landing	
RG11	10/10/2017	VP3	Red Grouse	1	08:09:00	10	10				WD4, (Conifer plantation) PB2, (Upland blanket bog)	Small Covey of 4 birds
RG12	13/10/2017	VP9	Red Grouse	1	07:30:00	10	10				PB2, (Upland blanket bog)	
RG13	01/11/2017	VP7a	Red Grouse	1	17:50:00	15	15				WD4, (Conifer plantation) Travelling	
RG14	07/11/2017	VP4a	Red Grouse	1	12:15:00	10	10				PB2, (Upland blanket bog) travelling	
RG15	07/11/2017	VP4a	Red Grouse	1	12:15:00	15	15				PB2, (Upland blanket bog) travelling	
RG16	07/11/2017	VP4a	Red Grouse	2	12:20:00	30	30				PB2, (Upland blanket bog) travelling, calling	



**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
RG17	17/11/2017	VP9	Red Grouse	1	11:40:00	20	20				PB2, (Upland blanket bog) Travelling, calling	
RG18	20/12/2017	VP3	Red Grouse	1	11:48:00	32	32				PB2, (Upland blanket bog) WS5, (Recently-felled woodland) Calling, flying and landing on PB2	
2338	27/09/2018	9	Red Grouse	1	11:20:00	7	7				PB2, (Upland blanket bog) Flushed by ravens	
SN01	05/10/2016	VP7a	Snipe	4	11:47:00	55			55		WD4, (Conifer plantation) Travelling	
SN02	07/10/2016	VP5a	Snipe	2	10:26:00	66			66		WD4, (Conifer plantation) Travelling	
SN03	18/10/2016	VP9	Snipe	1	07:17:00	10	10				PB2, (Upland blanket bog) Travelling	
SN04	18/10/2016	VP9	Snipe	1	11:15:00	58			58		PB2, (Upland blanket bog) WD4, (Conifer plantation) Flying/Calling	
SN05	15/02/2017	VP7a	Snipe	1	12:25:00	27		27			WD4, (Conifer plantation) PB2, (Upland blanket bog) Travelling	
SN06	28/02/2017	VP9	Snipe	1	12:15:00	25	25				PB2, (Upland blanket bog) Travelling	
SN07	15/08/2017	VP1a	Snipe	2	10:25:00	45	20	10	15		WD4, (Conifer plantation) PB2, (Upland blanket bog) travelling	
SN08	16/11/2017	VP1a	Snipe	1	17:10:00	20	20				PB2, (Upland blanket bog) travelling, calling	
SN09	16/11/2017	VP1a	Snipe	1	17:12:00	20	20				PB2, (Upland blanket bog) travelling, calling	
SN10	23/01/2018	VP8a	Snipe	2	13:02:00	47			47		WD4, (Conifer plantation) PB2, (Upland blanket bog) Travelling and Calling	Possibly flushed by dog walker.
SN11	16/02/2018	VP1a	Snipe	1	07:55:00	10	10				PB2, (Upland blanket bog)	

**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
SN12	16/02/2018	VP1a	Snipe	1	08:00:00	10	10				PB2, (Upland blanket bog) travelling, calling	
SN13	12/06/2018	1a	Snipe	2	16:10:00	130				130	PB2, (Upland blanket bog) WD4, (Conifer plantation) drumming	
SH01	12/09/2016	VP8a	Sparrowhawk	1	17:18:00	30	30				PB2, (Upland blanket bog) WD4, (Conifer plantation)	Flew along drain by vp, then west over bog and into mature conifers out of view.
SH02	05/10/2016	VP7a	Sparrowhawk	1	10:28:00	234	234				WD4, (Conifer plantation) Hunting	Flight (10sec) - Perch (140sec) - Flight(50sec) - Perch(20sec) - Flight(14sec)
SH03	11/10/2016	VP1a	Sparrowhawk	1	07:50:00	5	5				WD4, (Conifer plantation) Travelling	
SH04	14/10/2016	VP3	Sparrowhawk	1	08:32:00	17		17			WD4, (Conifer plantation) Travelling	
SH05	14/10/2016	VP3	Sparrowhawk	1	10:58:00	39		39			WD4, (Conifer plantation) Travelling	
SH06	02/11/2016	VP7a	Sparrowhawk	1	11:56:00	25	25				WD2, (Mixed broadleaved/conifer woodland) Perched then flew off	
SH07	07/11/2016	VP1a	Sparrowhawk	1	15:59:00		17				WD4, (Conifer plantation) WS5, (Recently-felled woodland) Hunting	
SH08	18/01/2017	VP4a	Sparrowhawk	1	15:42:00	12		12			WD4, (Conifer plantation) Hunting	
SH09	06/03/2017	VP2	Sparrowhawk	1	13:36:00	25		25			WD4, (Conifer plantation) Travelling	

**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
SH10	29/03/2017	VP4a	Sparrowhawk	1	20:17:00	30	10	20			WD4, (Conifer plantation) Mixed broadleaved/conifer woodland Hunting low through trees	Female
SH11	03/04/2017	VP5a	Sparrowhawk	1	08:50:00	3	3				WD4, (Conifer plantation) male	
SH12	03/04/2017	VP5a	Sparrowhawk	1	08:55:00	5	5				WD4, (Conifer plantation) male, hunting	
SH13	06/04/2017	VP3	Sparrowhawk	1	10:10:00	10		10			WD4, (Conifer plantation) Travelling, female	
SH14	10/05/2017	VP2	Sparrowhawk	1	18:36:00	10		10			WD4, (Conifer plantation) Mobbed by HC	
SH15	27/05/2017	VP7a	Sparrowhawk	1	20:55:00	10		10			WD4, (Conifer plantation)	
SH16	02/06/2017	VP2	Sparrowhawk	1	10:21:00	25		10	15		WD4, (Conifer plantation) Traveling	
SH17	26/06/2017	VP7a	Sparrowhawk	1	08:16:00	20		20			WD4, (Conifer plantation) Traveling	
SH18	26/06/2017	VP7a	Sparrowhawk	1	11:06:00	5	5				WD4, (Conifer plantation) Brief view	
SH19	15/08/2017	VP1a	Sparrowhawk	1	09:20:00	5	5	5			WD4, (Conifer plantation) PB2, (Upland blanket bog) travelling	
SH20	24/08/2017	VP5a	Sparrowhawk	1	09:45:00	60	60				WD4, (Conifer plantation) Mobbed by hc, perching on log pile	
SH21	11/09/2017	VP3	Sparrowhawk	1	16:56:00	20	20				WD4, (Conifer plantation) travelling	
SH22	11/09/2017	VP3	Sparrowhawk	1	15:30:00	260	150	100	100		WD4, (Conifer plantation) travelling, aggressive	
SH23	18/09/2017	VP9	Sparrowhawk	1	15:55:00	10	10				PB2, (Upland blanket bog) travelling female	
SH24	18/09/2017	VP9	Sparrowhawk	1	17:50:00	100			100		PB2, (Upland blanket bog) female travelling	

**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
SH25	03/10/2017	VP8a	Sparrowhawk	1	11:30:00	10	10				WD4, (Conifer plantation) Travelling	
SH26	03/10/2017	VP8a	Sparrowhawk	1	12:50:00	15	15				WD4, (Conifer plantation) Hunting	
SH27	11/10/2017	VP5a	Sparrowhawk	1	13:40:00	5	5				WD4, (Conifer plantation) Male travelling	
SH28	01/11/2017	VP7a	Sparrowhawk	1	12:45:00	12	12				WD4, (Conifer plantation) Hunting	
SH29	01/11/2017	VP7a	Sparrowhawk	1	12:50:00	5	5				WD4, (Conifer plantation) Hunting	
SH30	02/11/2017	VP8a	Sparrowhawk	1	17:32:00	10	10				WD4, (Conifer plantation) Travelling	
SH31	13/12/2017	VP1a	Sparrowhawk	1	12:01:00	134		134			WD4, (Conifer plantation) GA1, (Improved agricultural grassland) Hunting and Flying on	
SH32	13/12/2017	VP9	Sparrowhawk	1	11:46:00	5	5				WD4, (Conifer plantation) Flying	
SH33	22/12/2017	VP7a	Sparrowhawk	1	11:15:00	15		15			WD4, (Conifer plantation) PB, (Bogs) Flying	
SH34	15/01/2018	VP1a	Sparrowhawk	1	16:13:00	34		34			WD4, (Conifer plantation) PB2, (Upland blanket bog) Travelling	
SH35	18/01/2018	VP4a	Sparrowhawk	1	15:26:00	57		57				
SH36	16/02/2018	VP1a	Sparrowhawk	1	11:20:00	50	10	20	20		WD4, (Conifer plantation) PB2, (Upland blanket bog) travelling, display	
SH37	20/02/2018	VP9	Sparrowhawk	1	07:00:00	10	10				WD4, (Conifer plantation) travelling	
SH38	07/03/2018	VP8a	Sparrowhawk	1	17:00:00	10		10			WD4, (Conifer plantation) Brief flight of female	Female

**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
SH39	28/03/2018	VP7a	Sparrowhawk	1	18:06:00	46		46			WD4, (Conifer plantation) WS5, (Recently-felled woodland) Travelling	
SH40	16/05/2018	8	Sparrowhawk	1	19:38:00	5	3	2			WD4, (Conifer plantation) Perched on a tree then flew away	Adult Female
SH49	24/05/2018	2	Sparrowhawk	1	17:40:00	40	30				WD4, (Conifer plantation) PB2, (Upland blanket bog) circling	
SH41	16/07/2018	7a	Sparrowhawk	1	11:15:00	10	10				WD4, (Conifer plantation) PB2, (Upland blanket bog) low flight	
SH42	16/07/2018	7a	Sparrowhawk	1	12:10:00	25	25				WD4, (Conifer plantation) carrying food	carrying food towards suitable nesting habitat
SH43	16/07/2018	7a	Sparrowhawk	1	16:31:00	20	20				WD4, (Conifer plantation) Carrying food	carrying food towards suitable nesting habitat
SH44	26/07/2018	9	Sparrowhawk	1	09:10:00	35		35			WD4, (Conifer plantation) PB2, (Upland blanket bog) Female hunting	Adult Female
SH45	07/08/2018	7a	Sparrowhawk	1	10:10:00	20		20			WD4, (Conifer plantation) circling nest area	Adult female
SH46	07/08/2018	7a	Sparrowhawk	3	15:00:00	130		130			WD4, (Conifer plantation) begging call	
SH47	24/09/2018	7a	Sparrowhawk	1	07:50:00	15		15			WD4, (Conifer plantation) Travelling	
SH48	25/09/2018	4a	Sparrowhawk	1	09:10:00	7	7				WD4, (Conifer plantation) Travelling	
WK01	29/12/2016	VP8a	Woodcock	1	08:15:00	5		5			Conifer plantation and Blanket bog Flying over in SE direction	

**Table 3: Vantage Point (Target Species Data)**

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-10m)	Band 2 (10-25m)	Band 3 PCH (25-175m)	Band 4 (>175m)	Notes on habitat and activity	Comments
WK02	29/03/2017	VP4a	Woodcock	1	20:41:00	10		10			WD4, (Conifer plantation) Mixed broadleaved/conifer woodland Flying high above tree tops	Female
WK03	24/08/2017	VP5a	Woodcock	1	05:45:00	10	10				WD4, (Conifer plantation) travelling	
WK04	02/11/2017	VP8a	Woodcock	1	17:30:00	15	15				WD4, (Conifer plantation) Travelling	
WK05	24/05/2018	2	Woodcock	1	21:32:00	20		20			WD4, (Conifer plantation) PB2, (Upland blanket bog) Travelling	
WK06	24/05/2018	2	Woodcock	1	21:35:00	65		65			WD4, (Conifer plantation) Travelling	
WK07	24/05/2018	2	Woodcock	1	21:48:00	60		60			WD4, (Conifer plantation) Travelling	

**Table 4: Vantage Point Survey - Non-Flight Data**

Map Reference No.	Date	VP	Season	Species	No. of Birds	Time of flight	Notes on habitat and activity	Comments
-	13/09/2016	VP4a	Breeding	Kestrel	1	16:16:00	WD4, (Conifer plantation)	Alarm call from mature conifer stand where individual at 16:09 landed (no visual).
-	13/09/2016	VP4a	Breeding	Kestrel	1	16:16:00	WD4, (Conifer plantation)	Alarm call from mature conifer stand where individual at 16:09 landed (no visual).
-	05/10/2016	VP7a	Non-breeding	Hen Harrier	1	07:16:00	WD4, (Conifer plantation) Calling	Heard over forestry, Not seen
-	05/10/2016	VP7a	Non-breeding	Hen Harrier	1	07:16:00	WD4, (Conifer plantation) Calling	Heard over forestry, Not seen
-	18/10/2016	VP9	Non-breeding	Red Grouse	3	07:08:00	PB2, (Upland blanket bog) Heard Only	Heard Only
-	18/10/2016	VP9	Non-breeding	Red Grouse	1	09:44:00	PB2, (Upland blanket bog) Heard Only	Heard Only
-	18/10/2016	VP9	Non-breeding	Red Grouse	2	11:19:00	PB2, (Upland blanket bog) Heard Only	Heard Only
-	18/10/2016	VP9	Non-breeding	Red Grouse	1	11:57:00	PB2, (Upland blanket bog) Heard Only	Heard Only
	18/10/2016	VP9	Non-breeding	Red Grouse	3	07:08:00	PB2, (Upland blanket bog) Heard Only	Heard Only
	18/10/2016	VP9	Non-breeding	Red Grouse	1	09:44:00	PB2, (Upland blanket bog) Heard Only	Heard Only
	18/10/2016	VP9	Non-breeding	Red Grouse	2	11:19:00	PB2, (Upland blanket bog) Heard Only	Heard Only
	18/10/2016	VP9	Non-breeding	Red Grouse	1	11:57:00	PB2, (Upland blanket bog) Heard Only	Heard Only
-	02/11/2016	VP7a	Non-breeding	Golden Plover		12:22:00	WD4, (Conifer plantation) Heard Only	
	02/11/2016	VP7a	Non-breeding	Golden Plover		12:22:00	WD4, (Conifer plantation) Heard Only	
	07/11/2016	VP1a	Non-breeding	Snipe	1	17:38:00	PB2, (Upland blanket bog) Calling	
-	29/11/2016	VP9	Non-breeding	Red Grouse	1		Heard only	Heard Only

**Table 4: Vantage Point Survey - Non-Flight Data**

Map Reference No.	Date	VP	Season	Species	No. of Birds	Time of flight	Notes on habitat and activity	Comments
	29/11/2016	VP9	Non-breeding	Red Grouse	1		Heard only	Heard Only
-	05/12/2016	VP9	Non-breeding	Sparrowhawk	1	09:46:00	PB, (Bogs) calling	
-	05/12/2016	VP9	Non-breeding	Sparrowhawk	1	10:21:00	PB, (Bogs) calling	
-	05/12/2016	VP9	Non-breeding	Sparrowhawk	1	11:04:00	PB, (Bogs) calling	To E of VP
-	05/12/2016	VP9	Non-breeding	Sparrowhawk	1	12:22:00	PB, (Bogs) calling	To E of VP
-	05/12/2016	VP9	Non-breeding	Sparrowhawk	1	12:43:00	PB, (Bogs) calling	To E of VP
-	05/12/2016	VP9	Non-breeding	Sparrowhawk	1	09:46:00	PB, (Bogs) calling	
-	05/12/2016	VP9	Non-breeding	Sparrowhawk	1	10:21:00	PB, (Bogs) calling	
-	05/12/2016	VP9	Non-breeding	Sparrowhawk	1	11:04:00	PB, (Bogs) calling	To E of VP
-	05/12/2016	VP9	Non-breeding	Sparrowhawk	1	12:22:00	PB, (Bogs) calling	To E of VP
-	05/12/2016	VP9	Non-breeding	Sparrowhawk	1	12:43:00	PB, (Bogs) calling	To E of VP
-	05/12/2016	VP1a	Non-breeding	Red Grouse	1	07:35:00	PB2, (Upland blanket bog) Calling	Heard Only
-	05/12/2016	VP1a	Non-breeding	Red Grouse	1	07:56:00	PB2, (Upland blanket bog) Calling	Heard Only
	05/12/2016	VP1a	Non-breeding	Red Grouse	1	07:35:00	PB2, (Upland blanket bog) Calling	Heard Only
	05/12/2016	VP1a	Non-breeding	Red Grouse	1	07:56:00	PB2, (Upland blanket bog) Calling	Heard Only
-	05/12/2016	VP9	Non-breeding	Sparrowhawk	1	09:46:00	PB, (Bogs) calling	
-	05/12/2016	VP9	Non-breeding	Sparrowhawk	1	10:21:00	PB, (Bogs) calling	



**Table 4: Vantage Point Survey - Non-Flight Data**

Map Reference No.	Date	VP	Season	Species	No. of Birds	Time of flight	Notes on habitat and activity	Comments
-	05/12/2016	VP9	Non-breeding	Sparrowhawk	1	11:04:00	PB, (Bogs) calling	To E of VP
-	05/12/2016	VP9	Non-breeding	Sparrowhawk	1	12:22:00	PB, (Bogs) calling	To E of VP
-	05/12/2016	VP9	Non-breeding	Sparrowhawk	1	12:43:00	PB, (Bogs) calling	To E of VP
-	15/12/2016	VP3	Non-breeding	Sparrowhawk	1	08:32:00	PB, (Bogs) calling	To S
-	15/12/2016	VP3	Non-breeding	Red Grouse	1	08:32:00	PB, (Bogs) calling	Heard Only
-	15/12/2016	VP3	Non-breeding	Sparrowhawk	1	08:32:00	PB, (Bogs) calling	To S
-	15/12/2016	VP3	Non-breeding	Red Grouse	1	08:32:00	PB, (Bogs) calling	Heard Only
-	04/01/2017	VP1a	Non-breeding	Red Grouse	1	11:33:00	PB2, (Upland blanket bog) Calling	Heard Only
-	04/01/2017	VP1a	Non-breeding	Red Grouse	1	13:50:00	PB2, (Upland blanket bog) Calling	Heard Only
	04/01/2017	VP1a	Non-breeding	Red Grouse	1	11:33:00	PB2, (Upland blanket bog) Calling	Heard Only
	04/01/2017	VP1a	Non-breeding	Red Grouse	1	13:50:00	PB2, (Upland blanket bog) Calling	Heard Only
-	17/01/2017	VP3	Non-breeding	Red Grouse	1	16:56:00	PB2, (Upland blanket bog) Calling	Heard Only
	17/01/2017	VP3	Non-breeding	Red Grouse	1	16:56:00	PB2, (Upland blanket bog) Calling	Heard Only
-	19/01/2017	VP9	Non-breeding	Red Grouse	1	17:42:00	PB2, (Upland blanket bog) Calling	Heard Only
	19/01/2017	VP9	Non-breeding	Red Grouse	1	17:42:00	PB2, (Upland blanket bog) Calling	Heard Only
-	10/02/2017	VP3	Non-breeding	Red Grouse	1	07:09:00	PB2, (Upland blanket bog) Calling	Heard Only

**Table 4: Vantage Point Survey - Non-Flight Data**

Map Reference No.	Date	VP	Season	Species	No. of Birds	Time of flight	Notes on habitat and activity	Comments
-	10/02/2017	VP3	Non-breeding	Red Grouse	1	07:16:00	PB2, (Upland blanket bog) Calling	Heard Only
	10/02/2017	VP3	Non-breeding	Red Grouse	1	07:09:00	PB2, (Upland blanket bog) Calling	Heard Only
	10/02/2017	VP3	Non-breeding	Red Grouse	1	07:16:00	PB2, (Upland blanket bog) Calling	Heard Only
-	16/02/2017	VP9	Non-breeding	Golden Plover	1	08:34:00	PB2, (Upland blanket bog) Calling	Heard flying over above cloud height
	16/02/2017	VP9	Non-breeding	Golden Plover	1	08:34:00	PB2, (Upland blanket bog) Calling	Heard flying over above cloud height
	14/03/2017	VP8a	Non-breeding	Snipe	1	19:23:00	PB2, (Upland blanket bog) Calling	Heard calling whilst flying in dark
2132	05/04/2017	VP8a	Breeding	Woodcock	1	06:05:00	WD4, (Conifer plantation) male roding call	
2132	05/04/2017	VP8a	Breeding	Woodcock	1	06:05:00	WD4, (Conifer plantation) male roding call	
2004	06/04/2017	VP3	Breeding	Mallard	1	06:15:00	WD4, (Conifer plantation) PB2, (Upland blanket bog) Calling	
2005	06/04/2017	VP3	Breeding	Red Grouse	1	06:35:00	PB2, (Upland blanket bog) calling	Heard Only
2006	06/04/2017	VP3	Breeding	Red Grouse	1	08:05:00	PB2, (Upland blanket bog) calling	Heard Only
2004	06/04/2017	VP3	Breeding	Mallard	1	06:15:00	WD4, (Conifer plantation) PB2, (Upland blanket bog) Calling	
2004	06/04/2017	VP3	Breeding	Mallard	1	06:15:00	WD4, (Conifer plantation) PB2, (Upland blanket bog) Calling	
2005	06/04/2017	VP3	Breeding	Red Grouse	1	06:35:00	PB2, (Upland blanket bog) calling	Heard Only
2006	06/04/2017	VP3	Breeding	Red Grouse	1	08:05:00	PB2, (Upland blanket bog) calling	Heard Only
2001	07/04/2017	VP4a	Breeding	Red Grouse	1	06:20:00	PB2, (Upland blanket bog) calling	Heard Only
2002	07/04/2017	VP4a	Breeding	Red Grouse	1	06:30:00	PB2, (Upland blanket bog) calling	Heard Only
2003	07/04/2017	VP4a	Breeding	Red Grouse	1	06:30:00	PB2, (Upland blanket bog) calling	Heard Only
2001	07/04/2017	VP4a	Breeding	Red Grouse	1	06:20:00	PB2, (Upland blanket bog) calling	Heard Only

**Table 4: Vantage Point Survey - Non-Flight Data**

Map Reference No.	Date	VP	Season	Species	No. of Birds	Time of flight	Notes on habitat and activity	Comments
2002	07/04/2017	VP4a	Breeding	Red Grouse	1	06:30:00	PB2, (Upland blanket bog) calling	Heard Only
2003	07/04/2017	VP4a	Breeding	Red Grouse	1	06:30:00	PB2, (Upland blanket bog) calling	Heard Only
-	14/04/2017	VP1a	Both (overlap)	Red Grouse	1	06:51:00	PB, (Bogs) calling	Heard Only
-	14/04/2017	VP1a	Both (overlap)	Red Grouse	1	08:23:00	PB, (Bogs) calling	Heard Only
-	14/04/2017	VP1a	Both (overlap)	Red Grouse	1	10:35:00	PB, (Bogs) calling	Heard Only
-	14/04/2017	VP1a	Both (overlap)	Red Grouse	1	06:51:00	PB, (Bogs) calling	Heard Only
-	14/04/2017	VP1a	Both (overlap)	Red Grouse	1	08:23:00	PB, (Bogs) calling	Heard Only
-	14/04/2017	VP1a	Both (overlap)	Red Grouse	1	10:35:00	PB, (Bogs) calling	Heard Only
-	14/04/2017	VP1a	Both (overlap)	Red Grouse	1	06:51:00	PB, (Bogs) calling	Heard Only
-	14/04/2017	VP1a	Both (overlap)	Red Grouse	1	08:23:00	PB, (Bogs) calling	Heard Only
-	14/04/2017	VP1a	Both (overlap)	Red Grouse	1	10:35:00	PB, (Bogs) calling	Heard Only
-	19/04/2017	2	Both (overlap)	Red Grouse	1	08:00:00	PB2, (Upland blanket bog) sound	Heard Only
-	19/04/2017	2	Both (overlap)	Red Grouse	1	08:15:00	PB2, (Upland blanket bog) calling	Heard Only
-	19/04/2017	2	Both (overlap)	Red Grouse	1	08:25:00	PB2, (Upland blanket bog) calling	Heard Only
-	19/04/2017	2	Both (overlap)	Red Grouse	1	08:00:00	PB2, (Upland blanket bog) sound	Heard Only
-	19/04/2017	2	Both (overlap)	Red Grouse	1	08:15:00	PB2, (Upland blanket bog) calling	Heard Only
-	19/04/2017	2	Both (overlap)	Red Grouse	1	08:25:00	PB2, (Upland blanket bog) calling	Heard Only

**Table 4: Vantage Point Survey - Non-Flight Data**

Map Reference No.	Date	VP	Season	Species	No. of Birds	Time of flight	Notes on habitat and activity	Comments
-	19/04/2017	2	Both (overlap)	Merlin	1	07:38:00	WS5, (Recently-felled woodland) Perched on dead tree	
-	19/04/2017	2	Both (overlap)	Merlin	1	08:10:00	WS5, (Recently-felled woodland) Perched on dead tree	
-	19/04/2017	2	Both (overlap)	Merlin	1	07:38:00	WS5, (Recently-felled woodland) Perched on dead tree	
-	19/04/2017	2	Both (overlap)	Merlin	1	08:10:00	WS5, (Recently-felled woodland) Perched on dead tree	
-	19/04/2017	2	Both (overlap)	Merlin	1	07:38:00	WS5, (Recently-felled woodland) Perched on dead tree	
-	19/04/2017	2	Both (overlap)	Red Grouse	1	08:00:00	PB2, (Upland blanket bog) sound	Heard Only
-	19/04/2017	2	Both (overlap)	Merlin	1	08:10:00	WS5, (Recently-felled woodland) Perched on dead tree	
-	19/04/2017	2	Both (overlap)	Red Grouse	1	08:15:00	PB2, (Upland blanket bog) calling	Heard Only
-	19/04/2017	2	Both (overlap)	Red Grouse	1	08:25:00	PB2, (Upland blanket bog) calling	Heard Only
-	21/04/2017	VP9	Both (overlap)	Red Grouse	1	05:52:00	PB2, (Upland blanket bog)	Heard Only
-	21/04/2017	VP9	Both (overlap)	Red Grouse	1	06:15:00	PB2, (Upland blanket bog)	Heard Only
-	21/04/2017	VP9	Both (overlap)	Red Grouse	1	06:30:00	PB2, (Upland blanket bog)	Heard Only
-	21/04/2017	VP9	Both (overlap)	Red Grouse	1	05:52:00	PB2, (Upland blanket bog)	Heard Only
-	21/04/2017	VP9	Both (overlap)	Red Grouse	1	06:15:00	PB2, (Upland blanket bog)	Heard Only
-	21/04/2017	VP9	Both (overlap)	Red Grouse	1	06:30:00	PB2, (Upland blanket bog)	Heard Only
-	21/04/2017	VP9	Both (overlap)	Red Grouse	1	05:52:00		Heard Only
-	21/04/2017	VP9	Both (overlap)	Red Grouse	1	06:15:00		Heard Only

**Table 4: Vantage Point Survey - Non-Flight Data**

Map Reference No.	Date	VP	Season	Species	No. of Birds	Time of flight	Notes on habitat and activity	Comments
-	21/04/2017	VP9	Both [overlap]	Red Grouse	1	06:30:00	PB2, (Upland blanket bog)	Heard Only
	09/05/2017	VP9	Breeding	Red Grouse	1	17:46:00	To SW	Heard Only
-	09/05/2017	VP9	Breeding	Red Grouse	1	17:46:00	To SW	Heard Only
-	09/05/2017	VP9	Breeding	Cuckoo	1	18:40:00	To NW	
-	09/05/2017	VP9	Breeding	Red Grouse	1	17:46:00	To SW	Heard Only
-	09/05/2017	VP9	Breeding	Cuckoo	1	18:40:00	To NW	
-	16/05/2017	VP3	Breeding	Red Grouse	1	21:54:00	PB, (Bogs) Calling	Heard Only
-	16/05/2017	VP3	Breeding	Red Grouse	1	21:54:00	PB, (Bogs) Calling	Heard Only
	16/05/2017	VP3	Breeding	Red Grouse	1	21:54:00	PB, (Bogs) Calling	Heard Only
-	17/05/2017	VP4a	Breeding	Red Grouse	1	22:06:00	PB, (Bogs) calling	Heard Only
-	17/05/2017	VP4a	Breeding	Red Grouse	1	22:06:00	PB, (Bogs) calling	Heard Only
-	17/05/2017	VP4a	Breeding	Red Grouse	1	22:06:00	PB, (Bogs) calling	Heard Only
-	27/05/2017	VP7a	Breeding	Cuckoo		18:02:00	WD4, (Conifer plantation) Calling	
-	27/05/2017	VP7a	Breeding	Cuckoo		18:02:00		
-	02/06/2017	2	Breeding	Hen Harrier		14:15:00	WD4, (Conifer plantation) Male perched for 30 min	
-	02/06/2017	2	Breeding	Hen Harrier		16:07:00	WD4, (Conifer plantation) After vp female flew N from young conifers	west of vp
-	02/06/2017	2	Breeding	Cuckoo	1	09:40:00	WD4, (Conifer plantation) Calling to E	
-	02/06/2017	2	Breeding	Hen Harrier		14:15:00	WD4, (Conifer plantation) Male perched for 30 min	

**Table 4: Vantage Point Survey - Non-Flight Data**

Map Reference No.	Date	VP	Season	Species	No. of Birds	Time of flight	Notes on habitat and activity		Comments
-	02/06/2017	2	Breeding	Hen Harrier		16:07:00	WD4, (Conifer plantation) from young conifers	After vp female flew N	west of vp
-	02/06/2017	2	Breeding	Hen Harrier		14:15:00	WD4, (Conifer plantation) min	Male perched for 30 min	
-	02/06/2017	2	Breeding	Cuckoo	1	09:40:00	WD4, (Conifer plantation)	Calling to E	
	02/06/2017	2	Breeding	Hen Harrier		14:15:00	WD4, (Conifer plantation) min	Male perched for 30 min	
	02/06/2017	2	Breeding	Hen Harrier		16:07:00	WD4, (Conifer plantation) from young conifers	After vp female flew N	west of vp
-	11/07/2017	VP5a	Breeding	Kestrel	1	11:34:00	WD4, (Conifer plantation)	Perched on dead tree	
-	11/07/2017	VP5a	Breeding	Kestrel	1	11:34:00	WD4, (Conifer plantation)	Perched on dead tree	
-	17/07/2017	VP1a	Breeding	Kestrel	1	14:50:00	WD4, (Conifer plantation)	Female perched	
-	17/07/2017	VP1a	Breeding	Kestrel	1	14:50:00	WD4, (Conifer plantation)	Female perched	
-	31/08/2017	VP9	Breeding	Red Grouse	1	06:06:00	PB2, (Upland blanket bog)	Calling	Heard Only
-	31/08/2017	VP9	Breeding	Red Grouse	1	06:34:00	PB2, (Upland blanket bog)	Calling	Heard Only
-	31/08/2017	VP9	Breeding	Red Grouse	1	06:06:00			Heard Only
-	31/08/2017	VP9	Breeding	Red Grouse	1	06:34:00			Heard Only
2007	12/10/2017	VP4a	Non-breeding	Red Grouse	3	07:00:00	PB2, (Upland blanket bog)	Calling	Heard Only
2007	12/10/2017	VP4a	Non-breeding	Red Grouse	3	07:00:00	PB2, (Upland blanket bog)	Calling	Heard Only
2180	13/10/2017	VP9	Non-breeding	Red Grouse	1	07:40:00	PB2, (Upland blanket bog)	Calling	Heard Only
2180	13/10/2017	VP9	Non-breeding	Red Grouse	1	07:40:00	PB2, (Upland blanket bog)	Calling	Heard Only
2183	20/10/2017	VP9	Non-breeding	Red Grouse	1	10:00:00	PB2, (Upland blanket bog)	Territorial calling	Heard Only

**Table 4: Vantage Point Survey - Non-Flight Data**

Map Reference No.	Date	VP	Season	Species	No. of Birds	Time of flight	Notes on habitat and activity	Comments
2183	20/10/2017	VP9	Non-breeding	Red Grouse	1	10:00:00	PB2, (Upland blanket bog) Territorial calling	Heard Only
2008	06/11/2017	VP3	Non-breeding	Red Grouse	1	17:00:00	PB2, (Upland blanket bog) Calling	Heard Only
2008	06/11/2017	VP3	Non-breeding	Red Grouse	1	17:00:00	PB2, (Upland blanket bog) Calling	Heard Only
2009	07/11/2017	VP4a	Non-breeding	Red Grouse	1	11:45:00	PB2, (Upland blanket bog) Calling	Heard Only
2009	07/11/2017	VP4a	Non-breeding	Red Grouse	1	11:45:00	PB2, (Upland blanket bog) Calling	Heard Only
2010	16/11/2017	VP1a	Non-breeding	Red Grouse	1	15:00:00	PB2, (Upland blanket bog) Calling	Heard Only
2011	16/11/2017	VP1a	Non-breeding	Red Grouse	1	17:00:00	PB2, (Upland blanket bog) Calling	Heard Only
2010	16/11/2017	VP1a	Non-breeding	Red Grouse	1	15:00:00	PB2, (Upland blanket bog) Calling	Heard Only
2011	16/11/2017	VP1a	Non-breeding	Red Grouse	1	17:00:00	PB2, (Upland blanket bog) Calling	Heard Only
-	13/12/2017	VP9	Non-breeding	Red Grouse	1	08:03:00	PB, (Bogs) Sound of	Heard Only
-	13/12/2017	VP9	Non-breeding	Red Grouse	1	08:24:00	PB, (Bogs) Sound of	Heard Only
-	13/12/2017	VP9	Non-breeding	Red Grouse	1	08:03:00	PB, (Bogs) Sound of	Heard Only
-	13/12/2017	VP9	Non-breeding	Red Grouse	1	08:24:00	PB, (Bogs) Sound of	Heard Only
-	15/12/2017	VP4a	Non-breeding	Red Grouse		08:06:00	PB, (Bogs) Sound of	Heard Only
-	15/12/2017	VP4a	Non-breeding	Red Grouse		08:58:00	PB, (Bogs) Sound of	Heard Only
-	15/12/2017	VP4a	Non-breeding	Red Grouse		10:15:00	PB, (Bogs) Sound of	Heard Only
-	15/12/2017	VP4a	Non-breeding	Red Grouse		13:01:00	PB, (Bogs) Sound of	Heard Only

**Table 4: Vantage Point Survey - Non-Flight Data**

Map Reference No.	Date	VP	Season	Species	No. of Birds	Time of flight	Notes on habitat and activity	Comments
-	15/12/2017	VP4a	Non-breeding	Red Grouse		08:06:00	PB, (Bogs) Sound of	Heard Only
-	15/12/2017	VP4a	Non-breeding	Red Grouse		08:58:00	PB, (Bogs) Sound of	Heard Only
-	15/12/2017	VP4a	Non-breeding	Red Grouse		10:15:00	PB, (Bogs) Sound of	Heard Only
-	15/12/2017	VP4a	Non-breeding	Red Grouse		13:01:00	PB, (Bogs) Sound of	Heard Only
6134	30/01/2018	VP9	Non-breeding	Golden Plover	1	17:27:00	PB2, (Upland blanket bog) Landing on PB2	
6134	30/01/2018	VP9	Non-breeding	Golden Plover	1	17:27:00	PB2, (Upland blanket bog) Landing on PB2	
2211	06/02/2018	VP4a	Non-breeding	Red Grouse	2	08:10:00	PB2, (Upland blanket bog) Male territorial calling	Male territorial call
2212	06/02/2018	VP4a	Non-breeding	Red Grouse	1	08:12:00	PB2, (Upland blanket bog) Male territorial calling	Male territorial call
2211	06/02/2018	VP4a	Non-breeding	Red Grouse	2	08:10:00	PB2, (Upland blanket bog) Male territorial calling	Male territorial call
2212	06/02/2018	VP4a	Non-breeding	Red Grouse	1	08:12:00	PB2, (Upland blanket bog) Male territorial calling	Male territorial call
2211	06/02/2018	VP4a	Non-breeding	Red Grouse	2	08:10:00	PB2, (Upland blanket bog) Male territorial calling	Male territorial call
2212	06/02/2018	VP4a	Non-breeding	Red Grouse	1	08:12:00	PB2, (Upland blanket bog) Male territorial calling	Male territorial call
2012	16/02/2018	VP1a	Non-breeding	Red Grouse	1	07:20:00	PB2, (Upland blanket bog) Male territorial calling	
2013	16/02/2018	VP1a	Non-breeding	Red Grouse	2	07:40:00	PB2, (Upland blanket bog) Male territorial calling, female calling	
2012	16/02/2018	VP1a	Non-breeding	Red Grouse	1	07:20:00	PB2, (Upland blanket bog) Male territorial calling	
2013	16/02/2018	VP1a	Non-breeding	Red Grouse	2	07:40:00	PB2, (Upland blanket bog) Male territorial calling, female calling	
2014	20/02/2018	VP9	Non-breeding	Red Grouse	1	07:10:00	PB2, (Upland blanket bog) Calling	Male territorial call



**Table 4: Vantage Point Survey - Non-Flight Data**

Map Reference No.	Date	VP	Season	Species	No. of Birds	Time of flight	Notes on habitat and activity	Comments
2015	20/02/2018	VP9	Non-breeding	Red Grouse	1	07:20:00	PB2, (Upland blanket bog) Calling	Male territorial call
2014	20/02/2018	VP9	Non-breeding	Red Grouse	1	07:10:00	PB2, (Upland blanket bog) Calling	Male territorial call
2015	20/02/2018	VP9	Non-breeding	Red Grouse	1	07:20:00	PB2, (Upland blanket bog) Calling	Male territorial call
2016	08/03/2018	2	Non-breeding	Red Grouse	1	18:30	PB2, (Upland blanket bog) calling off site	
2016	08/03/2018	2	Non-breeding	Red Grouse	1	18:30	PB2, (Upland blanket bog) calling off site	
2017	12/03/2018	VP4a	Non-breeding	Red Grouse	1	13:30	PB2, (Upland blanket bog) calling off site	
2017	12/03/2018	VP4a	Non-breeding	Red Grouse	1	13:30	PB2, (Upland blanket bog) calling off site	
2018	21/03/2018	VP9	Non-breeding	Red Grouse	1	19:15	PB2, (Upland blanket bog) calling off site	
2018	21/03/2018	VP9	Non-breeding	Red Grouse	1	19:15	PB2, (Upland blanket bog) calling off site	
8002	03/04/2018	3	Breeding	Red Grouse	8		WD4	
RG0001	03/04/2018	3	Breeding	Red Grouse	8		WD4, (Conifer plantation)	Calls from 8 distinct locations around the VP between 06:15 and 07:15
8004	04/04/2018	8a	Breeding	Common Snipe	1		WD4, (Conifer plantation)	Calling
RG002	19/04/2018	9	Breeding	Red Grouse	1	06:00:00	PB2, (Upland blanket bog)	calling
GP001	19/04/2018	9	Breeding	Golden Plover	5	07:30:00	PB2, (Upland blanket bog)	travelling
MA001	19/04/2018	4a	Breeding	Mallard	2	09:50:00	WD4, (Conifer plantation)	travelling
MA002	19/04/2018	4a	Breeding	Mallard	1	10:30:00	WD4, (Conifer plantation)	travelling
RG001	19/04/2018	4a	Breeding	Red Grouse	1	09:20:00	PB2, (Upland blanket bog)	calling

**Table 4: Vantage Point Survey - Non-Flight Data**

Map Reference No.	Date	VP	Season	Species	No. of Birds	Time of flight	Notes on habitat and activity	Comments
8005	20/04/2018	5a	Breeding	Hen Harrier	1	08:14:00	WD4, (Conifer plantation)	Adult male flying through
8006	20/04/2018	5a	Breeding	Mallard	2	09:11:00	WD4, (Conifer plantation)	Breeding pair flying through
8007	20/04/2018	5a	Breeding	Hen Harrier	2	09:38:00	WD4, (Conifer plantation)	Adult female and a juvenile flying together, the juvenile appeared to be attempting a display
8008	20/04/2018	5a	Breeding	Hen Harrier	1	11:00:00	WD4, (Conifer plantation)	Adult male flying through
8009	20/04/2018	9	Breeding	Kestrel	1	15:04:00	PB4, (Cutover bog) WD4, (Conifer plantation)	Adult male flying through
-	16/05/2018	8	Breeding	Sparrowhawk	1	19:38:00	WD4, (Conifer plantation)	Perched on a tree then flew away
-	17/05/2018	3	Breeding	Mallard	1	21:50:00	WD4, (Conifer plantation)	Flying
-	17/05/2018	3	Breeding	Mallard	2	22:01:00	WD4, (Conifer plantation)	Flying
-	17/05/2018	3	Breeding	Mallard	1	22:17:00	WD4, (Conifer plantation)	Flying
2263	28/05/2018	1a	Breeding	Hen Harrier	1	18:50:00	WD4	
2264	28/05/2018	1a	Breeding	Kestrel	1	18:54:00	WD4	
2265	28/05/2018	1a	Breeding	Kestrel	1	20:10:00	PB2	
2266	28/05/2018	1a	Breeding	Hen Harrier	1	20:50:00	PB2	
2022	28/05/2018	1a	Breeding	Red Grouse	1	22:36:00	PB2	
2023	28/05/2018	1a	Breeding	Cuckoo	1	22:30:00	WD4	
2024	06/06/2018	7a	Breeding	Cuckoo	1	10:15:00	WD4	PB2
2025	06/06/2018	7a	Breeding	Cuckoo	1	10:35:00	WD4	
2026	06/06/2018	7a	Breeding	Cuckoo	1	11:15:00	WD4	PB2
2267	06/06/2018	7a	Breeding	Hen Harrier	1	11:48:00	WD4	PB2

**Table 4: Vantage Point Survey - Non-Flight Data**

Map Reference No.	Date	VP	Season	Species	No. of Birds	Time of flight	Notes on habitat and activity	Comments
2268	06/06/2018	7a	Breeding	Buzzard	1	12:00:00	PB2	WD4
2269	06/06/2018	7a	Breeding	Cuckoo	1	14:10:00	WD4	
2027	06/06/2018	7a	Breeding	Cuckoo	1	14:15:00	PB2	WD4
2028	07/06/2018	9	Breeding	Red Grouse	1	10:00:00	PB2	
2031	11/06/2018	2	Breeding	Cuckoo	1	10:00:00	WD4, (Conifer plantation)	calling
2032	11/06/2018	2	Breeding	Cuckoo	1	13:30:00	WD4, (Conifer plantation)	calling
2029	12/06/2018	1a	Breeding	Cuckoo	1	11:30:00	WD4, (Conifer plantation) PB2, (Upland blanket bog)	calling
2030	12/06/2018	1a	Breeding	Sparrowhawk	1	16:15:00	WD4, (Conifer plantation)	begging call
2033	07/08/2018	7a	Breeding	Sparrowhawk	2	09:15:00	WD4, (Conifer plantation)	begging call
2034	07/08/2018	7a	Breeding	Sparrowhawk	2	10:20:00	WD4, (Conifer plantation)	begging call
2035	08/08/2018	2	Breeding	Sparrowhawk	3	10:00:00	WD4, (Conifer plantation)	begging call

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
12/09/2016	VP8a	Dunnock	1	Calling in vegetation by drain behind VP. No visual.
12/09/2016	VP8a	Wren	1	Calling by drain behind VP, no visual
12/09/2016	VP8a	Chaffinch	1	Calling, no visual, in conifers W of VP.
12/09/2016	VP8a	Blue Tit	1	Singing in conifers W of VP.
12/09/2016	VP8a	Wren	1	Singing in conifers W of VP.
12/09/2016	VP8a	Swallow	2	Pair of swallows fly across bog, band 1, 30 secs.
12/09/2016	VP8a	Coal Tit	1	Fly amongst conifers behind VP.
12/09/2016	VP8a	Wren	1	In conifers behind VP. Flying, perch, call.
12/09/2016	VP8a	Chaffinch	2	In conifers opposite VP, calling.
12/09/2016	VP8a	Wren	1	In vegetation along stream.
12/09/2016	VP8a	Wren	1	Singing in conifers
12/09/2016	VP8a	Swallow	5	Band 1/2, fly south over bog.
12/09/2016	VP8a	Wren	1	Singing in conifers in front of VP
12/09/2016	VP8a	Meadow Pipit	2	On conifers by drain near vp. Flying between trees. On site, below PCH.
12/09/2016	VP8a	Robin	2	Calling, Below PCH, on site. In conifers, calling, no visual.
12/09/2016	VP8a	Robin	3	Calling, Below PCH, on site. In conifers, calling, no visual.
12/09/2016	VP8a	Robin	2	Calling, Below PCH, on site. In conifers, calling, no visual.
12/09/2016	VP8a	Robin	2	In conifers opposite VP
12/09/2016	VP8a	Robin	1	Singing in conifers
12/09/2016	VP8a	Robin	1	Singing in conifers in front of VP
12/09/2016	VP8a	Robin	1	Robin singing and chip calling from conifers behind VP
12/09/2016	VP8a	Robin	1	Chip calls in conifers by drain behind VP
12/09/2016	VP8a	Robin	1	Singing in conifers in front of VP.
12/09/2016	VP8a	Robin	1	Singing in conifers behind VP
13/09/2016	VP4a	Dunnock	1	Calling in vegetation west of VP
13/09/2016	VP4a	Dunnock	1	Calls from vegetation, W of VP.
13/09/2016	VP4a	Dunnock	1	Calls NW of VP.
13/09/2016	VP4a	Dunnock	1	Calling in vegetation east of VP.
13/09/2016	VP4a	Dunnock	1	Calling in front of VP, from juvenile conifers.
13/09/2016	VP4a	Dunnock	1	Calling, W of VP.
13/09/2016	VP4a	Wren	1	Calling in juvenile conifer plantation N of VP
13/09/2016	VP4a	Wren	1	Calling in conifer plantation behind VP
13/09/2016	VP4a	Wren	1	Calling from juvenile conifers N of VP
13/09/2016	VP4a	Wren	1	In willows N of VP
13/09/2016	VP4a	Swallow		No visual, singing in conifers NW of VP.
13/09/2016	VP4a	Chaffinch	1	Calling, no visual N of VP in young conifer stand.
13/09/2016	VP4a	Swallow	12	Fly over VP, head South out of view.

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
13/09/2016	VP4a	Wren	1	Singing in conifers NW of VP
13/09/2016	VP4a	Swallow	30+	Flying over VP, band 3 and over hill south of VP.
13/09/2016	VP4a	Chaffinch	1	Calling west of VP in conifers
13/09/2016	VP4a	Wren	1	East of VP in vegetation calling
13/09/2016	VP4a	Wren	1	West of VP, in vegetation calling.
13/09/2016	VP4a	Swallow	10+	Fly over conifers and clearfell east of VP, band 3.
13/09/2016	VP4a	Chaffinch	1	Chink call, conifers N of vp, no visual.
13/09/2016	VP4a	Wren	1	In willows E of VP calling
13/09/2016	VP4a	Wren	1	Calling from immature conifers in front of VP
13/09/2016	VP4a	Swallow	1	Flying over survey area band 3
13/09/2016	VP4a	Wren	1	Immature conifers in front of VP calling
13/09/2016	VP4a	Blackbird	1	Calling in vegetation by VP
13/09/2016	VP4a	Wren	2	In young conifers in front of VP.
13/09/2016	VP4a	Wren	1	Calling in immature conifer stand.
13/09/2016	VP4a	Swallow	1	Flying, calling, band 3
13/09/2016	VP4a	Chaffinch	1	Call, west of VP in vegetation.
13/09/2016	VP4a	Swallow	1	In flight, band 3, calling.
13/09/2016	VP4a	Blue Tit	1	In conifers behind VP calling.
13/09/2016	VP4a	Blue Tit	1	Sings in vegetation W of VP.
13/09/2016	VP4a	Blue Tit	1	Singing in vegetation W of VP
13/09/2016	VP4a	Wren	1	Calling from vegetation in front of VP.
13/09/2016	VP4a	Wren	1	Calling in vegetation behind VP.
13/09/2016	VP4a	Chaffinch	1	Calling in vegetation W of VP.
13/09/2016	VP4a	Wren	1	Calling in vegetation W of VP.
13/09/2016	VP4a	Swallow	20+	Fly in band 1/2/3, all over viewshed.
13/09/2016	VP4a	Wren	1	Calls from young conifers.
13/09/2016	VP4a	Jay	1	Heard calling from young conifer stand N of VP; no visual.
13/09/2016	VP4a	Jay	2	Calling from mature conifers N of VP
13/09/2016	VP4a	Jay	1	Calls in conifers NE of VP
13/09/2016	VP4a	Swallow	1	Land in conifers, S of VP.
13/09/2016	VP4a	Jay	1	Calls from conifers N of VP, no visual.
13/09/2016	VP4a	Chaffinch	1	Calling behind VP.
13/09/2016	VP4a	Wren	1	Calling, N of VP, immature conifers.
13/09/2016	VP4a	Wren	1	Calling in front of VP.
13/09/2016	VP4a	Blue Tit	1	Singing in vegetation behind VP
13/09/2016	VP4a	Chaffinch	1	In conifers behind VP.
13/09/2016	VP4a	Wren	1	Calling from young conifers
13/09/2016	VP4a	Swallow	30+	Flying over survey area.

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
13/09/2016	VP4a	Wren	1	Calling from willows east of vp.
13/09/2016	VP4a	Chaffinch	1	Calling from willows east of vp.
13/09/2016	VP4a	Blue Tit	1	Behind VP.
13/09/2016	VP4a	Wren	1	In front of VP.
13/09/2016	VP4a	Wren	1	Wren in front of VP, calling.
13/09/2016	VP4a	Wren	1	Singing in conifers NW of VP.
13/09/2016	VP4a	Swallow	20+	Juveniles congregate in conifers behind VP.
13/09/2016	VP4a	Wren	1	Conifers in front of VP, calls.
13/09/2016	VP4a	Wren	1	Calling, conifers W of VP.
13/09/2016	VP4a	Wren	1	Conifers, N of VP, calling.
13/09/2016	VP4a	Wren	1	Conifers, w of vp, calling.
13/09/2016	VP4a	Wren	1	Conifers, w of vp, calling.
13/09/2016	VP4a	Wren	1	Wren calling in front of VP.
13/09/2016	VP4a	Chaffinch	1	Conifers NW of VP.
13/09/2016	VP4a	Wren	1	Calling from willows east of VP.
13/09/2016	VP4a	Blue Tit	1	In conifers behind VP; calling.
13/09/2016	VP4a	Wren	1	East of VP, calling.
13/09/2016	VP4a	Wren	1	In vegetation next to VP.
13/09/2016	VP4a	Swallow	50+	Fly throughout survey area.
13/09/2016	VP4a	Wren	1	Calling from conifers W of VP.
13/09/2016	VP4a	Blackbird	1	Singing in conifers NW of VP.
13/09/2016	VP4a	Blue Tit	1	calling
13/09/2016	VP4a	Wren	1	Calling
13/09/2016	VP4a	Wren	1	Calling
13/09/2016	VP4a	Wren	1	Calling, N of VP.
13/09/2016	VP4a	Wren	1	Calls NW of VP.
13/09/2016	VP4a	Wren	1	Behind VP, calling.
13/09/2016	VP4a	Blackbird	1	Singing from conifers N of VP.
13/09/2016	VP4a	Wren	1	Calls from conifers, N of VP.
13/09/2016	VP4a	Wren	1	Calls from vegetation in front of VP
13/09/2016	VP4a	Robin	1	Singing in conifers NW of VP
13/09/2016	VP4a	Robin	1	Singing in conifer plantation NW of VP
13/09/2016	VP4a	Robin	2	Singing in conifers NW of VP and NE of VP
13/09/2016	VP4a	Robin	1	Chip calls west of VP in conifers
13/09/2016	VP4a	Robin	1	Singing in mature conifer stand N of VP
13/09/2016	VP4a	Robin	1	Robin chip calls in conifers NW of VP.
13/09/2016	VP4a	Robin	1	Chip calling W of VP.
13/09/2016	VP4a	Robin	1	Chip calls W of VP

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
13/09/2016	VP4a	Robin	1	Singing in conifers NW of VP
13/09/2016	VP4a	Robin	1	Singing in conifers NW of VP.
13/09/2016	VP4a	Robin	1	Chip calls N of VP, in conifers.
13/09/2016	VP4a	Robin	1	Chip calls in front of VP.
13/09/2016	VP4a	Robin	1	West of VP, calling.
13/09/2016	VP4a	Robin	1	Singing in conifers, N of VP.
13/09/2016	VP4a	Robin	1	Singing N of VP.
13/09/2016	VP4a	Robin	1	In conifers NW of VP.
13/09/2016	VP4a	Robin	1	In front of VP in conifers.
13/09/2016	VP4a	Robin	1	North of VP, calling, no visual.
13/09/2016	VP4a	Robin	1	Singing in conifers W of VP.
13/09/2016	VP4a	Robin	1	Singing in conifers, NW of VP.
13/09/2016	VP4a	Robin	1	Conifers in front of VP, calls.
13/09/2016	VP4a	Robin	1	Calling, conifers W of VP.
13/09/2016	VP4a	Robin	1	Singing in mature conifers west of VP.
13/09/2016	VP4a	Robin	1	Singing in mature conifers north of VP.
13/09/2016	VP4a	Robin	1	Calling. In front of VP, immature conifers.
13/09/2016	VP4a	Robin	1	Calling, NW of VP, from conifers.
13/09/2016	VP4a	Robin	1	Singing in conifers, N of VP.
13/09/2016	VP4a	Robin	1	Singing in conifers, N of VP.
13/09/2016	VP4a	Robin	1	Calling
13/09/2016	VP4a	Robin	2	Singing, N of VP.
13/09/2016	VP4a	Robin	1	Chip calls, NW of VP.
13/09/2016	VP4a	Robin	1	Singing behind VP.
13/09/2016	VP4a	Robin	1	Singing from conifers N of VP.
13/09/2016	VP4a	Robin	1	Chip calls east of VP.
13/09/2016	VP4a	Robin	1	Chip calls and singing behind VP.
13/09/2016	VP4a	Robin	3	Singing N of VP.
13/09/2016	VP4a	Robin	1	Singing in vegetation behind VP.
13/09/2016	VP4a	Robin	1	Singing in conifers N of VP.
13/09/2016	VP4a	Robin	1	Singing in conifers N of VP.
13/09/2016	VP4a	Raven	1	No visual, heard calling NW of VP.
13/09/2016	VP4a	Raven	1	Calling from conifers NW of VP
13/09/2016	VP4a	Raven	1	Calling NW of VP; no visual
13/09/2016	VP4a	Raven	1	Commuting south along conifer treeline.
13/09/2016	VP4a	Raven	2	Pair of ravens fly N over juvenile conifers, NE of VP, into mature conifers out of view, 40 seconds, band 3.
13/09/2016	VP4a	Raven	11	Emerge from conifer woodland where previous RN pair dropped down. Soaring over woodland calling.

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
13/09/2016	VP4a	Raven	1	Calling, soaring over mature conifers E of VP (east of clearfell). Band 3, 40 secs, goes out of view into trees.
13/09/2016	VP4a	Raven	1	Flies W over mature conifers at the E of view shed; W over clearfell, behind VP to hill behind VP, soars, lands on bog.
13/09/2016	VP4a	Raven	1	Individual joins aforementioned raven at 16:28, soaring over bog before landing.
13/09/2016	VP4a	Raven	1	Calls behind VP, no visual.
13/09/2016	VP4a	Raven	3	1 minute, band 3. Fly south (along viewshed edge E of VP) over mature conifers, dropdown, out of view.
13/09/2016	VP4a	Raven	2	Pair fly S of VP calling.
13/09/2016	VP4a	Raven	1	Flies over clearfell NE of VP calling. Lands on tree for approx. 30 secs, then into conifers out of view. Band 1, 30 secs.
13/09/2016	VP4a	Raven	1	Flies along same route as aforementioned individual at 16:51. Calling. Lands in conifers, out of view.
13/09/2016	VP4a	Raven	2	Calls from conifer behind VP, soars over hill, heads W, out of view, band 2/3. Circles back, flies S, band 2, calling. Duration 2 mins.
13/09/2016	VP4a	Raven	1	Calls from behind VP, no visual.
13/09/2016	VP4a	Raven	1	Calling N of VP no visual.
13/09/2016	VP4a	Raven	3	Fly W over VP, from conifers, out of view, behind VP, calling. Band 3.
13/09/2016	VP4a	Raven	3	Calling. 3 individuals follow aforementioned individuals @ 20:02. Band 3.
13/09/2016	VP4a	Raven	1	One individual flies in front of VP, and flies into conifers NW of VP. Band 3.
13/09/2016	VP4a	Raven	21	Follow aforementioned individuals (flight ref 18, 19, 20). Fly from conifers behind VP, NW into mature conifers, out of view. Calling. Band 3.
13/09/2016	VP4a	Raven	1	Follows individuals at 20:04. Calling. Band 3. Flies over hill behind VP, over mature conifers, to the north west.
13/09/2016	VP4a	Raven	2	Flies east over conifers, east of VP. 20 seconds, flight band 3.
13/09/2016	VP4a	Raven	1	Raven calling from mature conifers west of VP, no visual.
13/09/2016	VP4a	Raven	1	Calling from mature conifers NW of VP. NO visual.
14/09/2016	VP5a	Dunnock	4	Perched on conifers in clearfell. On site.
14/09/2016	VP5a	Dunnock	1	Calling from conifers behind vp.
14/09/2016	VP5a	Jay	1	Calling. Below; on site. From stand of mature conifers NW of VP.
14/09/2016	VP5a	Jay	1	SW of VP, Calling, No visual.
14/09/2016	VP5a	Wren	1	On site. Calling in juvenile conifers W of VP.
14/09/2016	VP5a	Wren	1	On site. Singing in juvenile conifers east of VP.
14/09/2016	VP5a	Wren	1	Calling in juvenile conifers west of VP.
14/09/2016	VP5a	Wren	1	On site. Calling from juvenile conifers west of VP.
14/09/2016	VP5a	Wren	1	On site. Calling, w of VP in immature conifers.
14/09/2016	VP5a	Wren	1	On site. Calling from juvenile conifers W of VP.
14/09/2016	VP5a	Swallow	10	On site. Calling, flying (below).
14/09/2016	VP5a	Wren	1	Calling, flying below height, on site. Calling from juvenile conifers, W of VP.
14/09/2016	VP5a	Wren	1	Calling, flying below height, on site. Calling from juvenile conifers SW of VP.
14/09/2016	VP5a	Blue Tit	1	Calling; fly; height: below; on site. Mature conifers sw of vp.
14/09/2016	VP5a	Blue Tit	1	On site. Height : below; flies sw over vp
14/09/2016	VP5a	Wren	1	On site. Conifers calling.



**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
14/09/2016	VP5a	Rook	1	On site. Singing W of VP.
14/09/2016	VP5a	Wren	1	Calling, On site. In mature conifers.
14/09/2016	VP5a	Swallow	1	Fly W. Height: above.
14/09/2016	VP5a	Swallow	5	North of VP flying, PCH.
14/09/2016	VP5a	Wren	1	Calling; no visual N of VP.
14/09/2016	VP5a	Wren	1	Calling NW of vp.
14/09/2016	VP5a	Wren	1	Calling W of VP.
14/09/2016	VP5a	Wren	1	Calling, SW OF VP
14/09/2016	VP5a	Wren	1	Calling, W of vp.
14/09/2016	VP5a	Wren	1	Calling behind VP.
14/09/2016	VP5a	Wren	1	Calling.
14/09/2016	VP5a	Wren	1	Conifers w of vp.
14/09/2016	VP5a	Wren	1	Behind vp calling.
14/09/2016	VP5a	Wren	1	N of vp calling.
14/09/2016	VP5a	Chaffinch	1	Singing in conifers sw of vp.
14/09/2016	VP5a	Wren	1	Calling in conifers behind vp.
14/09/2016	VP5a	Chaffinch	1	Calls from NE of vp.
14/09/2016	VP5a	Robin	1	On site. Calling in juvenile conifers W of VP.
14/09/2016	VP5a	Robin	1	On site. Calling in juvenile conifers W of VP.
14/09/2016	VP5a	Robin	1	On site. Calling in juvenile conifers W of VP.
14/09/2016	VP5a	Robin	1	On site. Calling in juvenile conifers east of VP.
14/09/2016	VP5a	Robin	1	On site. Calling in juvenile conifers W of VP.
14/09/2016	VP5a	Robin	1	Singing in juvenile conifers W of VP.
14/09/2016	VP5a	Robin	2	On site. Calling. Singing from mature conifers SW of VP and NW of VP.
14/09/2016	VP5a	Robin	1	On site. Singing west of vp from juvenile conifer plantation.
14/09/2016	VP5a	Robin	1	On site. Singing SW of VP from mature conifers.
14/09/2016	VP5a	Robin	1	Calling. On site. Flying - below. Conifers SW of VP.
14/09/2016	VP5a	Robin	1	Calling. On site. Conifers W
14/09/2016	VP5a	Robin	1	Singing from conifers SW of VP.
14/09/2016	VP5a	Robin	3	SW of VP, W of vp; nw of vp, singing.
14/09/2016	VP5a	Robin	3	Singing in conifers w, nw, sw of vp.
14/09/2016	VP5a	Robin	1	Chip calling in conifers NW.
14/09/2016	VP5a	Robin	1	Chip calling in conifers SW of vp.
14/09/2016	VP5a	Robin	1	Chip calling in conifers behind VP.
14/09/2016	VP5a	Robin	3	In conifers w, sw and behind vp.
14/09/2016	VP5a	Robin	1	Singing in conifers N of VP.
14/09/2016	VP5a	Robin	1	Chip calling s of vp.
14/09/2016	VP5a	Robin	1	Chip calls W of vp in conifers.

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
14/09/2016	VP5a	Robin	1	Singing w of vp.
14/09/2016	VP5a	Raven	1	Heard calling; no visual, W of VP.
14/09/2016	VP5a	Raven	1	Calling west of VP; no visual.
14/09/2016	VP5a	Raven	1	Singing sw if vp, no visual.
14/09/2016	VP5a	Raven	1	Flies S to NW - then N. Band 3. Swoops down into conifers calling.
14/09/2016	VP5a	Raven	1	Likely same individual as recorded at 16:00. Flies NW, W then swoops down into juvenile conifers oov.
15/09/2016	VP2	Dunnock	1	N of VP - in bog.
15/09/2016	VP2	Wren	1	Calling in juvenile conifers in front of Vp.
15/09/2016	VP2	Chaffinch	1	Calling.
15/09/2016	VP2	Wren	1	Calling E of Vp
15/09/2016	VP2	Blue Tit	1	Calling in juvenile conifers in front of Vp.
15/09/2016	VP2	Swallow	1	Fly overhead, calling, band 2/3.
15/09/2016	VP2	Swallow	15	Calling and fly over juvenile conifers, band 2/3.
15/09/2016	VP2	Swallow	8	Fly over VP, band 2.
15/09/2016	VP2	Chaffinch	1	Calling from vegetation behind VP.
15/09/2016	VP2	Wren	1	Calling behind VP
15/09/2016	VP2	Wren	1	Calling behind VP.
15/09/2016	VP2	Wren	1	Calling in bog behind VP.
15/09/2016	VP2	Wren	1	Calling in bog N of VP.
15/09/2016	VP2	Wren	1	Calling N of VP.
15/09/2016	VP2	Wren	1	
15/09/2016	VP2	Wren	1	Calling N of VP.
15/09/2016	VP2	Chaffinch	1	Conifers NE of VP, calling.
15/09/2016	VP2	Swallow	4	In flight over hill, band 2
15/09/2016	VP2	Rook	1	Calling NW of VP, no visual.
15/09/2016	VP2	Chaffinch	1	Calling NW of VP, no visual.
15/09/2016	VP2	Rook	1	Singing N of VP
15/09/2016	VP2	Magpie	1	Calls w of VP
15/09/2016	VP2	Swallow	10	Flying over hill band 2
15/09/2016	VP2	Swallow	20	Mobbing K.
15/09/2016	VP2	Swallow	30+	Fly over VP, unsettled by HH.
15/09/2016	VP2	Swallow	30+	Flying over clearfell and mature conifer N of VP
15/09/2016	VP2	Wren	1	N of VP calling
15/09/2016	VP2	Blue Tit	1	Singing W of VP.
15/09/2016	VP2	Chaffinch	1	West of VP.
15/09/2016	VP2	Swallow	20+	Flying over bog and mature conifer.
15/09/2016	VP2	Chaffinch	1	Call from mature conifer N of VP.

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
15/09/2016	VP2	Stonechat	1	Calling from vegetation in front of vp.
15/09/2016	VP2	Wren	1	N of VP, singing.
15/09/2016	VP2	Swallow	4	Fly over hill.
15/09/2016	VP2	Wren	1	Calling from bog N of VP.
15/09/2016	VP2	Robin	1	Calling in conifers.
15/09/2016	VP2	Robin	1	Singing in conifers in front of the VP.
15/09/2016	VP2	Robin	1	Singing in conifers in front of the VP.
15/09/2016	VP2	Robin	1	Singing in mature conifer plantation.
15/09/2016	VP2	Robin	1	Singing in mature mature conifers NE of VP
15/09/2016	VP2	Robin	1	Singing in mature conifers NW of VP.
15/09/2016	VP2	Robin	1	Singing in mature conifers W of VP.
15/09/2016	VP2	Robin	1	Singing N of VP in mature conifers.
15/09/2016	VP2	Robin	1	Singing NW of VP mature conifers.
15/09/2016	VP2	Robin	3	NW of VP - singing
15/09/2016	VP2	Robin	1	
15/09/2016	VP2	Robin	2	In conifers N and NW of VP
15/09/2016	VP2	Robin	1	Singing in conifers N of VP.
15/09/2016	VP2	Robin	1	Singing in conifers NW of VP.
15/09/2016	VP2	Robin	1	Singing in mature conifers N of VP.
15/09/2016	VP2	Robin	1	Singing N of VP.
15/09/2016	VP2	Robin	1	Singing N of VP, no visual.
15/09/2016	VP2	Robin	2	One singing Nw and one chip calling W of VP.
15/09/2016	VP2	Robin	2	Singing, one north of VP, one NE of vp in mature conifers.
15/09/2016	VP2	Robin	1	In vegetation east of VP.
15/09/2016	VP2	Robin	1	Singing in mature conifer N of VP
15/09/2016	VP2	Robin	1	Singing N of VP in mature conifers.
15/09/2016	VP2	Raven	2	PB2, (Upland blanket bog) Fly over hill NE of VP, out of view calling
15/09/2016	VP2	Raven	12	Fly east from conifers, over bog soaring, then fly north east, out of view over brow of hill.
15/09/2016	VP2	Raven	12	Likely group from earlier (16:45), lift from bog, fly east, soaring then head NE out of view over brow of hill.
15/09/2016	VP2	Raven	2	Pair fly SE over conifers east of vp, and over hill out of view, calling.
15/09/2016	VP2	Raven	1	Flies from conifers east of vp, over mature conifers,
15/09/2016	VP2	Raven	1	
15/09/2016	VP2	Raven	1	Calling, no visual.
15/09/2016	VP2	Raven	1	Calling NE of VP, no visual.
15/09/2016	VP2	Raven	1	Calls from mature conifer plantation NE of VP, no visual.
15/09/2016	VP2	Raven	1	Calling E of vp.

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
15/09/2016	VP2	Raven	1	Calling N of VP, no visual.
15/09/2016	VP2	Raven	1	Calling in conifers, E of VP, no visual.
15/09/2016	VP2	Raven	1	Calling E of VP
16/09/2016	VP7a	Dunnock	1	NW of VP, calling.
16/09/2016	VP7a	Mistle Thrush	24	Land on conifers on site, NE of vp. Fly amongst conifers, band 2.
16/09/2016	VP7a	Mistle Thrush	1	Flies in from W, sits on tree with other mistle thrush, flies East alarm calling.
16/09/2016	VP7a	Mistle Thrush	5	Fly SE, band 2.
16/09/2016	VP7a	Meadow Pipit	1	Calling N of VP
16/09/2016	VP7a	Wren	1	NE of Vp calling
16/09/2016	VP7a	Swallow	2	Calling, fly N over VP.
16/09/2016	VP7a	Swallow	13	Flying NW of Vp, band 3.
16/09/2016	VP7a	Hooded Crow	2	Calling, fly, perch in conifers, band 2.
16/09/2016	VP7a	Swallow	12	In flight, E,
16/09/2016	VP7a	Wren	1	Calling N of VP
16/09/2016	VP7a	Chaffinch	1	Calling NE of VP.
16/09/2016	VP7a	Swallow	1	Flies N of Vp, band 1.
16/09/2016	VP7a	Wren	1	Calls w of VP
16/09/2016	VP7a	Swallow	30+	In flight east of vp.
16/09/2016	VP7a	Hooded Crow	1	Soars N of VP over conifers.
16/09/2016	VP7a	Wren	1	Wren calling N of VP
16/09/2016	VP7a	Swallow	1	Flying, on site, over bog and conifers.
16/09/2016	VP7a	Linnet	4	Fly over Vp east to west
16/09/2016	VP7a	Wren	1	Calling N of vp.
16/09/2016	VP7a	Swallow	10	Fly SW over conifer and bog band 3
16/09/2016	VP7a	Swallow	4	Fly NW, band 2
16/09/2016	VP7a	Wren	1	Calling behind vp in vegetation.
16/09/2016	VP7a	Stonechat	1	Land in scrub next to vp.
16/09/2016	VP7a	Wren	1	Sings west in conifers.
16/09/2016	VP7a	Wren	1	Calling in conifers NE of vp.
16/09/2016	VP7a	Robin	1	Sings NW of VP
16/09/2016	VP7a	Robin	1	Robin sings N of vp.
16/09/2016	VP7a	Robin	1	Robin sings N of vp.
16/09/2016	VP7a	Robin	1	N of VP.
16/09/2016	VP7a	Robin	1	Singing N of vp.
16/09/2016	VP7a	Robin	1	Sings behind vp.
16/09/2016	VP7a	Robin	1	R singing N of VP.

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
16/09/2016	VP7a	Robin	1	Singing N of vp.
16/09/2016	VP7a	Robin	1	Singing in conifers NE of vp.
16/09/2016	VP7a	Robin	1	Singing in conifers E of vp.
16/09/2016	VP7a	Raven	3	Lift from mature conifers, fly NW, band 3 calling.
16/09/2016	VP7a	Raven	1	Soaring over conifers NW of VP, soars SE, over mature conifers behind vp.
16/09/2016	VP7a	Raven	1	Flies w in front of vp over conifers and juvenile conifers out of view.
16/09/2016	VP7a	Raven	4	
16/09/2016	VP7a	Raven	2	
16/09/2016	VP7a	Raven	2	fly out of conifer stand nw of vp, calling, head w.
16/09/2016	VP7a	Raven	1	Fly from conifer tree, E of vp, west in front of vp calling.
16/09/2016	VP7a	Raven	2	Soar over conifers NW of VP, head west out of view.
16/09/2016	VP7a	Raven	2	Fly NE over vp, calling, behind mature conifer out of view.
16/09/2016	VP7a	Raven	13	Fly along treeline/ mature conifers, behind VP, west, band 2. 40 secs.
16/09/2016	VP7a	Raven	1	Calling, no visual, N of VP.
16/09/2016	VP7a	Raven	1	Calling, N in the distance.
19/09/2016	VP3	Dunnock	1	Calling in vegetation behind vp
19/09/2016	VP3	Dunnock	1	Calling
19/09/2016	VP3	Wren	1	Calling in vegetation by vp
19/09/2016	VP3	Wren	1	Calling in vegetation by vp
19/09/2016	VP3	Chaffinch	1	Calling in vegetation by vp
19/09/2016	VP3	Swallow	10+	Flying over vp, calling, band 2/3
19/09/2016	VP3	Swallow	20+	Flying over hill, w of vp.
19/09/2016	VP3	Swallow	50+	Calling, in flight, band 1/2/3 over hill W of VP.
19/09/2016	VP3	Swallow	70+	Flying over hill to SW, calling. Bands 1/2/3. Constant activity throughout viewshed for hour of survey
19/09/2016	VP3	Rook	1	Heard calling; no visual
19/09/2016	VP3	Wren	1	Calling W of VP.
19/09/2016	VP3	Wren	1	Calling W of VP
19/09/2016	VP3	Rook	1	Calling
19/09/2016	VP3	Swallow	9	Flying on site, band 1/2/3
19/09/2016	VP3	Wren	1	Calling
19/09/2016	VP3	Blue Tit	1	Fly, call, band 2.
19/09/2016	VP3	Wren	1	Calling
19/09/2016	VP3	Wren	1	Calling, no visual - west of vp.
19/09/2016	VP3	Chaffinch	1	Calling, w of vp.
19/09/2016	VP3	Wren	1	Calling near river, W of vp
19/09/2016	VP3	Wren	1	Fly, on site, calling
19/09/2016	VP3	Grey Wagtail	1	Flies along the course of the river, calling, band 2

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
19/09/2016	VP3	Blue Tit	1	Calling
19/09/2016	VP3	Swallow	1	Calling in vegetation behind vp
19/09/2016	VP3	Wren	1	Calling in vegetation behind vp
19/09/2016	VP3	Chaffinch	1	Calling in vegetation behind vp
19/09/2016	VP3	Wren	1	Sings by vp.
19/09/2016	VP3	Wren	1	Calling west of vp.
19/09/2016	VP3	Blackbird	1	Calling west of vp.
19/09/2016	VP3	Wren	1	Calling
19/09/2016	VP3	Robin	1	Singing in conifers behind vp
19/09/2016	VP3	Robin	1	Calling in vegetation by vp
19/09/2016	VP3	Robin	1	Calling behind vp; no visual
19/09/2016	VP3	Robin	1	Chip calls
19/09/2016	VP3	Robin	1	Sings, N of vp.
19/09/2016	VP3	Robin	1	Chip calls, N of vp
19/09/2016	VP3	Robin		Singing in conifers, North of vp
19/09/2016	VP3	Robin	1	Chip calls, behind vp.
19/09/2016	VP3	Robin	1	Calling
19/09/2016	VP3	Robin	2	West of vp, 1 chip calls, 1 sings.
19/09/2016	VP3	Robin	1	Calling west of vp.
19/09/2016	VP3	Robin	1	Singing behind vp.
19/09/2016	VP3	Robin	1	Calling in front of vp.
19/09/2016	VP3	Raven	2	Fly along conifers SW, soar over hill to west of vp, over crest of hill out of view.
19/09/2016	VP3	Raven	1	Travelling west, band two soaring over hill. Flies SW over conifer edge to hill. Soars over bog, flies w out of view.
19/09/2016	VP3	Raven	2	Fly from north west to south east, calling, drops into conifers out of view.
19/09/2016	VP3	Raven	1	Briefly comes into view, soaring over hill out of view.
19/09/2016	VP3	Raven	1	Flies SE along brow of hill, then out of view.
19/09/2016	VP3	Raven	1	In flight along conifer boundary
19/09/2016	VP3	Raven	1	Calling behind vp no visual.
19/09/2016	VP3	Raven	1	Calling; no visual.
19/09/2016	VP3	Raven	1	Calling; no visual.
19/09/2016	VP3	Raven	1	Calling from hill sw of VP; no visual
20/09/2016	VP5a	Dunnock	1	Calling w of vp, from young conifers.
20/09/2016	VP5a	Dunnock	1	Singing west of vp in conifers.
20/09/2016	VP5a	Mistle Thrush	20	Fly. Height: below. Land on tree in clearfell.
20/09/2016	VP5a	Wren	1	Calling N of VP
20/09/2016	VP5a	Swallow	2	Fly south calling, height: below.
20/09/2016	VP5a	Swallow	4	Flying over hill S of vp.

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
20/09/2016	VP5a	Chaffinch	2	Calling from conifers behind VP.
20/09/2016	VP5a	Chaffinch	1	Calling from behind vp.
20/09/2016	VP5a	Wren	1	NW of VP calling.
20/09/2016	VP5a	Chaffinch	1	Calling W of VP.
20/09/2016	VP5a	Blue Tit	1	Calling S of VP, from conifers.
20/09/2016	VP5a	Wren	1	Calling, in conifers W of VP.
20/09/2016	VP5a	Swallow	1	Calling behind VP.
20/09/2016	VP5a	Chaffinch	1	Calling Sw of vp.
20/09/2016	VP5a	Blue Tit	1	Behind vp calling
20/09/2016	VP5a	Wren	2	Calling behind vp and sw of vp.
20/09/2016	VP5a	Chaffinch	1	In front of vp calling.
20/09/2016	VP5a	Wren	1	Calling in young conifers N of VP.
20/09/2016	VP5a	Linnet	3	Fly east into conifers behind VP.
20/09/2016	VP5a	Wren	1	Calling west of vp in conifers.
20/09/2016	VP5a	Chaffinch	1	Calling west of vp in conifers.
20/09/2016	VP5a	Wren	1	Calling west of vp in conifers.
20/09/2016	VP5a	Wren	1	Calling west of vp in conifers.
20/09/2016	VP5a	Wren	1	Calling west of vp in conifers.
20/09/2016	VP5a	Wren	1	Calling west of vp in conifers.
20/09/2016	VP5a	Robin	1	Calling W of VP.
20/09/2016	VP5a	Robin	1	Chip calling W of Vp in conifers.
20/09/2016	VP5a	Robin	1	Chip calling W of Vp in conifers.
20/09/2016	VP5a	Robin	1	Singing in conifers behind vp.
20/09/2016	VP5a	Robin	1	Calling W of VP.
20/09/2016	VP5a	Robin	1	Calling west of vp in conifers.
20/09/2016	VP5a	Robin	1	Calling west of vp in conifers.
20/09/2016	VP5a	Robin	1	Calling west of vp in conifers.
20/09/2016	VP5a	Robin	1	Singing W of VP.
20/09/2016	VP5a	Robin	1	Singing W of VP.
20/09/2016	VP5a	Robin	1	Singing W of VP.
20/09/2016	VP5a	Robin	1	Singing W of VP.
20/09/2016	VP5a	Raven	1	Calling, no visual.
21/09/2016	VP1a	Dunnock	1	Calling, on site, NE of VP.
21/09/2016	VP1a	Mistle Thrush	2	Fly SE over bog, band 3, calling.
21/09/2016	VP1a	Meadow Pipit	1	On site, flight band 2, calling.
21/09/2016	VP1a	Meadow Pipit	2	Fly SE calling, land on bog.
21/09/2016	VP1a	Meadow Pipit	4	Fly SE, calling, band 1/2

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
21/09/2016	VP1a	Meadow Pipit	2	Fly, band 3, calling, off site.
21/09/2016	VP1a	Meadow Pipit	1	In flight, calling, band 2.
21/09/2016	VP1a	Meadow Pipit	1	Fly over bog and conifer, band , on site, calling.
21/09/2016	VP1a	Meadow Pipit	3	Fly over vp, band 1, off site.
21/09/2016	VP1a	Meadow Pipit	3	Fly over VP (band1), then NE over bog.
21/09/2016	VP1a	Meadow Pipit	1	Fly over Vp, calling, off site.
21/09/2016	VP1a	Meadow Pipit	1	Fly, band 1, over VP, then off site, calling.
21/09/2016	VP1a	Meadow Pipit	2	#REF!
21/09/2016	VP1a	Meadow Pipit	3	Fly over VP off site.
21/09/2016	VP1a	Meadow Pipit	18	Fly over bog, over VP, calling. Off site.
21/09/2016	VP1a	Meadow Pipit	3	Fly over bog, calling.
21/09/2016	VP1a	Rook	1	On site, calling, no visual.
21/09/2016	VP1a	Wren	1	Calling in conifers NW of VP
21/09/2016	VP1a	Wren	1	Calling from young conifers NW of VP.
21/09/2016	VP1a	Wren	1	Calling.
21/09/2016	VP1a	Wren	1	Calling, on site, conifers N of VP.
21/09/2016	VP1a	Wren	1	Calling, on site, conifers N of VP.
21/09/2016	VP1a	Chaffinch	1	Calling NW of vp.
21/09/2016	VP1a	Wren	1	Calling NW of VP
21/09/2016	VP1a	Hooded Crow	2	Fly over clearfell, N of VP, band 1/2, lands out of view.
21/09/2016	VP1a	Wren	1	Calling nw of vp.
21/09/2016	VP1a	Coal Tit	1	Calling in conifers N of VP.
21/09/2016	VP1a	Swallow	1	Calling W of VP, no visual.
21/09/2016	VP1a	Wren	1	Singing in young conifers NW of vp.
21/09/2016	VP1a	Chaffinch	1	Calling, on site, no visual.
21/09/2016	VP1a	Chaffinch	1	Calling from conifers NW of VP
21/09/2016	VP1a	Swallow	7	In flight band 2/3, calling, over bog and young conifers.
21/09/2016	VP1a	Swallow	3	Fly low over VP and bog, band 1, off site.
21/09/2016	VP1a	Swallow	4	Fly over bog, band 3.
21/09/2016	VP1a	Swallow	2	Fly west into conifers, on site, band 1.
21/09/2016	VP1a	Wren	1	
21/09/2016	VP1a	Swallow	2	Flies W, band 2, and calling.
21/09/2016	VP1a	Wren	1	Calling.
21/09/2016	VP1a	Swallow	3	Fly over bog, calling, band 2.





**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
30/09/2016	VP9	Robin	1	Calling in conifers behind VP
05/10/2016	VP7a	Dunnock	1	
05/10/2016	VP7a	Jay	1	
05/10/2016	VP7a	Meadow Pipit	2	
05/10/2016	VP7a	Meadow Pipit	7	
05/10/2016	VP7a	Meadow Pipit	4	
05/10/2016	VP7a	Meadow Pipit	6	
05/10/2016	VP7a	Meadow Pipit	2	
05/10/2016	VP7a	Meadow Pipit	5	
05/10/2016	VP7a	Meadow Pipit	2	
05/10/2016	VP7a	Meadow Pipit	2	
05/10/2016	VP7a	Meadow Pipit	5	
05/10/2016	VP7a	Meadow Pipit	2	
05/10/2016	VP7a	Meadow Pipit	3	
05/10/2016	VP7a	Meadow Pipit	2	
05/10/2016	VP7a	Meadow Pipit	1	
05/10/2016	VP7a	Meadow Pipit	2	
05/10/2016	VP7a	Meadow Pipit	1	
05/10/2016	VP7a	Meadow Pipit	3	
05/10/2016	VP7a	Meadow Pipit	1	
05/10/2016	VP7a	Blackbird	1	
05/10/2016	VP7a	Chaffinch	1	
05/10/2016	VP7a	Wren	1	
05/10/2016	VP7a	Goldcrest	1	
05/10/2016	VP7a	Hooded Crow	1	
05/10/2016	VP7a	Hooded Crow	1	
05/10/2016	VP7a	Linnet	1	
05/10/2016	VP7a	Linnet	2	
05/10/2016	VP7a	Hooded Crow	1	
05/10/2016	VP7a	Goldfinch	3	
05/10/2016	VP7a	Hooded Crow	3	
05/10/2016	VP7a	Goldfinch	3	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
05/10/2016	VP7a	Hooded Crow	1	
05/10/2016	VP7a	Stonechat	2	
05/10/2016	VP7a	Wren	1	
05/10/2016	VP7a	Linnet	9	
05/10/2016	VP7a	Linnet	17	
05/10/2016	VP7a	Stonechat	1	
05/10/2016	VP7a	Wren	1	
05/10/2016	VP7a	Stonechat	1	
05/10/2016	VP7a	Chaffinch	1	
05/10/2016	VP7a	Wren	1	
05/10/2016	VP7a	Chaffinch	2	
05/10/2016	VP7a	Hooded Crow	1	
05/10/2016	VP7a	Hooded Crow	2	
05/10/2016	VP7a	Goldfinch	2	
05/10/2016	VP7a	Hooded Crow	1	
05/10/2016	VP7a	Blackbird	1	
05/10/2016	VP7a	Chaffinch	2	
05/10/2016	VP7a	Robin	1	
05/10/2016	VP7a	Reed Bunting	1	
05/10/2016	VP7a	Reed Bunting	1	
05/10/2016	VP7a	Raven	1	
05/10/2016	VP7a	Raven	1	
05/10/2016	VP7a	Raven	1	
05/10/2016	VP7a	Raven	2	
05/10/2016	VP7a	Raven	1	
05/10/2016	VP7a	Raven	1	
05/10/2016	VP7a	Raven	1	
05/10/2016	VP7a	Raven	2	
05/10/2016	VP7a	Raven	1	
05/10/2016	VP7a	Raven	1	
05/10/2016	VP7a	Woodpigeon	6	
05/10/2016	VP7a	Woodpigeon	7	
06/10/2016	VP2	Dunnock	1	
06/10/2016	VP2	Meadow Pipit	1	
06/10/2016	VP2	Meadow Pipit	2	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
06/10/2016	VP2	Meadow Pipit	2	
06/10/2016	VP2	Meadow Pipit	2	
06/10/2016	VP2	Meadow Pipit	2	
06/10/2016	VP2	Meadow Pipit	1	
06/10/2016	VP2	Meadow Pipit	3	
06/10/2016	VP2	Meadow Pipit	1	
06/10/2016	VP2	Meadow Pipit	5	
06/10/2016	VP2	Meadow Pipit	1	
06/10/2016	VP2	Meadow Pipit	1	
06/10/2016	VP2	Meadow Pipit	1	
06/10/2016	VP2	Meadow Pipit	2	
06/10/2016	VP2	Meadow Pipit	1	
06/10/2016	VP2	Meadow Pipit	1	
06/10/2016	VP2	Meadow Pipit	1	
06/10/2016	VP2	Meadow Pipit	1	
06/10/2016	VP2	Wren	1	
06/10/2016	VP2	Blackbird	1	
06/10/2016	VP2	Linnet	2	
06/10/2016	VP2	Swallow	3	
06/10/2016	VP2	Goldfinch	1	
06/10/2016	VP2	Chaffinch	2	
06/10/2016	VP2	Swallow	1	
06/10/2016	VP2	Coal Tit	1	
06/10/2016	VP2	Linnet	1	
06/10/2016	VP2	Robin	1	
06/10/2016	VP2	Robin	1	
06/10/2016	VP2	Robin	1	
06/10/2016	VP2	Robin	1	
06/10/2016	VP2	Raven	1	
06/10/2016	VP2	Raven	1	
06/10/2016	VP2	Raven	1	
06/10/2016	VP2	Raven	1	
07/10/2016	VP5a	Dunnock	1	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
07/10/2016	VP5a	Meadow Pipit	2	
07/10/2016	VP5a	Meadow Pipit	3	
07/10/2016	VP5a	Meadow Pipit	2	
07/10/2016	VP5a	Meadow Pipit	1	
07/10/2016	VP5a	Meadow Pipit	1	
07/10/2016	VP5a	Meadow Pipit	1	
07/10/2016	VP5a	Wren	1	
07/10/2016	VP5a	Blackbird	1	
07/10/2016	VP5a	Chaffinch	1	
07/10/2016	VP5a	Great Tit	1	
07/10/2016	VP5a	Blackbird	1	
07/10/2016	VP5a	Swallow	7	
07/10/2016	VP5a	Goldcrest	1	
07/10/2016	VP5a	Wren	1	
07/10/2016	VP5a	Linnet	1	
07/10/2016	VP5a	Hooded Crow	3	
07/10/2016	VP5a	Blackbird	1	
07/10/2016	VP5a	Linnet	1	
07/10/2016	VP5a	Robin	1	
07/10/2016	VP5a	Robin	1	
07/10/2016	VP5a	Robin	1	
07/10/2016	VP5a	Raven	1	
07/10/2016	VP5a	Raven	5	
07/10/2016	VP5a	Raven	1	
10/10/2016	VP8a	Dunnock	1	
10/10/2016	VP8a	Dunnock	1	
10/10/2016	VP8a	Jay	1	
10/10/2016	VP8a	Jay	1	
10/10/2016	VP8a	Meadow Pipit	2	
10/10/2016	VP8a	Meadow Pipit	1	
10/10/2016	VP8a	Meadow Pipit	3	
10/10/2016	VP8a	Meadow Pipit	1	
10/10/2016	VP8a	Meadow Pipit	1	
10/10/2016	VP8a	Meadow Pipit	1	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
10/10/2016	VP8a	Meadow Pipit	2	
10/10/2016	VP8a	Meadow Pipit	2	
10/10/2016	VP8a	Meadow Pipit	2	
10/10/2016	VP8a	Meadow Pipit	2	
10/10/2016	VP8a	Meadow Pipit	1	
10/10/2016	VP8a	Meadow Pipit	1	
10/10/2016	VP8a	Meadow Pipit	1	
10/10/2016	VP8a	Blackbird	1	
10/10/2016	VP8a	Wren	1	
10/10/2016	VP8a	Swallow	8	
10/10/2016	VP8a	Redwing	27	
10/10/2016	VP8a	Chaffinch	1	
10/10/2016	VP8a	Redwing	25	
10/10/2016	VP8a	Hooded Crow	1	
10/10/2016	VP8a	Redwing	3	
10/10/2016	VP8a	Hooded Crow	1	
10/10/2016	VP8a	Redwing	6	
10/10/2016	VP8a	Crossbill	1	
10/10/2016	VP8a	Redwing	6	
10/10/2016	VP8a	Wren	1	
10/10/2016	VP8a	Blackbird	1	
10/10/2016	VP8a	Redwing	35	
10/10/2016	VP8a	Redwing	48	
10/10/2016	VP8a	Goldfinch	2	
10/10/2016	VP8a	Goldcrest	1	
10/10/2016	VP8a	Redwing	9	
10/10/2016	VP8a	Redwing	30	
10/10/2016	VP8a	Redwing	9	
10/10/2016	VP8a	Redwing	6	
10/10/2016	VP8a	Redwing	34	
10/10/2016	VP8a	Redwing	12	
10/10/2016	VP8a	Redwing	8	
10/10/2016	VP8a	Redwing	20	
10/10/2016	VP8a	Redwing	49	
10/10/2016	VP8a	Linnet	2	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
10/10/2016	VP8a	Redwing	24	
10/10/2016	VP8a	Redwing	12	
10/10/2016	VP8a	Goldfinch	1	
10/10/2016	VP8a	Redwing	41	
10/10/2016	VP8a	Linnet	49	
10/10/2016	VP8a	Redwing	12	
10/10/2016	VP8a	Goldcrest	1	
10/10/2016	VP8a	Linnet	2	
10/10/2016	VP8a	Robin	1	
10/10/2016	VP8a	Robin	1	
10/10/2016	VP8a	Raven	2	
10/10/2016	VP8a	Raven	2	
10/10/2016	VP8a	Raven	1	
10/10/2016	VP8a	Raven	1	
10/10/2016	VP8a	Raven	2	
10/10/2016	VP8a	Raven	4	
10/10/2016	VP8a	Woodpigeon	1	
10/10/2016	VP8a	Woodpigeon	4	
10/10/2016	VP8a	Woodpigeon	4	
10/10/2016	VP8a	Woodpigeon	1	
10/10/2016	VP8a	Woodpigeon	6	
11/10/2016	VP1a	Meadow Pipit	1	
11/10/2016	VP1a	Meadow Pipit	2	
11/10/2016	VP1a	Meadow Pipit	2	
11/10/2016	VP1a	Meadow Pipit	1	
11/10/2016	VP1a	Meadow Pipit	1	
11/10/2016	VP1a	Meadow Pipit	1	
11/10/2016	VP1a	Meadow Pipit	2	
11/10/2016	VP1a	Meadow Pipit	1	
11/10/2016	VP1a	Meadow Pipit	1	
11/10/2016	VP1a	Meadow Pipit	1	
11/10/2016	VP1a	Meadow Pipit	1	
11/10/2016	VP1a	Meadow Pipit	2	
11/10/2016	VP1a	Meadow Pipit	1	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
11/10/2016	VP1a	Meadow Pipit	1	
11/10/2016	VP1a	Meadow Pipit	1	
11/10/2016	VP1a	Meadow Pipit	2	
11/10/2016	VP1a	Meadow Pipit	1	
11/10/2016	VP1a	Meadow Pipit	1	
11/10/2016	VP1a	Wren	1	
11/10/2016	VP1a	Blackbird	1	
11/10/2016	VP1a	Linnet	9	
11/10/2016	VP1a	Redwing	58	
11/10/2016	VP1a	Redwing	7	
11/10/2016	VP1a	Goldcrest	1	
11/10/2016	VP1a	Robin	1	
11/10/2016	VP1a	Raven	1	
11/10/2016	VP1a	Raven	2	
11/10/2016	VP1a	Raven	1	
13/10/2016	VP4a	Jay	1	
13/10/2016	VP4a	Meadow Pipit	2	
13/10/2016	VP4a	Meadow Pipit	2	
13/10/2016	VP4a	Meadow Pipit	1	
13/10/2016	VP4a	Wren	1	
13/10/2016	VP4a	Blackbird	1	
13/10/2016	VP4a	Goldcrest	1	
13/10/2016	VP4a	Redwing	6	
13/10/2016	VP4a	Redwing	4	
13/10/2016	VP4a	Chaffinch	1	
13/10/2016	VP4a	Redwing	5	
13/10/2016	VP4a	Redwing	23	
13/10/2016	VP4a	Redwing	2	
13/10/2016	VP4a	Red Grouse	1	
13/10/2016	VP4a	Chaffinch	2	
13/10/2016	VP4a	Redwing	22	
13/10/2016	VP4a	Red Grouse	1	
13/10/2016	VP4a	Redwing	15	
13/10/2016	VP4a	Redwing	4	
13/10/2016	VP4a	Hooded Crow	1	



**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
13/10/2016	VP4a	Goldcrest	1	
13/10/2016	VP4a	Wren	1	
13/10/2016	VP4a	Blackbird	1	
13/10/2016	VP4a	Chaffinch	1	
13/10/2016	VP4a	Redwing	11	
13/10/2016	VP4a	Redwing	15	
13/10/2016	VP4a	Blue Tit	2	
13/10/2016	VP4a	Coal Tit	1	
13/10/2016	VP4a	Redwing	1	
13/10/2016	VP4a	Hooded Crow	1	
13/10/2016	VP4a	Redwing	5	
13/10/2016	VP4a	Redwing	6	
13/10/2016	VP4a	Redwing	3	
13/10/2016	VP4a	Redwing	1	
13/10/2016	VP4a	Redwing	19	
13/10/2016	VP4a	Redwing	8	
13/10/2016	VP4a	Great Tit	1	
13/10/2016	VP4a	Redwing	3	
13/10/2016	VP4a	Blue Tit	2	
13/10/2016	VP4a	Hooded Crow	1	
13/10/2016	VP4a	Robin	1	
13/10/2016	VP4a	Robin	1	
13/10/2016	VP4a	Raven	4	
13/10/2016	VP4a	Raven	1	
14/10/2016	VP3	Meadow Pipit	1	
14/10/2016	VP3	Meadow Pipit	1	
14/10/2016	VP3	Meadow Pipit	1	
14/10/2016	VP3	Meadow Pipit	1	
14/10/2016	VP3	Meadow Pipit	2	
14/10/2016	VP3	Meadow Pipit	1	
14/10/2016	VP3	Meadow Pipit	1	
14/10/2016	VP3	Meadow Pipit	1	
14/10/2016	VP3	Blackbird	1	
14/10/2016	VP3	Wren	1	
14/10/2016	VP3	Great Tit	1	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
14/10/2016	VP3	Goldcrest	1	
14/10/2016	VP3	Redwing	14	
14/10/2016	VP3	Redwing	9	
14/10/2016	VP3	Redwing	7	
14/10/2016	VP3	Redwing	1	
14/10/2016	VP3	Redwing	51	
14/10/2016	VP3	Chaffinch	3	
14/10/2016	VP3	Bullfinch	6	
14/10/2016	VP3	Redwing	30	
14/10/2016	VP3	Redwing	5	
14/10/2016	VP3	Redwing	23	
14/10/2016	VP3	Wren	1	
14/10/2016	VP3	Goldcrest	1	
14/10/2016	VP3	Blackbird	1	
14/10/2016	VP3	Great Tit	1	
14/10/2016	VP3	Chaffinch	1	
14/10/2016	VP3	Chaffinch	9	
14/10/2016	VP3	Redwing	27	
14/10/2016	VP3	Redwing	17	
14/10/2016	VP3	Redwing	24	
14/10/2016	VP3	Chaffinch	34	
14/10/2016	VP3	Redwing	19	
14/10/2016	VP3	Redwing	28	
14/10/2016	VP3	Chaffinch	2	
14/10/2016	VP3	Redwing	6	
14/10/2016	VP3	Linnet	11	
14/10/2016	VP3	Redwing	28	
14/10/2016	VP3	Redwing	6	
14/10/2016	VP3	Chaffinch	5	
14/10/2016	VP3	Redwing	8	
14/10/2016	VP3	Robin	1	
14/10/2016	VP3	Robin	1	
14/10/2016	VP3	Raven	4	
14/10/2016	VP3	Raven	2	
14/10/2016	VP3	Raven	2	
14/10/2016	VP3	Raven	1	
14/10/2016	VP3	Raven	3	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
18/10/2016	VP9	Meadow Pipit	1	
18/10/2016	VP9	Meadow Pipit	1	
18/10/2016	VP9	Meadow Pipit	1	
18/10/2016	VP9	Meadow Pipit	1	
18/10/2016	VP9	Meadow Pipit	1	
18/10/2016	VP9	Meadow Pipit	1	
18/10/2016	VP9	Meadow Pipit	2	
18/10/2016	VP9	Meadow Pipit	1	
18/10/2016	VP9	Meadow Pipit	1	
18/10/2016	VP9	Meadow Pipit	1	
18/10/2016	VP9	Meadow Pipit	1	
18/10/2016	VP9	Meadow Pipit	1	
18/10/2016	VP9	Meadow Pipit	1	
18/10/2016	VP9	Meadow Pipit	1	
18/10/2016	VP9	Meadow Pipit	2	
18/10/2016	VP9	Meadow Pipit	1	
18/10/2016	VP9	Meadow Pipit	1	
18/10/2016	VP9	Meadow Pipit	1	
18/10/2016	VP9	Blackbird	1	
18/10/2016	VP9	Hooded Crow	1	
18/10/2016	VP9	Hooded Crow	1	
18/10/2016	VP9	Linnet	3	
18/10/2016	VP9	Redwing	30	
18/10/2016	VP9	Chaffinch	2	
18/10/2016	VP9	Raven	6	
18/10/2016	VP9	Raven	1	
18/10/2016	VP9	Raven	2	
18/10/2016	VP9	Raven	1	
18/10/2016	VP9	Raven	1	
18/10/2016	VP9	Raven	2	
18/10/2016	VP9	Raven	2	
02/11/2016	VP7a	Meadow Pipit	1	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
02/11/2016	VP7a	Meadow Pipit	1	
02/11/2016	VP7a	Meadow Pipit	2	
02/11/2016	VP7a	Meadow Pipit	1	
02/11/2016	VP7a	Meadow Pipit	1	
02/11/2016	VP7a	Meadow Pipit	1	
02/11/2016	VP7a	Meadow Pipit	2	
02/11/2016	VP7a	Meadow Pipit	4	
02/11/2016	VP7a	Meadow Pipit	1	
02/11/2016	VP7a	Wren	1	Present for duration of survey
02/11/2016	VP7a	Goldcrest	1	Present for duration of survey
02/11/2016	VP7a	Blackbird	1	Present for duration of survey
02/11/2016	VP7a	Hooded Crow	1	
02/11/2016	VP7a	Redwing	4	
02/11/2016	VP7a	Redwing	66	
02/11/2016	VP7a	Linnet	5	
02/11/2016	VP7a	Siskin	5	
02/11/2016	VP7a	Fieldfare	1	
02/11/2016	VP7a	Chaffinch	8	
02/11/2016	VP7a	Chaffinch	1	
02/11/2016	VP7a	Fieldfare	60	
02/11/2016	VP7a	Siskin	2	
02/11/2016	VP7a	Linnet	3	
02/11/2016	VP7a	Wren	1	Present for duration of survey
02/11/2016	VP7a	Blackbird	1	Present for duration of survey
02/11/2016	VP7a	Goldcrest	1	Present for duration of survey
02/11/2016	VP7a	Chaffinch	1	Present for duration of survey
02/11/2016	VP7a	Linnet	3	
02/11/2016	VP7a	Redwing	32	
02/11/2016	VP7a	Redwing	102	
02/11/2016	VP7a	Redwing	73	
02/11/2016	VP7a	Robin	1	Present for duration of survey
02/11/2016	VP7a	Robin	1	Present for duration of survey
02/11/2016	VP7a	Reed Bunting	1	
02/11/2016	VP7a	Raven	2	
02/11/2016	VP7a	Raven	1	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
03/11/2016	VP2	Meadow Pipit	1	
03/11/2016	VP2	Blackbird	1	Present for duration of survey
03/11/2016	VP2	Wren	1	Present for duration of survey
03/11/2016	VP2	Goldcrest	1	Present for duration of survey
03/11/2016	VP2	Chaffinch	2	
03/11/2016	VP2	Redwing	59	
03/11/2016	VP2	Wren	1	
03/11/2016	VP2	Redwing	9	
03/11/2016	VP2	Robin	1	Present for duration of survey
03/11/2016	VP2	Robin	1	
03/11/2016	VP2	Raven	1	
03/11/2016	VP2	Raven	1	
03/11/2016	VP2	Raven	1	
03/11/2016	VP2	Woodpigeon	6	
07/11/2016	VP1a	Meadow Pipit	2	Calling
07/11/2016	VP1a	Meadow Pipit	1	Fly/Calling
07/11/2016	VP1a	Meadow Pipit	2	Fly/Calling
07/11/2016	VP1a	Meadow Pipit	1	Calling
07/11/2016	VP1a	Meadow Pipit	1	Calling
07/11/2016	VP1a	Meadow Pipit	1	Flying/Calling
07/11/2016	VP1a	Meadow Pipit	1	Calling
07/11/2016	VP1a	Meadow Pipit	1	Flying/Calling
07/11/2016	VP1a	Meadow Pipit	2	Calling
07/11/2016	VP1a	Chaffinch	1	Fly/Calling
07/11/2016	VP1a	Blackbird	1	Calling
07/11/2016	VP1a	Chaffinch	1	Calling
07/11/2016	VP1a	Hooded Crow	3	Flying
07/11/2016	VP1a	Chaffinch	3	Calling
07/11/2016	VP1a	Redwing	13	Flying
07/11/2016	VP1a	Fieldfare	37	Flying/Perched
07/11/2016	VP1a	Blackbird	1	Calling
07/11/2016	VP1a	Robin	1	Calling
07/11/2016	VP1a	Wren	1	Calling
07/11/2016	VP1a	Blackbird	1	Calling
07/11/2016	VP1a	Chaffinch	1	Calling

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
07/11/2016	VP1a	Robin	1	R.
07/11/2016	VP1a	Robin	1	Calling
07/11/2016	VP1a	Robin	1	Calling
07/11/2016	VP1a	Robin	1	Calling
07/11/2016	VP1a	Raven	1	Fly/Calling
07/11/2016	VP1a	Raven	1	Fly/Calling
07/11/2016	VP1a	Raven	1	Flying
07/11/2016	VP1a	Raven	1	Callling
07/11/2016	VP1a	Raven	1	Calling
09/11/2016	VP5a	Wren	1	
09/11/2016	VP5a	Goldcrest	1	
09/11/2016	VP5a	Hooded Crow	1	
09/11/2016	VP5a	Hooded Crow	1	
09/11/2016	VP5a	Blackbird	1	
09/11/2016	VP5a	Hooded Crow	1	
09/11/2016	VP5a	Hooded Crow	1	
09/11/2016	VP5a	Chaffinch	1	
09/11/2016	VP5a	Hooded Crow	1	
09/11/2016	VP5a	Fieldfare	9	
09/11/2016	VP5a	Robin	1	
09/11/2016	VP5a	Chaffinch	1	
09/11/2016	VP5a	Redwing	12	Perched for 15 minutes
09/11/2016	VP5a	Great Tit	1	
09/11/2016	VP5a	Redwing	35	Perched for 15 minutes
09/11/2016	VP5a	Blackbird	1	Perched for 15 minutes
09/11/2016	VP5a	Robin	1	
09/11/2016	VP5a	Redwing	82	
09/11/2016	VP5a	Hooded Crow	1	
09/11/2016	VP5a	Raven	2	
09/11/2016	VP5a	Raven	1	
09/11/2016	VP5a	Raven	2	
09/11/2016	VP5a	Raven	1	
10/11/2016	VP4a	Robin	1	Calling
10/11/2016	VP4a	Blackbird	1	Calling
10/11/2016	VP4a	Great Tit	1	Calling
10/11/2016	VP4a	Wren	1	Calling

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
10/11/2016	VP4a	Goldcrest	1	Calling
10/11/2016	VP4a	Redwing	36	Flying
10/11/2016	VP4a	Robin	1	Calling
10/11/2016	VP4a	Redwing	101	Flying
10/11/2016	VP4a	Redwing	18	Flying/Calling
10/11/2016	VP4a	Blackbird	1	Calling
10/11/2016	VP4a	Great Tit	1	Calling
10/11/2016	VP4a	Wren	1	Calling
10/11/2016	VP4a	Redwing	10	Flying
10/11/2016	VP4a	Chaffinch	1	Calling
10/11/2016	VP4a	Fieldfare	76	Flying
10/11/2016	VP4a	Redwing	8	Flying
10/11/2016	VP4a	Redwing	91	Flying
10/11/2016	VP4a	Redwing	16	Flying
10/11/2016	VP4a	Redwing	61	Flying
10/11/2016	VP4a	Redwing	133	Flying
10/11/2016	VP4a	Raven	1	Flying
10/11/2016	VP4a	Raven	1	
10/11/2016	VP4a	Raven	2	Flying
11/11/2016	VP8a	Robin	1	Calling
11/11/2016	VP8a	Hooded Crow	1	Flying
15/11/2016	VP3	Dunnock	1	Calling
15/11/2016	VP3	Meadow Pipit	1	Flying
15/11/2016	VP3	Robin	1	Calling
15/11/2016	VP3	Robin	1	Calling
15/11/2016	VP3	Goldcrest	1	Calling
15/11/2016	VP3	Blue Tit	1	Calling
15/11/2016	VP3	Great Tit	1	Calling
15/11/2016	VP3	Wren	1	Calling
15/11/2016	VP3	Chaffinch	1	Calling
15/11/2016	VP3	Goldcrest	1	Calling
15/11/2016	VP3	Wren	1	Calling
15/11/2016	VP3	Chaffinch	1	Flying
15/11/2016	VP3	Chaffinch	1	Calling
15/11/2016	VP3	Raven	1	Flying/Calling
15/11/2016	VP3	Raven	1	Calling
15/11/2016	VP3	Raven	1	Flying

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
15/11/2016	VP3	Raven	1	Flying/Calling
16/11/2016	VP2	Robin	1	Calling
16/11/2016	VP2	Wren	1	Calling
16/11/2016	VP2	Goldcrest	1	Calling
16/11/2016	VP2	Blackbird	1	Calling
16/11/2016	VP2	Wren	1	Calling
16/11/2016	VP2	Raven	2	Flying/Calling
16/11/2016	VP9	Meadow Pipit	1	Flying/Calling
16/11/2016	VP9	Raven	1	Flying
17/11/2016	VP8a	Robin	1	Heard only
17/11/2016	VP8a	Fieldfare	2	Flying
17/11/2016	VP8a	Wren	1	Perched
17/11/2016	VP8a	Blackbird	1	Heard only
17/11/2016	VP8a	Chaffinch	4	Flying
17/11/2016	VP8a	Goldfinch	1	Perched
18/11/2016	VP8a	Meadow Pipit	1	Heard only
18/11/2016	VP8a	Wren	1	Heard only
18/11/2016	VP8a	Wren	1	Heard only
29/11/2016	VP9	Meadow Pipit	1	Flying
29/11/2016	VP9	Meadow Pipit	1	Flying
29/11/2016	VP9	Chaffinch	1	Flying
29/11/2016	VP9	Raven	2	Flying
29/11/2016	VP9	Raven	2	Flying
29/11/2016	VP9	Raven	1	Flying
29/11/2016	VP9	Raven	1	Flying
30/11/2016	VP8a	Robin	1	Heard only
30/11/2016	VP8a	Chaffinch	1	Heard only
30/11/2016	VP8a	Wren	1	Heard only
30/11/2016	VP8a	Coal Tit	1	Heard only
30/11/2016	VP8a	Raven	1	Flying
30/11/2016	VP8a	Raven	2	Flying
05/12/2016	VP9	Raven	1	Brief sound to SW 8:57
05/12/2016	VP9	Raven	1	Brief sound to SW 13:37
05/12/2016	VP1a	Dunnock		
05/12/2016	VP9	Raven	1	Brief sound to SW 8:57
05/12/2016	VP9	Raven	1	Brief sound to SW 13:37
05/12/2016	VP9	Raven	1	Brief sound to SW 8:57



**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
05/12/2016	VP9	Raven	1	Brief sound to SW 13:37
05/12/2016	VP9	Raven	1	Brief sound to SW 8:57
05/12/2016	VP9	Raven	1	Brief sound to SW 13:37
05/12/2016	VP1a	Meadow Pipit		
05/12/2016	VP1a	Robin		
05/12/2016	VP1a	Goldcrest		
05/12/2016	VP1a	Wren		
05/12/2016	VP1a	Blackbird		
05/12/2016	VP1a	Crossbill	1	
05/12/2016	VP1a	Raven	1	
06/12/2016	VP7a	Meadow Pipit	1	
06/12/2016	VP7a	Robin	1	
07/12/2016	VP5a	Robin		
07/12/2016	VP5a	Wren		
07/12/2016	VP5a	Goldcrest		
07/12/2016	VP5a	Great Tit		
07/12/2016	VP5a	Chaffinch		
07/12/2016	VP5a	Goldcrest		
15/12/2016	VP3	Raven	1	NE over WD4 and again into WS5
15/12/2016	VP3	Raven	1	NE over WD4 and again into WS5
15/12/2016	VP3	Raven	1	NE over WD4 and again into WS5
15/12/2016	VP3	Raven	1	NE over WD4 and again into WS5
16/12/2016	VP2	Robin		
16/12/2016	VP2	Wren		
16/12/2016	VP2	Goldcrest		
16/12/2016	VP2	Raven	4	
28/12/2016	VP4a	Robin	1	
28/12/2016	VP4a	Wren	2	
28/12/2016	VP4a	Goldcrest	3	
28/12/2016	VP4a	Raven	2	Flying over habitat and landing in tree
28/12/2016	VP4a	Raven	2	Flying from tree and in S direction out of view
29/12/2016		Robin	1	
29/12/2016	VP8a	Goldcrest	5	
29/12/2016	VP8a	Wren	2	
29/12/2016	VP8a	Woodpigeon	1	Flying over in E direction
29/12/2016	VP8a	Woodpigeon	1	Flying over in N direction
29/12/2016	VP8a	Woodpigeon	1	Flying over in N direction

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
04/01/2017	VP1a	Meadow Pipit	1	
04/01/2017	VP1a	Robin		
04/01/2017	VP1a	Chaffinch		
04/01/2017	VP1a	Hooded Crow	1	
04/01/2017	VP1a	Wren		
04/01/2017	VP1a	Blackbird	1	
04/01/2017	VP1a	Raven	2	
09/01/2017	VP7a	Robin		
09/01/2017	VP7a	Chaffinch		
09/01/2017	VP7a	Blue Tit		
09/01/2017	VP7a	Wren		
09/01/2017	VP7a	Raven	1	
10/01/2017	VP2	Meadow Pipit		
10/01/2017	VP2	Robin		
10/01/2017	VP2	Wren		
10/01/2017	VP2	Chaffinch		
10/01/2017	VP2	Blackbird		
11/01/2017	VP5a	Wren		
11/01/2017	VP5a	Goldcrest		
11/01/2017	VP5a	Raven	1	
12/01/2017	VP8a	Dunnock		
12/01/2017	VP8a	Robin		
12/01/2017	VP8a	Wren		
12/01/2017	VP8a	Goldfinch		
12/01/2017	VP8a	Raven	2	
17/01/2017	VP3	Dunnock		
17/01/2017	VP3	Robin		
17/01/2017	VP3	Blackbird		
17/01/2017	VP3	Wren		
17/01/2017	VP3	Hooded Crow	1	
17/01/2017	VP3	Chaffinch		
17/01/2017	VP3	Goldfinch	11	
17/01/2017	VP3	Great Tit		
18/01/2017	VP4a	Robin		
18/01/2017	VP4a	Chaffinch		
18/01/2017	VP4a	Wren		
18/01/2017	VP4a	Goldcrest		

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
18/01/2017	VP4a	Blackbird		
18/01/2017	VP4a	Raven	1	
18/01/2017	VP4a	Woodpigeon	2	
19/01/2017	VP9	Meadow Pipit	1	
19/01/2017	VP9	Raven	1	
24/01/2017	VP8a	Dunnock		
24/01/2017	VP8a	Robin		
24/01/2017	VP8a	Chaffinch		
24/01/2017	VP8a	Blue Tit		
01/02/2017	VP2	Dunnock		
01/02/2017	VP2	Robin		
01/02/2017	VP2	Chaffinch		
01/02/2017	VP2	Wren		
01/02/2017	VP2	Blackbird		
01/02/2017	VP2	Goldfinch		
01/02/2017	VP2	Woodpigeon	1	
02/02/2017	VP1a	Robin		
02/02/2017	VP1a	Wren		
02/02/2017	VP1a	Raven	2	
09/02/2017	VP4a	Robin		
09/02/2017	VP4a	Wren		
09/02/2017	VP4a	Blackbird		
09/02/2017	VP4a	Hooded Crow	10	
09/02/2017	VP4a	Chaffinch		
09/02/2017	VP4a	Goldcrest		
09/02/2017	VP4a	Raven	1	
09/02/2017	VP4a	Woodpigeon	2	
10/02/2017	VP3	Dunnock		
10/02/2017	VP3	Robin		
10/02/2017	VP3	Wren		
10/02/2017	VP3	Hooded Crow	1	
10/02/2017	VP3	Goldfinch		
10/02/2017	VP3	Raven	2	
10/02/2017	VP3	Woodpigeon	3	
14/02/2017	VP5a	Robin		
14/02/2017	VP5a	Wren		
14/02/2017	VP5a	Song Thrush		

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
14/02/2017	VP5a	Blackbird		
14/02/2017	VP5a	Goldfinch		
14/02/2017	VP5a	Goldcrest		
14/02/2017	VP5a	Chaffinch		
14/02/2017	VP5a	Bullfinch		
14/02/2017	VP5a	Raven	1	
15/02/2017	VP7a	Meadow Pipit		
15/02/2017	VP7a	Robin		
15/02/2017	VP7a	Reed Bunting		
15/02/2017	VP7a	Blackbird		
15/02/2017	VP7a	Great Tit		
15/02/2017	VP7a	Wren		
15/02/2017	VP7a	Chaffinch		
15/02/2017	VP7a	Woodpigeon		
16/02/2017	VP9	Meadow Pipit		
17/02/2017	VP8a	Meadow Pipit		
17/02/2017	VP8a	Robin		
17/02/2017	VP8a	Wren		
17/02/2017	VP8a	Goldfinch		
17/02/2017	VP8a	Chaffinch		
06/03/2017	VP2	Goldfinch		
06/03/2017	VP2	Wren		
06/03/2017	VP2	Chaffinch		
06/03/2017	VP2	Hooded Crow	2	
06/03/2017	VP2	Song Thrush		
06/03/2017	VP2	Raven	1	
07/03/2017	VP7a	Duncock		
07/03/2017	VP7a	Robin		
07/03/2017	VP7a	Wren		
07/03/2017	VP7a	Hooded Crow	1	
07/03/2017	VP7a	Chaffinch		
07/03/2017	VP7a	Blackbird		
07/03/2017	VP7a	Woodpigeon	2	
08/03/2017	VP5a	Robin		
08/03/2017	VP5a	Blackbird		
08/03/2017	VP5a	Wren		

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
08/03/2017	VP5a	Chaffinch		
08/03/2017	VP5a	Great Tit		
08/03/2017	VP5a	Hooded Crow	2	
08/03/2017	VP5a	Song Thrush		
08/03/2017	VP5a	Raven	2	
08/03/2017	VP5a	Woodpigeon		
13/03/2017	VP3	Robin		
13/03/2017	VP3	Chaffinch		
13/03/2017	VP3	Goldfinch		
13/03/2017	VP3	Wren		
13/03/2017	VP3	Goldcrest		
13/03/2017	VP3	Hooded Crow	2	
13/03/2017	VP3	Raven	1	
14/03/2017	VP8a	Dunnock		
14/03/2017	VP8a	Robin		
14/03/2017	VP8a	Goldfinch		
14/03/2017	VP8a	Great Tit		
14/03/2017	VP8a	Wren		
14/03/2017	VP8a	Chaffinch		
14/03/2017	VP8a	Crossbill	5	
14/03/2017	VP8a	Song Thrush		
14/03/2017	VP8a	Goldcrest		
14/03/2017	VP8a	Raven	1	
14/03/2017	VP8a	Woodpigeon	2	
27/03/2017	VP7a	Meadow Pipit		
27/03/2017	VP4a	Meadow Pipit		
27/03/2017	VP7a	Wren		
27/03/2017	VP7a	Chaffinch		
27/03/2017	VP7a	Blackbird		
27/03/2017	VP7a	Great Tit		
27/03/2017	VP7a	Goldfinch	5	
27/03/2017	VP4a	Hooded Crow		
27/03/2017	VP4a	Great Tit		
27/03/2017	VP4a	Wren		
27/03/2017	VP4a	Coal Tit		
27/03/2017	VP7a	Raven	1	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
27/03/2017	VP4a	Raven		
27/03/2017	VP7a	Woodpigeon	1	
27/03/2017	VP4a	Woodpigeon		
28/03/2017	VP1a	Meadow Pipit		
28/03/2017	VP9	Meadow Pipit		
28/03/2017	VP1a	Robin		
28/03/2017	VP9	Hooded Crow		
28/03/2017	VP9	Wren		
28/03/2017	VP9	Crossbill		
28/03/2017	VP9	Song Thrush		
28/03/2017	VP9	Blackbird		
28/03/2017	VP1a	Blackbird		
28/03/2017	VP1a	Chaffinch		
28/03/2017	VP1a	Goldfinch		
28/03/2017	VP1a	Crossbill		
28/03/2017	VP9	Raven		
28/03/2017	VP9	Skylark		
28/03/2017	VP9	Woodpigeon		
28/03/2017	VP1a	Raven	1	
03/04/2017	VP5a	Robin	1	
03/04/2017	VP5a	Wren	3	
03/04/2017	VP5a	Dunlin	2	
03/04/2017	VP5a	Coal Tit	2	
04/04/2017	VP7a	Dunnock	2	
04/04/2017	VP7a	Meadow Pipit	4	courtship
04/04/2017	VP7a	Meadow Pipit	4	courtship
04/04/2017	VP7a	Robin	2	breeding-carrying nesting material
04/04/2017	VP7a	Robin	2	
04/04/2017	VP7a	Grey Wagtail	6	courtship
04/04/2017	VP7a	Wren	4	
04/04/2017	VP7a	Blackbird	4	
04/04/2017	VP7a	Pheasant	1	
04/04/2017	VP7a	Hooded Crow	4	
04/04/2017	VP7a	Bullfinch	4	adult female
04/04/2017	VP7a	Raven	2	pair
04/04/2017	VP7a	Woodpigeon	2	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
05/04/2017	VP8a	Mistle Thrush	2	
05/04/2017	VP8a	Robin	2	
05/04/2017	VP8a	Robin	4	
05/04/2017	VP8a	Wren	3	
05/04/2017	VP8a	Wren	2	
05/04/2017	VP8a	Chaffinch	4	
05/04/2017	VP8a	Wren	4	
05/04/2017	VP8a	Blackbird	1	
05/04/2017	VP8a	Chaffinch	3	
05/04/2017	VP8a	Woodpigeon	1	
06/04/2017	VP3	Dunnock	1	
06/04/2017	VP3	Robin	1	
06/04/2017	VP3	Blackbird	5	
06/04/2017	VP3	Wren	2	
06/04/2017	VP3	Chaffinch	1	
06/04/2017	VP3	Grey Wagtail	1	
06/04/2017	VP3	Bullfinch	2	pair
06/04/2017	VP3	Grey Wagtail	2	
06/04/2017	VP3	Bullfinch	2	
06/04/2017	VP3	Hooded Crow	2	
06/04/2017	VP3	Chaffinch	2	
06/04/2017	VP3	Woodpigeon	1	
06/04/2017	VP3	Woodpigeon	2	
07/04/2017	VP4a	Meadow Pipit	4	courtship
07/04/2017	VP4a	Wren	6	
07/04/2017	VP4a	Blackbird	2	
07/04/2017	VP4a	Woodpigeon	2	
14/04/2017	VP1a	Meadow Pipit	1	
14/04/2017	VP1a	Meadow Pipit	1	
14/04/2017	VP1a	Meadow Pipit	1	
14/04/2017	VP1a	Meadow Pipit	1	
14/04/2017	VP1a	Meadow Pipit	1	
14/04/2017	VP1a	Meadow Pipit	1	
14/04/2017	VP1a	Wren		
14/04/2017	VP1a	Blue Tit	1	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
14/04/2017	VP1a	Grey Wagtail	2	on way down from site
14/04/2017	VP1a	Wren		
14/04/2017	VP1a	Blue Tit	1	
14/04/2017	VP1a	Grey Wagtail	2	on way down from site
14/04/2017	VP1a	Wren		
14/04/2017	VP1a	Blue Tit	1	
14/04/2017	VP1a	Grey Wagtail	2	on way down from site
19/04/2017	VP2	Jay	1	
19/04/2017	VP2	Jay	1	
19/04/2017	VP2	Jay	1	
19/04/2017	VP2	Jay	1	
19/04/2017	VP2	Jay	1	
19/04/2017	VP2	Jay	1	
19/04/2017	VP2	Jay	1	
19/04/2017	VP2	Jay	1	
19/04/2017	VP2	Jay	1	
19/04/2017	VP2	Meadow Pipit	2	
19/04/2017	VP2	Meadow Pipit	2	
19/04/2017	VP2	Meadow Pipit	2	
19/04/2017	VP2	Wren	1	
19/04/2017	VP2	Hooded Crow	1	
19/04/2017	VP2	Wren	1	
19/04/2017	VP2	Hooded Crow	1	
19/04/2017	VP2	Wren	1	
19/04/2017	VP2	Hooded Crow	1	
19/04/2017	VP2	Raven	1	
19/04/2017	VP2	Raven	2	
19/04/2017	VP2	Raven	1	
19/04/2017	VP2	Raven	1	
19/04/2017	VP2	Raven	2	
19/04/2017	VP2	Raven	1	
19/04/2017	VP2	Raven	1	
19/04/2017	VP2	Raven	2	
19/04/2017	VP2	Raven	1	
19/04/2017	VP2	Woodpigeon	1	
19/04/2017	VP2	Woodpigeon	2	



**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
19/04/2017	VP2	Woodpigeon	1	
19/04/2017	VP2	Woodpigeon	2	
19/04/2017	VP2	Woodpigeon	1	
19/04/2017	VP2	Woodpigeon	2	
21/04/2017	VP9	Cuckoo	1	
21/04/2017	VP9	Hooded Crow	1	
21/04/2017	VP9	Hooded Crow	1	
21/04/2017	VP9	Cuckoo	1	
21/04/2017	VP9	Hooded Crow	1	
21/04/2017	VP9	Hooded Crow	1	
21/04/2017	VP9	Cuckoo	1	
21/04/2017	VP9	Hooded Crow	1	
21/04/2017	VP9	Hooded Crow	1	
21/04/2017	VP9	Raven	1	
21/04/2017	VP9	Raven	1	
21/04/2017	VP9	Raven	1	
21/04/2017	VP9	Woodpigeon	1	
21/04/2017	VP9	Woodpigeon	1	
21/04/2017	VP9	Woodpigeon	1	
21/04/2017	VP9	Woodpigeon	1	
21/04/2017	VP9	Woodpigeon	1	
21/04/2017	VP9	Woodpigeon	1	
21/04/2017	VP9	Woodpigeon	1	
21/04/2017	VP9	Woodpigeon	1	
21/04/2017	VP9	Woodpigeon	1	
21/04/2017	VP9	Woodpigeon	1	
21/04/2017	VP9	Woodpigeon	1	
21/04/2017	VP9	Woodpigeon	1	
08/05/2017	VP1a	Meadow Pipit		
08/05/2017	VP1a	Meadow Pipit		
08/05/2017	VP1a	Cuckoo		
08/05/2017	VP1a	Cuckoo		
08/05/2017	VP1a	Raven		
08/05/2017	VP1a	Raven		
08/05/2017	VP1a	Skylark		
08/05/2017	VP1a	Skylark		

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
08/05/2017	VP1a	Woodpigeon		
08/05/2017	VP1a	Woodpigeon		
08/05/2017	VP1a	Woodpigeon		
08/05/2017	VP1a	Woodpigeon		
09/05/2017	VP9	Meadow Pipit	2	display
09/05/2017	VP9	Swallow	1	
09/05/2017	VP9	Cuckoo		To NW
09/05/2017	VP9	Swallow	1	
09/05/2017	VP9	Skylark	2	display
10/05/2017	VP2	Meadow Pipit		
10/05/2017	VP2	Cuckoo		
10/05/2017	VP2	Cuckoo		
10/05/2017	VP2	Hooded Crow	1	
10/05/2017	VP2	Willow Warbler		
10/05/2017	VP2	Song Thrush		
10/05/2017	VP2	Blackbird	multiple	
10/05/2017	VP2	Wren		
10/05/2017	VP2	Chaffinch		
10/05/2017	VP2	Raven	2	
10/05/2017	VP2	Raven	2	
10/05/2017	VP2	Raven		
10/05/2017	VP2	Skylark		
10/05/2017	VP2	Woodpigeon		
10/05/2017	VP2	Woodpigeon	1	
16/05/2017	VP3	Jay		calling as HH fly over
16/05/2017	VP3	Meadow Pipit		
16/05/2017	VP3	Meadow Pipit		
16/05/2017	VP3	Blue Tit		
16/05/2017	VP3	Blackbird		
16/05/2017	VP3	Blackbird		
16/05/2017	VP3	Coal Tit		
16/05/2017	VP3	Wren		
16/05/2017	VP3	Raven		
16/05/2017	VP3	Raven		
16/05/2017	VP3	Skylark		
17/05/2017	VP4a	Mistle Thrush		

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
17/05/2017	VP4a	Meadow Pipit		
17/05/2017	VP4a	Siskin		
17/05/2017	VP4a	Blackbird		
17/05/2017	VP4a	Swallow		
17/05/2017	VP4a	Blackcap		
17/05/2017	VP4a	Cuckoo		
17/05/2017	VP4a	Raven		
17/05/2017	VP4a	Woodpigeon		
27/05/2017	VP7a	Meadow Pipit	1	WD4
27/05/2017	VP7a	Cuckoo		
27/05/2017	VP7a	Hooded Crow	1	WD4
27/05/2017	VP7a	Stonechat		
27/05/2017	VP7a	Blackbird		
27/05/2017	VP7a	Skylark		
27/05/2017	VP7a	Woodpigeon	2	WD4
30/05/2017	VP5a	Meadow Pipit		
30/05/2017	VP5a	Robin		
30/05/2017	VP5a	Blackcap		
30/05/2017	VP5a	Cuckoo	1	
30/05/2017	VP5a	Hooded Crow	1	
30/05/2017	VP5a	Raven	2	
30/05/2017	VP5a	Raven	1	
30/05/2017	VP5a	Raven	1	
30/05/2017	VP5a	Skylark		
31/05/2017	VP8a	Dunnock		
31/05/2017	VP8a	Jay	SEVERAL	
31/05/2017	VP8a	Robin		
31/05/2017	VP8a	Blackbird		
31/05/2017	VP8a	Wren		
31/05/2017	VP8a	Raven	2	
02/06/2017	VP2	Meadow Pipit		
02/06/2017	VP2	Cuckoo		Calling to E
02/06/2017	VP2	Hooded Crow		
02/06/2017	VP2	Raven		
02/06/2017	VP2	Wren		
02/06/2017	VP2	Blackbird		

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
02/06/2017	VP2	Skylark		
02/06/2017	VP2	Woodpigeon		
02/06/2017	VP2	Woodpigeon		
09/06/2017	VP3	Jay		
09/06/2017	VP3	Meadow Pipit		
09/06/2017	VP3	Raven	3	
09/06/2017	VP3	Raven	3	Display
09/06/2017	VP3	Hooded Crow	1	
09/06/2017	VP3	Hooded Crow	1	
09/06/2017	VP3	Hooded Crow		
09/06/2017	VP3	Hooded Crow	1	
09/06/2017	VP3	Swallow	2	
09/06/2017	VP3	Hooded Crow	1	
09/06/2017	VP3	Wren		
09/06/2017	VP3	Hooded Crow	1	
09/06/2017	VP3	Skylark		Display
09/06/2017	VP3	Woodpigeon	1	
26/06/2017	VP7a	Meadow Pipit		
26/06/2017	VP7a	Blackbird		
26/06/2017	VP7a	Siskin	2	
26/06/2017	VP7a	Wren		
26/06/2017	VP7a	Swallow	2	
26/06/2017	VP7a	Goldfinch	4	
26/06/2017	VP7a	Skylark		
26/06/2017	VP7a	Woodpigeon		flying
26/06/2017	VP7a	Woodpigeon	5	flying
27/06/2017	VP1a	Meadow Pipit		
27/06/2017	VP1a	Swallow	4	
27/06/2017	VP1a	Wren		
27/06/2017	VP1a	Goldfinch		
27/06/2017	VP1a	Blackbird		
27/06/2017	VP1a	Skylark		
27/06/2017	VP1a	Woodpigeon		
28/06/2017	VP8a	Duncock		
28/06/2017	VP8a	Jay	1	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
28/06/2017	VP8a	Raven	2	
28/06/2017	VP8a	Raven	2	
28/06/2017	VP8a	Wren	multiple	
28/06/2017	VP8a	Blackbird		
28/06/2017	VP8a	Great Tit		
28/06/2017	VP8a	Woodpigeon		
28/06/2017	VP8a	Woodpigeon		
29/06/2017	VP5a	Raven	2	Flying and calling
29/06/2017	VP5a	Wren		
29/06/2017	VP5a	Blackbird		
29/06/2017	VP5a	Swallow		
29/06/2017	VP5a	Siskin		
29/06/2017	VP5a	Chaffinch		
30/06/2017	VP4a	Meadow Pipit		
30/06/2017	VP4a	Willow Warbler		
30/06/2017	VP4a	Grasshopper Warbler		
30/06/2017	VP4a	Swallow		
30/06/2017	VP4a	Wren		
30/06/2017	VP4a	Skylark		
03/07/2017	VP9	Meadow Pipit		
03/07/2017	VP9	Raven	5	Traveling
03/07/2017	VP9	Hooded Crow	1	
03/07/2017	VP9	Hooded Crow	2	
03/07/2017	VP9	Goldcrest		
03/07/2017	VP9	Goldfinch	14	
03/07/2017	VP9	Hooded Crow		
11/07/2017	VP5a	Meadow Pipit	4	Flying, young also
11/07/2017	VP5a	Raven		
11/07/2017	VP5a	Blackbird	1	
11/07/2017	VP5a	Hooded Crow		
11/07/2017	VP5a	Wren		
11/07/2017	VP5a	Siskin		
11/07/2017	VP5a	Chaffinch		
11/07/2017	VP5a	Woodpigeon	3	Perched
14/07/2017	VP2	Meadow Pipit		

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
14/07/2017	VP2	Raven	1	Flying
14/07/2017	VP2	Wren		
14/07/2017	VP2	Swallow	2	
14/07/2017	VP2	Woodpigeon	7	Perched and flying within WD4
14/07/2017	VP2	Woodpigeon	2	Flying in collision zone
14/07/2017	VP2	Woodpigeon		
14/07/2017	VP2	Woodpigeon		
17/07/2017	VP1a	Meadow Pipit		
17/07/2017	VP1a	Raven	3	Flying
17/07/2017	VP1a	Raven	1	
17/07/2017	VP1a	Swallow	12	Feeding
17/07/2017	VP1a	Hooded Crow	2	Perched, calling, flying
17/07/2017	VP1a	Hooded Crow	2	
18/07/2017	VP3	Meadow Pipit		
18/07/2017	VP3	Raven		
18/07/2017	VP3	Wren		
18/07/2017	VP3	Blue Tit		
18/07/2017	VP3	Swallow		
18/07/2017	VP3	Hooded Crow		
20/07/2017	VP7a	Hooded Crow	3	Travelling
20/07/2017	VP4a	Meadow Pipit		
20/07/2017	VP4a	Raven	1	Flying
20/07/2017	VP4a	Wren		
20/07/2017	VP4a	Chaffinch		
20/07/2017	VP4a	Coal Tit		
20/07/2017	VP4a	Woodpigeon	4	Perched then flying
20/07/2017	VP7a	Woodpigeon		Travelling
20/07/2017	VP7a	Woodpigeon	2	Travelling
20/07/2017	VP7a	Woodpigeon	2	Travelling
20/07/2017	VP7a	Woodpigeon		Travelling
20/07/2017	VP7a	Woodpigeon	2	Landing in WD4
20/07/2017	VP7a	Woodpigeon	2	Travelling
20/07/2017	VP7a	Woodpigeon		Travelling
20/07/2017	VP7a	Woodpigeon	2	Landing in WD4
20/07/2017	VP7a	Woodpigeon		Travelling
20/07/2017	VP7a	Woodpigeon	2	Landing in WD4

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
20/07/2017	VP7a	Woodpigeon		Landing in WD4
24/07/2017	VP8a	Raven		Travelling
24/07/2017	VP8a	Hooded Crow		Travelling
24/07/2017	VP8a	Woodpigeon		Travelling
24/07/2017	VP8a	Woodpigeon		Travelling
24/07/2017	VP8a	Woodpigeon		Travelling
24/07/2017	VP8a	Woodpigeon		Travelling
24/07/2017	VP8a	Woodpigeon		Travelling
24/07/2017	VP8a	Woodpigeon		Travelling
25/07/2017	VP9	Raven		Travelling
10/08/2017	VP7a	Robin	3	
10/08/2017	VP7a	Raven	11	
10/08/2017	VP7a	Wren	10	
10/08/2017	VP7a	Marsh Tit	2	
10/08/2017	VP7a	Willow Warbler	1	
10/08/2017	VP7a	Chaffinch	4	
10/08/2017	VP7a	Hooded Crow	2	
10/08/2017	VP7a	Woodpigeon	3	
11/08/2017	VP3	Chaffinch	2	
14/08/2017	VP8a	Meadow Pipit	1	calling
14/08/2017	VP8a	Wren	1	calling
14/08/2017	VP8a	Coal Tit	1	calling
14/08/2017	VP8a	Hooded Crow		
15/08/2017	VP1a	Meadow Pipit	1	
15/08/2017	VP1a	Raven	2	
15/08/2017	VP1a	Starling	60	
15/08/2017	VP1a	Swallow	10	
16/08/2017	VP3	Wren	2	
17/08/2017	VP4a	Meadow Pipit	1	
17/08/2017	VP4a	Wren	2	
17/08/2017	VP4a	Blackbird	2	
17/08/2017	VP4a	Blue Tit	5	
17/08/2017	VP4a	Willow Warbler	1	
17/08/2017	VP4a	Woodpigeon	2	
24/08/2017	VP5a	Duncock	1	
24/08/2017	VP5a	Wren	4	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
24/08/2017	VP5a	Hooded Crow	1	
24/08/2017	VP5a	Coal Tit	2	
24/08/2017	VP5a	Chaffinch	1	
24/08/2017	VP5a	Woodpigeon	1	
25/08/2017	VP2	Robin	2	
25/08/2017	VP2	Wren	3	
25/08/2017	VP2	Blackbird	1	
25/08/2017	VP2	Coal Tit	4	
31/08/2017	VP9	Jay		
31/08/2017	VP9	Meadow Pipit		
31/08/2017	VP9	Raven	2	
31/08/2017	VP9	Raven	4	
31/08/2017	VP9	Lesser Redpoll		
31/08/2017	VP9	Swallow	3	
31/08/2017	VP9	Hooded Crow		
01/09/2017		Raven	2	
01/09/2017	VP7a	Blackbird	4	
01/09/2017		Wren	3	
01/09/2017		Swallow	10	
01/09/2017		Coal Tit	2	
01/09/2017		Woodpigeon	2	
07/09/2017		Chaffinch	2	
07/09/2017		Wren	1	
11/09/2017		Mistle Thrush	1	
11/09/2017		Meadow Pipit	3	
11/09/2017		Robin	1	
11/09/2017		Raven	1	
11/09/2017		Wren	2	
11/09/2017		Coal Tit	3	
11/09/2017		Swallow	5	
12/09/2017		Swallow	2	
13/09/2017		Raven	3	
13/09/2017		Swallow	5	
18/09/2017		Meadow Pipit	5	
18/09/2017		Raven	3	
18/09/2017		Swallow	10	



**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
19/09/2017		Wren	1	
19/09/2017		Woodpigeon	2	
20/09/2017	VP1a	Woodpigeon		Travelling
21/09/2017	VP2	Jay		Perched in WD4
21/09/2017	VP2	Raven		Travelling
21/09/2017	VP2	Raven		Travelling
21/09/2017	VP2	Raven		Travelling
21/09/2017	VP2	Rook	2	Travelling
21/09/2017	VP2	Rook		Travelling
21/09/2017	VP2	Woodpigeon		Travelling
02/10/2017	VP7a	Meadow Pipit	2	
02/10/2017	VP7a	Raven	3	
02/10/2017	VP7a	Chaffinch	2	
02/10/2017	VP7a	Wren	3	
03/10/2017	VP8a	Raven	1	
03/10/2017	VP8a	Chaffinch	2	
03/10/2017	VP8a	Coal Tit	3	
10/10/2017	VP3	Robin	2	
10/10/2017	VP3	Robin	1	
10/10/2017	VP3	Wren	4	
10/10/2017	VP3	Goldcrest	1	
10/10/2017	VP3	Coal Tit	10	
10/10/2017	VP3	Woodpigeon	1	
11/10/2017	VP5a	Raven	2	
11/10/2017	VP5a	Hooded Crow	2	
11/10/2017	VP5a	Wren	2	
11/10/2017	VP5a	Marsh Tit	4	
11/10/2017	VP5a	Goldcrest	3	
11/10/2017	VP5a	Coal Tit	1	
12/10/2017	VP4a	Meadow Pipit	1	
12/10/2017	VP4a	Raven	4	
12/10/2017	VP4a	Wren	1	
12/10/2017	VP4a	Blue Tit	2	
12/10/2017	VP4a	Stonechat	1	
12/10/2017	VP4a	Long-tailed Tit	15	
13/10/2017	VP9	Meadow Pipit	1	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
17/10/2017	VP5a	Raven	2	
17/10/2017	VP5a	Wren	1	
17/10/2017	VP5a	Chaffinch	1	
17/10/2017	VP5a	Hooded Crow	1	
20/10/2017	VP9	Meadow Pipit	1	
23/10/2017	VP1a	Raven	4	Travelling
23/10/2017	VP1a	Raven		Perched in WD4
23/10/2017	VP1a	Hooded Crow		Perched in WD4
23/10/2017	VP1a	Hooded Crow		Travelling
23/10/2017	VP1a	Rook		Travelling
27/10/2017	VP2	Rook		Perched in WD4
27/10/2017	VP2	Hooded Crow		Travelling
27/10/2017	VP2	Chaffinch		Perched on fallen dead wood
27/10/2017	VP2	Bullfinch	3	Travelling
27/10/2017	VP2	Wren		Calling from cover
27/10/2017	VP2	Hooded Crow		Travelling
01/11/2017	VP7a	Dunnock	1	
01/11/2017	VP7a	Meadow Pipit	5	
01/11/2017	VP7a	Raven	2	
01/11/2017	VP7a	Stonechat	2	
01/11/2017	VP7a	Blackbird	1	
01/11/2017	VP7a	Wren	1	
02/11/2017	VP8a	Robin	1	
02/11/2017	VP8a	Blue Tit	2	
02/11/2017	VP8a	Long-tailed Tit	12	
02/11/2017	VP8a	Coal Tit	1	
02/11/2017	VP8a	Goldcrest	1	
07/11/2017	VP4a	Dunnock	1	
07/11/2017	VP4a	Raven	1	
07/11/2017	VP4a	Bullfinch	3	
07/11/2017	VP4a	Blue Tit	3	
07/11/2017	VP4a	Stonechat	1	
13/11/2017	VP2	Dunnock	3	
13/11/2017	VP2	Robin	4	
13/11/2017	VP2	Chaffinch	3	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
13/11/2017	VP2	Hooded Crow	1	
14/11/2017	VP5a	Goldfinch	3	
14/11/2017	VP5a	Hooded Crow	2	
14/11/2017	VP5a	Wren	3	
08/12/2017	VP8a	Robin	1	
08/12/2017	VP8a	Raven	2	
08/12/2017	VP8a	Raven	2	
08/12/2017	VP8a	Wren	2	
08/12/2017	VP8a	Hooded Crow	2	
08/12/2017	VP8a	Long-tailed Tit	6	
08/12/2017	VP8a	Wren	1	
08/12/2017	VP8a	Hooded Crow	1	
13/12/2017	VP1a	Meadow Pipit	2	Landing on PB2
13/12/2017	VP1a	Raven		Travelling
13/12/2017	VP1a	Rook	2	Travelling
13/12/2017	VP1a	Rook	2	Travelling
13/12/2017	VP9	Jay		SOUND OF
13/12/2017	VP9	Raven	2	
13/12/2017	VP9	Hooded Crow	1	
13/12/2017	VP9	Woodpigeon	1	
14/12/2017	VP2	Hooded Crow	2	Travelling
15/12/2017	VP4a	Wren	1	
15/12/2017	VP4a	Blue Tit	1	
15/12/2017	VP4a	Hooded Crow	2	
15/12/2017	VP4a	Coal Tit	1	
20/12/2017	VP3	Bullfinch		Calling from WD4
20/12/2017	VP3	Hooded Crow	2	Travelling
20/12/2017	VP3	Woodpigeon	1	Travelling
21/12/2017	VP2	Jay		Calling from WD4
21/12/2017	VP5a	Meadow Pipit	1	
21/12/2017	VP5a	Raven	1	
21/12/2017	VP5a	Raven	3	
21/12/2017	VP5a	Raven	1	
21/12/2017	VP5a	Long-tailed Tit	2	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
21/12/2017	VP5a	Bullfinch	1	
21/12/2017	VP5a	Wren	1	
21/12/2017	VP5a	Hooded Crow	2	
22/12/2017	VP7a	Wren	1	
22/12/2017	VP7a	Blackbird	1	
22/12/2017	VP7a	Hooded Crow	1	
22/12/2017	VP7a	Siskin	4	
22/12/2017	VP7a	Wren	1	
22/12/2017	VP7a	Goldfinch	6	
22/12/2017	VP7a	Woodpigeon	2	
22/12/2017	VP7a	Woodpigeon	1	
08/01/2018	VP2	Raven	3	
08/01/2018	VP2	Wren	1	
10/01/2018	VP7a	Meadow Pipit	2	
10/01/2018	VP7a	Robin	1	
10/01/2018	VP7a	Raven	2	
10/01/2018	VP7a	Wren	2	
15/01/2018	VP1a	Raven		Travelling
15/01/2018	VP1a	Raven		Travelling
15/01/2018	VP1a	Raven		Travelling
15/01/2018	VP1a	Raven		Travelling
18/01/2018	VP4a	Raven	2	Travelling
18/01/2018	VP4a	Hooded Crow		Travelling
19/01/2018	VP3	Raven	2	Travelling
19/01/2018	VP3	Hooded Crow		Travelling
23/01/2018	VP8a	Raven		Travelling
23/01/2018	VP8a	Hooded Crow		Travelling
23/01/2018	VP8a	Bullfinch	6	Travelling
23/01/2018	VP8a	Bullfinch		Travelling
24/01/2018	VP3	Raven		Travelling
24/01/2018	VP3	Hooded Crow		Travelling
30/01/2018	VP9	Raven		Travelling
05/02/2018	VP3	Robin	1	
05/02/2018	VP3	Song Thrush	1	
05/02/2018	VP3	Wren	3	
06/02/2018	VP4a	Meadow Pipit	2	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
06/02/2018	VP4a	Robin	1	
06/02/2018	VP4a	Raven	2	
06/02/2018	VP4a	Long-tailed Tit	5	
06/02/2018	VP4a	Woodpigeon	1	
07/02/2018	VP5a	Raven	2	
08/02/2018	VP8a	Dunnock	4	
08/02/2018	VP8a	Robin	2	
08/02/2018	VP8a	Blackbird	2	
08/02/2018	VP8a	Wren	3	
08/02/2018	VP8a	Bullfinch	10	
08/02/2018	VP8a	Woodpigeon	2	
15/02/2018	VP5a	Raven	1	
15/02/2018	VP5a	Hooded Crow	1	
15/02/2018	VP5a	Woodpigeon	2	
16/02/2018	VP1a	Meadow Pipit	2	
16/02/2018	VP1a	Raven	2	
16/02/2018	VP1a	Wren	1	
16/02/2018	VP1a	Stonechat	1	
20/02/2018	VP9	Raven	4	
21/02/2018	VP2	Rook	2	Travelling
21/02/2018	VP2	Woodpigeon		Landing in WD4
21/02/2018	VP2	Woodpigeon		Perched in WD4
21/02/2018	VP2	Woodpigeon	2	Travelling
21/02/2018	VP2	Woodpigeon	2	Travelling
22/02/2018	VP7a	Meadow Pipit		Display flight and calling
22/02/2018	VP7a	Hooded Crow		Landing in WD4
22/02/2018	VP7a	Hooded Crow		Travelling
22/02/2018	VP7a	Hooded Crow		Travelling
22/02/2018	VP7a	Rook		Travelling
22/02/2018	VP7a	Woodpigeon		Travelling
22/02/2018	VP7a	Woodpigeon	2	Travelling
22/02/2018	VP7a	Woodpigeon		Travelling
22/02/2018	VP7a	Woodpigeon		Travelling
07/03/2018	VP8a	Mistle Thrush	20	Travelling
07/03/2018	VP8a	Blackbird	1	
07/03/2018	VP8a	Coal Tit	2	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
07/03/2018	VP8a	Chaffinch	1	
07/03/2018	VP8a	Woodpigeon	2	
08/03/2018	VP2	Mistle Thrush	5	
08/03/2018	VP2	Common Raven	2	
08/03/2018	VP2	Blackbird	1	
08/03/2018	VP2	Wren	1	
08/03/2018	VP2	Woodpigeon	1	
08/03/2018	VP2	Woodpigeon	1	
09/03/2018	VP3	Mistle Thrush	2	
12/03/2018	VP4a	Mistle Thrush	1	
12/03/2018	VP4a	Mistle Thrush	3	
12/03/2018	VP4a	Meadow Pipit	6	Displaying
20/03/2018	VP5a	Mistle Thrush	1	
20/03/2018	VP5a	Mistle Thrush	3	
20/03/2018	VP5a	Meadow Pipit	1	
20/03/2018	VP5a	Common Raven	2	
20/03/2018	VP5a	Coal Tit	1	
20/03/2018	VP5a	Grey Wagtail	2	
20/03/2018	VP5a	Wigeon	2	
20/03/2018	VP5a	Chaffinch	1	
21/03/2018	VP9	Mistle Thrush	3	
21/03/2018	VP9	Meadow Pipit	1	
21/03/2018	VP9	Meadow Pipit	1	
27/03/2018	VP1a	Meadow Pipit	N	Displaying
27/03/2018	VP1a	Raven	N	Travelling
27/03/2018	VP1a	Raven	N	Travelling
27/03/2018	VP1a	Skylark	N	Flying and Singing
27/03/2018	VP1a	Hooded Crow	N	Travelling
27/03/2018	VP1a	Hooded Crow	N	Travelling
27/03/2018	VP1a	Hooded Crow	N	Travelling
27/03/2018	VP1a	Hooded Crow	N	Travelling
27/03/2018	VP1a	Hooded Crow	N	Travelling

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
27/03/2018	VP1a	Hooded Crow	N	Travelling
27/03/2018	VP1a	Woodpigeon	N	Landing in WD4
28/03/2018	VP7a	Woodpigeon	N	Travelling
28/03/2018	VP7a	Woodpigeon	N	Landing in WD4
28/03/2018	VP7a	Woodpigeon	N	Landing in WD4
28/03/2018	VP7a	Woodpigeon	N	Travelling
28/03/2018	VP7a	Woodpigeon	N	Travelling
28/03/2018	VP7a	Woodpigeon	N	Travelling
03/04/2018	3	Pied Wagtail	1	
03/04/2018	3	Grey Wagtail	1	
03/04/2018	3	Chaffinch	1	
03/04/2018	3	Meadow Pipit	3	
03/04/2018	3	Coal Tit	1	
04/04/2018	8a	Robin	2	
05/04/2018	8a	Blackbird	1	
06/04/2018	8a	Chaffinch	3	
07/04/2018	8a	Coal Tit	2	
08/04/2018	8a	Raven	5	
16/04/2018	7a	Song Thrush	1	
16/04/2018	7a	Blackbird	1	
16/04/2018	7a	Meadow Pipit	3	
16/04/2018	7a	Wren	1	
16/04/2018	7a	Mistle Thrush	2	
16/04/2018	7a	Mistle Thrush	1	
16/04/2018	7a	Woodpigeon	2	
16/04/2018	7a	Chaffinch	1	
16/04/2018	7a	Stonechat	1	
17/04/2018	2	Blackbird	2	
17/04/2018	2	Song Thrush	1	
17/04/2018	2	Mistle Thrush	2	
17/04/2018	2	Meadow Pipit	3	
17/04/2018	2	Coal Tit	1	
17/04/2018	2	Chaffinch	1	
17/04/2018	2	Willow Warbler	5	
17/04/2018	2	Woodpigeon	2	
17/04/2018	2	Grey Wagtail	1	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
17/04/2018	2	Pheasant	1	
17/04/2018	2	Hooded Crow	1	
17/04/2018	2	Blue Tit	1	
17/04/2018	2	Great Tit	1	
17/04/2018	2	Chaffinch	5	
17/04/2018	2	Mistle Thrush	4	
17/04/2018	2	Crossbill	2	
18/04/2018	7a	Mistle Thrush	3	
18/04/2018	7A	Meadow Pipit	3	
18/04/2018	7a	Hooded Crow	2	
19/04/2018	9	Mistle Thrush	5	
19/04/2018	9	Blackbird	1	
19/04/2018	9	Goldcrest	1	
19/04/2018	9	Coal Tit	1	
19/04/2018	9	Meadow Pipit	2	
19/04/2018	4a	Willow Warbler	3	
19/04/2018	4a	Chaffinch	3	
19/04/2018	4a	Woodpigeon	1	
19/04/2018	4a	Mistle Thrush	2	
20/04/2018	5a	Cuckoo	1	
20/04/2018	5a	Coal Tit	1	
20/04/2018	5a	Chaffinch	2	
20/04/2018	5a	Woodpigeon	2	
20/04/2018	5a	Wren	2	
20/04/2018	5a	Raven	1	
20/04/2018	5a	Pheasant	1	
20/04/2018	5a	Meadow Pipit	3	
23/04/2018	4	Wren	1	
23/04/2018	4	Chaffinch	2	
23/04/2018	4	Coal Tit	1	
23/04/2018	4	Robin	1	
23/04/2018	4	Blackbird	1	
23/04/2018	4	Woodpigeon	1	
23/04/2018	4	Raven	1	
08/05/2018	7a	Meadow Pipit	2	



**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
08/05/2018	7a	Pied Wagtail	1	
08/05/2018	7a	Hooded Crow	1	
08/05/2018	7a	Willow Warbler	1	
08/05/2018	7a	Chaffinch	2	
08/05/2018	7a	Mistle Thrush	2	
08/05/2018	7a	Cuckoo	1	
08/05/2018	7a	Wren	1	
08/05/2018	7a	Song Thrush	1	
08/05/2018	7a	Blackbird	1	
08/05/2018	7a	Woodpigeon	2	
16/05/2018	9	Chaffinch	2	
16/05/2018	9	Meadow Pipit	2	
16/05/2018	9	Meadow Pipit	2	
16/05/2018	9	Meadow Pipit	1	
16/05/2018	9	Mistle Thrush	4	
16/05/2018	9	Swallow	2	
16/05/2018	8	Cuckoo	1	
16/05/2018	8	Chaffinch	2	
16/05/2018	8	Woodpigeon	2	
16/05/2018	8	Mistle Thrush	1	
16/05/2018	8	Coal Tit	1	
16/05/2018	8	Hooded Crow	2	
16/05/2018	8	Meadow Pipit	1	
16/05/2018	8	Raven	1	
16/05/2018	8	Robin	1	
17/05/2018	3	Swallow	1	
17/05/2018	3	Coal Tit	1	
17/05/2018	3	Meadow Pipit	1	
17/05/2018	3	Chaffinch	1	
17/05/2018	3	Raven	1	
17/05/2018	3	Grey Wagtail	1	
22/05/2018	5	Hooded Crow	1	
22/05/2018	5	Chaffinch	2	
22/05/2018	5	Raven	1	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
22/05/2018	5	Pied Wagtail	1	
22/05/2018	5	Meadow Pipit	2	
22/05/2018	5	Cuckoo	1	
22/05/2018	5	Mistle Thrush	1	
22/05/2018	5	Siskin	2	
24/05/2018	2	Hooded Crow	2	
24/05/2018	2	Meadow Pipit	6	
24/05/2018	2	Blackbird	2	
24/05/2018	2	Mistle Thrush	3	
24/05/2018	2	Stonechat	2	
24/05/2018	2	Willow Warbler	3	
24/05/2018	2	Chaffinch	2	
24/05/2018	2	Cuckoo	2	
24/05/2018	2	Woodpigeon	2	
24/05/2018	2	Song Thrush	3	
28/05/2018	1a	Skylark	2	
28/05/2018	1a	Meadow Pipit	5	
28/05/2018	1a	Chaffinch	1	
28/05/2018	1a	Woodpigeon	11	
28/05/2018	1a	Swallow	1	
28/05/2018	1a	Swift	5	
28/05/2018	1a	Mistle Thrush	2	
28/05/2018	1a	Wren	2	
28/05/2018	1a	Blackbird	1	
29/05/2018	4	Cuckoo	1	
29/05/2018	4	Chaffinch	2	
29/05/2018	4	Coal Tit	1	
29/05/2018	4	Meadow Pipit	3	
29/05/2018	4	Woodpigeon	4	
29/05/2018	4	Mistle Thrush	1	
04/06/2018	3	Chaffinch	3	
04/06/2018	3	Coal Tit	1	
04/06/2018	3	Grey Wagtail	1	
04/06/2018	3	Meadow Pipit	2	
04/06/2018	3	Swallow	1	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
05/06/2018	8	Chaffinch	4	
05/06/2018	8	Coal Tit	1	
05/06/2018	8	Meadow Pipit	2	
05/06/2018	8	Wren	2	
05/06/2018	8	Siskin	2	
05/06/2018	8	Cuckoo	2	
05/06/2018	8	Blackbird	1	
05/06/2018	8	Woodpigeon	6	
05/06/2018	8	Mistle Thrush	2	
05/06/2018	8	Willow Warbler	2	
05/06/2018	8	Bullfinch	1	
05/06/2018	8	Raven	1	
05/06/2018	8	Swallow	1	
06/06/2018	7a	Chaffinch	2	
06/06/2018	7a	Wren	1	
06/06/2018	7a	Woodpigeon	2	
06/06/2018	7a	Willow Warbler	2	
06/06/2018	7a	Meadow Pipit	1	
06/06/2018	7a	Chaffinch	3	
06/06/2018	7a	Blackbird	1	
06/06/2018	7a	Blackbird	1	
06/06/2018	7a	Woodpigeon	4	
06/06/2018	7a	Song Thrush	2	travelling
06/06/2018	7a	Whitethroat	1	
06/06/2018	7a	Dunnock	1	
06/06/2018	7a	Meadow Pipit	2	
06/06/2018	7a	Mistle Thrush	1	alarm
06/06/2018	7a	Raven	1	
06/06/2018	7a	Swallow	2	
07/06/2018	9	Meadow Pipit	1	Song flight
07/06/2018	9	Meadow Pipit	4	displaying 2-3 territories
07/06/2018	9	Woodpigeon	10	travelling
07/06/2018	9	Swift	1	travelling NE
07/06/2018	9	Swift	1	travelling NE
07/06/2018	9	Swift	3	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
07/06/2018	9	Swallow	2	
11/06/2018	2	Stonechat	2	
11/06/2018	2	Mistle Thrush	3	
11/06/2018	2	Woodpigeon	3	
11/06/2018	2	Meadow Pipit	2	
11/06/2018	2	Blackbird	1	
11/06/2018	2	Chaffinch	4	
11/06/2018	2	Dunnock	1	
11/06/2018	2	Wren	1	
11/06/2018	2	Hooded Crow	2	
11/06/2018	2	Raven	2	
11/06/2018	2	Willow Warbler	1	
12/06/2018	1a	Meadow Pipit	3	Song flight
12/06/2018	1a	Chaffinch	1	
12/06/2018	1a	Woodpigeon	2	
12/06/2018	1a	Swallow	3	
12/06/2018	1a	Raven	3	Calling
12/06/2018	1a	Jay	1	
12/06/2018	1a	Hooded Crow	1	juv.
12/06/2018	1a	Blackbird	1	
19/06/2018	4	Woodpigeon	1	
19/06/2018	4	Chaffinch	2	
19/06/2018	4	Blackbird	1	
19/06/2018	4	Coal Tit	1	
20/06/2018	5	Cuckoo	1	
20/06/2018	5	Chaffinch	4	
20/06/2018	5	Woodpigeon	3	
20/06/2018	5	Hooded Crow	3	
20/06/2018	5	Siskin	2	
20/06/2018	5	Chiffchaff	2	
20/06/2018	5	Robin	1	
20/06/2018	5	Blackbird	1	
11/07/2018	8	Swallow	8	
11/07/2018	8	Mistle Thrush	2	
11/07/2018	8	Lesser Redpoll	6	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
11/07/2018	8	Woodpigeon	6	
11/07/2018	8	Raven	2	
12/07/2018	1	Swallow	10	
12/07/2018	1	House Martin	4	
12/07/2018	1	Mistle Thrush	4	
12/07/2018	1	Song Thrush	2	
12/07/2018	1	Blackbird	2	
12/07/2018	1	Woodpigeon	8	
12/07/2018	1	Hooded Crow	2	
12/07/2018	1	Skylark	1	
16/07/2018	7a	Woodpigeon	4	
16/07/2018	7a	Hooded Crow	2	
16/07/2018	7a	Swallow	4	
16/07/2018	7a	Wren	1	
16/07/2018	7a	Mistle Thrush	30	Travelling East
17/07/2018	2	Woodpigeon	3	
17/07/2018	2	Hooded Crow	2	
17/07/2018	2	Stonechat	1	
17/07/2018	2	Swallow	3	
24/07/2018	3	Swallow	5	
24/07/2018	3	Meadow Pipit	2	
24/07/2018	3	Skylark	1	
24/07/2018	3	Hooded Crow	2	
25/07/2018	4	Woodpigeon	6	
25/07/2018	4	Starling	8	
25/07/2018	4	Linnet	4	
25/07/2018	4	Hooded Crow	2	
07/08/2018	7a	Woodpigeon	2	
07/08/2018	7a	Meadow Pipit	1	
07/08/2018	7a	Wren	1	
07/08/2018	7a	Coal Tit	1	
07/08/2018	7a	Hooded Crow	1	
07/08/2018	7a	Chaffinch	3	
07/08/2018	7a	Raven	2	
07/08/2018	7a	Jay	1	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
07/08/2018	7a	Blackbird	1	
08/08/2018	2	Willow Warbler	1	
08/08/2018	2	Jay	2	
08/08/2018	2	Woodpigeon	1	
08/08/2018	2	Chaffinch	3	
08/08/2018	2	Meadow Pipit	1	
08/08/2018	2	Wren	1	
08/08/2018	2	Raven	4	
08/08/2018	2	Hooded Crow	2	
08/08/2018	2	Swallow	2	
09/08/2018	8a	Chaffinch	3	
09/08/2018	8a	Wren	2	
09/08/2018	8a	Swallow	8	
09/08/2018	8a	Robin	1	
09/08/2018	8a	Raven	1	
09/08/2018	8a	Woodpigeon	1	
10/08/2018	5a	Chaffinch	30	
10/08/2018	5a	Jay	2	
10/08/2018	5a	Woodpigeon	3	
10/08/2018	5a	Wren	1	
10/08/2018	5a	Raven	2	
13/08/2018	4a	Woodpigeon	2	
13/08/2018	4a	Wren	2	
13/08/2018	4a	Blue Tit	1	
13/08/2018	4a	Willow Warbler	1	
13/08/2018	4a	Swallow	3	
14/08/2018	1a	Wren	1	
14/08/2018	1a	Hooded Crow	2	
14/08/2018	1a	Jay	1	
20/08/2018	3	Robin	3	
20/08/2018	3	Blackbird	1	
20/08/2018	3	Wren	1	
20/08/2018	3	Swallow	3	
20/08/2018	3	Goldcrest	1	
20/08/2018	3	Willow Warbler	1	
21/08/2018	5	Meadow Pipit	5	

**Table 5: Vantage Point Survey - Non-Target Species Data**

Date:	VP No.	Species	Est no. individuals (if recorded)	Notes
21/08/2018	2	Wren	2	
21/08/2018	1	Raven	1	
21/08/2018	5	Swallow	5	
27/08/2018	9	Meadow Pipit	2	
27/08/2018	9	Raven	2	
27/08/2018	9	Swallow	6	
20/20/2018	VP9	Meadow Pipit	7	

**Table 6: Red Grouse Survey Data**

Map Reference No.	Date	Transect Number	Species	No. of Birds	Time of flight	Duration of flight (s)	Notes on habitat and activity	GPS Ref. (X)	GPS Ref. (Y)
RG001	23/03/2017	4	Red Grouse	1			PB2, (Upland blanket bog)	163,263	176,454
RG002	23/03/2017	4	Red Grouse	1			PB2, (Upland blanket bog)	163,326	176,490
RG003	23/03/2017	4	Red Grouse	1			PB2, (Upland blanket bog)	163,643	176,465
RG004	23/03/2017	4	Red Grouse	1			PB2, (Upland blanket bog)	163,700	176,392
RG005	23/03/2017	4	Red Grouse	1			PB2, (Upland blanket bog)	163,387	176,266
RG006	23/03/2017	4	Red Grouse	1			PB2, (Upland blanket bog)	164,480	176,204
RG007	13/03/2018	1	Red Grouse	1	11:10:19	5	PB2, (Upland blanket bog) Flew away, calling	161,206	175,548



**Table 6: Red Grouse Survey Data**

Map Reference No.	Date	Transect Number	Species	No. of Birds	Time of flight	Duration of flight (s)	Notes on habitat and activity	GPS Ref. (X)	GPS Ref. (Y)
RG008	13/03/2018	1	Red Grouse	1	12:08:20	-	PB2, (Upland blanket bog) Calling	159,912	175,722
RG009	13/03/2018	1	Red Grouse	1	13:15:22	10	PB2, (Upland blanket bog) Flew away, calling	161,496	175,254
RG010	13/03/2018	1	Red Grouse	1	13:16:52	15	PB2, (Upland blanket bog) Towards calling then away	161,082	175,181
RG011	13/03/2018	4	Red Grouse	1	15:06:37	10	PB2, (Upland blanket bog) Flushed	165,348	176,036
RG012	13/03/2018	4	Red Grouse	1	15:11:49	10	PB2, (Upland blanket bog) Flew away, calling	165,651	175,948
RG013	13/03/2018	4	Red Grouse	1	15:33:17	10	PB2, (Upland blanket bog) Flew away, calling	165,672	175,779
RG014	13/03/2018	4	Red Grouse	1	15:33:36	15	PB2, (Upland blanket bog) Flushed	165,425	175,771
RG015	13/03/2018	4	Red Grouse	1	16:18:08	7	PB2, (Upland blanket bog) Flushed	163,861	176,068

**Table 6: Red Grouse Survey Data**

Map Reference No.	Date	Transect Number	Species	No. of Birds	Time of flight	Duration of flight (s)	Notes on habitat and activity	GPS Ref. (X)	GPS Ref. (Y)
RG016	13/03/2018	4	Red Grouse	1	16:28:19	5	PB2, (Upland blanket bog) Flew away	163,540	176,436
RG017	13/03/2018	4	Red Grouse	1	16:45:02	5	PB2, (Upland blanket bog) Flew away	163,315	176,478
RG018	13/03/2018	4	Red Grouse	1	16:52:16	20	PB2, (Upland blanket bog) Towards calling then away	163,712	176,647
RG019	30/03/2018	7	Red Grouse	1	10:36:00	-	PB2, (Upland blanket bog) Calling	159,887	176,598
RG020	30/03/2018	7	Red Grouse	1	10:36:12	10	PB2, (Upland blanket bog) Flew away, calling	159,879	176,427
RG021	30/03/2018	7	Red Grouse	1	10:55:12	20	PB2, (Upland blanket bog) Towards calling then down into bog	159,729	176,243
RG022	30/03/2018	7	Red Grouse	1	10:56:48	-	WS5, (Recently-felled woodland) Calling from within recently cut conifer	159,801	175,966
RG023	30/03/2018	11	Red Grouse	1	14:33:11	-	PB2, (Upland blanket bog) Calling	163,438	178,547
RG024	30/03/2018	11	Red Grouse	1	14:36:12	-	PB2, (Upland blanket bog) Calling	163,377	178,363
RG025	30/03/2018	11	Red Grouse	1	14:55:22	5	PB2, (Upland blanket bog) Flew away, calling	163,549	178,389

**Table 7: Winter Walkover Survey Results**

Survey Date	Season	Time of observation	Species	Number of birds	Habitat and Activity	
18/10/2016	Non-Breeding	08:43:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	08:58:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	09:02:00	Robin	2	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	09:04:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	09:13:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	09:25:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	09:28:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	09:29:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	09:35:00	Robin	2	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	09:44:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	09:44:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	09:53:00	Robin	1	WD4, (Conifer plantation)	Flying
18/10/2016	Non-Breeding	10:03:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	10:04:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	10:07:00	Robin	2	WD4, (Conifer plantation)	Flying
18/10/2016	Non-Breeding	10:14:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	10:19:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	10:22:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	10:24:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	10:27:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	10:36:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	10:53:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	11:10:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	11:16:00	Robin	1	WD4, (Conifer plantation)	Flying
18/10/2016	Non-Breeding	11:19:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	11:28:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	11:34:00	Robin	2	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	11:37:00	Robin	1	WD4, (Conifer plantation)	Calling

**Table 7: Winter Walkover Survey Results**

Survey Date	Season	Time of observation	Species	Number of birds	Habitat and Activity	
18/10/2016	Non-Breeding	11:41:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	11:45:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	11:52:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	12:10:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	12:12:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	12:15:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	12:18:00	Robin	2	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	12:23:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	12:32:00	Robin	1	WD4, (Conifer plantation)	Flying
18/10/2016	Non-Breeding	12:40:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	12:43:00	Robin	2	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	13:02:00	Robin	2	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	13:05:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	13:07:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	13:13:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	13:17:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	13:20:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	13:22:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	13:26:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	13:29:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	13:38:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	13:59:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	14:21:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	14:22:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	13:25:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	14:30:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	14:50:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	14:52:00	Robin	1	WD4, (Conifer plantation)	Calling

**Table 7: Winter Walkover Survey Results**

Survey Date	Season	Time of observation	Species	Number of birds	Habitat and Activity	
18/10/2016	Non-Breeding	15:10:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	15:16:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	15:30:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	15:58:00	Robin	1	WD4, (Conifer plantation)	Flying
18/10/2016	Non-Breeding	16:10:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	16:13:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	16:15:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	16:35:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	17:01:00	Robin	1	WD4, (Conifer plantation)	Calling
18/10/2016	Non-Breeding	17:03:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	09:18:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	09:21:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	09:23:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	09:26:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	09:30:00	Robin	2	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	09:34:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	09:35:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	09:37:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	09:46:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	09:51:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	10:16:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	10:21:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	10:22:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	10:29:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	10:45:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	10:56:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	11:00:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	11:24:00	Robin	1	WD4, (Conifer plantation)	Calling

**Table 7: Winter Walkover Survey Results**

Survey Date	Season	Time of observation	Species	Number of birds	Habitat and Activity	
13/12/2016	Non-Breeding	11:37:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	11:39:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	11:49:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	12:24:00	Robin	3	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	12:34:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	12:38:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	12:42:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	12:53:00	Robin	2	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	12:56:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	13:02:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	13:05:00	Robin	2	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	13:14:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	13:26:00	Robin	1	WD4, (Conifer plantation)	Calling
13/12/2016	Non-Breeding	14:02:00	Robin	1	WD4, (Conifer plantation)	Calling
14/12/2016	Non-Breeding	09:53:00	Robin	2	WD4, (Conifer plantation)	Calling
14/12/2016	Non-Breeding	10:01:00	Robin	1	WD4, (Conifer plantation)	Calling
14/12/2016	Non-Breeding	10:07:00	Robin	1	WD4, (Conifer plantation)	Calling
14/12/2016	Non-Breeding	10:09:00	Robin	1	WD4, (Conifer plantation)	Calling
14/12/2016	Non-Breeding	10:19:00	Robin	1	WD4, (Conifer plantation)	Calling
14/12/2016	Non-Breeding	10:39:00	Robin	1	WD4, (Conifer plantation)	Calling
14/12/2016	Non-Breeding	10:42:00	Robin	1	WD4, (Conifer plantation)	Calling
14/12/2016	Non-Breeding	10:46:00	Robin	1	WD4, (Conifer plantation)	Calling
14/12/2016	Non-Breeding	10:50:00	Robin	1	WD4, (Conifer plantation)	Calling
14/12/2016	Non-Breeding	10:59:00	Robin	1	WD4, (Conifer plantation)	Calling
14/12/2016	Non-Breeding	11:12:00	Robin	1	WD4, (Conifer plantation)	Calling
14/12/2016	Non-Breeding	11:15:00	Robin	1	WD4, (Conifer plantation)	Calling
14/12/2016	Non-Breeding	11:19:00	Robin	2	WD4, (Conifer plantation)	Calling
14/12/2016	Non-Breeding	11:27:00	Robin	1	WD4, (Conifer plantation)	Calling

**Table 7: Winter Walkover Survey Results**

Survey Date	Season	Time of observation	Species	Number of birds	Habitat and Activity	
14/12/2016	Non-Breeding	11:35:00	Robin	2	WD4, (Conifer plantation)	Calling
14/12/2016	Non-Breeding	11:43:00	Robin	1	WD4, (Conifer plantation)	Calling
14/12/2016	Non-Breeding	11:56:00	Robin	1	WD4, (Conifer plantation)	Calling
20/01/2017	Non-Breeding	09:27:00	Robin	1	WD4, (Conifer plantation)	Calling
20/01/2017	Non-Breeding	09:29:00	Robin	1	WD4, (Conifer plantation)	Calling
20/01/2017	Non-Breeding	09:31:00	Robin	1	WD4, (Conifer plantation)	Calling
20/01/2017	Non-Breeding	09:40:00	Robin	1	WD4, (Conifer plantation)	Calling
20/01/2017	Non-Breeding	09:45:00	Robin	1	WD4, (Conifer plantation)	Calling
20/01/2017	Non-Breeding	09:55:00	Robin	1	WD4, (Conifer plantation)	Calling
20/01/2017	Non-Breeding	09:59:00	Robin	1	WD4, (Conifer plantation)	Calling
20/01/2017	Non-Breeding	10:27:00	Robin	1	WD4, (Conifer plantation)	Calling
20/01/2017	Non-Breeding	10:35:00	Robin	1	WD4, (Conifer plantation)	Calling
20/01/2017	Non-Breeding	10:44:00	Robin	1	WD4, (Conifer plantation)	Calling
20/01/2017	Non-Breeding	10:51:00	Robin	1	WD4, (Conifer plantation)	Calling
20/01/2017	Non-Breeding	10:59:00	Robin	1	WD4, (Conifer plantation)	Calling
20/01/2017	Non-Breeding	11:11:00	Robin	1	WD4, (Conifer plantation)	Calling
20/01/2017	Non-Breeding	11:17:00	Robin	1	WD4, (Conifer plantation)	Calling
20/01/2017	Non-Breeding	11:43:00	Robin	1	WD4, (Conifer plantation)	Calling
20/01/2017	Non-Breeding	12:15:00	Robin	1	WD4, (Conifer plantation)	Calling
20/01/2017	Non-Breeding	12:18:00	Robin	1	WD4, (Conifer plantation)	Calling
20/01/2017	Non-Breeding	12:20:00	Robin	1	WD4, (Conifer plantation)	Calling
20/01/2017	Non-Breeding	12:27:00	Robin	1	WD4, (Conifer plantation)	Calling
20/01/2017	Non-Breeding	12:34:00	Robin	1	WD4, (Conifer plantation)	Calling
20/01/2017	Non-Breeding	12:37:00	Robin	1	WD4, (Conifer plantation)	Calling
20/01/2017	Non-Breeding	12:50:00	Robin	1	WD4, (Conifer plantation)	Calling
20/01/2017	Non-Breeding	12:51:00	Robin	1	WD4, (Conifer plantation)	Calling
20/01/2017	Non-Breeding	12:59:00	Robin	1	WD4, (Conifer plantation)	Calling
20/01/2017	Non-Breeding	13:00:00	Robin	1	WD4, (Conifer plantation)	Calling

**Table 7: Winter Walkover Survey Results**

Survey Date	Season	Time of observation	Species	Number of birds	Habitat and Activity
20/01/2017	Non-Breeding	13:05:00	Robin	1	WD4, (Conifer plantation) Calling
20/01/2017	Non-Breeding	13:09:00	Robin	1	WD4, (Conifer plantation) Calling
20/01/2017	Non-Breeding	13:11:00	Robin	1	WD4, (Conifer plantation) Calling
20/01/2017	Non-Breeding	13:14:00	Robin	1	WD4, (Conifer plantation) Calling
20/01/2017	Non-Breeding	13:42:00	Robin	1	WD4, (Conifer plantation) Calling
20/01/2017	Non-Breeding	13:48:00	Robin	1	WD4, (Conifer plantation) Calling
23/01/2017	Non-Breeding	11:46:00	Robin	1	WD4, (Conifer plantation) Calling
23/01/2017	Non-Breeding	11:57:00	Robin	1	WD4, (Conifer plantation) Calling
23/01/2017	Non-Breeding	12:15:00	Robin	1	WD4, (Conifer plantation) Calling
23/01/2017	Non-Breeding	12:20:00	Robin	1	WD4, (Conifer plantation) Calling
23/01/2017	Non-Breeding	12:34:00	Robin	1	WD4, (Conifer plantation) Calling
23/01/2017	Non-Breeding	12:51:00	Robin	1	WD4, (Conifer plantation) Calling
05/10/2017	Non-Breeding	10:00:00	Stonechat	1	WD4, (Conifer plantation) PB2, (Upland blanket bog)
05/10/2017	Non-Breeding	10:30:00	Meadow Pipit	1	PB2, (Upland blanket bog)
05/10/2017	Non-Breeding	14:00:00	Kestrel	1	WD4, (Conifer plantation)
05/10/2017	Non-Breeding	15:30:00	Meadow Pipit	6	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	13:10:00	Robin	1	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	13:42:00	Robin	2	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	13:50:00	Robin	3	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	13:55:00	Robin	2	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	14:00:00	Robin	1	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	14:05:00	Robin	4	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	14:05:00	Robin	2	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	14:05:00	Robin	1	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	14:10:00	Robin	2	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	14:30:00	Robin	5	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	14:35:00	Robin	1	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	14:40:00	Robin	1	WD4, (Conifer plantation)



**Table 7: Winter Walkover Survey Results**

Survey Date	Season	Time of observation	Species	Number of birds	Habitat and Activity
09/10/2017	Non-Breeding	14:45:00	Robin	4	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	14:50:00	Robin	4	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	15:35:00	Robin	2	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	15:50:00	Robin	1	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	13:10:00	Blackbird	2	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	13:15:00	Wren	1	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	13:20:00	Goldcrest	4	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	13:40:00	Chaffinch	1	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	13:45:00	Wren	1	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	13:48:00	Wren	2	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	13:55:00	Wren	1	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	13:55:00	Blackbird	1	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	14:00:00	Song Thrush	1	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	14:00:00	Wren	2	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	14:05:00	Wren	2	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	14:30:00	Willow Warbler	1	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	14:35:00	Wren	1	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	14:45:00	Wren	1	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	14:50:00	Wren	1	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	15:35:00	Wren	2	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	15:50:00	Wren	1	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	16:00:00	Meadow Pipit	2	PB2, (Upland blanket bog)
09/10/2017	Non-Breeding	16:05:00	Wren	1	WD4, (Conifer plantation)
09/10/2017	Non-Breeding	14:00:00	Snipe	1	WD4, (Conifer plantation) PB2, (Upland blanket bog)
01/12/2017	Non-Breeding	11:30:00	Robin	1	WD4, (Conifer plantation)
01/12/2017	Non-Breeding	11:55:00	Robin		WD4, (Conifer plantation)
01/12/2017	Non-Breeding	11:55:00	Robin		WD4, (Conifer plantation)
01/12/2017	Non-Breeding	12:00:00	Robin		WD4, (Conifer plantation)

**Table 7: Winter Walkover Survey Results**

Survey Date	Season	Time of observation	Species	Number of birds	Habitat and Activity
01/12/2017	Non-Breeding	12:05:00	Robin		WD4, (Conifer plantation)
01/12/2017	Non-Breeding	12:10:00	Robin		WD4, (Conifer plantation)
01/12/2017	Non-Breeding	12:20:00	Robin		WD4, (Conifer plantation)
01/12/2017	Non-Breeding	12:40:00	Robin		WD4, (Conifer plantation)
01/12/2017	Non-Breeding	12:40:00	Robin		WD4, (Conifer plantation)
01/12/2017	Non-Breeding	12:50:00	Robin		WD4, (Conifer plantation)
01/12/2017	Non-Breeding	14:05:00	Robin		WD4, (Conifer plantation)
01/12/2017	Non-Breeding	14:20:00	Robin		WD4, (Conifer plantation)
01/12/2017	Non-Breeding	14:40:00	Robin		WD4, (Conifer plantation)
01/12/2017	Non-Breeding	14:45:00	Robin		WD4, (Conifer plantation)
01/12/2017	Non-Breeding	14:50:00	Robin		WD4, (Conifer plantation)
01/12/2017	Non-Breeding	15:00:00	Robin		WD4, (Conifer plantation)
01/12/2017	Non-Breeding	15:40:00	Robin		WD4, (Conifer plantation)
01/12/2017	non-breeding	10:40:00	Dunnock	2	WD4, (Conifer plantation)
01/12/2017	non-breeding	11:00:00	Wren	1	WD4, (Conifer plantation)
01/12/2017	non-breeding	11:10:00	Wren	2	WD4, (Conifer plantation)
01/12/2017	non-breeding	11:30:00	Blue Tit	2	WD4, (Conifer plantation) PB2, (Upland blanket bog)
01/12/2017	non-breeding	11:30:00	Wren	1	WD4, (Conifer plantation) PB2, (Upland blanket bog)
01/12/2017	non-breeding	11:30:00	Dunnock	2	WD4, (Conifer plantation)
01/12/2017	non-breeding	11:35:00	Wren	1	WD4, (Conifer plantation)
01/12/2017	non-breeding	11:35:00	Wren	1	WD4, (Conifer plantation)
01/12/2017	non-breeding	11:40:00	Mistle Thrush	1	WD4, (Conifer plantation)
01/12/2017	non-breeding	11:40:00	Blue Tit	3	WD4, (Conifer plantation)
01/12/2017	non-breeding	11:45:00	Blue Tit	1	WD4, (Conifer plantation)
01/12/2017	non-breeding	11:50:00	Blue Tit		WD4, (Conifer plantation)
01/12/2017	non-breeding	11:50:00	Dunnock		WD4, (Conifer plantation)
01/12/2017	non-breeding	11:50:00	Long-tailed Tit		WD4, (Conifer plantation)
01/12/2017	non-breeding	11:50:00	Blackbird		WD4, (Conifer plantation)

**Table 7: Winter Walkover Survey Results**

Survey Date	Season	Time of observation	Species	Number of birds	Habitat and Activity
01/12/2017	non-breeding	11:50:00	Dunnock		WD4, (Conifer plantation)
01/12/2017	non-breeding	11:55:00	Chaffinch		WD4, (Conifer plantation)
01/12/2017	non-breeding	11:55:00	Chaffinch		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:00:00	Chaffinch		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:05:00	Blue Tit		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:10:00	Blue Tit		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:10:00	Wren		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:10:00	Dunnock		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:10:00	Mistle Thrush		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:10:00	Wren		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:15:00	Dunnock		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:15:00	Blue Tit		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:15:00	Wren		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:20:00	Dunnock		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:20:00	Dunnock		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:20:00	Wren		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:20:00	Dunnock		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:30:00	Hooded Crow		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:30:00	Dunnock		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:30:00	Wren		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:30:00	Chaffinch		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:30:00	Goldcrest		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:30:00	Dunnock		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:40:00	Dunnock		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:40:00	Dunnock		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:40:00	Blue Tit		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:40:00	Wren		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:40:00	Dunnock		WD4, (Conifer plantation)

**Table 7: Winter Walkover Survey Results**

Survey Date	Season	Time of observation	Species	Number of birds	Habitat and Activity
01/12/2017	non-breeding	12:40:00	Wren		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:50:00	Wren		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:50:00	Dunnock		WD4, (Conifer plantation)
01/12/2017	non-breeding	13:00:00	Hen Harrier		PB2, (Upland blanket bog), Male hunting
01/12/2017	non-breeding	13:45:00	Wren		WD4, (Conifer plantation)
01/12/2017	non-breeding	14:10:00	Wren		WD4, (Conifer plantation)
01/12/2017	non-breeding	14:10:00	Dunnock		WD4, (Conifer plantation)
01/12/2017	non-breeding	14:10:00	Goldcrest		WD4, (Conifer plantation)
01/12/2017	non-breeding	14:15:00	Wren		WD4, (Conifer plantation)
01/12/2017	non-breeding	14:15:00	Chaffinch		WD4, (Conifer plantation)
01/12/2017	non-breeding	14:15:00	Coal Tit		WD4, (Conifer plantation)
01/12/2017	non-breeding	14:20:00	Dunnock		WD4, (Conifer plantation)
01/12/2017	non-breeding	14:20:00	Goldcrest		WD4, (Conifer plantation)
01/12/2017	non-breeding	14:20:00	Raven		WD4, (Conifer plantation) PB2, (Upland blanket bog)
01/12/2017	non-breeding	14:20:00	Wren		WD4, (Conifer plantation)
01/12/2017	non-breeding	14:25:00	Wren		WD4, (Conifer plantation)
01/12/2017	non-breeding	14:30:00	Kestrel		WD4, (Conifer plantation) Perched then flying, female
01/12/2017	non-breeding	14:30:00	Wren		WD4, (Conifer plantation)
01/12/2017	non-breeding	14:40:00	Dunnock		WD4, (Conifer plantation)
01/12/2017	non-breeding	14:40:00	Dunnock		WD4, (Conifer plantation)
01/12/2017	non-breeding	14:40:00	Coal Tit		WD4, (Conifer plantation)
01/12/2017	non-breeding	14:45:00	Coal Tit		PB2, (Upland blanket bog)
01/12/2017	non-breeding	14:45:00	Dunnock		WD4, (Conifer plantation)
01/12/2017	non-breeding	14:45:00	Dunnock		WD4, (Conifer plantation)
01/12/2017	non-breeding	14:50:00	Blackbird		WD4, (Conifer plantation)
01/12/2017	non-breeding	14:50:00	Dunnock		WD4, (Conifer plantation)
01/12/2017	non-breeding	14:50:00	Dunnock		WD4, (Conifer plantation)
01/12/2017	non-breeding	14:50:00	Wren		WD4, (Conifer plantation)

**Table 7: Winter Walkover Survey Results**

Survey Date	Season	Time of observation	Species	Number of birds	Habitat and Activity
01/12/2017	non-breeding	15:00:00	Dunnock		WD4, (Conifer plantation) PB2, (Upland blanket bog)
01/12/2017	non-breeding	15:00:00	Coal Tit		WD4, (Conifer plantation)
01/12/2017	non-breeding	15:00:00	Wren		WD4, (Conifer plantation)
01/12/2017	non-breeding	15:10:00	Goldcrest		WD4, (Conifer plantation)
01/12/2017	non-breeding	15:15:00	Wren		WD4, (Conifer plantation)
01/12/2017	non-breeding	15:15:00	Wren		WD4, (Conifer plantation)
01/12/2017	non-breeding	15:15:00	Wren		WD4, (Conifer plantation)
01/12/2017	non-breeding	15:25:00	Wren		WD4, (Conifer plantation)
01/12/2017	non-breeding	15:25:00	Coal Tit		WD4, (Conifer plantation)
01/12/2017	non-breeding	15:25:00	Red Grouse		PB2, (Upland blanket bog), travelling, off site
01/12/2017	non-breeding	15:25:00	Dunnock		WD4, (Conifer plantation)
01/12/2017	non-breeding	15:25:00	Wren		WD4, (Conifer plantation)
01/12/2017	non-breeding	15:30:00	Long-tailed Tit		PB2, (Upland blanket bog)
01/12/2017	non-breeding	15:45:00	Dunnock		WD4, (Conifer plantation)
01/12/2017	non-breeding	15:45:00	Wren		WD4, (Conifer plantation)
01/12/2017	non-breeding	12:30:00	Woodcock		WD4, (Conifer plantation)
04/12/2017	Non-Breeding	13:20:00	Robin		WD4, (Conifer plantation)
04/12/2017	Non-Breeding	15:20:00	Robin		WD4, (Conifer plantation)
04/12/2017	non-breeding	13:00:00	Wren		WD4, (Conifer plantation)
04/12/2017	non-breeding	13:00:00	Goldcrest		WD4, (Conifer plantation)
04/12/2017	non-breeding	13:00:00	Blackbird		WD4, (Conifer plantation)
04/12/2017	non-breeding	13:20:00	Wren		WD4, (Conifer plantation)
04/12/2017	non-breeding	13:40:00	Coal Tit		WD4, (Conifer plantation)
04/12/2017	non-breeding	13:45:00	Coal Tit		WD4, (Conifer plantation)
04/12/2017	non-breeding	13:50:00	Goldcrest		WD4, (Conifer plantation)
04/12/2017	non-breeding	13:50:00	Wren		WD4, (Conifer plantation)
04/12/2017	non-breeding	14:00:00	Goldcrest		WD4, (Conifer plantation)
04/12/2017	non-breeding	14:45:00	Blackbird		WD4, (Conifer plantation)

**Table 7: Winter Walkover Survey Results**

Survey Date	Season	Time of observation	Species	Number of birds	Habitat and Activity
04/12/2017	non-breeding	15:00:00	Hooded Crow		WD4, (Conifer plantation)
04/12/2017	non-breeding	15:20:00	Wren		WD4, (Conifer plantation)
10/01/2018	Non-Breeding	11:40:00	Robin	1	WD4, (Conifer plantation) PB2, (Upland blanket bog)
10/01/2018	Non-Breeding	12:00:00	Robin	2	WD4, (Conifer plantation)
10/01/2018	Non-Breeding	11:00:00	Blackbird	1	PB2, (Upland blanket bog)
10/01/2018	Non-Breeding	11:00:00	Wren	2	WD4, (Conifer plantation)
10/01/2018	Non-Breeding	11:10:00	Wren	1	WD4, (Conifer plantation)
10/01/2018	Non-Breeding	11:20:00	Goldcrest	1	WD4, (Conifer plantation)
10/01/2018	Non-Breeding	11:20:00	Coal Tit	4	WD4, (Conifer plantation)
10/01/2018	Non-Breeding	11:35:00	Raven	2	PB2, (Upland blanket bog)
10/01/2018	Non-Breeding	12:00:00	Reed Bunting	1	WD4, (Conifer plantation)
10/01/2018	Non-Breeding	12:15:00	Blackbird	1	WD4, (Conifer plantation)
10/01/2018	Non-Breeding	12:30:00	Wren	3	WD4, (Conifer plantation)
10/01/2018	Non-Breeding	12:30:00	Blackbird	1	WD4, (Conifer plantation)
10/01/2018	Non-Breeding	13:00:00	Wren		WD4, (Conifer plantation)
10/01/2018	Non-Breeding	13:00:00	Hooded Crow		PB2, (Upland blanket bog)
10/01/2018	Non-Breeding	13:10:00	Meadow Pipit		WD4, (Conifer plantation)
10/01/2018	Non-Breeding	13:10:00	Dunnock		WD4, (Conifer plantation)
10/01/2018	Non-Breeding	13:30:00	Wren		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	10:30:00	Robin		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	11:20:00	Robin		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	11:40:00	Robin		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	11:45:00	Robin		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	11:42:00	Robin		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	11:45:00	Robin		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	12:10:00	Robin		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	12:15:00	Robin		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	15:15:00	Robin		WD4, (Conifer plantation)

**Table 7: Winter Walkover Survey Results**

Survey Date	Season	Time of observation	Species	Number of birds	Habitat and Activity
11/01/2018	Non-Breeding	15:20:00	Robin		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	10:15:00	Goldfinch		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	11:00:00	Wren		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	11:10:00	Coal Tit		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	11:12:00	Blue Tit		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	11:15:00	Coal Tit		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	11:17:00	Wren		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	11:20:00	Wren		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	11:24:00	Wren		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	11:36:00	Coal Tit		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	11:36:00	Wren		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	11:42:00	Wren		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	11:55:00	Coal Tit		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	11:55:00	Dunnock		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	12:00:00	Goldcrest		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	12:00:00	Blackbird		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	12:05:00	Goldcrest		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	12:05:00	Coal Tit		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	12:15:00	Coal Tit		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	12:15:00	Blackbird		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	12:15:00	Goldcrest		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	12:15:00	Coal Tit		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	12:20:00	Wren		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	12:20:00	Dunnock		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	12:25:00	Coal Tit		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	12:30:00	Coal Tit		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	12:35:00	Blue Tit		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	12:35:00	Coal Tit		WD4, (Conifer plantation)

**Table 7: Winter Walkover Survey Results**

Survey Date	Season	Time of observation	Species	Number of birds	Habitat and Activity
11/01/2018	Non-Breeding	12:40:00	Dunnock		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	12:40:00	Wren		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	12:40:00	Long-tailed Tit		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	12:40:00	Wren		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	12:45:00	Blue Tit		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	12:45:00	Coal Tit		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	12:50:00	Goldcrest		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	13:00:00	Bullfinch		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	13:10:00	Coal Tit		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	13:15:00	Coal Tit		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	13:20:00	Blue Tit		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	14:00:00	Blue Tit		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	14:30:00	Dunnock		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	14:32:00	Dunnock		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	14:35:00	Wren		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	14:35:00	Raven		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	14:55:00	Coal Tit		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	15:00:00	Blue Tit		PB2, (Upland blanket bog)
11/01/2018	Non-Breeding	15:10:00	Reed Bunting		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	15:15:00	Wren		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	15:15:00	Blue Tit		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	15:20:00	Dunnock		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	15:20:00	Wren		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	15:20:00	Reed Bunting		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	15:30:00	Reed Bunting		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	15:30:00	Dunnock		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	15:30:00	Blackbird		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	15:30:00	Reed Bunting		WD4, (Conifer plantation)



**Table 7: Winter Walkover Survey Results**

Survey Date	Season	Time of observation	Species	Number of birds	Habitat and Activity
11/01/2018	Non-Breeding	15:40:00	Reed Bunting		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	15:40:00	Kestrel		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	15:45:00	Wren		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	15:50:00	Reed Bunting		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	16:00:00	Kestrel		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	11:30:00	Snipe		WD4, (Conifer plantation)
11/01/2018	Non-Breeding	12:35:00	Treecreeper		WD4, (Conifer plantation)

**Table 3: Incidental Observations**

Date	Location	Species	No. of birds	Comments	GPS	GPS
30/01/2017		Hen Harrier	1	Saw bird during break, W of vp4 - not visible from vp due to hill		
20/04/2017		Red deer	3		52.84006579	8.594229421
02/06/2017	2	Hen Harrier		WD4, (Conifer plantation) After vp female flew N from young conifers		
25/07/2017	Caherhurlly Entrance	Red Squirrel	1	Red Squirrel on forestry track at site entrance		
25/07/2017	West of VP 9	Feral Goats	7	7 Feral Goats west of VP 9		
07/09/2017	North of VP8	Kestrel		Observed perched on approach to vp 8		
15/01/2018	VP 1	Snipe	1	Flushed by observer on route to VP location		
15/01/2018	VP 1	Snipe	1	17:16 PM Snipe calling no visual - too dark		
18/01/2018	VP 4a	Red Grouse	1	Calling from behind VP location		
19/01/2018	VP 3	Red Grouse	1	Calling -Offsite PB2		
30/01/2018	VP 9	Golden Plover	6	Flushed by observer on route to VP location from PB2		
30/01/2018	VP 9	Red Stags	4	Grazing on PB2 below VP location at edge of WD4		
05/02/2018	Forest roadway between vp 5a and vp3	Woodcock	1	Flushed by vehicle		
06/02/2018	Forest roadway between vp 5a and vp4a	Woodcock	2	Flushed by vehicle		
08/02/2018	Forest roadway between VP 7a and vp5a	Woodcock	4	Flushed by vehicle		
20/02/2018	Forest roadway at vp3	Woodcock	1	Flushed by vehicle		
13/03/2018		Snipe	1		160,036	175,510
13/03/2018		Golden Plover	5		163,802	176,055
13/03/2018		Red Grouse		Fresh Grouse Droppings	163,544	176,278
13/03/2018		Kestrel	1		160,772	177,515
28/03/2018	VP 7	Buzzard	1	14:00PM - Flying in Band 2 on site for 60 seconds in area of VP 7- before start of survey		
28/03/2018	VP7	Kestrel	1	18:38 PM -Female Kestrel perched on dead wood on site - WD4		
02/05/2018	Knockalass	Irish Hare	2	Together on forestry road. ITM 561510, 679220		
17/05/2018	killokennedy	Badger	2	2 badgers foraging outside sett. ITM 560320, 675320		
23/05/2018	Carrownagowan	Red Deer	2	2 males travelling through young plantation. ITM 562860, 675930		
28/05/2018	Inchalughoge	Pine Marten	1	crossing forestry road. ITM 561340, 677470		

**Table 3: Incidental Observations**

Date	Location	Species	No. of birds	Comments	GPS	GPS
29/05/2018	Violethill (close to Doon Lough)	Buzzard	1	Adult in high circling flight over mixed woodland, calling also.		
07/06/2018	Close to VP 8a	Irish Hare	1	563205, 677477		
08/06/2018		Red Deer	2	561888, 678368		
08/06/2018	Stags	Red Deer	2	559813, 677683		
08/06/2018	stag	Sika Deer	1	559008, 675840		
08/06/2018	stack of logs, possible nesting area	Pine Marten	1	562841, 676976		
11/06/2018	travelling close to vp5	Kestrel	1			
11/06/2018	female with fawn	Red Deer	4	561848, 675888		
12/06/2018	On forestry road	Irish Hare	1	561174, 676029		
12/06/2018	travelling close to vp 1a	Buzzard	1			
20/06/2018	Caherhurly	Red Deer	2	562610, 680316		
		Hen Harrier		- See confidential appendix 5 for data relating to sensitive records		
08/08/2018	North of VP2	Red Deer stag	1	feeding		
10/08/2018	Close to VP1a	Red Deer	3	feeding		
14/08/2018	Forestry road at [561330,677440]	Red Deer	3	crossing roadway		

**Table 4: Breeding Raptor Survey Data**

Territory ID	Species	Activity April	Activity May	Activity June	Activity July
2017					
PE01	Peregrine	No activity	Seen Flying Off Cliff	Mobbing Buzzard	No activity
BZ01	Buzzard	Pair Displaying	Present	Present	Present
BZ02	Buzzard	No activity	Present	No activity	Present
HH01	Hen Harrier	Male Display	Pair present	No activity	Present
HH02	Hen Harrier	Pair Courtship Display	No activity	No activity	No activity
HH03	Hen Harrier	No activity	Pair Displaying	Food Pass/ female alarm See Confidential Appendix 5 for maps relating to sensitive records	No activity
HH04	Hen Harrier	No activity	Pair Displaying	Pair present	Fledgling present - See Confidential Appendix 5 for maps relating to sensitive records
PE01	Peregrine	Pair present	No activity	Pair present	Pair present - See Confidential Appendix 5 for maps relating to sensitive records
PE02	Peregrine	No activity	Pair present/alarm calling	Chicks in nest See Confidential Appendix 5 for maps relating to sensitive records	4 fledglings present - See Confidential Appendix 5 for maps relating to sensitive records
K01	Kestrel	Present	Present	Present	Alarm call
K02	Kestrel	Pair present	No activity	No activity	No activity
K03	Kestrel	No activity	present	Pair present	No activity
K04	Kestrel	Present	Present	No activity	Present
K05	Kestrel	No activity	No activity	No activity	Pair present

**Table 4: Breeding Raptor Survey Data**

Territory ID	Species	Activity April	Activity May	Activity June	Activity July
K06	Kestrel	No activity	present	Alarm call	present
SH01	Sparrowhawk	Present	No activity	No activity	Present
SH02	Sparrowhawk	Present	No activity	No activity	No activity
SH03	Sparrowhawk	Present	No activity	No activity	No activity
SH04	Sparrowhawk	No activity	Present	No activity	No activity
SH05	Sparrowhawk	No activity	No activity	Present	No activity
HH05	Hen Harrier			Pair at nest site See Confidential Appendix 5 for maps relating to sensitive records	
HH06	Hen Harrier			Pair at nest site See Confidential Appendix 5 for maps relating to sensitive records	
<b>2018</b>					
PE01	Peregrine	Adult present with agitated behaviour/Alarming	Incubation at nest See Confidential Appendix 5 for data relating to sensitive records	Alarming at active nest See Confidential Appendix 5 for maps relating to sensitive records	Fledged Chicks present See Confidential Appendix 5 for maps relating to sensitive records
PE02	Peregrine	Adult present with agitated behaviour/Alarming	Present	No activity	No activity
HH05	Hen Harrier	Pair Displaying	Pair Displaying	Several Food Passes observed between adults at nest site - Agitated behaviour and alarming from both adults	Active nest See Confidential Appendix 5 for maps relating to sensitive records
HH06	Hen Harrier	Male in high display before travelling on	No activity	Male present, hunting.	No activity
BZ03	Buzzard	Adult territorial call and display	Present	Fresh nesting material observed	Present - no breeding evident

**Table 4: Breeding Raptor Survey Data**

Territory ID	Species	Activity April	Activity May	Activity June	Activity July
BZ04	Buzzard	3 individuals displaying	Displaying/Territorial Behaviour	Territorial calling and Displaying	Present - no breeding evident
SH06	Sparrowhawk	No activity	Male carrying prey to nest	Active nest located	3-4 Fledged young calling
SH07	Sparrowhawk	Female display	Male carrying prey towards suitable breeding habitat	No activity	No activity
SH08	Sparrowhawk	No activity	No activity	No activity	4 fledged young calling
K07	Kestrel	Display	Adult carrying prey	Present, hunting	Fledgling present
K08	Kestrel	Pair present, territorial behaviour	adult territorial behaviour	present	present
K09	Kestrel	territorial call	aggressive behaviour	4 individuals present, hunting	present, hunting

**Table 5: Breeding Walkover Survey Data**

Territory ID	Species	Activity April	Activity May	Activity June	Activity July
2017					
MP01	Meadow Pipit	Agitated Behaviour and Display	No activity	No activity	Displaying
MP02	Meadow Pipit	Agitated Behaviour and Display	Nesting material	No activity	Displaying
MP03	Meadow Pipit	Singing male	No activity	No activity	Displaying
MP04	Meadow Pipit	No activity	No activity	Displaying	Displaying
MP05	Meadow Pipit	Agitated Behaviour and Display	No activity	Displaying	Displaying
MP06	Meadow Pipit	No activity	Displaying	Carrying food	No activity
MP07	Meadow Pipit	No activity	No activity	No activity	Displaying
MP08	Meadow Pipit	Suitable Habitat	Displaying	No activity	Present
MP09	Meadow Pipit	No activity	Displaying	Displaying	No activity
MP10	Meadow Pipit	No activity	No activity	Displaying	No activity
MP11	Meadow Pipit	Displaying	No activity	No activity	Present
MP12	Meadow Pipit	No activity	Present	No activity	No activity
MP13	Meadow Pipit	Displaying	Displaying	Displaying	No activity
MP14	Meadow Pipit	No activity	No activity	No activity	Displaying
MP15	Meadow Pipit	No activity	No activity	No activity	Displaying
MP16	Meadow Pipit	No activity	Displaying	No activity	Displaying
MP17	Meadow Pipit	Suitable Habitat	Displaying	Displaying	Displaying
MP18	Meadow Pipit	Pair Present and Displaying	No activity	Displaying	No activity
MP19	Meadow Pipit	No activity	No activity	No activity	Present
MP20	Meadow Pipit	No activity	No activity	No activity	Present
MP21	Meadow Pipit	Pair Present and Displaying	No activity	No activity	Present
MP22	Meadow Pipit	No activity	No activity	Present	No activity
MP23	Meadow Pipit	No activity	No activity	Present	No activity
MP24	Meadow Pipit	Suitable Habitat	Displaying	Displaying	Displaying
MP25	Meadow Pipit	Display in Suitable Habitat	Displaying	Displaying	Displaying

**Table 5: Breeding Walkover Survey Data**

Territory ID	Species	Activity April	Activity May	Activity June	Activity July
MP26	Meadow Pipit	Suitable Habitat	Displaying	Displaying	No activity
MP27	Meadow Pipit	No activity	Displaying	No activity	Displaying
MP28	Meadow Pipit	No activity	No activity	Displaying	Displaying
MP29	Meadow Pipit	No activity	No activity	No activity	Displaying
MP30	Meadow Pipit	Pair Present	Calling	Displaying	Displaying
MP31	Meadow Pipit	No activity	No activity	Displaying	Displaying
MP32	Meadow Pipit	No activity	Displaying	No activity	No activity
MP33	Meadow Pipit	No activity	Displaying	Displaying	Displaying
MP34	Meadow Pipit	No activity	Calling	No activity	Displaying
MP35	Meadow Pipit	No activity	No activity	Displaying	No activity
MP36	Meadow Pipit	No activity	Displaying	Displaying	Displaying
MP37	Meadow Pipit	No activity	Displaying	No activity	No activity
MP38	Meadow Pipit	No activity	Displaying	Displaying	Displaying
MP39	Meadow Pipit	Displaying	Calling	No activity	No activity
MP40	Meadow Pipit	No activity	No activity	Calling	Displaying
MP41	Meadow Pipit	No activity	Present	No activity	Present
MP42	Meadow Pipit	No activity	Present	Present	No activity
MP43	Meadow Pipit	Displaying	Displaying	Displaying	Displaying
MP44	Meadow Pipit	Suitable Habitat	Displaying	Displaying	Displaying
MP45	Meadow Pipit	Displaying	No activity	Displaying	Displaying
MP46	Meadow Pipit	No activity	Displaying	No activity	Displaying
MP47	Meadow Pipit	Displaying	Displaying	No activity	Displaying
MP48	Meadow Pipit	Displaying and Singing Male	Present	No activity	Displaying
S01	Skylark	No activity	Present	No activity	No activity
S02	Skylark	No activity	No activity	Displaying	No activity
S03	Skylark	No activity	No activity	Displaying	No activity
S04	Skylark	No activity	No activity	No activity	Present
S05	Skylark	No activity	No activity	Displaying	Present
S06	Skylark	No activity	No activity	Present	Present
S07	Skylark	No activity	Displaying	No activity	No activity
S08	Skylark	No activity	No activity	Present	No activity



**Table 5: Breeding Walkover Survey Data**

Territory ID	Species	Activity April	Activity May	Activity June	Activity July
S09	Skylark	No activity	Displaying	No activity	Present
S10	Skylark	No activity	Displaying	Present	No activity
S11	Skylark	No activity	No activity	Present	No activity
S12	Skylark	No activity	No activity	Present	Present
S13	Skylark	No activity	Displaying	Present	No activity
SN01	Snipe	Agitated Behaviour	No activity	No activity	drumming
GL01	Grey Wagtail	No activity	No activity	Pair present	No activity
GL02	Grey Wagtail	No activity	No activity	Present	No activity
GL03	Grey Wagtail	No activity	No activity	Present	No activity
GL04	Grey Wagtail	No activity	No activity	Present	No activity
RG01	Red Grouse	No activity	No activity	No activity	Pair present
RG02	Red Grouse	No activity	No activity	Pair present	Present
RG03	Red Grouse	No activity	Present	No activity	Pair present
RG04	Red Grouse	No activity	Pair present	Present	Pair present
RG05	Red Grouse	Pair Present in Suitable Habitat	No activity	No activity	No activity
MP50	Meadow Pipit	Suitable Habitat and Display	No activity	No activity	No activity
MP51	Meadow Pipit	Agitated Behaviour and Display	No activity	No activity	No activity
MP52	Meadow Pipit	Singing male and Display	No activity	No activity	No activity
MP53	Meadow Pipit	Suitable Nesting Habitat	No activity	No activity	No activity
MP54	Meadow Pipit	Suitable nesting habitat and Display	No activity	No activity	No activity
MP55	Meadow Pipit	Probable Breeding Pair	No activity	No activity	No activity
MP56	Meadow Pipit	Displaying	No activity	No activity	No activity
MP57	Meadow Pipit	Displaying	No activity	No activity	No activity
<b>2018</b>					
MP58	Meadow Pipit		Present	Displaying	Present
MP59	Meadow Pipit			Displaying	Alarming
MP60	Meadow Pipit			Displaying	
MP61	Meadow Pipit		Present	Displaying	Alarming
MP62	Meadow Pipit		Present	Displaying	

**Table 5: Breeding Walkover Survey Data**

Territory ID	Species	Activity April	Activity May	Activity June	Activity July
MP63	Meadow Pipit			Displaying	
MP64	Meadow Pipit		4 present	Displaying	Alarming
MP65	Meadow Pipit			Displaying	Alarming
MP66	Meadow Pipit			Displaying	Alarming
MP67	Meadow Pipit			Displaying	Present
MP68	Meadow Pipit			Displaying	
MP69	Meadow Pipit			Displaying	
MP70	Meadow Pipit		Alarming		
MP71	Meadow Pipit		Present	Displaying	
MP72	Meadow Pipit		Present	Displaying	
MP73	Meadow Pipit			Displaying	4 Present
MP74	Meadow Pipit		Displaying	Displaying	
MP75	Meadow Pipit		Carrying Material	Displaying	
MP76	Meadow Pipit			Displaying	Alarming
MP77	Meadow Pipit		Alarm		
MP78	Meadow Pipit		Displaying		
MP79	Meadow Pipit			Displaying	
MP80	Meadow Pipit	6 present	Displaying		Alarming
MP81	Meadow Pipit		Displaying	Displaying	
MP82	Meadow Pipit			On nest	
MP83	Meadow Pipit		Displaying		Alarming
MP84	Meadow Pipit		Displaying		
MP85	Meadow Pipit				Alarming
MP86	Meadow Pipit			Displaying	
MP87	Meadow Pipit			Displaying	Alarming
MP88	Meadow Pipit	Territorial behaviour	6 present	Displaying	
MP89	Meadow Pipit			Displaying	Present
MP90	Meadow Pipit	4 present	present	Displaying	
MP91	Meadow Pipit			Alarming	
MP92	Meadow Pipit			Displaying	
MP93	Meadow Pipit		Present	Alarming	Alarming

**Table 5: Breeding Walkover Survey Data**

Territory ID	Species	Activity April	Activity May	Activity June	Activity July
MP94	Meadow Pipit			Alarming	
MP95	Meadow Pipit			Displaying	Alarming
MP96	Meadow Pipit			Displaying	
MP97	Meadow Pipit				
MP98	Meadow Pipit			Alarming	Alarming
MP99	Meadow Pipit			Displaying	
MP100	Meadow Pipit			Displaying	Alarming
MP101	Meadow Pipit			Displaying	
MP102	Meadow Pipit			Displaying	
MP103	Meadow Pipit			Displaying	
MP104	Meadow Pipit		Present	Displaying	
MP105	Meadow Pipit			Displaying	
MP106	Meadow Pipit			Displaying	Present
MP107	Meadow Pipit			Displaying	Alarming
MP108	Meadow Pipit		Displaying		
MP109	Meadow Pipit				
MP110	Meadow Pipit			Displaying	4 Present
MP111	Meadow Pipit			Displaying	3 Present
MP112	Meadow Pipit			Displaying	
MP113	Meadow Pipit			Displaying	10 Present
MP114	Meadow Pipit		Present	Displaying	Alarming
MP115	Meadow Pipit				Alarming
MP116	Meadow Pipit			Displaying	
MP117	Meadow Pipit		Present	Displaying	
MP118	Meadow Pipit			Displaying	
MP119	Meadow Pipit		Present		Alarming
MP120	Meadow Pipit			Displaying	5 Present
MP121	Meadow Pipit				Alarming
MP122	Meadow Pipit			Displaying	Alarming
MP123	Meadow Pipit			Displaying	
MP124	Meadow Pipit			Displaying	14 Present

**Table 5: Breeding Walkover Survey Data**

Territory ID	Species	Activity April	Activity May	Activity June	Activity July
MP125	Meadow Pipit		Present	Displaying	Alarming
MP126	Meadow Pipit			Displaying	Alarming
MP127	Meadow Pipit				Alarming
MP128	Meadow Pipit			Displaying	Present
MP129	Meadow Pipit				Alarming
MP130	Meadow Pipit			Displaying	
MP131	Meadow Pipit			Alarm	
MP132	Meadow Pipit				Alarming
MP133	Meadow Pipit			Alarm	Alarming
MP134	Meadow Pipit				Alarming
MP135	Meadow Pipit			Carrying material	
MP136	Meadow Pipit			Displaying	
MP137	Meadow Pipit				Alarming
MP138	Meadow Pipit		6 present	Displaying	
MP139	Meadow Pipit			Displaying	
MP140	Meadow Pipit				Alarming
MP141	Meadow Pipit			Displaying	Present
MP142	Meadow Pipit		2 present	Displaying	Alarming
MP143	Meadow Pipit			Displaying	Alarming
MP144	Meadow Pipit		Displaying	Displaying	
MP145	Meadow Pipit		Displaying	Displaying	
RG06	Red Grouse			Pair present	
RG07	Red Grouse		Present	Present, flushed	
RG08	Red Grouse			Pair with 4 juveniles	
RG09	Red Grouse			Pair Incubating	
RG10	Red Grouse		Present		3 Present flushed by HH
RG11	Red Grouse		Present	2 flushed	

# Appendix 3

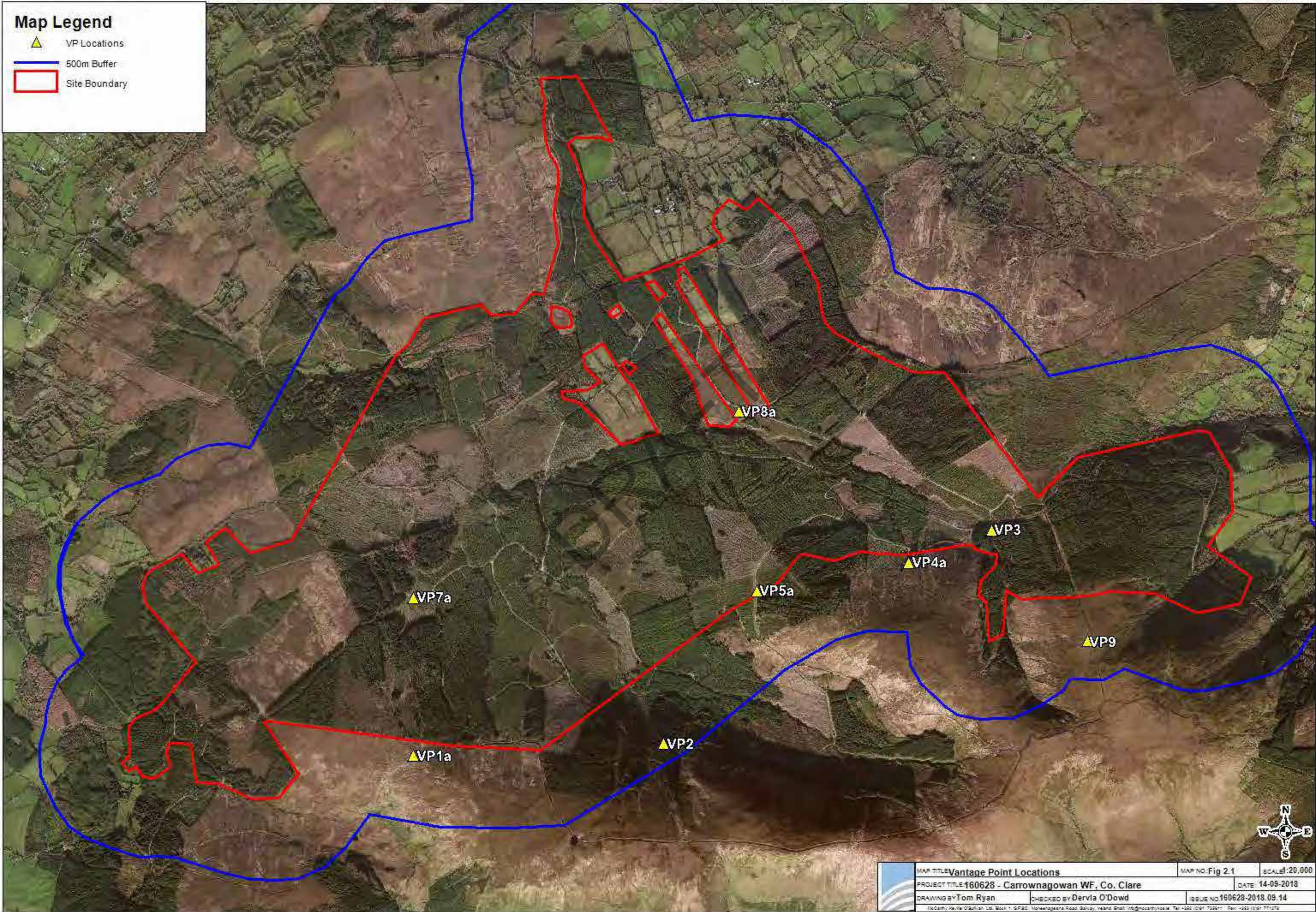
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Figures (non-sensitive species)



### Map Legend





-  VP Locations
-  500m Buffer
-  Site Boundary

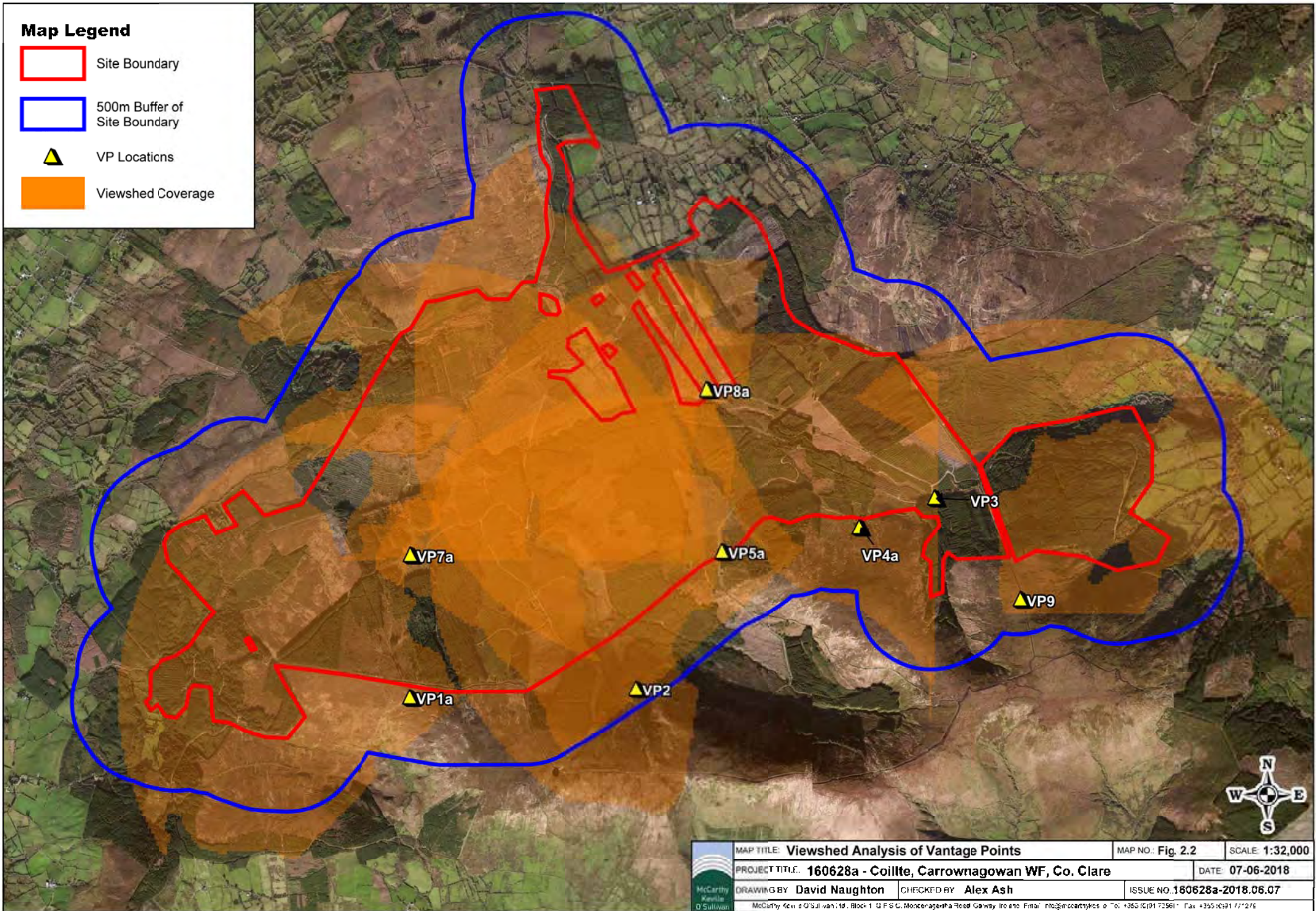


MAP TITLE: Vantage Point Locations	MAP NO.: Fig 2.1	SCALE: 1:20,000
PROJECT TITLE: 160628 - Carrownagowan WF, Co. Clare	DATE: 14-09-2018	
DRAWING BY: Tom Ryan	CHECKED BY: Dervla O'Dowd	ISSUE NO: 160628-2018.09.14



### Map Legend

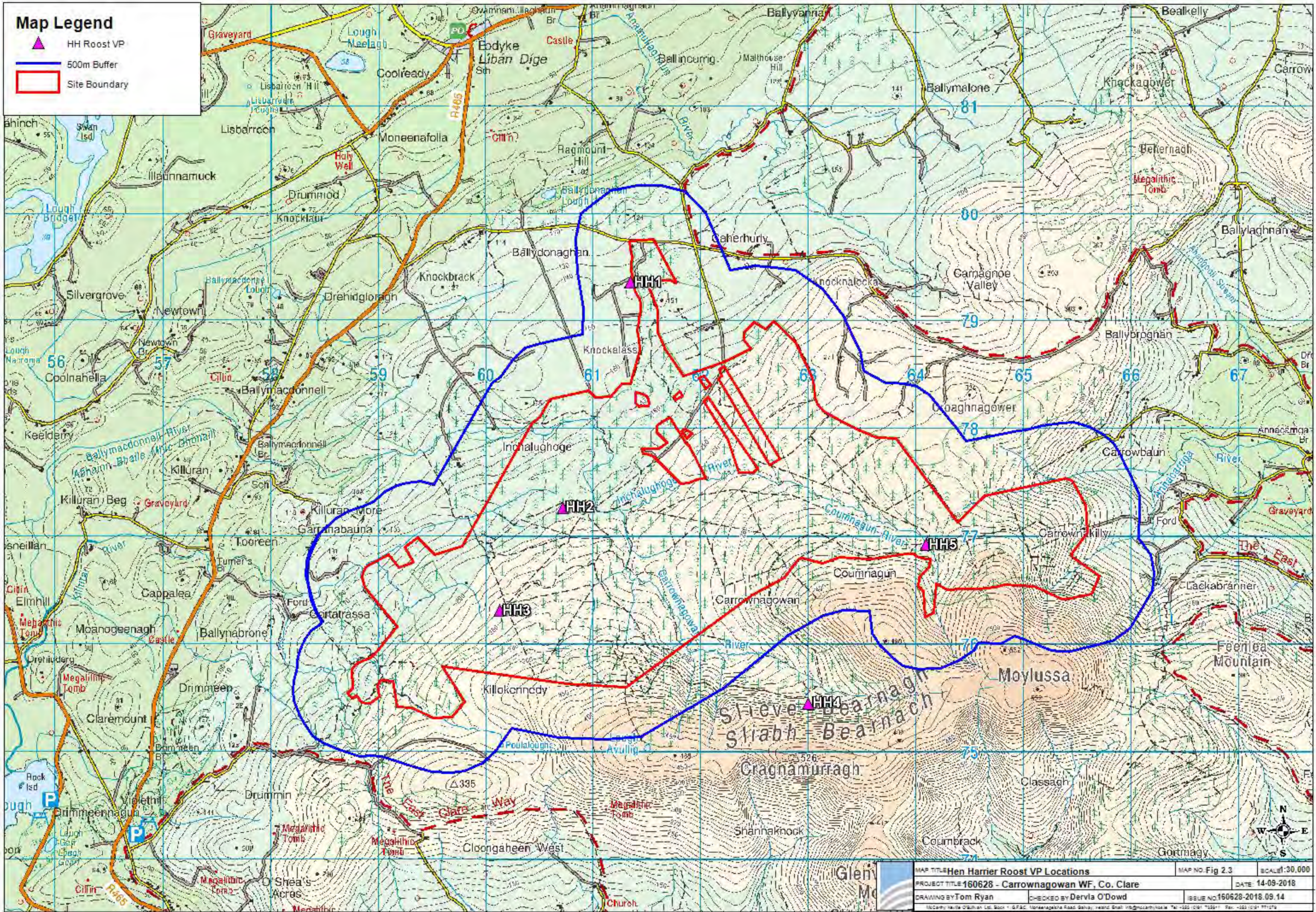
-  Site Boundary
-  500m Buffer of Site Boundary
-  VP Locations
-  Viewshed Coverage





### Map Legend

- ▲ HH Roost VP
- 500m Buffer
- Site Boundary

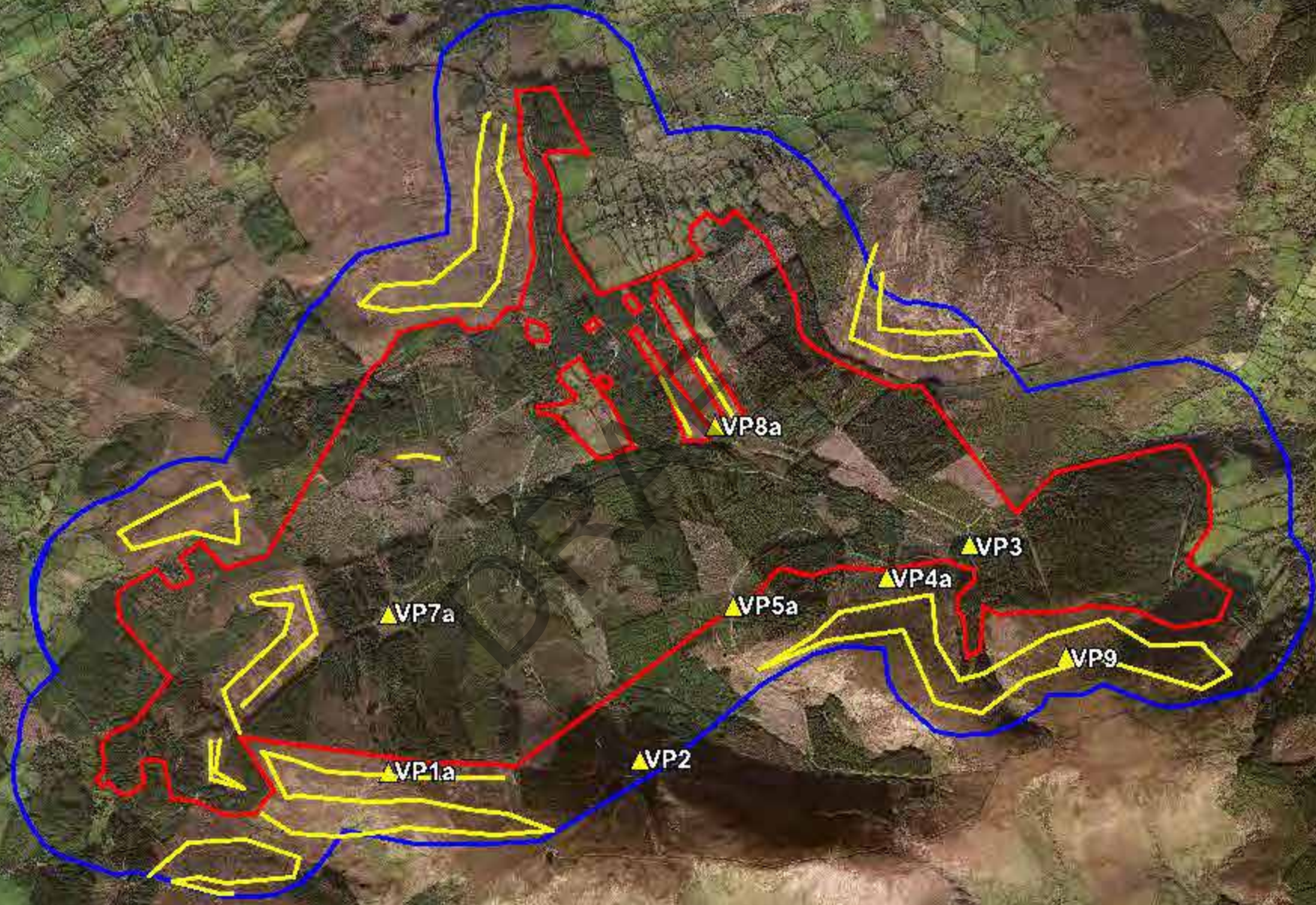


MAP TITLE: Hen Harrier Roost VP Locations	MAP NO: Fig 2.3	SCALE: 30,000
PROJECT TITLE: 160628 - Carrowmagowan WF, Co. Clare	DATE: 14-09-2018	
DRAWING BY: Tom Ryan	CHECKED BY: Dervla O'Dowd	ISSUE NO: 160628-2018.09.14



### Map Legend

- Red Grouse Survey Transect
- 500m Buffer
- Site Boundary

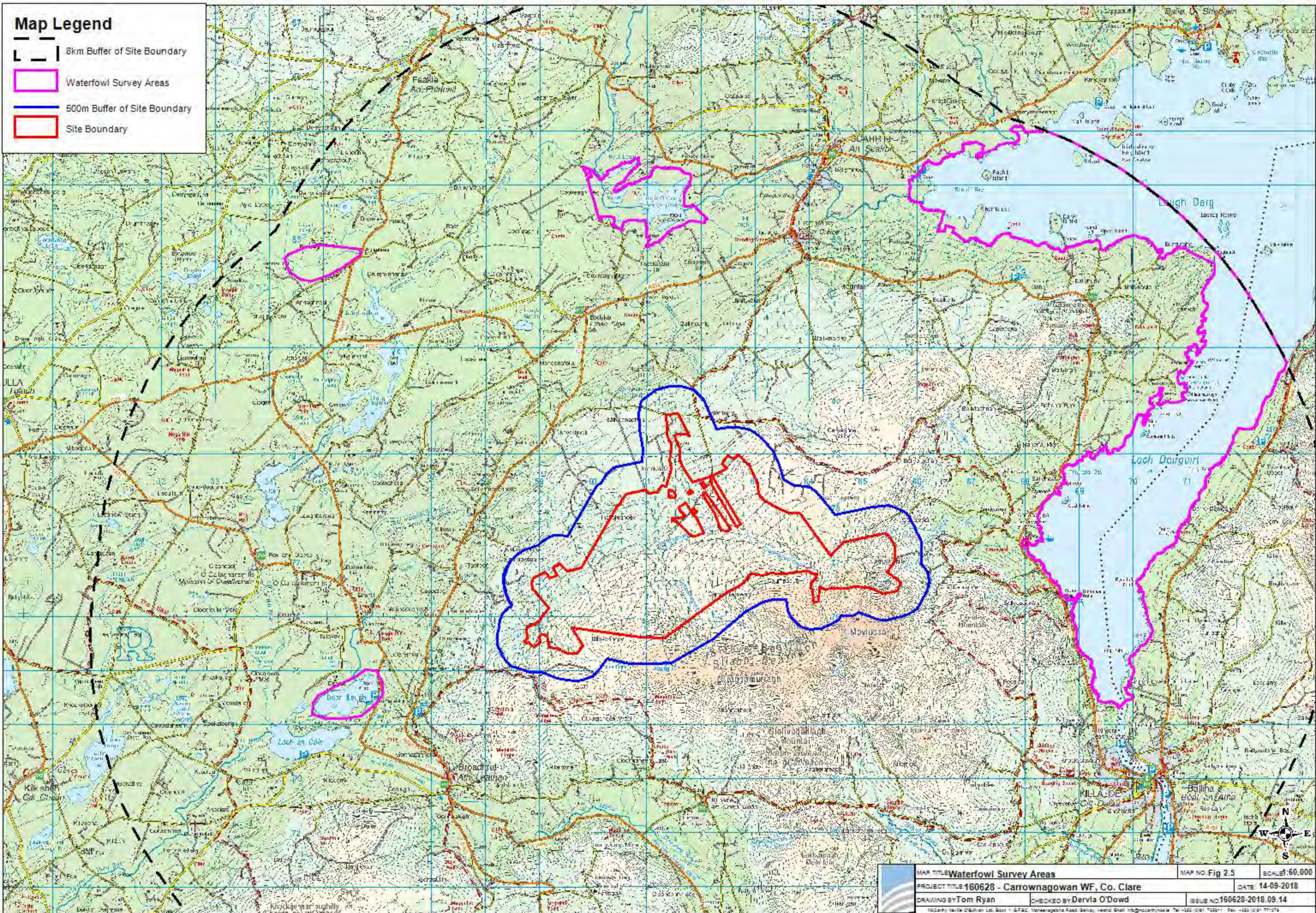


MAP TITLE: Red Grouse Survey Transects	MAP NO.: Fig 2.4	SCALE: 1:35,000
PROJECT TITLE: 160628 - Carrownagowan WF, Co. Clare	DATE: 14-09-2018	
DRAWING BY: Tom Ryan	CHECKED BY: Dervla O'Dowd	ISSUE NO: 160628-2018.09.14



# Map Legend

-  8km Buffer of Site Boundary
-  Waterfowl Survey Areas
-  500m Buffer of Site Boundary
-  Site Boundary

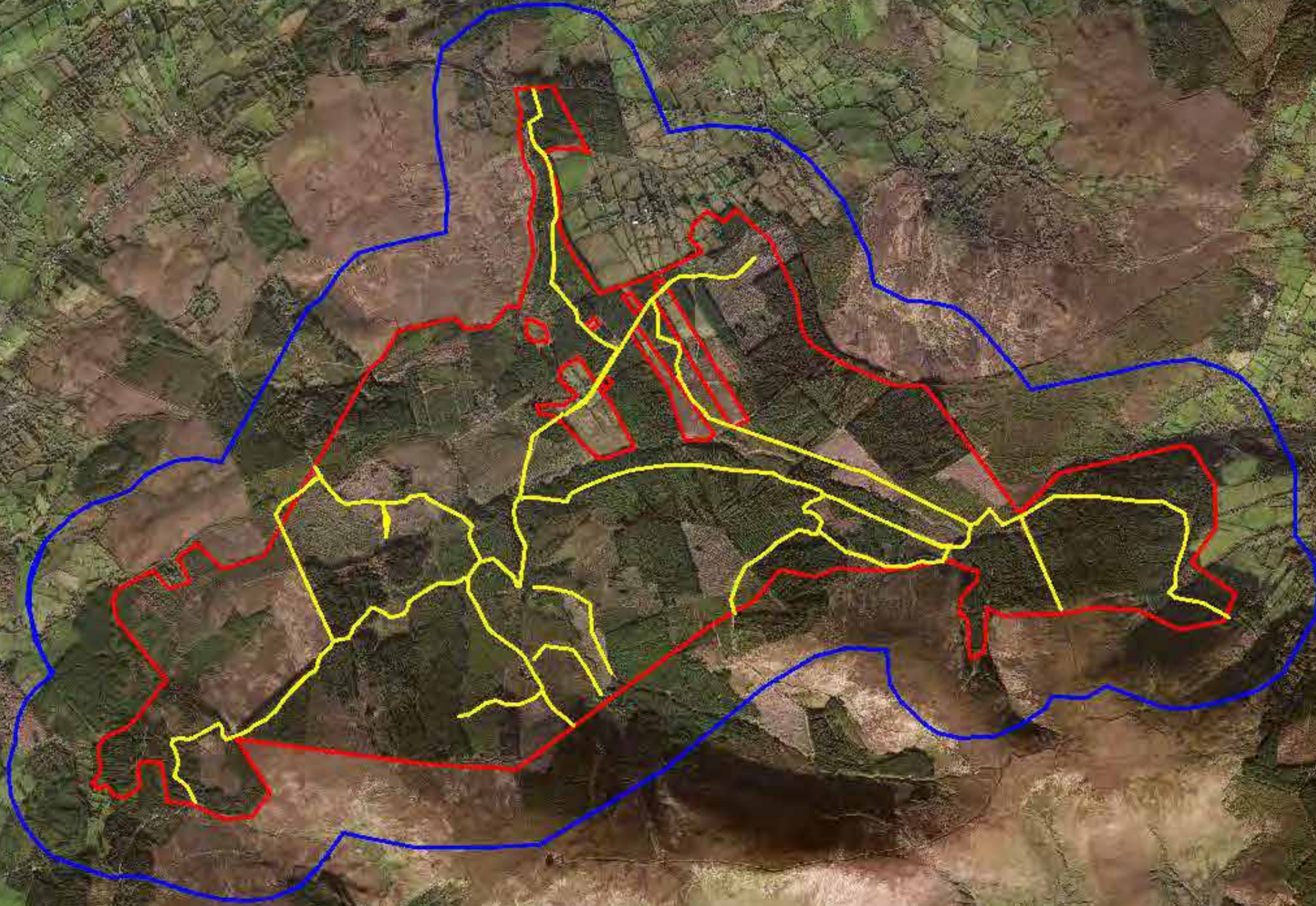


MAP TITLE: Waterfowl Survey Areas	MAP NO: Fig 2.5	SCALE: 60,000
PROJECT TITLE: 160628 - Carrowmagowan WF, Co. Clare	DATE: 14-09-2018	
DRAWING BY: Tom Ryan	CHECKED BY: Dervia O'Dowd	ISSUE NO: 160628-2018.09.14



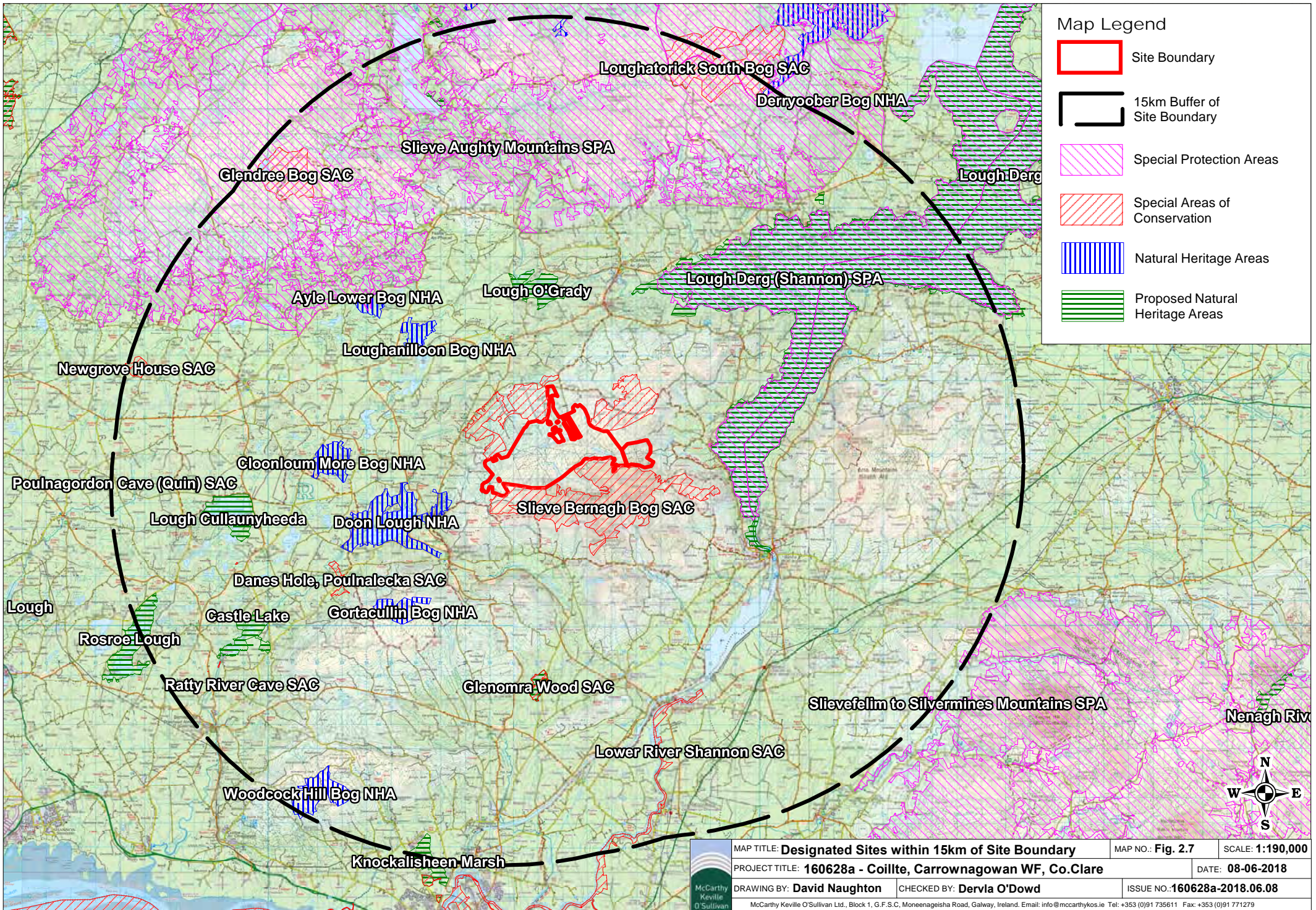
### Map Legend

- Winter Walkover Transect
- 500m Buffer
- Site Boundary



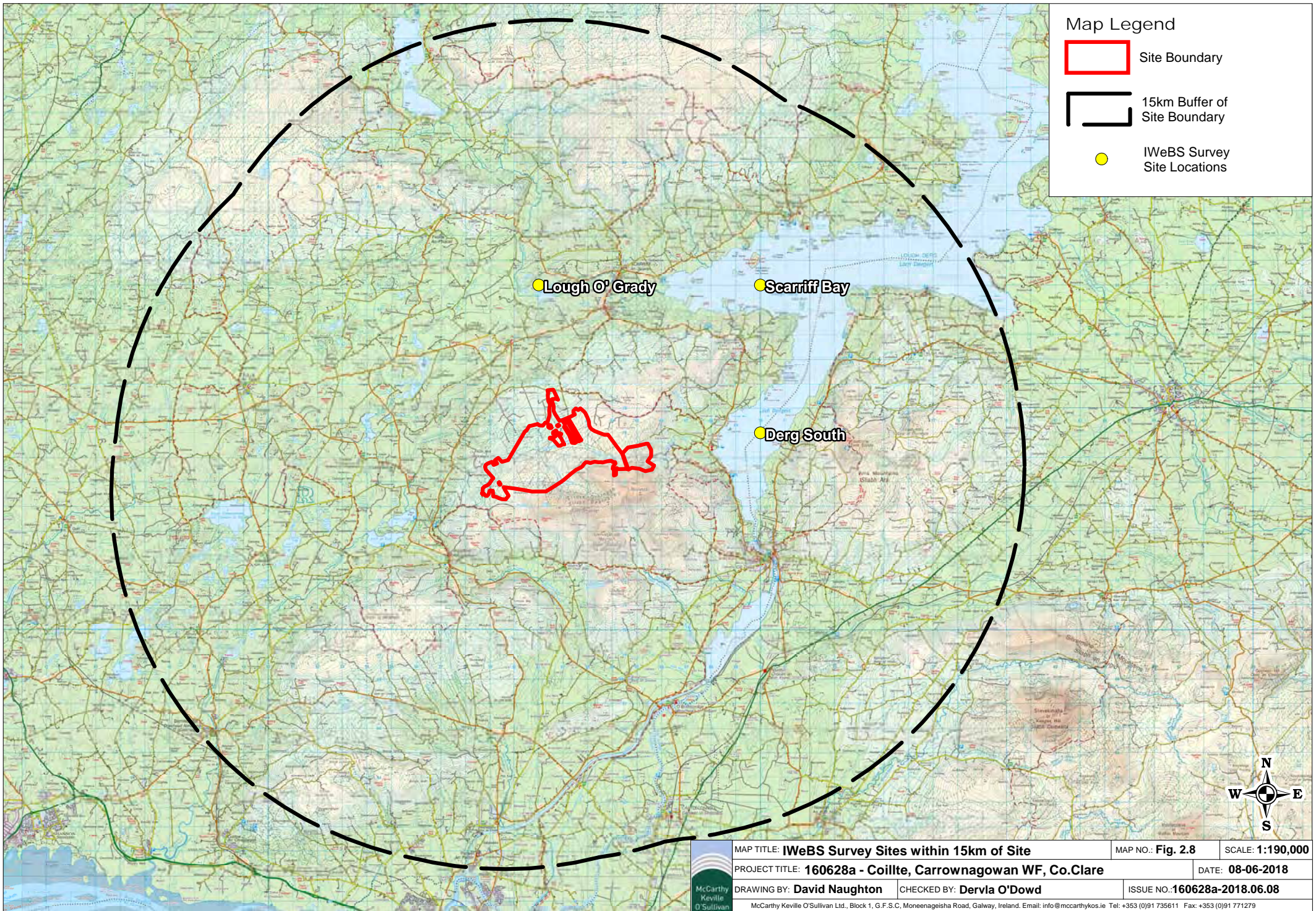
MAP TITLE: Winter Walkover Transects	MAP NO.: Fig 2.5	SCALE: 30,000
PROJECT TITLE: 160628 - Carrownagowan WF, Co. Clare	DATE: 14-09-2018	
DRAWING BY: Tom Ryan	CHECKED BY: Dervla O'Dowd	ISSUE NO: 160628-2018.09.14









	MAP TITLE: <b>Designated Sites within 15km of Site Boundary</b>	MAP NO.: <b>Fig. 2.7</b>	SCALE: <b>1:190,000</b>
	PROJECT TITLE: <b>160628a - Coillte, Carrownagowan WF, Co.Clare</b>	DATE: <b>08-06-2018</b>	
	DRAWING BY: <b>David Naughton</b>	CHECKED BY: <b>Dervla O'Dowd</b>	ISSUE NO.: <b>160628a-2018.06.08</b>
	<small>McCarthy Keville O'Sullivan Ltd., Block 1, G.F.S.C. Moneenagelsha Road, Galway, Ireland. Email: info@mccarthykos.ie Tel: +353 (0)91 735611 Fax: +353 (0)91 771279</small>		

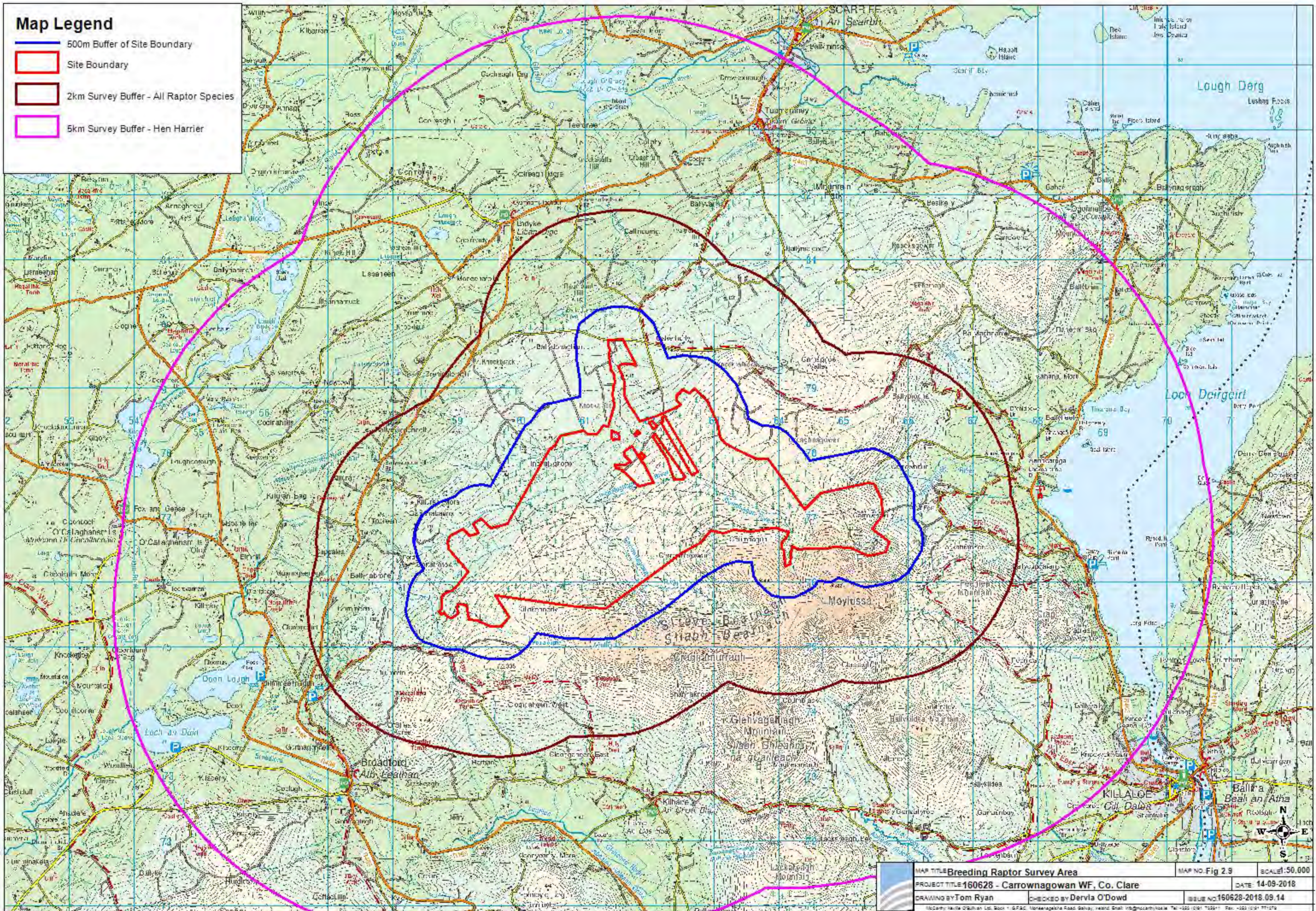






### Map Legend




-  500m Buffer of Site Boundary
-  Site Boundary
-  2km Survey Buffer - All Raptor Species
-  5km Survey Buffer - Hen Harrier

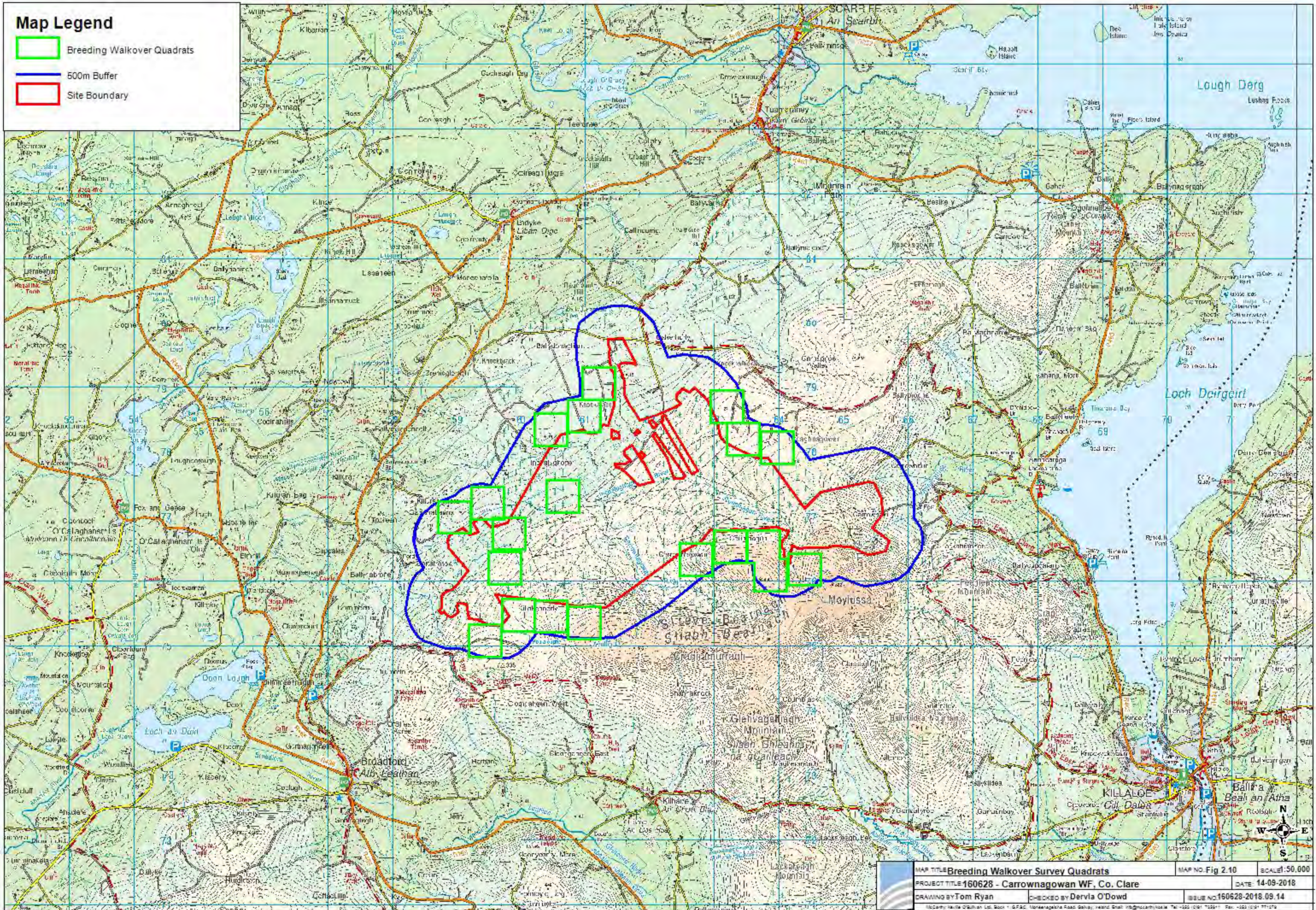


MAP TITLE: <b>Breeding Raptor Survey Area</b>	MAP NO: Fig 2.9	SCALE: 1:50,000
PROJECT TITLE: <b>160628 - Carrowmagowan WF, Co. Clare</b>	DATE: 14-09-2018	
DRAWING BY: <b>Tom Ryan</b>	CHECKED BY: <b>Dervia O'Dowd</b>	ISSUE NO: <b>160628-2018.09.14</b>



# Map Legend

-  Breeding Walkover Quadrats
-  500m Buffer
-  Site Boundary

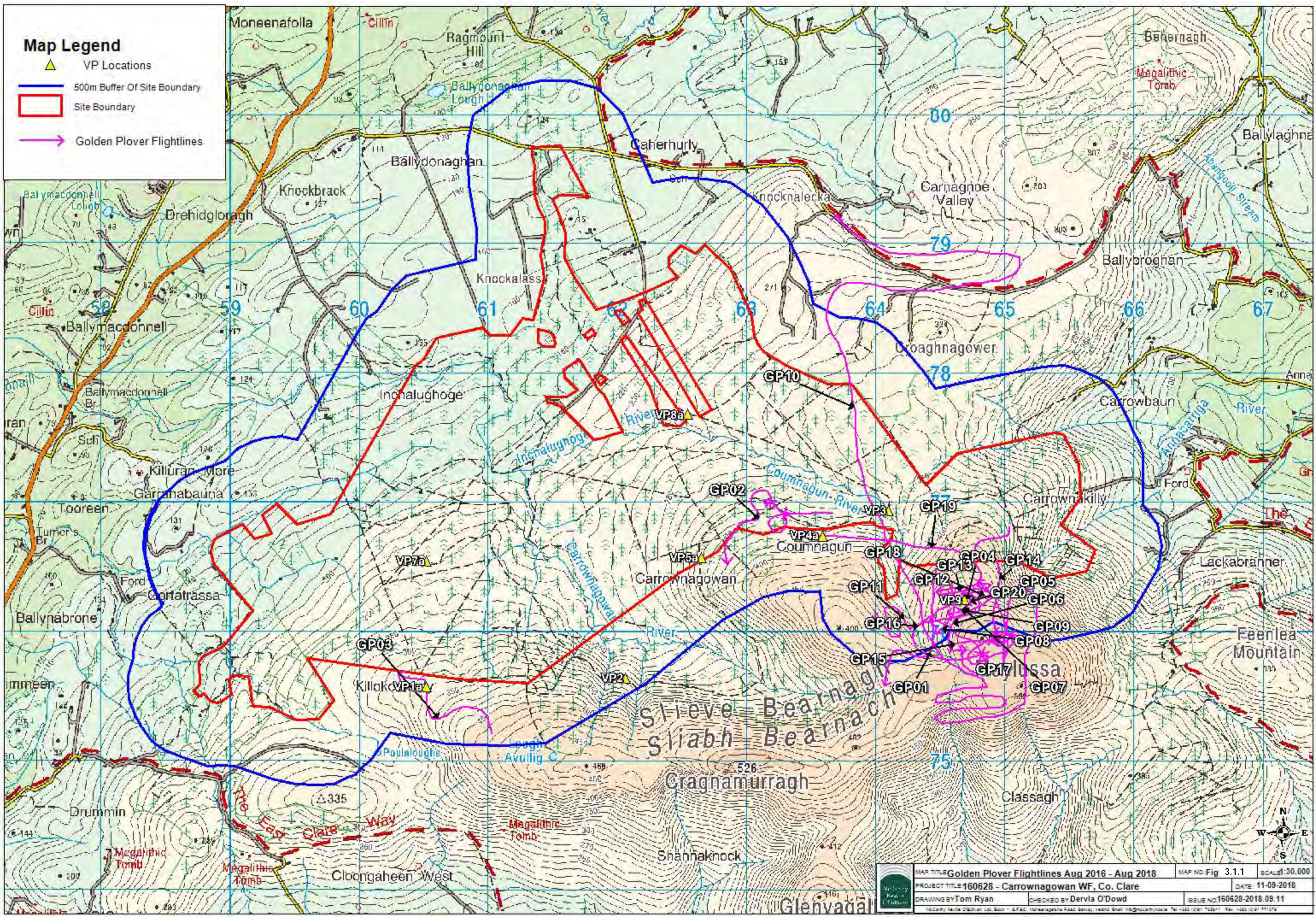


MAP TITLE: Breeding Walkover Survey Quadrats	MAP NO: Fig 2.10	SCALE: 1:50,000
PROJECT TITLE: 160628 - Carrowmagowan WF, Co. Clare	DATE: 14-09-2018	
DRAWING BY: Tom Ryan	CHECKED BY: Dervia O'Dowd	ISSUE NO: 160628-2018.09.14



### Map Legend

- ▲ VP Locations
- 500m Buffer Of Site Boundary
- Site Boundary
- Golden Plover Flightlines

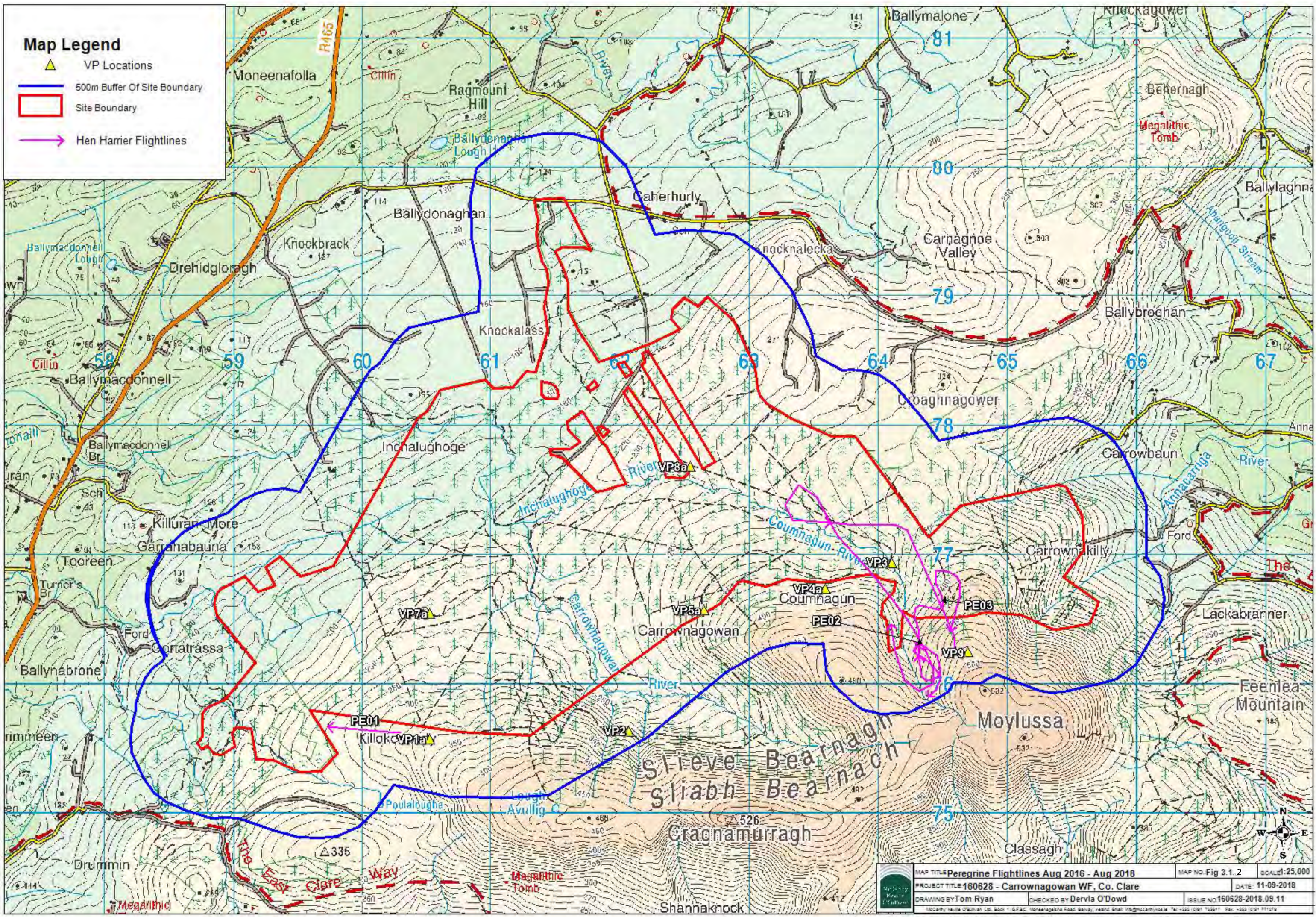



<b>MAP TITLE</b> Golden Plover Flightlines Aug 2016 - Aug 2018	<b>MAP NO.</b> Fig 3.1.1	<b>SCALE:</b> 30,000
<b>PROJECT TITLE</b> 160628 - Carrowmagowan WF, Co. Clare		
<b>DATE:</b> 11-09-2018		
<b>DRAWING BY</b> Tom Ryan	<b>CHECKED BY</b> Dervia O'Dowd	<b>ISSUE NO.</b> 160628-2018.09.11



### Map Legend

-  VP Locations
-  500m Buffer Of Site Boundary
-  Site Boundary
-  Hen Harrier Flightlines

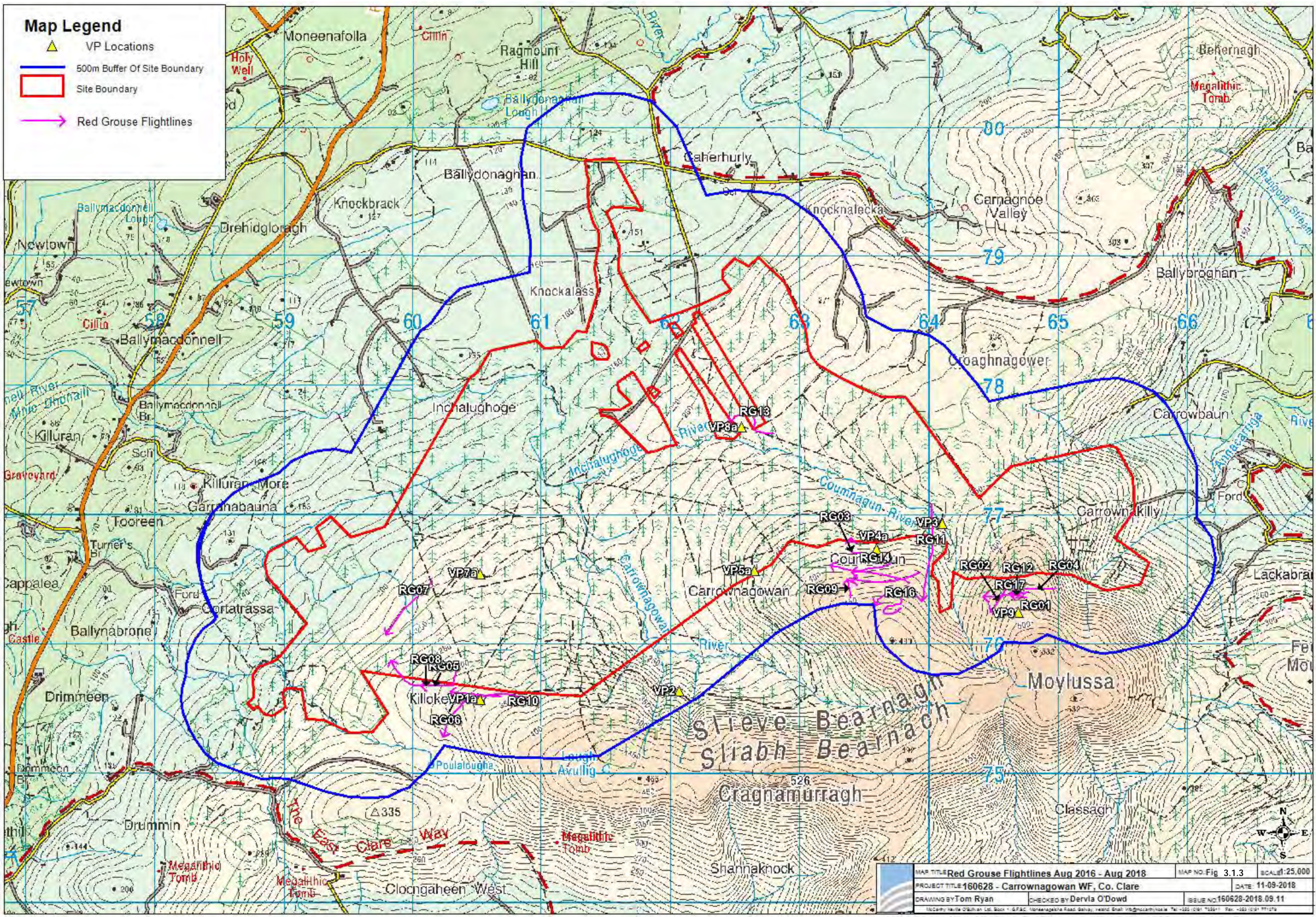


	MAP TITLE: Peregrine Flightlines Aug 2016 - Aug 2018	MAP NO: Fig 3.1.2	SCALE: 25,000
	PROJECT TITLE: 160628 - Carrowmagowan WF, Co. Clare		DATE: 11-09-2018
	DRAWING BY: Tom Ryan	CHECKED BY: Dervia O'Dowd	ISSUE NO: 160628-2018.09.11
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### Map Legend

- ▲ VP Locations
- 500m Buffer Of Site Boundary
- Site Boundary
- Red Grouse Flightlines

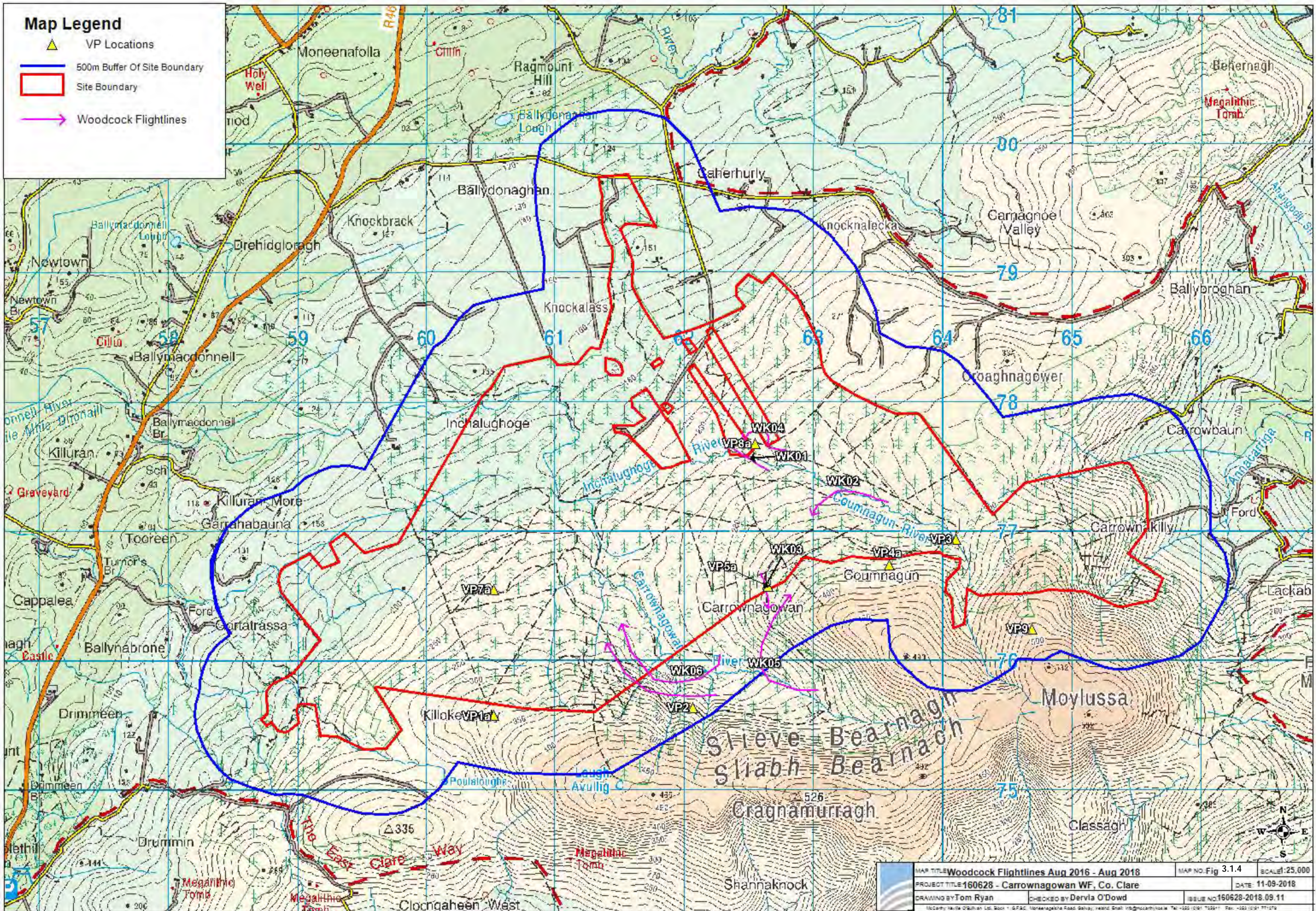


MAP TITLE: Red Grouse Flightlines Aug 2016 - Aug 2018 PROJECT TITLE: 160628 - Carrownagowan WF, Co. Clare DRAWING BY: Tom Ryan <small>© Ordnance Survey Ireland Licence No. AR 00218198</small>	MAP NO: Fig 3.1.3 DATE: 11-09-2018 CHECKED BY: Dervla O'Dowd <small>ISSUE NO: 160628-2018.09.11</small>	SCALE: 1:25,000
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### Map Legend

- ▲ VP Locations
- 500m Buffer Of Site Boundary
- Site Boundary
- Woodcock Flightlines



MAP TITLE: Woodcock Flightlines Aug 2016 - Aug 2018	MAP NO: Fig 3.1.4	SCALE: 25,000
PROJECT TITLE: 160628 - Carrownagowan WF, Co. Clare	DATE: 11-09-2018	
DRAWN BY: Tom Ryan	CHECKED BY: Dervia O'Dowd	ISSUE NO: 160628-2018.09.11

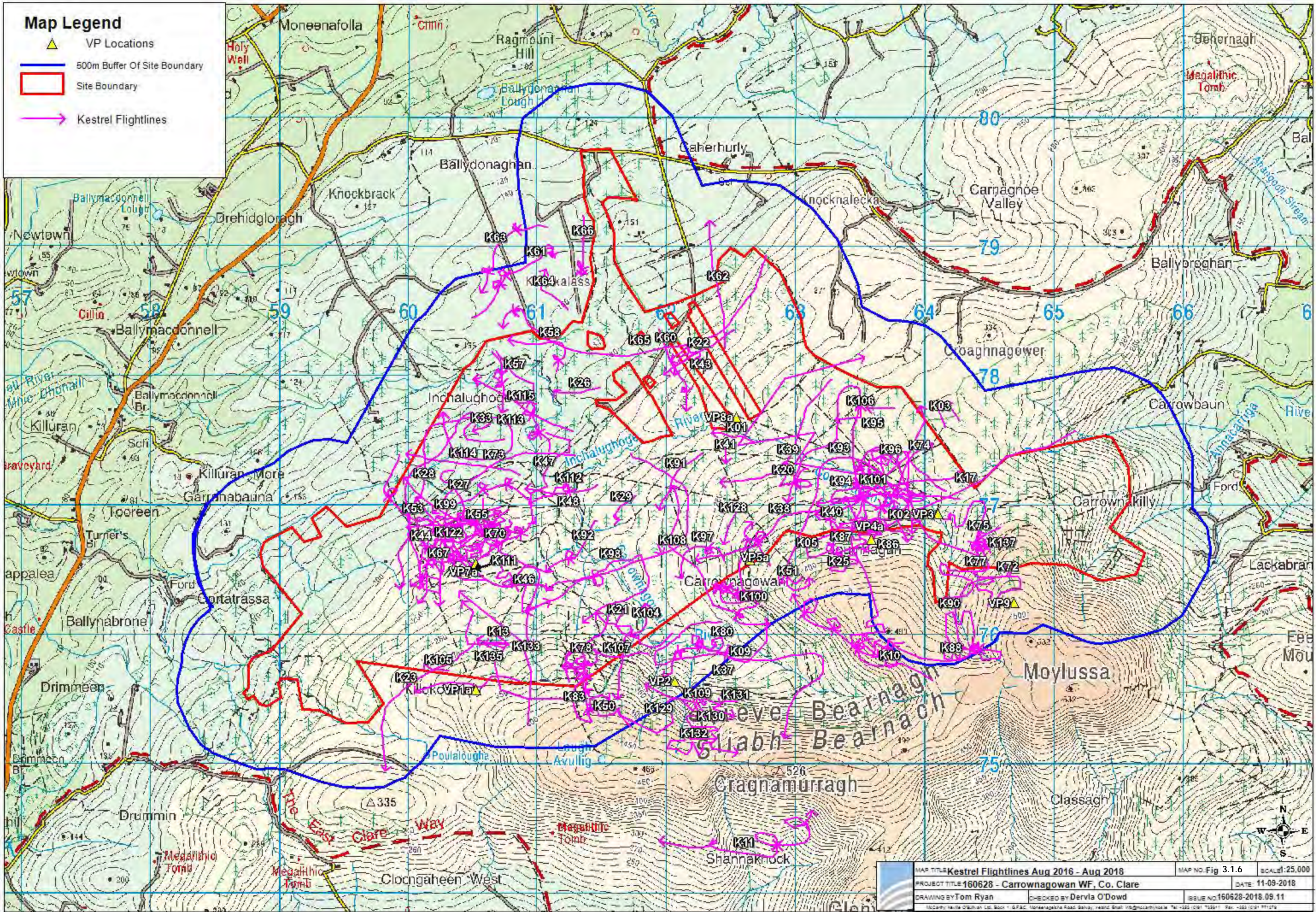






### Map Legend

-  VP Locations
-  500m Buffer Of Site Boundary
-  Site Boundary
-  Kestrel Flightlines

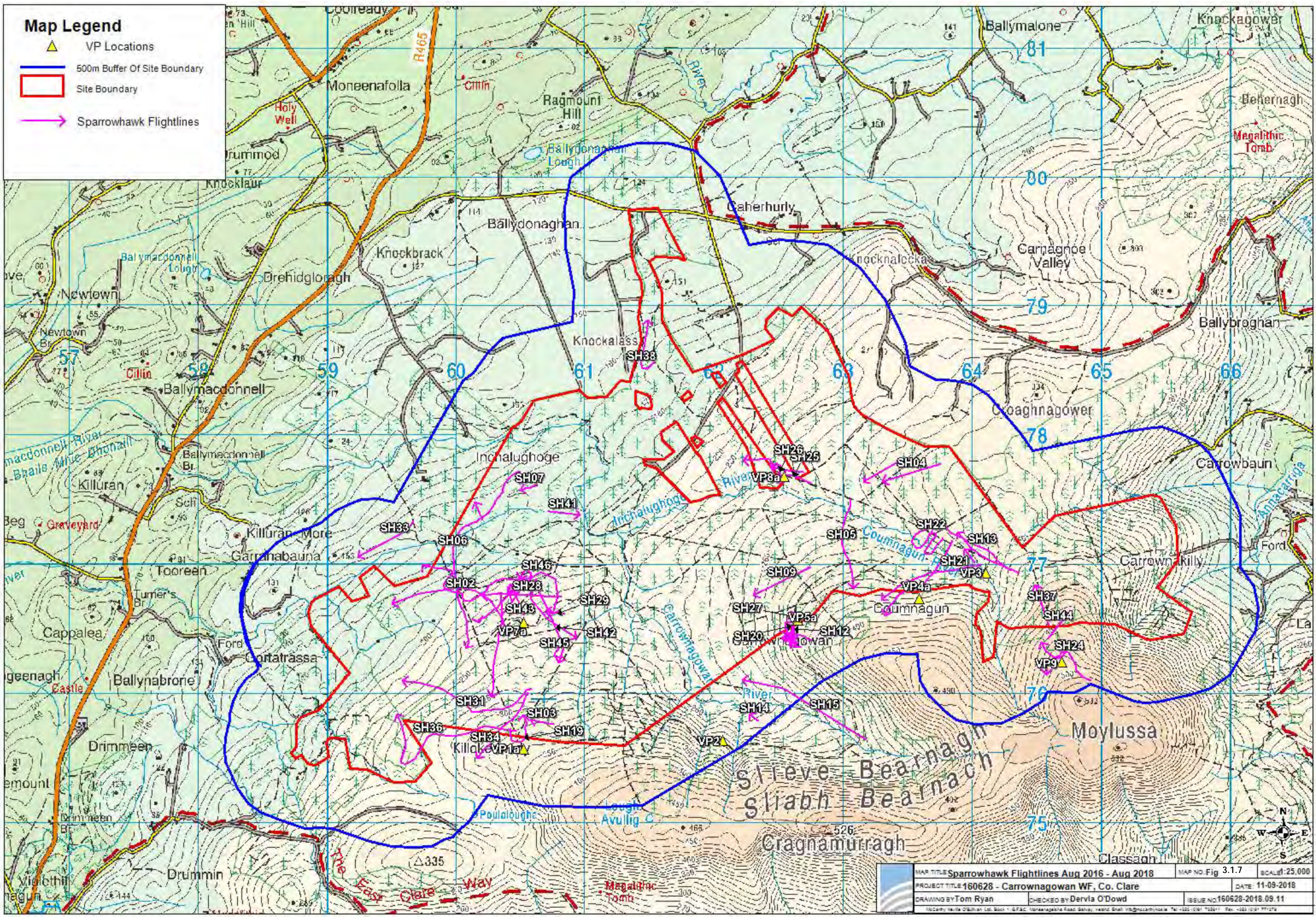


MAP TITLE: Kestrel Flightlines Aug 2016 - Aug 2018	MAP NO: Fig 3.1.6	SCALE: 25,000
PROJECT TITLE: 160628 - Carrowmagowan WF, Co. Clare	DATE: 11-09-2018	
DRAWING BY: Tom Ryan	CHECKED BY: Dervia O'Dowd	ISSUE NO: 160628-2018.09.11
SECURITY: Not for Release - G.F.S.C. Information: Road Safety, Ireland. Email: info@carrowmagowan.ie. Tel: +353 (0)91 705511. Fax: +353 (0)91 711276		



### Map Legend

-  VP Locations
-  500m Buffer Of Site Boundary
-  Site Boundary
-  Sparrowhawk Flightlines

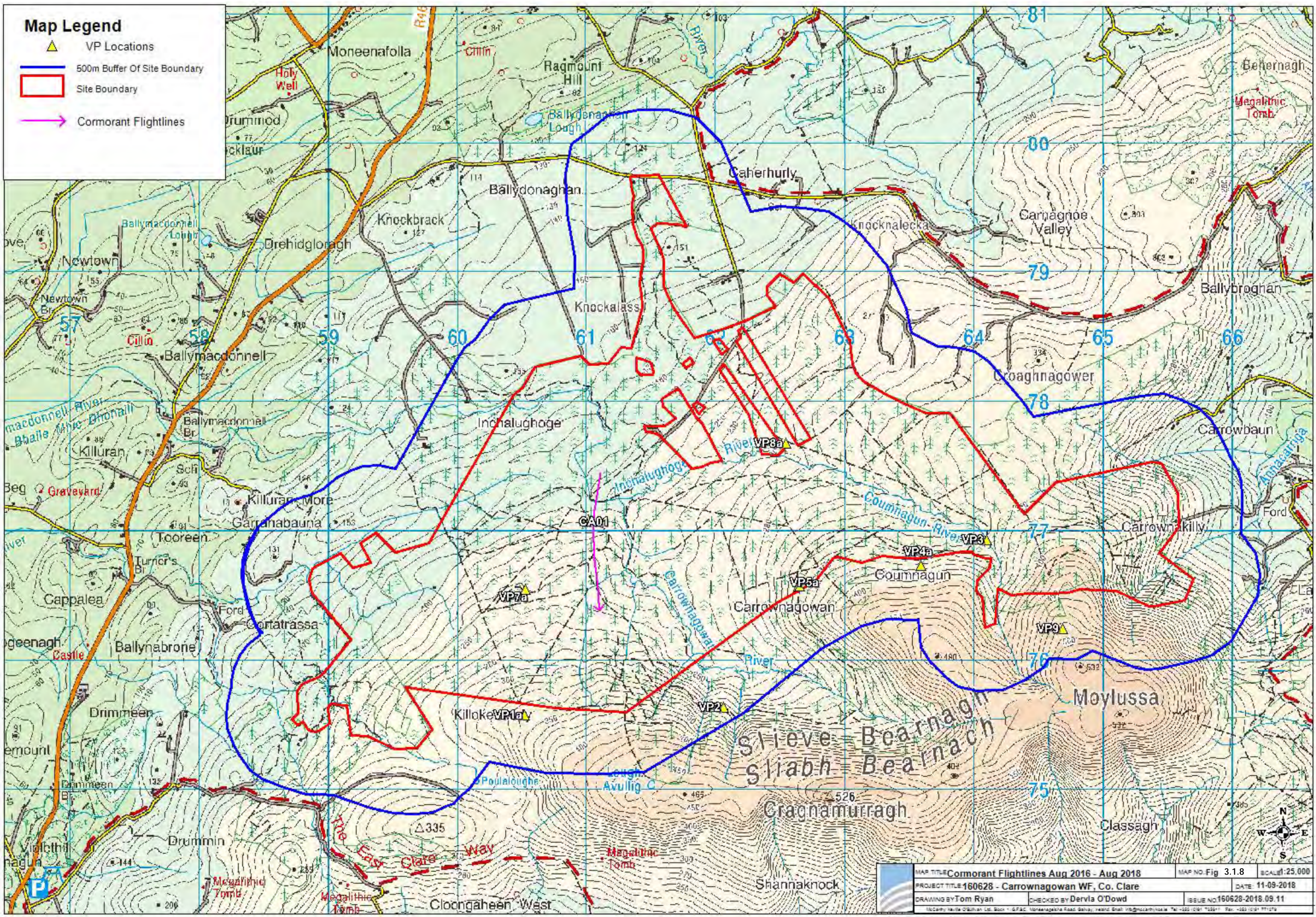


MAP TITLE Sparrowhawk Flightlines Aug 2016 - Aug 2018	MAP NO. Fig 3.1.7	SCALE: 25,000
PROJECT TITLE 160628 - Carrowmagowan WF, Co. Clare	DATE 11-09-2018	
DRAWING BY Tom Ryan	CHECKED BY Dervla O'Dowd	ISSUE NO 160628-2018.09.11



### Map Legend

- ▲ VP Locations
- 500m Buffer Of Site Boundary
- Site Boundary
- Cormorant Flightlines

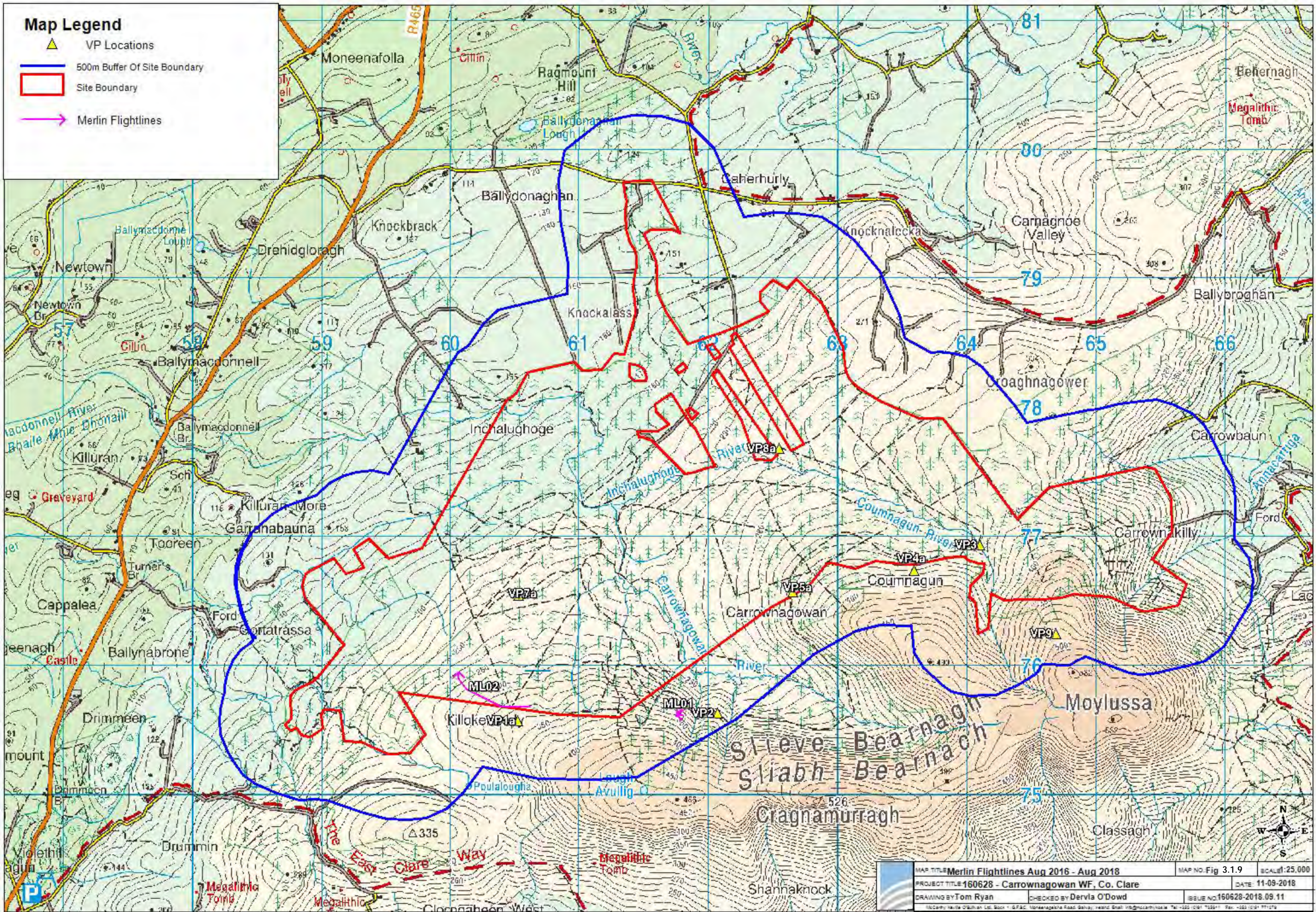


MAP TITLE: Cormorant Flightlines Aug 2016 - Aug 2018	MAP NO: Fig 3.1.8	SCALE: 1:25,000
PROJECT TITLE: 160628 - Carrowmagowan WF, Co. Clare	DATE: 11-09-2018	
DRAWING BY: Tom Ryan	CHECKED BY: Dervla O'Dowd	ISSUE NO: 160628-2018.09.11



### Map Legend

- ▲ VP Locations
- 500m Buffer Of Site Boundary
- Site Boundary
- Merlin Flightlines

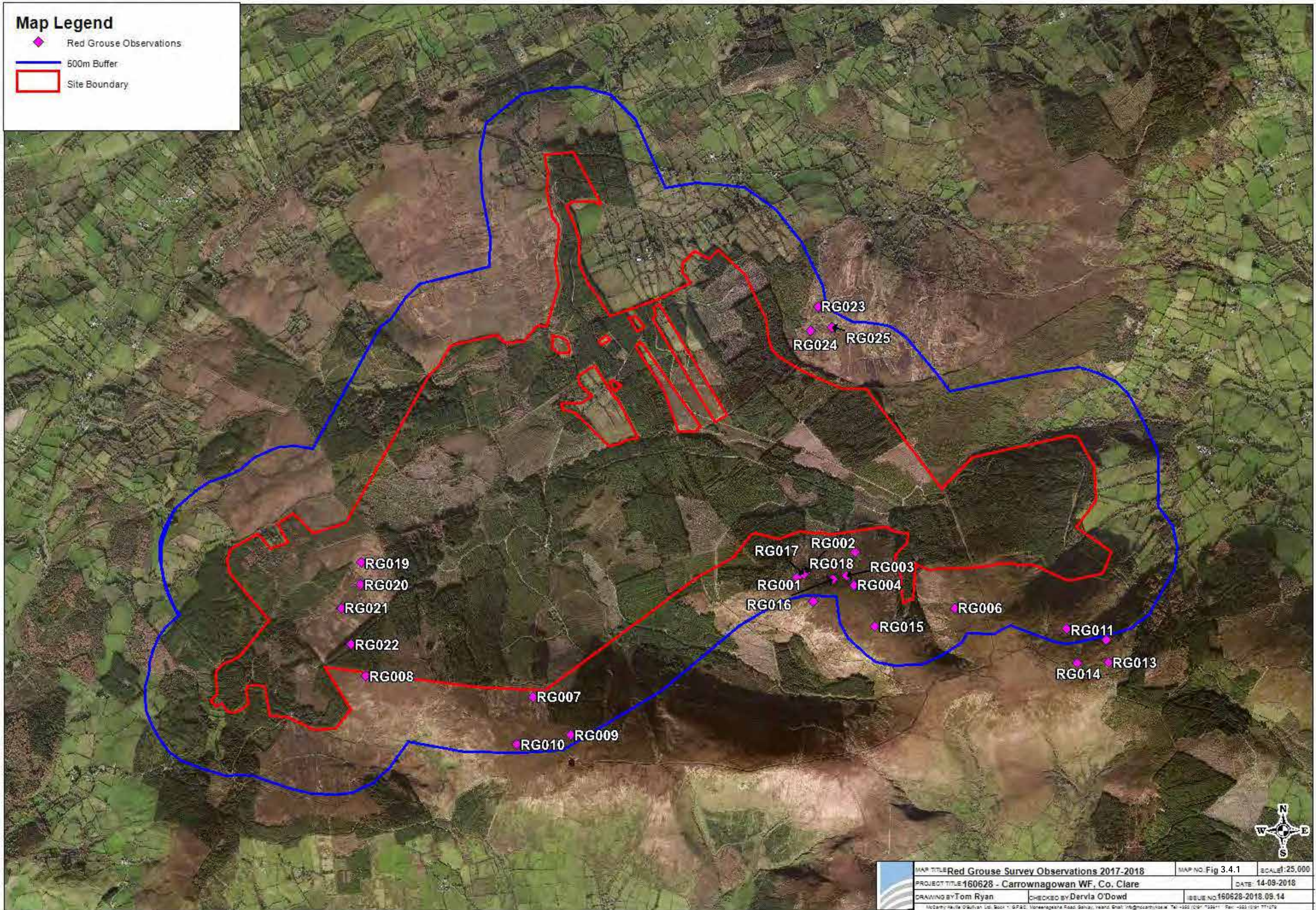


MAP TITLE: Merlin Flightlines Aug 2016 - Aug 2018	MAP NO: Fig 3.1.9	SCALE: 25,000
PROJECT TITLE: 160628 - Carrowmagowan WF, Co. Clare	DATE: 11-09-2018	
DRAWING BY: Tom Ryan	CHECKED BY: Dervla O'Dowd	ISSUE NO: 160628-2018.09.11



### Map Legend

- ◆ Red Grouse Observations
- 500m Buffer
- Site Boundary

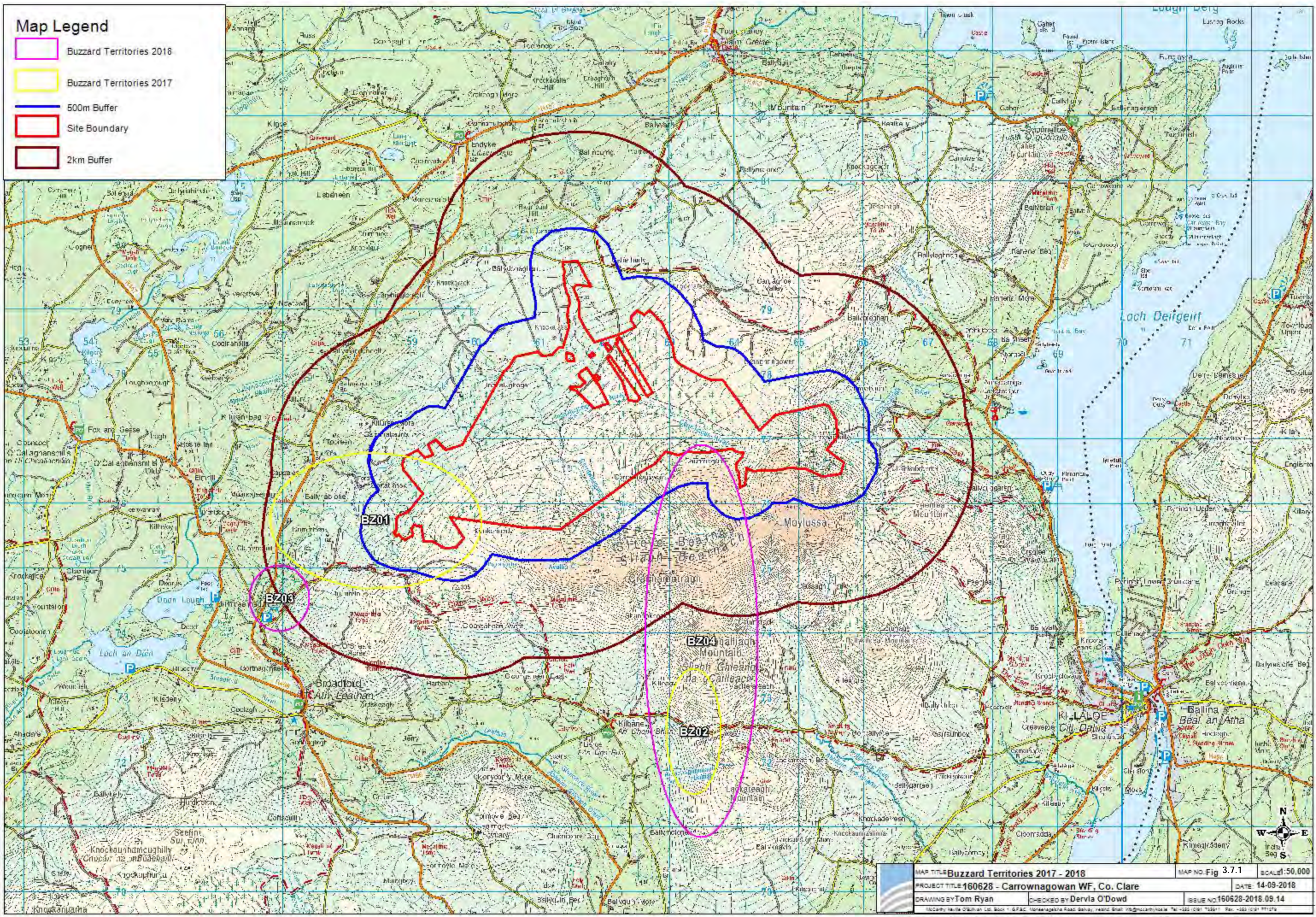


MAP TITLE: Red Grouse Survey Observations 2017-2018	MAP NO: Fig 3.4.1	SCALE: 1:25,000
PROJECT TITLE: 160628 - Carrownagowan WF, Co. Clare	DATE: 14-09-2018	
DRAWING BY: Tom Ryan	CHECKED BY: Dervla O'Dowd	ISSUE NO: 160628-2018.09.14
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### Map Legend

-  Buzzard Territories 2018
-  Buzzard Territories 2017
-  500m Buffer
-  Site Boundary
-  2km Buffer

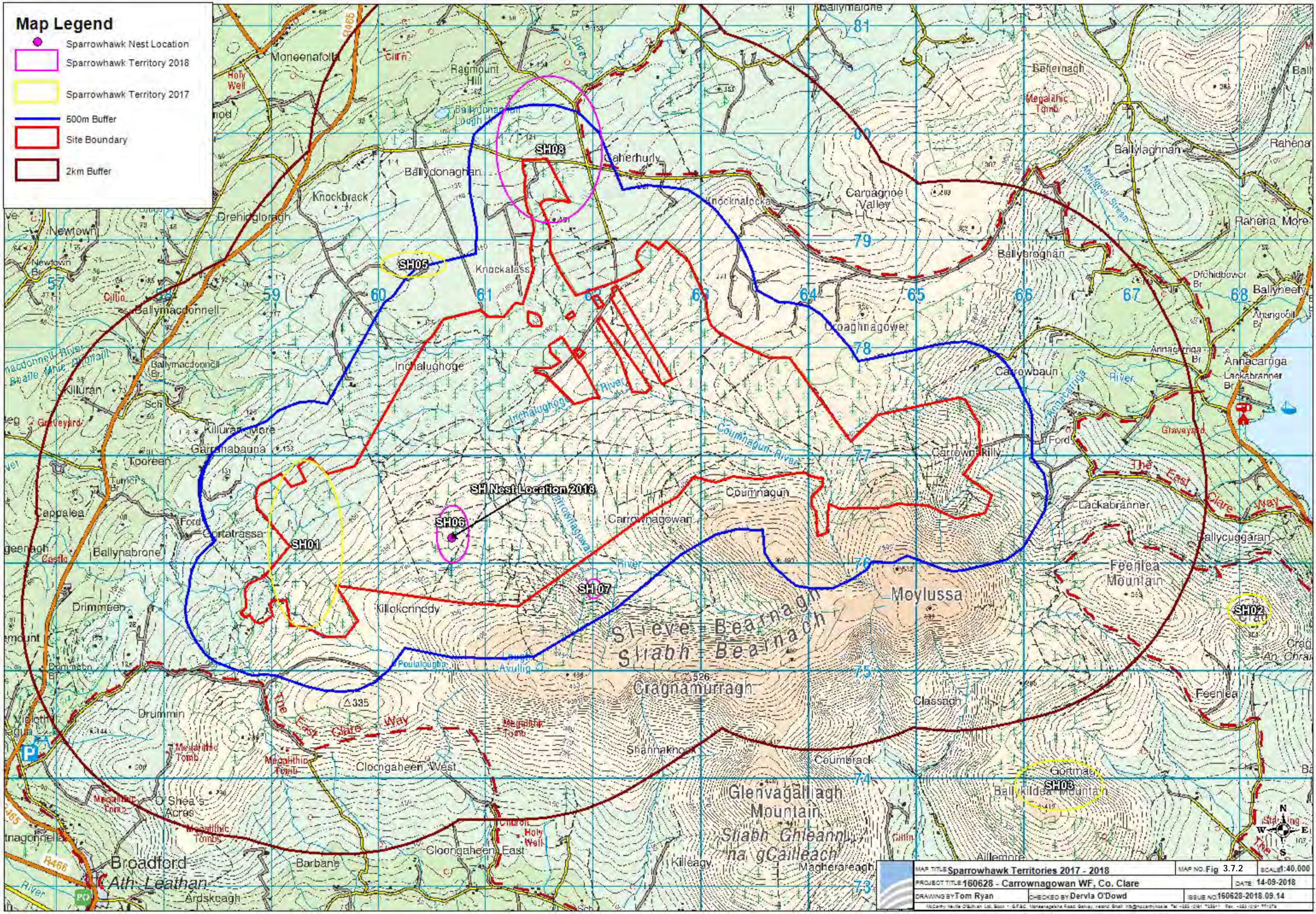


MAP TITLE: Buzzard Territories 2017 - 2018	MAP NO: Fig 3.7.1	SCALE: 50,000
PROJECT TITLE: 160628 - Carrowmagowan WF, Co. Clare	DATE: 14-09-2018	
DRAWING BY: Tom Ryan	CHECKED BY: Dervia O'Dowd	ISSUE NO: 160628-2018.09.14



### Map Legend

- Sparrowhawk Nest Location
- Sparrowhawk Territory 2018
- Sparrowhawk Territory 2017
- 500m Buffer
- Site Boundary
- 2km Buffer

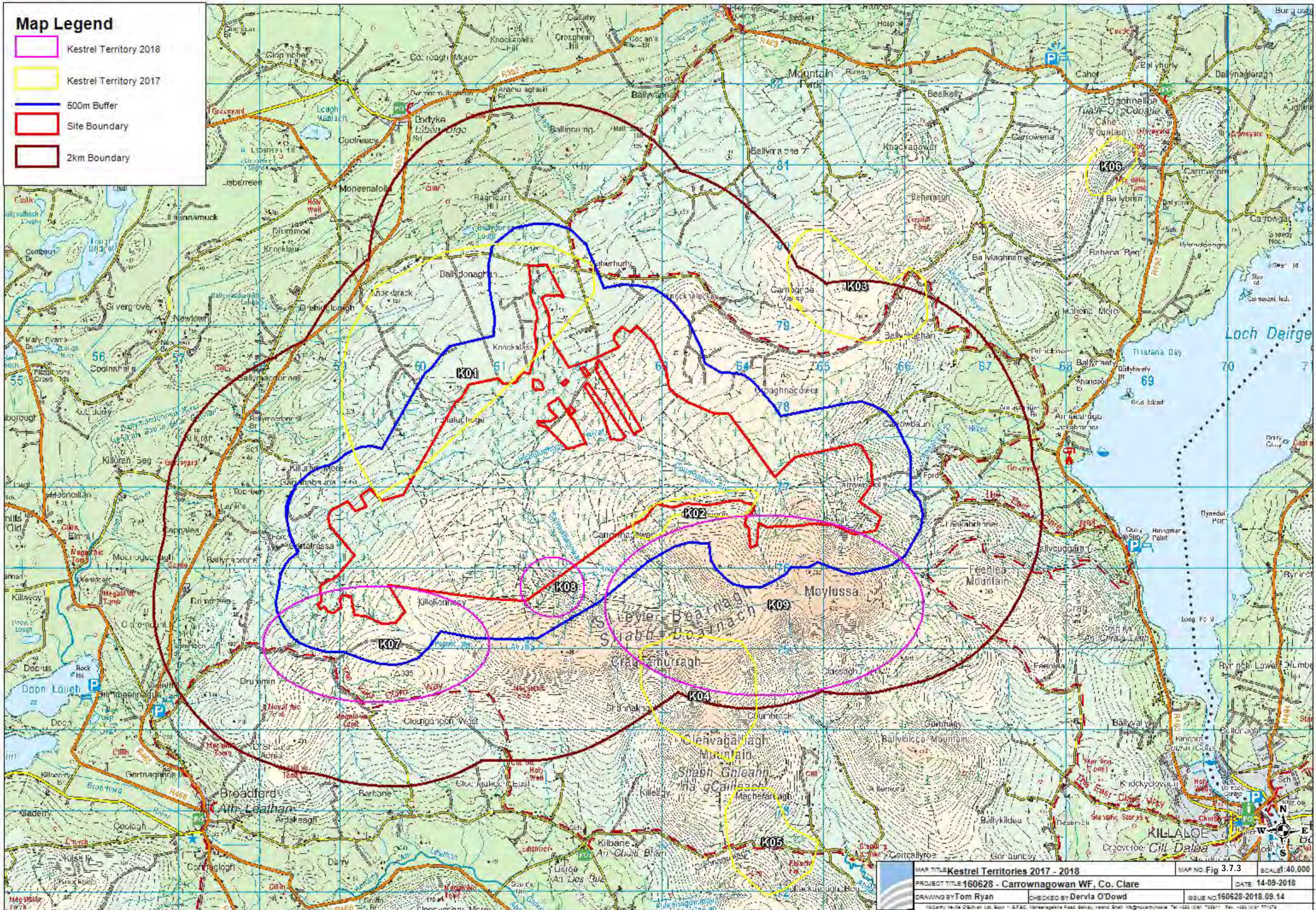


MAP TITLE Sparrowhawk Territories 2017 - 2018	MAP NO. Fig 3.7.2	SCALE: 40,000
PROJECT TITLE 160628 - Carrowmagowan WF, Co. Clare	DATE 14-09-2018	
DRAWING BY Tom Ryan	CHECKED BY Dervla O'Dowd	ISSUE NO 160628-2018.09.14



### Map Legend

- Kestrel Territory 2018
- Kestrel Territory 2017
- 500m Buffer
- Site Boundary
- 2km Boundary

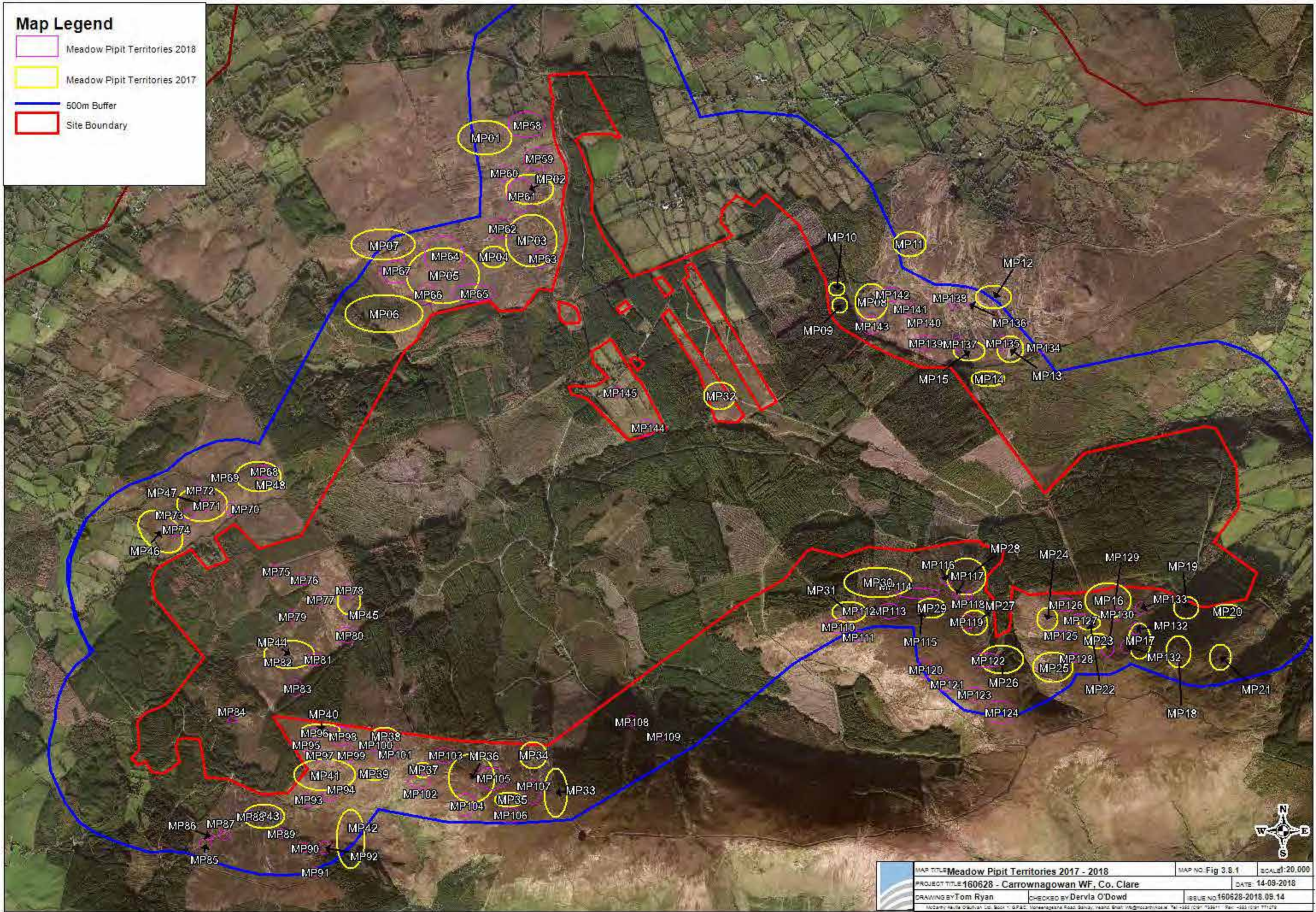


MAP TITLE: <b>Kestrel Territories 2017 - 2018</b>	MAP NO: Fig 3.7.3	SCALE: 40,000
PROJECT TITLE: <b>160628 - Carrowmagowan WF, Co. Clare</b>	DATE: 14-09-2018	
DRAWING BY: Tom Ryan	CHECKED BY: Dervia O'Dowd	ISSUE NO: 160628-2018.09.14



### Map Legend

- Meadow Pipit Territories 2018
- Meadow Pipit Territories 2017
- 500m Buffer
- Site Boundary

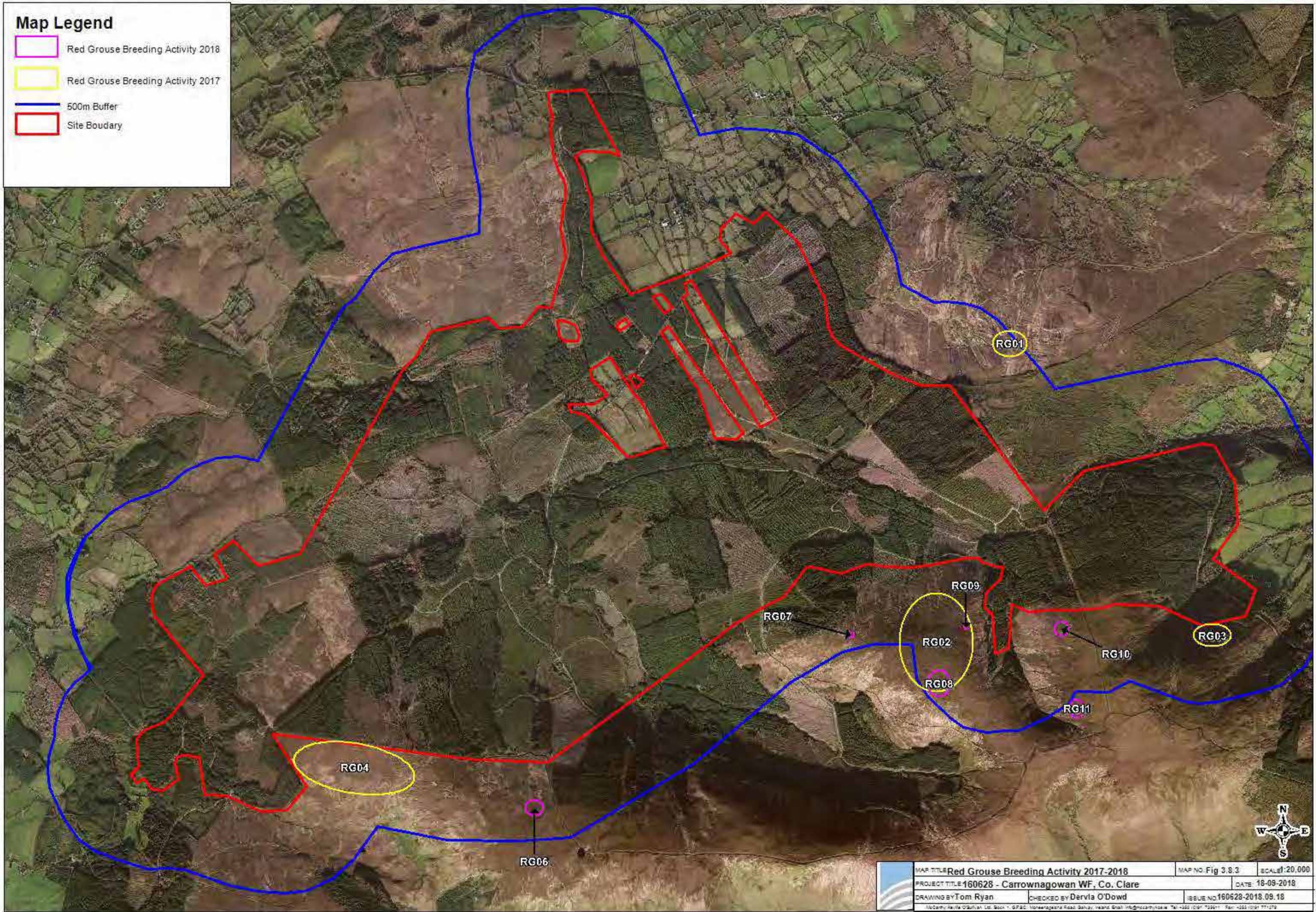


MAP TITLE: Meadow Pipit Territories 2017 - 2018		MAP NO: Fig 3.8.1	SCALE: 20,000
PROJECT TITLE: 160628 - Carrowmagowan WF, Co. Clare		DATE: 14-09-2018	
DRAWING BY: Tom Ryan	CHECKED BY: Dervla O'Dowd	ISSUE NO: 160628-2018.09.14	
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### Map Legend

-  Red Grouse Breeding Activity 2018
-  Red Grouse Breeding Activity 2017
-  500m Buffer
-  Site Boundary



MAP TITLE: Red Grouse Breeding Activity 2017-2018	MAP NO.: Fig 3.8.3	SCALE: 20,000
PROJECT TITLE: 160628 - Carrownagowan WF, Co. Clare	DATE: 18-09-2018	
DRAWING BY: Tom Ryan	CHECKED BY: Dervla O'Dowd	ISSUE NO: 160628-2018.09.18
<small>© McCarthy Keville O'Sullivan Ltd. 800k + 1, GPO, 100, Wellington Road, Galway, Ireland. Email: info@mcCarthyKeville.com Tel: +353 (0)91 709911 Fax: +353 (0)91 771278</small>		