

Appendix to Chapter 8: Biodiversity

Appendix 8.7: General Birds Fieldwork & Survey Results

The data and descriptions in this appendix have informed the cumulative evaluations in the EIA Main Report.

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A8-7.1 Fieldwork - General Birds

The receiving environment for Whole UWF Project includes typical upland habitats in the Irish context in addition to an improved agricultural landscape.

A8-7.1.1 2019 Breeding Bird Surveys

Breeding season bird transects were carried out for the subject development, UWF Grid Connection, with 40 transects along the entire length (c.30km) of the 110kV UGC carried out in April 2019. Survey work was carried out over seven days in April 2019 (12, 17, 18, 20, 25, 27 and 28). The methodology followed the standardised line transect methodology for surveying birds (BWI, 2012). All birds were recorded onto standardised recording sheets in four distance categories from the proposed UGC route (0-25m; 25-100m; 100+m and in flight).

Transect data were recorded using standard Countryside Bird Survey (CBS) methodology (Birdwatch Ireland, 2012). The conservation status of each species recorded during the field surveys was assessed using the Birds of Conservation Concern in Ireland (BoCCI) list (Colhoun & Cummins, 2013) in addition to relevant national or international legal designations.

A8-7.1.1.1 Information from 2016 and 2017 surveys for previous UWF Grid Connection application

A standardised bird transect survey was undertaken at the Mountphilips Substation site in the breeding season of 2016, 2017 and 2019. Standardised bird transect surveys were also undertaken along the entire length of the 110kV UGC. It is thought that the 2016 and 2017 data is still relevant as the habitats have not significantly changed over time.

A8-7.1.1.2 Survey information for Other Elements

Transect data and survey results for the Other Elements, UWF Related Works, UWF Replacement Forestry and UWF Other Activities was reviewed. Survey results for the Other Elements is included in the Biodiversity Appendices for UWF Related Works (Revised EIAR 2019) and for UWF Replacement Forestry (EIAR 2018). Available data on breeding birds within the EIS documentation for the Upperchurch Windfarm was also reviewed within the context of overlap with the locations of UWF Related Works, UWF Replacement Forestry and UWF Other Activities. The Upperchurch Windfarm EIS (2013) and RFI (2013) are included in the Reference Documents which accompany this planning application.

Due to the continuity and overlap of habitat types present throughout the respective elements, a sufficient representative sample of breeding birds is considered to have been achieved through both the results of the current study and previously conducted studies for the Upperchurch Windfarm.

A8-7.1.2 Kingfisher Surveys

Kingfisher are associated with aquatic habitats such as watercourses and canals. This species is listed on Annex I of the EU Birds Directive and Amber-listed in Ireland as a species of Conservation Concern (Colhoun & Cummins, 2013). With regard to the proposed UWF Grid Connection, in 2019, 26 no. suitable watercourses were surveyed 300m upstream and downstream of watercourse crossing locations. These surveyed watercourses include the Newport River (W7), Clare River (W26) and Bilboa River (W53) and 23 other watercourses (W5, W7, W8, W9, W18, W21, W22, W23, W26, W28, W29, W30, W33, W35, W39, W41, W42, W46, W47, W48, W49, W50, W51 and W52). These rivers were selected due to their potential to support suitable Kingfisher foraging and nesting habitats, and the potential for greater prey item availability. Watercourse crossings along the UWF Grid Connection route are generally unsuitable for nesting Kingfisher, which requires sandy or earth banks alongside the watercourse to establish their tunnel/burrow nests.

In addition, Kingfisher surveys extending to 500m upstream and downstream of W7 Newport River crossing point, following the methodology presented in National Roads Authority (2008), was undertaken on 26 June 2019 (in tandem with the Otter surveys).

Watercourse crossings were evaluated for any evidence of nest holes within 300m of crossing locations (in tandem with Otter surveys). In each case banks were inspected for evidence of Kingfisher, and general suitability of banks in proximity to crossing locations for nesting Kingfisher. Target notes were made on suitable nesting banks, and any observed nest holes.

A8-7.1.3 Barn Owls

In February 2019, buildings were noted for potential suitability for Breeding Barn Owls. In July 2019, buildings identified as having high suitability for Barn Owls were surveyed. This involved checking for signs of building occupation (such as pellets, feathers, etc.). All Barn Owl surveys were carried out in accordance with *Barn Owl Surveying Standards for National Road Projects*, (TII, 2017).

Four buildings were assessed as having high suitability for Barn Owl. These were all surveyed in August 2019 for occupancy. No signs of occupancy were detected for any of these buildings. One building was too dangerous to enter due to the state of repair. The owner stated that he had occasionally observed Barn Owls during the winter but did not believe that they were breeding at that location.

A8-7.2 Survey Results - General Bird Species

A8-7.2.1 Results of Countryside Bird Surveys 2019

Table 1: Results of Countryside Bird Surveys undertaken along transects T1 to T40 along the UWF Grid Route Connection during 2019 breeding season

Transect No.	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13	T14	T15	T16	T17	T18	T19	T20
Date	12/04	12/04	12/04	12/04	12/04	17/04	17/04	17/04	17/04	17/04	17/04	18/04	18/04	18/04	18/04	18/04	20/04	20/04	20/04	20/04
Species																				
Barn Swallow		2		3							2		2	6	3	2				1
Blackbird	4	5	4	5	2	3	6	6	4	2	2	4	10	11	9	5	6	8	8	4
Blackcap	1				6	1	1		2	3	1	3	1	1		2	3	4	3	
Blue Tit		2	1	1			1	1	1				1	4	3	2		1	4	2
Bullfinch	2	2	2			2		4						2				4		
Chaffinch	3	2	3	5	5	4	7	4	2	5	3	5	8	10	7	6	7	2	8	3
Chiffchaff	2	1	1	2	3	2	3	2	2	3	2	3		1			2	2	2	
Coal Tit				1					2											
Cuckoo				1			1		1			1							1	
Dunnoch	2	2	3	2	2	4	3	2	2	2	1	2	3	1	1		3	2	2	
Goldcrest	3		1	1	1			2	2			1	1				1		1	
Goldfinch		2			2	2	2	4	2	2	2	2	4	9	2	4	2	8		
Grasshopper Warbler					1	1		1												
Great Tit	2	2	4		1	2	3	2	2	1		1	1	4	3	4	2	3	4	2
Greenfinch	1		2			2							2		2					
Hooded Crow	3	5	2	2	2	5	2	1	2		3	2	3	4	4	6	7	8	8	2
House Sparrow		6	4		3	11							12	8	14	10	4	8	12	14
Jackdaw	2	11		4		2	4	5			2		2	17	9	14	6	2	4	14
Jay					1					1		1							1	

Transect No.	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13	T14	T15	T16	T17	T18	T19	T20
Date	12/04	12/04	12/04	12/04	12/04	17/04	17/04	17/04	17/04	17/04	18/04	18/04	18/04	18/04	18/04	18/04	20/04	20/04	20/04	20/04
Linnet	2		2				2		2										4	
Magpie	1	1		1		1	2	1	1				1	3		3		2	3	3
Mallard				2																
Meadow Pipit						2	7	5	2	4	4	6	3	3		2		3	6	
Mistle Thrush	2	2		3			1	1	2				1							
Pheasant		1			1	1	1	1	1	1	2	1					1	1	2	
Pied Wagtail		4	2			4		2		2	2	3	4	8	3	8		2	3	7
Reed Bunting				2		4	2			2								1		
Robin	2	2	5	2	3	3	3	2	3	3	2	3	2	3	4	6	4	3	4	
Rook		33	5	6	0	6	16	11	2	2	6	7	14	33	8	23	25	24	22	12
Herring Gull											2									
Woodpigeon	1	1	1	3	3	1	6	2	1	3	4	3	2	4	4		3	3	2	1
Collared Dove																				6
Kestrel			1		1			1		1	1	1						1		
Raven	2	1		1		1		2	2						2			2		
Skylark	3	2	1	3	1	1	1	1				2	1					2	3	
Long-tailed Tit				4		3		2	2										4	
Willow Warbler	3	3	4	3	2	3	4	1	3	2	3	2	2	4	5		3	6	3	
Sedge Warbler					1			1		1		1					1			
Whitethroat																		1		
Wren	5	4	5	3	5	3	4	3	3	5	3	5	3	6	6	5	6	5	4	3
Starling		12	4	3		2	1		1		6	6	8	5		5	3		7	10
Song Thrush	1	2	2	1	1	1	2	1	1	1	1	1	2	6	4	2	3	2	2	
Stonechat	2	2	2	2	2	4	2	2	2	2	2	2					2	2	2	
Dipper								1												

Transect No.	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13	T14	T15	T16	T17	T18	T19	T20
Date	12/04	12/04	12/04	12/04	12/04	17/04	17/04	17/04	17/04	17/04	18/04	18/04	18/04	18/04	18/04	18/04	20/04	20/04	20/04	20/04
Grey Wagtail						1							1						1	5

Transect No.	T21	T22	T23	T24	T25	T26	T27	T28	T29	T30	T31	T32	T33	T34	T35	T36	T37	T38	T39	T40
Date	20/04	20/04	25/04	25/04	25/04	25/04	25/04	27/04	27/04	27/04	27/04	27/04	27/04	28/04	28/04	28/04	28/04	28/04	28/04	28/04
Species																				
Barn Swallow				2					2		2	2			2	3		2		
Blackbird	11	3	4	8	4	7	3	5	2	3	4	8	4	7	4	5	12	13	5	5
Blackcap	2	1	1	1	3	2	1	1	2	2	1	2	1					1	1	2
Blue Tit				3				3			1			1		3	3	4	2	1
Bullfinch							2			2	2							2		
Chaffinch	11	4	3	4	8	6	7	4	2	5	6	6	9	5			4	4	7	6
Chiffchaff	2	2	2	2	1	2	1	1	2	1	1		2	1			1	1	1	3
Coal Tit				2				4												
Cuckoo		1	1						1		1			1						
Duncock		1	2	2	2	1	1	1	1	1	1	2		3			3	2		1
Goldcrest				1	3	1		2	2	2	1	1								
Goldfinch	4	4	2			2	2				4	4	2	2				3	4	
Grasshopper Warbler		1		1						1										
Great Tit	3	1	2	1	2	1	2	2	1		2	3		3	1	2		4	2	
Greenfinch	2		1	1	1				1	1	1	1		2				3		2
Hooded Crow	4	2	3	6		4		6	6	7	7	3	8	4	5	7	7	6	2	7

Transsect No.	T21	T22	T23	T24	T25	T26	T27	T28	T29	T30	T31	T32	T33	T34	T35	T36	T37	T38	T39	T40
Date	20/04	20/04	25/04	25/04	25/04	25/04	25/04	27/04	27/04	27/04	27/04	27/04	27/04	28/04	28/04	28/04	28/04	28/04	28/04	28/04
House Sparrow	10		5	2		4	10		5	8		4	12	11	15	18	4	20	6	8
Jackdaw	4	2	5				4		2	3	5		13	7	12	24	16	12	9	4
Jay				2	1	1		1	1			1								
Linnet		4																		
Magpie	3			1			3		2	1			1	1	2	2	4	3	1	1
Mallard												2		2						
Meadow Pipit	3	9	3	3		4	3	5	1	1	4	5		4				2	3	5
Mistle Thrush	2	2		2	1	2			2	2	1	1		1					1	1
Pheasant		1	1	1					1	1	1			1					1	
Pied Wagtail	5	2	2	2			4		4	2	2	3	2	4	8	6	5	4	6	2
Redpoll			4							4										
Reed Bunting		2	2						2	2	2									
Robin	4	2	3	3	4	3	4				3	5	3	4	1		5	5	4	4
Rook		6	10	7	16	9	25		8	12	24		18	21	17	17	23	13	14	19
Sparrowhawk								1												
Herring Gull											3			2						
Woodpigeon	2	1	2	2	1		1	1		1	1	2	3	2		1	4	2	2	4
Collared Dove																			4	
Kestrel									1											
Raven		2	2	1			1				1									
Skylark	2	3	2	1				2		1				1						
Sand Martin							4		2	3		2		2					6	
House Martin	2											2	2			2				

Transect No.	T21	T22	T23	T24	T25	T26	T27	T28	T29	T30	T31	T32	T33	T34	T35	T36	T37	T38	T39	T40
Date	20/04	20/04	25/04	25/04	25/04	25/04	25/04	27/04	27/04	27/04	27/04	27/04	27/04	28/04	28/04	28/04	28/04	28/04	28/04	28/04
Long-tailed Tit			2							4		2								
Willow Warbler	5	3	2	3	2		3	5	2	1	2	2	4	7			2	4	4	5
Sedge Warbler							1													
Whitethroat			1																	
Wren	4	3	2	3	2	4	2	3	3	2	3	3	5	6		1	5	4	5	5
Starling			8				7		6		12	2	6		4	11	6	4	6	2
Song Thrush	5	1	1	1	2	2	1	1				2	2	2			2	2	2	2
Stonechat		2	2	2	2			2	2		2	2		2						
Grey Wagtail	1										1			1						
Siskin								2		2										

A8-7.2.2 Results of 2019 Kingfisher Survey for UWF Grid Connection

Kingfisher surveys following the methodology presented in National Roads Authority (2008) was undertaken in January and May 2019. These surveyed watercourses include the Newport River (W7), Clare River (W26) and Bilboa River (W53) and 23 other watercourses (W5, W7, W8, W9, W18, W21, W22, W23, W26, W28, W29, W30, W33, W35, W39, W41, W42, W46, W47, W48, W49, W50, W51 and W52).. Watercourse crossings were evaluated for any evidence of nest holes within 300m of crossing locations (in tandem with Otter surveys). In each case banks were inspected for evidence of Kingfisher, and general suitability of banks in proximity to crossing locations for nesting Kingfisher.

Watercourse crossings along the UWF Grid Connection route are generally unsuitable for nesting Kingfisher, which requires sandy or earth banks alongside the watercourse to establish their tunnel/burrow nests.

In addition, Kingfisher surveys extending to 500m upstream and downstream of W7 Newport River crossing point, following the methodology presented in National Roads Authority (2008), was undertaken on 26 June 2019 (in tandem with the Otter surveys).

A Kingfisher nest was recorded 430m upstream of Rockvale Bridge, Newport River crossing W7, of the proposed UWF Grid Connection.

Table 2: Results of Kingfisher Survey for UWF Grid Connection carried out in June 2019

Location	Date	Record	Coordinates ITM (x)	Coordinates ITM (y)
Newport River (430m Upstream of Rockvale Bridge – W7)	26/06/19	Earth bank with Kingfisher nesting potential – No nest hole present	574163	663498
Newport River (450m Upstream of Rockvale Bridge – W7)	26/06/19	Kingfisher sighted; first flying downstream then upstream	574182	663512
Newport River (540m Upstream of Rockvale Bridge – W7)	26/06/19	Nest hole in riverbank – evidence of Kingfisher use in the form of whitewash (droppings)	574255	663567

A8-7.2.3 Results of 2019 Barn Owl Survey for UWF Grid Connection

Four buildings within the UWF Grid Connection study area were assessed as having high suitability for Barn Owl. These were all surveyed in July 2019 for occupancy. No signs of occupancy were detected for any of these buildings. One building was too dangerous to enter due to the state of repair. The owner stated that he had occasionally observed Barn Owls during the winter but did not believe that they were breeding at that location.

Table 3: Results of Barn Owl Survey for UWF Grid Connection carried out in July 2019

House Number	Level of Barn Owl Suitability	Coordinates ITM (x)	Coordinates ITM (y)	Description	Survey Results
1	High	588330	658608	House missing all windows but has potential for Barn Owl. Parts of roof and chimney are missing. Multiple entry/exit points and nesting opportunities.	Searched – no evidence of Barn Owl.
2	High	588911	658779	Set of old farm buildings with barn, cottage and shed. Slate roof open enough for coverage.	Searched – no evidence of Barn Owl.
3	High	586591	658227	The slate roof is intact but the chimney is half missing.	No evidence – no entry points due to intact doors and windows
4	High	573624	661496	Old farmhouse and barns with part of the roof of extension missing. Large chimneys. Looks derelict	Owner has occasionally observed Barn Owls during the winter but did not believe that they were breeding.

A8-7.2.4 Results of Countryside Bird Surveys 2016 to 2018

Note on Species colour codes:

Red = Red-listed species in the Birds of Conservation Concern (Colhoun and Cummins, 2013) are those of highest conservation priority

Orange = Amber-listed species in the Birds of Conservation Concern (Colhoun and Cummins, 2013) are those of which are of lesser conservation priority

Green = Green-listed species in the Birds of Conservation Concern (Colhoun and Cummins, 2013) are those of which are of least conservation priority

White = Not assessed/omitted from the Birds of Conservation Concern (Colhoun and Cummins, 2013) list

Table 4: Results of Countryside Bird Surveys undertaken along Mountphilips' transect during the breeding season of 2016.

Transect No.40		40 - Mountphilips	
Visit		May-16	Jun-16
Species			
Barn Swallow		2	7
Blackbird		13	1
Blackcap		3	4
Blue Tit		1	3
Chaffinch		7	8
Chiffchaff		1	1
Coal Tit			1
Dunnock		4	4
Goldcrest			3
Goldfinch			1
Grasshopper Warbler		1	
Great Tit		1	
Greenfinch		4	
Hooded Crow			2
Jackdaw		3	
Jay			1
Linnet		4	1
Magpie			2
Mistle Thrush		1	
Moorhen			2
Pheasant		1	1
Pied Wagtail		1	
Reed Bunting			2
Robin		12	5
Rook		9	10
Siskin		1	
Song Thrush		4	
Stonechat			3

Transect No.40	40 - Mountphilips	
Visit	May-16	Jun-16
Willow Warbler	6	3
Wood Pigeon	2	3
Wren	22	14
Total Abundance	103	82
Species Diversity	22	23

Table 5: Results of winter bird transect surveys undertaken along Mountphilips' transect during the non-breeding season of 2016/17

Transect No.40	Transect No.40 - Mountphilips			
Visit	Nov-16	Dec-16	Jan-17	Feb-17
Species				
Wood Pigeon	1			
Meadow Pipit	15	13		
Pied Wagtail	1			1
Dunnock	1	4	1	
Robin	3	6	4	
Stonechat				
Song Thrush	1	5	2	2
Mistle Thrush				
Blackbird	4	3	1	1
Redwing		3	10	
Wren	2	2	1	
Great Tit			2	
Coal Tit	1	3	1	
Magpie				1
Jay		2		
Rook	2			5
Starling	11			
Chaffinch	1	1		
Treecreeper	1			
Bullfinch	1			
Reed Bunting	1			
Total Abundance	46	42	22	10
Species Diversity	15	9	8	5

Table 6: Countryside Bird Survey Results for Mountphilips' transect during 2017 breeding season

	Transect No.40 - Mountphilips	
Species	Apr-17	June-17
Blackbird	7	4
Blackcap	1	
Blue Tit	1	
Chaffinch	2	3
Chiffchaff	2	
Coal Tit	5	6
Fieldfare	4	
Goldcrest		1
Hooded Crow	2	1
Jay		1
Magpie		4
Mallard	2	
Meadow Pipit		2
Robin	4	
Rook	10	
Song Thrush	5	3
Stonechat		2
Willow Warbler	1	2
Wood Pigeon	4	4
Wren	13	9
Total Abundance	63	42
Species Diversity	15	13

Table 7: Results of winter bird transect surveys undertaken along Mountphilips' transect during the non-breeding season of 2017/18 (November 2017 to December 2017).

Transect No.40	Transect No. 40 - Mountphilips		
Visit	Nov-17	Nov-17	Dec-17
Species			
Blackbird	1	8	1
Blue Tit	0	1	0
Bullfinch	0	2	0
Chaffinch	0	1	0
Coal Tit	0	1	0
Dunnock	0	0	0
Goldcrest	0	2	0
Great Tit	0	0	0
Grey Wagtail	0	0	0
Hooded Crow	1	3	0
House Sparrow	0	5	0
Jackdaw	0	1	2
Jay	0	1	0
Kestrel	0	0	0
Long-tailed Tit	0	0	0
Magpie	0	1	0
Meadow Pipit	20	1	0
Mistle Thrush	0	0	0
Pheasant	0	0	0
Pied Wagtail	0	0	0
Raven	2	0	0
Robin	2	9	0
Rook	15	2	4
Snipe	0	1	0
Song Thrush	0	0	0
Starling	40	50	0
Wood Pigeon	0	1	0
Fieldfare	0	0	0
Redwing	0	0	0
Wren	0	1	0
Goldfinch	0	0	1
Total Abundance	81	91	9
Species Diversity	7	18	4

Table 8: Results of winter bird transect surveys undertaken along Mountphilips transect during the non-breeding season of 2017/18 (January to February 2018).

Transect No.40	Transect No.40 - Mountphilips	
Visit	Jan-18	Feb-18
Species		
Blackbird	2	0
Blue Tit	0	1
Bullfinch	0	1
Chaffinch	0	2
Coal Tit	0	0
Dunnock	0	1
Goldcrest	0	0
Great Tit	1	0
Grey Wagtail	0	0
Hooded Crow	2	0
House Sparrow	0	3
Jackdaw	0	4
Jay	0	0
Kestrel	0	0
Long-tailed Tit	0	0
Magpie	0	0
Meadow Pipit	0	0
Mistle Thrush	0	0
Pheasant	0	0
Pied Wagtail	0	0
Raven	0	0
Robin	1	0
Rook	0	30
Snipe	0	0
Song Thrush	0	0
Starling	0	0
Wood Pigeon	0	0
Stonechat	0	0
Fieldfare	0	0
Wren	0	0
Total Abundance	6	42
Species Diversity	4	8

Table 9: Hen Harrier Vantage Point Surveys –General Bird Sightlines Non Breeding Season 2016/2017

Table 9: Details of UWF Grid Connection General Bird sightings and the habitats over which the birds were observed from vantage point surveys undertaken during the Hen Harrier UWF Grid Connection Non-breeding season 2016/2017 Vantage Point Surveys. See Appendix 8.4 for Vantage Point locations.

G = Grazing; RG = Rough Grazing; HB = Heath or bog; DE = Deciduous woodland or scrub; GO = Gorse; NF3 = New forestry plantation trees c 1m high; NF4 = New forestry plantation trees > 2m high; 2nd F4 = Second rotation forestry plantation trees > 2m high;

VP Na me	Date	Species	S ex	Time of sighting	G	RG	HB	DE	GO	NF 3	NF 4	2nd F4	F	Durati on (s)
10	18/07/ 2017	Raven_RN		12:07:0 0			70							
10	18/07/ 2017	Raven_RN		12:09:0 0			30							
10	18/07/ 2017	Raven_RN		12:36:0 0			40							
11	20/07/ 2017	Kestrel_K.		15:25:0 0	3 0									
11	20/07/ 2017	Raven_RN		17:43:0 0		20	20							10
11	24/07/ 2017	Raven_RN		17:40:0 0			40							
11	24/07/ 2017	Raven_RN		17:47:0 0			60							40
11	24/07/ 2017	Kestrel_K.		18:13:0 0			80							
11	24/07/ 2017	Kestrel_K.		18:22:0 0			160							
11	24/07/ 2017	Kestrel_K.		18:24:0 0			100							
11	24/07/ 2017	Kestrel_K.		18:47:0 0		220								
11	24/07/ 2017	Kestrel_K.		19:51:0 0			70							
11	24/07/ 2017	Kestrel_K.		19:54:0 0			450							10

VP Na me	Date	Species	S ex	Time of sighting	G	RG	HB	DE	GO	NF 3	NF 4	2nd F4	F	Durati on (s)
11	24/07/ 2017	Kestrel_K.		20:21:0 0		70								
12	20/07/ 2017	Kestrel_K.		12:13:0 0									30	
12	20/07/ 2017	Kestrel_K.		12:37:0 0		80							60	
12	20/07/ 2017	Kestrel_K.		14:21:0 0		120							40	
12	24/07/ 2017	Sparrowha wk_SH		14:17:0 0		145		10						
12	24/07/ 2017	Sparrowha wk_SH		14:28:0 0		50		130						
12	24/07/ 2017	Raven_RN		13:58:0 0		50								80
12	24/07/ 2017	Kestrel_K.		15:26:0 0										130
12	24/07/ 2017	Kestrel_K.		15:55:0 0										160
12	24/07/ 2017	Kestrel_K.		16:14:0 0				50						130
12	24/07/ 2017	Kestrel_K.		16:32:0 0		210								530
2	07/08/ 2017	Kestrel_K.		15:55:0 0		210								
2	07/08/ 2017	Raven_RN		16:01:0 0	2 0	20								
2	07/08/ 2017	Raven_RN		16:29:0 0	2 0	70								
2	07/08/ 2017	Kestrel_K.		17:12:0 0		40								
2	07/08/ 2017	Kestrel_K.		17:54:0 0		100								

VP Na me	Date	Species	S ex	Time of sighting	G	RG	HB	DE	GO	NF 3	NF 4	2nd F4	F	Durati on (s)
3	08/08/ 2017	Raven_RN		16:40:0 0		10							10	20

Table 10: Hen Harrier Vantage Point Surveys –General Bird Sightlines Non Breeding Season 2017/2018

Table 10: Details of UWF Grid Connection General Bird sightings and the habitats over which the birds were observed from vantage point surveys undertaken during the Hen Harrier UWF Grid Connection Non-breeding season 2017/2018 Vantage Point Surveys. See Appendix 8.4 for Vantage Point locations.

G = Grazing; RG = Rough Grazing; HB = Heath or bog; DE = Deciduous woodland or scrub; GO = Gorse; NF3 = New forestry plantation trees c 1m high; NF4 = New forestry plantation trees > 2m high; 2nd F4 = Second rotation forestry plantation trees > 2m high;

VP Name	Date	Species	Sex	Time of sighting	G	RG	HB	DE	GO	NF3	NF4	2nd F4	F	Duration (s)
7	11/09/17	Raven_RN		11:40:00	x								x	21
7	11/09/17	Raven_RN		11:40:00	x								x	21
7	11/09/17	Kestrel_K.		11:55:00	x								x	14
7	11/09/17	Raven_RN		13:14:00	x			x					x	20
8	12/09/17	Kestrel_K.		14:22:00	x	x			x					115
5	22/11/17	Raven_RN		10:35:00		40								40
5	22/11/17	Kestrel_K.		11:07:00		120								120
4	23/11/17	Kestrel_K.		10:55:00		140								140
4	23/11/17	Raven_RN		12:11:00		110								110
4	23/11/17	Kestrel_K.		12:23:00	240									240
4	23/11/17	Kestrel_K.		12:31:00	170									170
5	23/11/17	Golden Plover_GP		13:50:00		110	20							130

VP Name	Date	Species	Sex	Time of sighting	G	RG	HB	DE	GO	NF 3	NF 4	2nd F4	F	Durati on (s)
5	23/11/ 17	Golden Plover_GP		14:06:0 0		10	30							40
5	23/11/ 17	Golden Plover_GP		14:17:0 0		210								210
5	23/11/ 17	Kestrel_K.		14:46:0 0		320								320
5	23/11/ 17	Raven_RN		16:25:0 0		50								50
8	29/11/ 17	Snipe_SN		08:37:0 0		79								79
9	29/11/ 17	Kestrel_K.	F e m a l e	16:11:0 0		465						10		479
3	29/11/ 17	meadow Pipit_MP		11:57:0 0						X				15
8	28/11/ 17	Raven_RN		15:25:0 0									X	60
8	28/11/ 17	Raven_RN		16:42:0 0									X	10
8	28/11/ 17	Meadow Pipit_MP		16:06:0 0									X	5
12	30/11/ 17	Meadow Pipit_MP		08:03:0 0	X									20
12	30/11/ 17	Meadow Pipit_MP		08:52:0 0	X									5
12	30/11/ 17	Raven_RN		08:45:0 0	X									20
12	29/11/ 17	Kestrel_K.	F e m a l e	15:51:0 0	X									20

VP Na me	Date	Species	S ex	Time of sighting	G	RG	HB	DE	GO	NF 3	NF 4	2nd F4	F	Durati on (s)
12	29/11/ 17	Meadow Pipit_MP		16:17:0 0	X									
7	29/11/ 17	Raven_RN		07:10:0 0	X									5
7	29/11/ 17	Raven_RN		08:09:0 0	X									20
8	06/12/ 17	Raven_RN		10:44:0 0		X								20S
8	06/12/ 17	Raven_RN		10:46:0 0		X								20S
8	06/12/ 17	Kestrel_K.		10:55:0 0		X								10S
8	06/12/ 17	Kestrel_K.		10:55:0 0		X								5s
8	06/12/ 17	Raven_RN		12:31:0 0									X	300s
8	06/12/ 17	Raven_RN		10:46:0 0		x								20S
7	07/12/ 17	Kestrel_K.		11:01:0 0	X									20S
7	07/12/ 17	Raven_RN		13:32:0 0	X									10S
7	07/12/ 17	Kestrel_K.		14:00:0 0	X									
9	08/12/ 17	Raven_RN		11:55:0 0									X	
9	08/12/ 17	Kestrel_K.		12:25:0 0	X									240S
9	08/12/ 17	Kestrel_K.		12:28:0 0	X									300s
9	08/12/ 17	Kestrel_K.		12:31:0 0	X									5s

VP Na me	Date	Species	S ex	Time of sighting	G	RG	HB	DE	GO	NF 3	NF 4	2nd F4	F	Durati on (s)
11	06/12/ 17	Kestrel_K.		08:36:0 0	1 1 1									111
5	06/12/ 17	Raven_RN		10:58:0 0	9 0									90
5	06/12/ 17	Raven_RN		11:40:0 0	5 0									50
2	05/01/ 18	Kestrel_K.		12:40:0 0 pm	x									
5	02/01/ 18	Kestrel_K.	F e m a l e	11:52:0 0		57								57
1	03/01/ 18	Kestrel_K.	F e m a l e	10:36:0 0	8									8
1	03/01/ 18	Kestrel_K.	F e m a l e	14:12:0 0	1 8									18
8	15/01/ 18	Raven_RN		10:52:0 0		48					74			122
4	19/01/ 18	Raven_RN		14:06:0 0	1 6									16
4	19/01/ 18	Raven_RN		14:10:0 0	6 7									67
12	05/02/ 18	Kestrel_K.		15:33:0 0	1 2			19						21
1	06/02/ 18	Sparrowha wk_SH	F e m	14:59:0 0					13					13

VP Na me	Date	Species	S ex	Time of sighting	G	RG	HB	DE	GO	NF 3	NF 4	2nd F4	F	Durati on (s)
			al e											
1	06/02/ 18	Raven_RN		15:09:0 0		26								26
4	07/02/ 18	Sparrowha wk_SH		12:39:0 0	4 0							224 0		2280
8	01/02/ 18	Raven		14:10		x								10s
9	02/02/ 18	Raven		12:41		x (6s)							x (8s)	14s
7	05/02/ 18	Kestrel		11:00		x								5s
2	06/02/ 18	Kestrel	m	12.05		x								15s
2	06/02/ 18	Kestrel	m	14:33		x								24s
2	06/02/ 18	Kestrel	m	15:35		x								129s
2	06/02/ 18	Golden Plover		16:00	x									

A8-7.2.5 Survey Results – Other Elements

A8-7.2.5.1 Incidental Bird Recordings at Overhead Line Activities Study Area

All incidental sightings of birds were recorded within the overhead lines activities study area during a site walkover (January 2018). Table 11 lists the bird species and the total number of each species recorded. A total of 23 bird species consisting of 109 individual birds were recorded.

Table 11: Birds Recorded during Overhead Line Activities Surveys

Species	BOCCI status (Colhoun and Cummins, 2013)	Total Count
Blackbird	Green	7
Blue Tit	Green	3
Bullfinch	Green	5
Chaffinch	Green	22
Coal Tit	Green	2
Goldcrest	Amber	2
Great Tit	Green	6
House Sparrow	Amber	6
Jay	Green	2
Long-tailed Tit	Green	5
Pied Wagtail	Green	1
Robin	Amber	9
Rook	Green	2
Snipe	Amber	11
Song Thrush	N/A	2
Starling	Amber	5
Stonechat	Amber	1
Wood Pigeon	Green	3
Little Egret	Green	1
Magpie	Green	6
Goldfinch	Green	5
Redwing	Green	1
Wren	Green	2
Species Diversity	23	
Total Abundance	109	

A8-7.2.6 General Bird Species Recorded and Corresponding Sensitivity Rating

The table below, lists all species recorded across all surveys and all project elements. It should be noted that not all species will have been recorded as present at the location of works pertinent to the UWF Grid Connection development under consideration.

The corresponding sensitivity rating in line with the criteria outlined in Section 8.1.8 of the Biodiversity Chapter is also provided. Species included here includes those recorded from standardised survey effort and additionally anecdotal observations.

Note on Species colour codes:

Red = Red-listed species in the Birds of Conservation Concern (Colhoun and Cummins, 2013) are those of highest conservation priority

Orange = Amber-listed species in the Birds of Conservation Concern (Colhoun and Cummins, 2013) are those of which are of lesser conservation priority

Green = Green-listed species in the Birds of Conservation Concern (Colhoun and Cummins, 2013) are those of which are of least conservation priority

White = Not assessed/omitted from the Birds of Conservation Concern (Colhoun and Cummins, 2013) list

Table 12: Bird Sensitivity Rating for bird species recorded across all bird surveys

Species	BOCCI Status	EU Birds Directive	Sensitivity Rating
Barn Swallow	Amber	-	Low
Blackbird	Green	-	Negligible
Blackcap	Green	-	Negligible
Blue Tit	Green	-	Negligible
Bullfinch	Green	-	Negligible
Buzzard	Green	-	Negligible
Chaffinch	Green	-	Negligible
Chiffchaff	Green	-	Negligible
Coal Tit	Green	-	Negligible
Collared Dove	Green	-	Negligible
Common	Amber	-	Low
Crossbill	Green	-	Negligible
Cuckoo	Green	-	Negligible
Curlew	Red	-	High
Dunnock	Green	-	Negligible
Fieldfare	N/A	-	Negligible
Goldcrest	Amber	-	Low
Golden Plover	Red	Annex I	High
Goldfinch	Green	-	Negligible
Grasshopper Warbler	Green	-	Negligible
Great Tit	Green	-	Negligible
Greenfinch	Amber	-	Low
Grey Wagtail	Red	-	Low
Hen Harrier	Amber	Annex I	Very High
Hooded Crow	Green	-	Negligible

Species	BOCCI Status	EU Birds Directive	Sensitivity Rating
House Martin	Green	-	Negligible
House Sparrow	Amber	-	Low
Jackdaw	Green	-	Negligible
Jay	Green	-	Negligible
Kestrel	Amber	-	Low
Lesser Redpoll	Green	-	Negligible
Linnet	Amber	-	Low
Long-tailed Tit	Green	-	Negligible
Magpie	Green	-	Negligible
Mallard	Green	-	Negligible
Meadow Pipit	Red	-	Medium
Mistle Thrush	Amber	-	Low
Moorhen	Green	-	Negligible
Peregrine Falcon	Green	Annex I	Low
Pheasant	N/A	-	Negligible
Pied Wagtail	Green	-	Negligible
Raven	Green	-	Negligible
Red Grouse	Red	-	Medium
Redwing	N/A	-	Negligible
Reed Bunting	Green	-	Negligible
Robin	Amber	-	Low
Rook	Green	-	Negligible
Sand Martin	Amber	-	Low
Sedge Warbler	Green	-	Negligible
Siskin	Green	-	Negligible
Snipe	Amber	-	Low
Skylark	Amber	-	Low
Song Thrush	Green	-	Negligible
Sparrowhawk	Amber	-	Low
Starling	Amber	-	Low
Stonechat	Amber	-	Low
Swift	Amber	-	Low
Tree Creeper	Green	-	Negligible
Wheatear	Amber	-	Low
Whitethroat	Green	-	Negligible
Willow Warbler	Green	-	Negligible
Wood Pigeon	Green	-	Negligible
Woodcock	Red	-	Low
Wren	Green	-	Negligible