

## **Appendix 8-5 – Supporting Survey Data**

### Lyrenacarriga Windfarm



# Table of Contents

## TABLE OF TABLES

Table 1 Additional/Supplementary Vantage Point Survey Effort.....	2
Table 2 Supplementary Breeding Transect Survey Effort.....	11
Table 3 Supplementary Winter Transect Survey Effort.....	15
Table 4 Golden Plover Supporting Data – Vantage Point Surveys.....	20
Table 5 Golden Plover Supporting Data – VP Survey Non-Flight Observation.....	21
Table 6 Hen Harrier Supporting Data – Vantage Point Surveys.....	22
Table 7 Merlin Supporting Data – Vantage Point Surveys.....	23
Table 8 Peregrine Supporting Data – Vantage Point Surveys.....	24
Table 9 Lapwing Supporting Data – Vantage Point Surveys.....	25
Table 10 Woodcock Supporting Data – Vantage Point Surveys.....	26
Table 11 Woodcock Supporting Data – VP Survey Non-Flight Observation.....	26
Table 12 Woodcock Winter Transect Survey Data.....	26
Table 13 Lesser Black-backed Gull Supporting Data – Vantage Point Surveys.....	27
Table 14 Buzzard Supporting Data – Vantage Point Surveys.....	28
Table 15 Buzzard Supporting Data – VP Survey Non-Flight Observation.....	34
Table 16 Buzzard Breeding Transect Survey Data.....	34
Table 17 Buzzard Winter Transect Data.....	34
Table 18 Sparrowhawk Supporting Data – Vantage Point Surveys.....	35
Table 19 Sparrowhawk Supporting Data – VP Survey Non-Flight Observation.....	36
Table 20 Sparrowhawk Winter Transect Survey Data.....	36
Table 21 Kestrel Supporting Data – Vantage Point Surveys.....	37
Table 22 Kestrel Breeding Transect Survey Data.....	39
Table 23 Kestrel Winter Transect Survey Data.....	39
Table 24 Common Snipe Supporting Data – Vantage Point Surveys.....	40

## Surveyor Initials Key

Surveyor Initials	Surveyor Name
AMC	Alan McCarthy
JK	Jack Kennedy
TN	Tony Nagle

## APPENDIX 8 - 5 (SUPPORTING SURVEY DATA)

Table 1 Additional/Supplementary Vantage Point Survey Effort

Date	Survey Method	VP Number	Survey Duration	Weather Conditions	Comments	Surveyor
14/09/2016	Vantage Point Survey	Site 1 VP1	06:00 starting at 09:45	Wind Speed and Direction: Light Air, NE; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 50 Rain: None; Frost: None; Snow: None		TN
25/09/2016	Vantage Point Survey	Site 4 VP1	06:00 starting at 10:45	Wind Speed and Direction: Light Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: Cloud Cover %: 20 Rain: Drizzle Mist; Frost: None; Snow: None		TN
28/09/2016	Vantage Point Survey	Site 5 VP1	06:00 starting at 13:50	Wind Speed and Direction: Gentle Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: Cloud Cover %: 100 Rain: Drizzle Mist; Frost: None; Snow: None		TN
29/09/2016	Vantage Point Survey	Site 6 VP1	06:00 starting at 11:34	Wind Speed and Direction: Light Breeze, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 35 Rain: None; Frost: None; Snow: None		TN
30/09/2016	Vantage Point Survey	Site 7 VP1	06:00 starting at 10:10	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 60 Rain: None; Frost: None; Snow: None		TN
17/10/2016	Vantage Point Survey	Site 6 VP1	06:00 starting at 11:20	Wind Speed and Direction: Gentle Breeze, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 45 Rain: None; Frost: None; Snow: None		TN
20/10/2016	Vantage Point Survey	Site 1 VP1	06:00 starting at 10:30	Wind Speed and Direction: Calm, NE; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 5 Rain: None; Frost: None; Snow: None		TN
25/10/2016	Vantage Point Survey	Site 4 VP1	06:00 starting at 10:15	Wind Speed and Direction: Calm, SE; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: Drizzle Mist; Frost: None; Snow: None		TN
27/10/2016	Vantage Point Survey	Site 5 VP1	06:00 starting at 10:05	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 60 Rain: None; Frost: None; Snow: None		TN
28/10/2016	Vantage Point Survey	Site 7 VP1	06:00 starting at 10:06	Wind Speed and Direction: Light Air, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 90 Rain: None; Frost: None; Snow: None		TN

Date	Survey Method	VP Number	Survey Duration	Weather Conditions	Comments	Surveyor
23/11/2016	Vantage Point Survey	Site 6 VP1	06:00 starting at 10:10	Wind Speed and Direction: Light Breeze, N; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 40 Rain: None; Frost: None; Snow: None		TN
24/11/2016	Vantage Point Survey	Site 5 VP1	06:00 starting at 08:17	Wind Speed and Direction: Light Air, NE; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 10 Rain: None; Frost: None; Snow: None		TN
27/11/2016	Vantage Point Survey	Site 7 VP1	06:00 starting at 08:50	Wind Speed and Direction: Light Air, SE; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 50 Rain: Drizzle Mist; Frost: None; Snow: None		TN
28/11/2016	Vantage Point Survey	Site 1 VP1	06:00 starting at 10:35	Wind Speed and Direction: Light Air, E; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN
30/11/2016	Vantage Point Survey	Site 4 VP1	06:00 starting at 10:14	Wind Speed and Direction: Calm, NE; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 0 Rain: None; Frost: None; Snow: None		TN
18/12/2016	Vantage Point Survey	Site 1 VP1	06:00 starting at 10:00	Wind Speed and Direction: Calm, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: None; Frost: None; Snow: None	A deer hunter walked across the field where the Golden Plover were feeding and probably flushed them. Not seen flying away.	TN
29/12/2016	Vantage Point Survey	Site 7 VP1	06:00 starting at 09:35	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 85 Rain: None; Frost: None; Snow: None		TN
30/12/2016	Vantage Point Survey	Site 4 VP1	06:00 starting at 08:36	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 90 Rain: None; Frost: None; Snow: None		AMC
30/12/2016	Vantage Point Survey	Site 5 VP1	06:00 starting at 08:48	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 80 Rain: None; Frost: None; Snow: None		TN
31/12/2016	Vantage Point Survey	Site 6 VP1	06:00 starting at 09:20	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 95 Rain: Drizzle Mist; Frost: None; Snow: None		TN
14/01/2017	Vantage Point Survey	Site 7 VP1	06:00 starting at 08:52	Wind Speed and Direction: Light Air, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 80 Rain: Light Showers; Frost: None; Snow: None		TN

Date	Survey Method	VP Number	Survey Duration	Weather Conditions	Comments	Surveyor
16/01/2017	Vantage Point Survey	Site 6 VP1	06:00 starting at 09:50	Wind Speed and Direction: Calm, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 90 Rain: Light Showers; Frost: None; Snow: None		TN
19/01/2017	Vantage Point Survey	Site 5 VP1	06:00 starting at 09:45	Wind Speed and Direction: Calm, SE; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 30 Rain: None; Frost: None; Snow: None	Tractor hedge-cutting in fields below site all day (minimal disturbance).	TN
21/01/2017	Vantage Point Survey	Site 1 VP1	06:00 starting at 08:50	Wind Speed and Direction: Calm, SE; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN
25/01/2017	Vantage Point Survey	Site 4 VP1	06:00 starting at 10:05	Wind Speed and Direction: Light Breeze, S; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN
16/02/2017	Vantage Point Survey	Site 5 VP1	06:00 starting at 09:48	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN
17/02/2017	Vantage Point Survey	Site 7 VP1	06:00 starting at 11:30	Wind Speed and Direction: Light Air, S; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: Light Showers; Frost: None; Snow: None		TN
20/02/2017	Vantage Point Survey	Site 1 VP1	06:00 starting at 09:20	Wind Speed and Direction: Light Breeze, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN
21/02/2017	Vantage Point Survey	Site 4 VP1	06:00 starting at 09:43	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 95 Rain: None; Frost: None; Snow: None		TN
23/02/2017	Vantage Point Survey	Site 6 VP1	06:00 starting at 09:35	Wind Speed and Direction: Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 65 Rain: Light Showers; Frost: None; Snow: None		TN
11/03/2017	Vantage Point Survey	Site 1 VP1	06:00 starting at 08:03	Wind Speed and Direction: Calm, SW; Visibility: Moderate (1-2km); Cloud Height: Cloud Cover %: 80 Rain: Drizzle Mist; Frost: None; Snow: None		TN
20/03/2017	Vantage Point Survey	Site 7 VP1	06:00 starting at 09:48	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 50 Rain: Light Showers; Frost: None; Snow: None		TN

Date	Survey Method	VP Number	Survey Duration	Weather Conditions	Comments	Surveyor
21/03/2017	Vantage Point Survey	Site 5 VP1	06:00 starting at 09:53	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN
22/03/2017	Vantage Point Survey	Site 6 VP1	06:00 starting at 09:42	Wind Speed and Direction: Gentle Breeze, N; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: Drizzle Mist; Frost: None; Snow: None		TN
23/03/2017	Vantage Point Survey	Site 4 VP1	06:00 starting at 09:48	Wind Speed and Direction: Gentle Breeze, NE; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 75 Rain: None; Frost: None; Snow: None		TN
07/04/2017	Vantage Point Survey	Site 1 VP1	06:00 starting at 09:35	Wind Speed and Direction: Calm, SE; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 70 Rain: None; Frost: None; Snow: None		TN
19/04/2017	Vantage Point Survey	Site 4 VP1	07:00 starting at 08:58	Wind Speed and Direction: Calm, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 90 Rain: None; Frost: None; Snow: None		TN
22/04/2017	Vantage Point Survey	Site 7 VP1	06:00 starting at 07:05	Wind Speed and Direction: Calm, NE; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 80 Rain: None; Frost: None; Snow: None		TN
23/04/2017	Vantage Point Survey	Site 5 VP1	03:00 starting at 10:36	Wind Speed and Direction: Calm, S; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN
24/04/2017	Vantage Point Survey	Site 5 VP1	03:00 starting at 14:06	Wind Speed and Direction: Light Breeze, S; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN
24/04/2017	Vantage Point Survey	Site 6 VP1	06:00 starting at 09:44	Wind Speed and Direction: Light Breeze, NW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 90 Rain: Drizzle Mist; Frost: None; Snow: None		TN
01/05/2017	Vantage Point Survey	Site 1 VP1	06:00 starting at 12:30	Wind Speed and Direction: Light Breeze, N; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 60 Rain: None; Frost: None; Snow: None		TN
18/05/2017	Vantage Point Survey	Site 4 VP1	06:00 starting at 08:55	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 65 Rain: Drizzle Mist; Frost: None; Snow: None		TN

Date	Survey Method	VP Number	Survey Duration	Weather Conditions	Comments	Surveyor
19/05/2017	Vantage Point Survey	Site 6 VP1	06:00 starting at 08:55	Wind Speed and Direction: Calm, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 75 Rain: Drizzle Mist; Frost: None; Snow: None		TN
22/05/2017	Vantage Point Survey	Site 5 VP1	06:00 starting at 10:45	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 80 Rain: None; Frost: None; Snow: None	Digger working in cleared forest on top of hill causing limited disturbance.	TN
25/05/2017	Vantage Point Survey	Site 7 VP1	06:00 starting at 09:55	Wind Speed and Direction: Light Air, S; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 95 Rain: None; Frost: None; Snow: None		TN
02/06/2017	Vantage Point Survey	Site 1 VP1	06:00 starting at 10:30	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 65 Rain: None; Frost: None; Snow: None		TN
19/06/2017	Vantage Point Survey	Site 4 VP1	06:00 starting at 11:30	Wind Speed and Direction: Calm, E; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 70 Rain: None; Frost: None; Snow: None		TN
20/06/2017	Vantage Point Survey	Site 6 VP1	06:00 starting at 09:25	Wind Speed and Direction: Light Air, E; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 25 Rain: None; Frost: None; Snow: None		TN
27/06/2017	Vantage Point Survey	Site 5 VP1	06:00 starting at 10:50	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 60 Rain: None; Frost: None; Snow: None		TN
29/06/2017	Vantage Point Survey	Site 7 VP1	06:00 starting at 08:54	Wind Speed and Direction: Light Breeze, N; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 95 Rain: Drizzle Mist; Frost: None; Snow: None		TN
06/07/2017	Vantage Point Survey	Site 1 VP1	06:00 starting at 10:25	Wind Speed and Direction: Calm, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 85 Rain: None; Frost: None; Snow: None		TN
18/07/2017	Vantage Point Survey	Site 4 VP1	06:00 starting at 08:45	Wind Speed and Direction: Light Breeze, E; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 95 Rain: None; Frost: None; Snow: None		TN
18/07/2017	Vantage Point Survey	Site 5 VP1	03:00 starting at 14:55	Wind Speed and Direction: Light Breeze, E; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 20 Rain: None; Frost: None; Snow: None		TN



Date	Survey Method	VP Number	Survey Duration	Weather Conditions	Comments	Surveyor
21/07/2017	Vantage Point Survey	Site 5 VP1	03:00 starting at 08:26	Wind Speed and Direction: Light Breeze, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 70 Rain: None; Frost: None; Snow: None	Tractor hedge-cutting in fields.	TN
21/07/2017	Vantage Point Survey	Site 6 VP1	06:00 starting at 11:30	Wind Speed and Direction: Light Air, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 90 Rain: Light Showers; Frost: None; Snow: None		TN
22/07/2017	Vantage Point Survey	Site 7 VP1	06:00 starting at 09:58	Wind Speed and Direction: Light Air, E; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 80 Rain: None; Frost: None; Snow: None		TN
01/08/2017	Vantage Point Survey	Site 1 VP1	06:00 starting at 11:00	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 65 Rain: None; Frost: None; Snow: None		TN
12/08/2017	Vantage Point Survey	Site 4 VP1	06:00 starting at 09:48	Wind Speed and Direction: Light Breeze, NW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 80 Rain: None; Frost: None; Snow: None		TN
14/08/2017	Vantage Point Survey	Site 5 VP1	06:00 starting at 14:00	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 80 Rain: Light Showers; Frost: None; Snow: None	Several short showers throughout watch period.	TN
17/08/2017	Vantage Point Survey	Site 6 VP1	06:00 starting at 08:55	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 80 Rain: None; Frost: None; Snow: None		TN
25/08/2017	Vantage Point Survey	Site 7 VP1	06:00 starting at 10:45	Wind Speed and Direction: Calm, S; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 95 Rain: None; Frost: None; Snow: None		TN
14/09/2017	Vantage Point Survey	Site 1 VP1	06:00 starting at 10:12	Wind Speed and Direction: Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 60 Rain: None; Frost: None; Snow: None	Tractor in field to north of VP for much of third hour.	TN
03/10/2017	Vantage Point Survey	Site 1 VP1a	06:00 starting at 10:05	Wind Speed and Direction: Light Air, NW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 60 Rain: None; Frost: None; Snow: None		TN
28/11/2017	Vantage Point Survey	Site 1 VP1a	06:00 starting at 09:55	Wind Speed and Direction: Light Air, NW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 15 Rain: None; Frost: None; Snow: None		TN

Date	Survey Method	VP Number	Survey Duration	Weather Conditions	Comments	Surveyor
07/12/2017	Vantage Point Survey	Site 1 VP1a	06:00 starting at 09:45	Wind Speed and Direction: Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 60 Rain: Light Showers; Frost: None; Snow: None		TN
08/01/2018	Vantage Point Survey	Site 1 VP1a	06:00 starting at 10:00	Wind Speed and Direction: Calm, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 100 Rain: Light Showers; Frost: None; Snow: None		TN
05/02/2018	Vantage Point Survey	Site 1 VP1a	06:00 starting at 10:05	Wind Speed and Direction: Calm, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 35 Rain: None; Frost: None; Snow: None		TN
19/03/2018	Vantage Point Survey	Site 1 VP1a	06:00 starting at 10:15	Wind Speed and Direction: Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 75 Rain: None; Frost: None; Snow: None		TN
28/04/2018	Vantage Point Survey	Site 1 VP1a	06:00 starting at 13:43	Wind Speed and Direction: Calm, N; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 85 Rain: Light Showers; Frost: None; Snow: None		TN
27/05/2018	Vantage Point Survey	Site 1 VP1a	06:00 starting at 12:48	Wind Speed and Direction: Light Air, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 100 Rain: Light Showers; Frost: None; Snow: None		TN
02/06/2018	Vantage Point Survey	Site 1 VP1a	06:00 starting at 13:15	Wind Speed and Direction: Calm, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN
10/07/2018	Vantage Point Survey	Site 1 VP1a	06:00 starting at 11:30	Wind Speed and Direction: Calm, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 5 Rain: None; Frost: None; Snow: None		TN
03/08/2018	Vantage Point Survey	Site 1 VP1a	06:00 starting at 12:20	Wind Speed and Direction: Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 60 Rain: None; Frost: None; Snow: None		TN
03/09/2018	Vantage Point Survey	Site 1 VP1a	06:00 starting at 09:43	Wind Speed and Direction: Light Breeze, Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 2 Rain: None; Frost: None; Snow: None		TN
23/10/2018	Vantage Point Survey	Site 1 VP1a	03:00 starting at 09:52	Wind Speed and Direction: Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 90 Rain: None; Frost: None; Snow: None		TN

Date	Survey Method	VP Number	Survey Duration	Weather Conditions	Comments	Surveyor
23/10/2018	Vantage Point Survey	Site 2 VP1	03:00 starting at 13:06	Wind Speed and Direction: Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 85 Rain: None; Frost: None ; Snow: None		TN
26/10/2018	Vantage Point Survey	Site 3 VP1	03:00 starting at 12:10	Wind Speed and Direction: Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: ; Cloud Cover %: 45 Rain: Light Showers; Frost: None ; Snow: None		TN
26/10/2018	Vantage Point Survey	Site 3 VP2	03:00 starting at 15:15	Wind Speed and Direction: Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 20 Rain: Light Showers; Frost: None ; Snow: None		TN
28/10/2018	Vantage Point Survey	Site 3 VP3	03:00 starting at 11:44	Wind Speed and Direction: Calm, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 20 Rain: None; Frost: None ; Snow: None		TN
29/10/2018	Vantage Point Survey	Site 2 VP2a	03:00 starting at 12:55	Wind Speed and Direction: Light Air, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 100 Rain: Light Showers; Frost: None ; Snow: None		TN
12/11/2018	Vantage Point Survey	Site 1 VP1a	03:00 starting at 09:54	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 95 Rain: Light Showers; Frost: None; Snow: None		TN
12/11/2018	Vantage Point Survey	Site 2 VP1	03:00 starting at 13:02	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 90 Rain: Light Showers; Frost: None ; Snow: None		TN
17/11/2018	Vantage Point Survey	Site 2 VP2a	03:00 starting at 09:34	Wind Speed and Direction: Light Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 100 Rain: None; Frost: None ; Snow: None		TN
17/11/2018	Vantage Point Survey	Site 3 VP3	03:00 starting at 12:46	Wind Speed and Direction: Light Breeze, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 100 Rain: Drizzle Mist; Frost: None ; Snow: None		TN
18/11/2018	Vantage Point Survey	Site 3 VP1	03:00 starting at 12:22	Wind Speed and Direction: Light Breeze, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 3 Rain: None; Frost: None ; Snow: None		TN
23/11/2018	Vantage Point Survey	Site 3 VP2	03:00 starting at 13:30	Wind Speed and Direction: Light Air, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 100 Rain: Light Showers; Frost: None ; Snow: None		TN



Date	Survey Method	VP Number	Survey Duration	Weather Conditions	Comments	Surveyor
06/12/2018	Vantage Point Survey	Site 1 VP1a	03:00 starting at 10:13	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN
06/12/2018	Vantage Point Survey	Site 2 VP1	03:00 starting at 13:25	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 100 Rain: None; Frost: None ; Snow: None		TN





### Map Legend

- Original 7 Development Areas
- ▲ Original Vantage Point Locations



Drawing Title  
Original Development Areas and Vantage Point Survey Locations

Project Title  
Lyrenacarriga Windfarm

Drawn By Patrick Manley	Checked By Padraig Cregg
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Project No. 170749	Drawing No. Fig. 8.9
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Scale 1:50000	Date 18.11.2020
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Table 2 Supplementary Breeding Transect Survey Effort

Date	Survey Method	Transect Number	Survey Duration	Weather Conditions	Comments	Surveyor
03/04/2017	Breeding Walkover Transect	Site 2 T1	00:30 starting at 09:45	Wind Speed and Direction: Gentle Breeze, S; Visibility: Moderate (1-2km); Cloud Height: Cloud Cover %: 100 Rain: Drizzle Mist; Frost: None; Snow: None		TN
07/04/2017	Breeding Walkover Transect	Site 1 T1	00:30 starting at 09:00	Wind Speed and Direction: Calm, SE; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 70 Rain: None; Frost: None; Snow: None		TN
12/04/2017	Breeding Walkover Transect	Site 3 T1	00:30 starting at 08:10	Wind Speed and Direction: Light Breeze, NW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 80 Rain: None; Frost: None; Snow: None		TN
14/04/2017	Breeding Walkover Transect	Site 3 T2	00:30 starting at 15:05	Wind Speed and Direction: Light Air, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: Drizzle Mist; Frost: None; Snow: None		TN
19/04/2017	Breeding Walkover Transect	Site 4 T1	00:30 starting at 08:15	Wind Speed and Direction: Calm, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 90 Rain: None; Frost: None; Snow: None		TN
23/04/2017	Breeding Walkover Transect	Site 5 T1	00:30 starting at 09:55	Wind Speed and Direction: Calm, S; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN
24/04/2017	Breeding Walkover Transect	Site 6 T1	00:30 starting at 09:00	Wind Speed and Direction: Light Breeze, S; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN
01/05/2017	Breeding Walkover Transect	Site 1 T1	00:30 starting at 11:50	Wind Speed and Direction: Light Breeze, N; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 60 Rain: None; Frost: None; Snow: None		TN
02/05/2017	Breeding Walkover Transect	Site 2 T1	00:30 starting at 13:40	Wind Speed and Direction: Light Air, SE; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 5 Rain: None; Frost: None; Snow: None		TN
10/05/2017	Breeding Walkover Transect	Site 3 T2	00:30 starting at 08:10	Wind Speed and Direction: Light Air, NE; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 30 Rain: None; Frost: None; Snow: None		TN
18/05/2017	Breeding Walkover Transect	Site 4 T1	00:30 starting at 08:15	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 65 Rain: Drizzle Mist; Frost: None; Snow: None		TN
19/05/2017	Breeding Walkover Transect	Site 6 T1	00:30 starting at 08:15	Wind Speed and Direction: Calm, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 75 Rain: Drizzle Mist; Frost: None; Snow: None		TN
22/05/2017	Breeding Walkover Transect	Site 5 T1	00:30 starting at 10:10	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 80 Rain: None; Frost: None; Snow: None		TN
25/05/2017	Breeding Walkover Transect	Site 7 T1	00:30 starting at 09:15	Wind Speed and Direction: Light Air, S; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 95 Rain: None; Frost: None; Snow: None		TN
02/06/2017	Breeding Walkover Transect	Site 1 T1	00:30 starting at 09:50	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 65 Rain: None; Frost: None; Snow: None		TN
09/06/2017	Breeding Walkover Transect	Site 3 T1	00:30 starting at 08:50	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN



Date	Survey Method	Transect Number	Survey Duration	Weather Conditions	Comments	Surveyor
12/06/2017	Breeding Walkover Transect	Site 3 T2	00:30 starting at 09:00	Wind Speed and Direction: Light Air, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN
19/06/2017	Breeding Walkover Transect	Site 4 T1	00:30 starting at 10:55	Wind Speed and Direction: Calm, E; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 70 Rain: None; Frost: None; Snow: None		TN
20/06/2017	Breeding Walkover Transect	Site 6 T1	00:30 starting at 08:50	Wind Speed and Direction: Light Air, E; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 25 Rain: None; Frost: None; Snow: None		TN
27/06/2017	Breeding Walkover Transect	Site 5 T1	00:30 starting at 10:10	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 60 Rain: None; Frost: None; Snow: None		TN
29/06/2017	Breeding Walkover Transect	Site 7 T1	00:30 starting at 08:15	Wind Speed and Direction: Light Breeze, N; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 95 Rain: Drizzle Mist; Frost: None; Snow: None		TN
06/07/2017	Breeding Walkover Transect	Site 1 T1	00:30 starting at 09:45	Wind Speed and Direction: Calm, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 85 Rain: None; Frost: None; Snow: None		TN
08/07/2017	Breeding Walkover Transect	Site 2 T1	00:30 starting at 08:45	Wind Speed and Direction: Light Air, E; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 85 Rain: None; Frost: None; Snow: None		TN
15/07/2017	Breeding Walkover Transect	Site 3 T2	00:30 starting at 12:00	Wind Speed and Direction: Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 80 Rain: None; Frost: None; Snow: None		TN
18/07/2017	Breeding Walkover Transect	Site 4 T1	00:30 starting at 08:00	Wind Speed and Direction: Light Breeze, E; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 95 Rain: None; Frost: None; Snow: None		TN
21/07/2017	Breeding Walkover Transect	Site 5 T1	00:30 starting at 07:50	Wind Speed and Direction: Light Breeze, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 70 Rain: None; Frost: None; Snow: None		TN
21/07/2017	Breeding Walkover Transect	Site 6 T1	00:30 starting at 10:55	Wind Speed and Direction: Light Breeze, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 70 Rain: None; Frost: None; Snow: None		TN
22/07/2017	Breeding Walkover Transect	Site 7 T1	00:30 starting at 09:15	Wind Speed and Direction: Light Air, E; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 80 Rain: None; Frost: None; Snow: None		TN
01/08/2017	Breeding Walkover Transect	Site 1 T1	00:30 starting at 10:25	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 65 Rain: None; Frost: None; Snow: None		TN
02/08/2017	Breeding Walkover Transect	Site 2 T1	00:30 starting at 09:00	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 80 Rain: Drizzle Mist; Frost: None; Snow: None		TN
07/08/2017	Breeding Walkover Transect	Site 3 T1	00:30 starting at 10:10	Wind Speed and Direction: Light Air, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 90 Rain: Drizzle Mist; Frost: None; Snow: None		TN
08/08/2017	Breeding Walkover Transect	Site 3 T2	00:30 starting at 08:30	Wind Speed and Direction: Light Air, NW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 90 Rain: Drizzle Mist; Frost: None; Snow: None		TN
12/08/2017	Breeding Walkover Transect	Site 4 T1	00:30 starting at 09:10	Wind Speed and Direction: Light Breeze, NW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 80 Rain: None; Frost: None; Snow: None		TN

Date	Survey Method	Transect Number	Survey Duration	Weather Conditions	Comments	Surveyor
14/08/2017	Breeding Walkover Transect	Site 5 T1	00:30 starting at 13:20	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 80 Rain: Light Showers; Frost: None; Snow: None		TN
17/08/2017	Breeding Walkover Transect	Site 6 T1	00:30 starting at 08:20	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 80 Rain: None; Frost: None; Snow: None		TN
25/08/2017	Breeding Walkover Transect	Site 7 T1	00:30 starting at 10:10	Wind Speed and Direction: Calm, S; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 95 Rain: None; Frost: None; Snow: None		TN
14/09/2017	Breeding Walkover Transect	Site 1 T1	00:30 starting at 09:30	Wind Speed and Direction: Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 60 Rain: None; Frost: None; Snow: None		TN
24/09/2017	Breeding Walkover Transect	Site 3 T1	00:30 starting at 07:10	Wind Speed and Direction: Calm, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 60 Rain: None; Frost: None; Snow: None		TN
25/09/2017	Breeding Walkover Transect	Site 2 T1	00:30 starting at 09:30	Wind Speed and Direction: Light Air, S; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 50 Rain: None; Frost: None; Snow: None		TN
30/09/2017	Breeding Walkover Transect	Site 3 T2	00:30 starting at 11:10	Wind Speed and Direction: Calm, S; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 95 Rain: Drizzle Mist; Frost: None; Snow: None		TN
03/04/2018	Breeding Walkover Transect	Site 2 T1	00:30 starting at 09:45	Wind Speed and Direction: Gentle Breeze, S; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 90 Rain: Light Showers; Frost: None; Snow: None		TN
15/04/2018	Breeding Walkover Transect	Site 3 T3	00:30 starting at 10:30	Wind Speed and Direction: Gentle Breeze, S; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: Light Showers; Frost: None; Snow: None		TN
21/04/2018	Breeding Walkover Transect	Site 3 T1	00:30 starting at 11:50	Wind Speed and Direction: Light Air, S; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 13 Rain: None; Frost: None; Snow: None		TN
28/04/2018	Breeding Walkover Transect	Site 1 T1	00:30 starting at 13:00	Wind Speed and Direction: Calm, N; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 85 Rain: Light Showers; Frost: None; Snow: None		TN
04/05/2018	Breeding Walkover Transect	Site 3 T1	00:30 starting at 13:50	Wind Speed and Direction: Light Air, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 85 Rain: None; Frost: None; Snow: None		TN
05/05/2018	Breeding Walkover Transect	Site 3 T2	00:30 starting at 12:25	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 40 Rain: None; Frost: None; Snow: None		TN
09/05/2018	Breeding Walkover Transect	Site 2 T1	00:30 starting at 13:30	Wind Speed and Direction: Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 60 Rain: Light Showers; Frost: None; Snow: None		TN
27/05/2018	Breeding Walkover Transect	Site 1 T1	00:30 starting at 12:00	Wind Speed and Direction: Light Air, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 100 Rain: Light Showers; Frost: None; Snow: None		TN
02/06/2018	Breeding Walkover Transect	Site 1 T1	00:30 starting at 13:40	Wind Speed and Direction: Calm, S; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN
03/06/2018	Breeding Walkover Transect	Site 2 T1	00:30 starting at 11:50	Wind Speed and Direction: Light Air, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 50 Rain: None; Frost: None; Snow: None		TN





Date	Survey Method	Transect Number	Survey Duration	Weather Conditions	Comments	Surveyor
06/06/2018	Breeding Walkover Transect	Site 3 T1	00:30 starting at 13:55	Wind Speed and Direction: Light Air, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 45 Rain: None; Frost: None; Snow: None		TN
08/06/2018	Breeding Walkover Transect	Site 2 T1	00:30 starting at 08:30	Wind Speed and Direction: Light Air, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 45 Rain: None; Frost: None; Snow: None		TN
25/06/2018	Breeding Walkover Transect	Site 3 T2	00:30 starting at 15:15	Wind Speed and Direction: Light Air, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 45 Rain: None; Frost: None; Snow: None		TN
10/07/2018	Breeding Walkover Transect	Site 1 T1	00:30 starting at 10:45	Wind Speed and Direction: Calm, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 5 Rain: None; Frost: None; Snow: None		TN
11/07/2018	Breeding Walkover Transect	Site 2 T1	00:30 starting at 08:00	Wind Speed and Direction: Light Air, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 5 Rain: None; Frost: None; Snow: None		TN
14/07/2018	Breeding Walkover Transect	Site 3 T1	00:30 starting at 13:45	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 75 Rain: None; Frost: None; Snow: None		TN
16/07/2018	Breeding Walkover Transect	Site 3 T2	00:30 starting at 13:00	Wind Speed and Direction: Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 85 Rain: None; Frost: None; Snow: None		TN
03/08/2018	Breeding Walkover Transect	Site 1 T1	00:30 starting at 11:45	Wind Speed and Direction: Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 60 Rain: None; Frost: None; Snow: None		TN
06/08/2018	Breeding Walkover Transect	Site 2 T1	00:30 starting at 09:00	Wind Speed and Direction: Calm, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN
08/08/2018	Breeding Walkover Transect	Site 3 T1	00:30 starting at 09:15	Wind Speed and Direction: Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 65 Rain: None; Frost: None; Snow: None		TN
14/08/2018	Breeding Walkover Transect	Site 3 T2	00:30 starting at 08:30	Wind Speed and Direction: Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 80 Rain: None; Frost: None; Snow: None		TN
03/09/2018	Breeding Walkover Transect	Site 1 T1	00:30 starting at 09:00	Wind Speed and Direction: Light Breeze, Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 2 Rain: None; Frost: None; Snow: None		TN
07/09/2018	Breeding Walkover Transect	Site 2 T1	00:30 starting at 09:00	Wind Speed and Direction: Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 100 Rain: Light Showers; Frost: None; Snow: None		TN
10/09/2018	Breeding Walkover Transect	Site 3 T1	00:30 starting at 09:10	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN
27/09/2018	Breeding Walkover Transect	Site 3 T2	00:30 starting at 09:00	Wind Speed and Direction: Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 1 Rain: None; Frost: None; Snow: None		TN

Table 3 Supplementary Winter Transect Survey Effort

Date	Survey Method	Transect Number	Survey Duration	Weather Conditions	Comments	Surveyor
08/09/2016	Winter Transect Survey	Site 2 T2	00:30 starting at 09:30	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 90 Rain: Drizzle Mist; Frost: None; Snow: None		TN
13/09/2016	Winter Transect Survey	Site 2 T1	00:30 starting at 09:00	Wind Speed and Direction: Light Air, N; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 85 Rain: None; Frost: None; Snow: None		TN
14/09/2016	Winter Transect Survey	Site 1 T1	00:30 starting at 09:00	Wind Speed and Direction: Light Air, NE; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 50 Rain: None; Frost: None; Snow: None		TN
15/09/2016	Winter Transect Survey	Site 3 T2	01:00 starting at 09:00	Wind Speed and Direction: Calm, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: Drizzle Mist; Frost: None; Snow: None		TN
16/09/2016	Winter Transect Survey	Site 3 T3	00:30 starting at 09:30	Wind Speed and Direction: Light Breeze, NW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 80 Rain: Drizzle Mist; Frost: None; Snow: None		TN
23/09/2016	Winter Transect Survey	Site 3 T1	00:30 starting at 09:45	Wind Speed and Direction: Gentle Breeze, S; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 95 Rain: None; Frost: None; Snow: None		TN
25/09/2016	Winter Transect Survey	Site 4 T1	00:30 starting at 10:00	Wind Speed and Direction: Light Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: Cloud Cover %: 20 Rain: Drizzle Mist; Frost: None; Snow: None		TN
28/09/2016	Winter Transect Survey	Site 5 T1	00:30 starting at 13:00	Wind Speed and Direction: Gentle Breeze, SW; Visibility: Moderate (1-2km); Cloud Height: Cloud Cover %: 100 Rain: Drizzle Mist; Frost: None; Snow: None		TN
29/09/2016	Winter Transect Survey	Site 6 T1	00:30 starting at 10:45	Wind Speed and Direction: Light Breeze, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 35 Rain: None; Frost: None; Snow: None		TN
30/09/2016	Winter Transect Survey	Site 7 T1	00:30 starting at 09:30	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 60 Rain: None; Frost: None; Snow: None		TN
10/10/2016	Winter Transect Survey	Site 2 T2	00:30 starting at 09:30	Wind Speed and Direction: Calm, E; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 60 Rain: None; Frost: None; Snow: None		TN
12/10/2016	Winter Transect Survey	Site 3 T2	00:30 starting at 09:15	Wind Speed and Direction: Light Breeze, E; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 75 Rain: None; Frost: None; Snow: None		TN
13/10/2016	Winter Transect Survey	Site 3 T1	00:30 starting at 09:35	Wind Speed and Direction: Calm, NE; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 50 Rain: None; Frost: None; Snow: None		TN
17/10/2016	Winter Transect Survey	Site 6 T1	00:30 starting at 10:30	Wind Speed and Direction: Gentle Breeze, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 45 Rain: None; Frost: None; Snow: None		TN
25/10/2016	Winter Transect Survey	Site 4 T1	00:30 starting at 09:20	Wind Speed and Direction: Calm, SE; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: Drizzle Mist; Frost: None; Snow: None		TN
27/10/2016	Winter Transect Survey	Site 5 T1	00:30 starting at 09:30	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 60 Rain: None; Frost: None; Snow: None		TN



Date	Survey Method	Transect Number	Survey Duration	Weather Conditions	Comments	Surveyor
28/10/2016	Winter Transect Survey	Site 7 T1	00:30 starting at 09:30	Wind Speed and Direction: Light Air, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 90 Rain: None; Frost: None; Snow: None		TN
09/11/2016	Winter Transect Survey	Site 2 T1	00:30 starting at 09:15	Wind Speed and Direction: Light Breeze, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 70 Rain: Light Showers; Frost: None; Snow: None		TN
09/11/2016	Winter Transect Survey	Site 2 T2	00:30 starting at 14:15	Wind Speed and Direction: Light Breeze, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 70 Rain: Light Showers; Frost: None; Snow: None		TN
10/11/2016	Winter Transect Survey	Site 3 T1	00:30 starting at 09:20	Wind Speed and Direction: Light Breeze, NW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 50 Rain: Light Showers; Frost: None; Snow: None		TN
14/11/2016	Winter Transect Survey	Site 3 T2	00:30 starting at 09:15	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 80 Rain: None; Frost: None; Snow: None		TN
23/11/2016	Winter Transect Survey	Site 6 T1	00:30 starting at 09:15	Wind Speed and Direction: Light Breeze, N; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 40 Rain: None; Frost: None; Snow: None		TN
24/11/2016	Winter Transect Survey	Site 5 T1	00:30 starting at 14:25	Wind Speed and Direction: Light Air, NE; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 10 Rain: None; Frost: None; Snow: None		TN
30/11/2016	Winter Transect Survey	Site 4 T1	00:30 starting at 09:20	Wind Speed and Direction: Calm, NE; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 0 Rain: None; Frost: None; Snow: None		TN
10/12/2016	Winter Transect Survey	Site 2 T1	00:30 starting at 08:30	Wind Speed and Direction: Calm, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 95 Rain: None; Frost: None; Snow: None		TN
18/12/2016	Winter Transect Survey	Site 1 T1	00:30 starting at 09:10	Wind Speed and Direction: Calm, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN
24/12/2016	Winter Transect Survey	Site 3 T2	00:30 starting at 15:05	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 90 Rain: Drizzle Mist; Frost: None; Snow: None		TN
30/12/2016	Winter Transect Survey	Site 5 T1	00:30 starting at 15:00	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 90 Rain: Drizzle Mist; Frost: None; Snow: None		TN
31/12/2016	Winter Transect Survey	Site 6 T1	00:30 starting at 08:20	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 95 Rain: Drizzle Mist; Frost: None; Snow: None		TN
05/01/2017	Winter Transect Survey	Site 2 T2	00:30 starting at 09:15	Wind Speed and Direction: Light Air, S; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN
09/01/2017	Winter Transect Survey	Site 3 T1	00:30 starting at 09:30	Wind Speed and Direction: Light Breeze, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 60 Rain: Light Showers; Frost: None; Snow: None		TN
14/01/2017	Winter Transect Survey	Site 7 T1	00:30 starting at 15:15	Wind Speed and Direction: Light Air, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 80 Rain: Light Showers; Frost: None; Snow: None		TN
16/01/2017	Winter Transect Survey	Site 6 T1	00:30 starting at 09:00	Wind Speed and Direction: Calm, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 90 Rain: Light Showers; Frost: None; Snow: None		TN

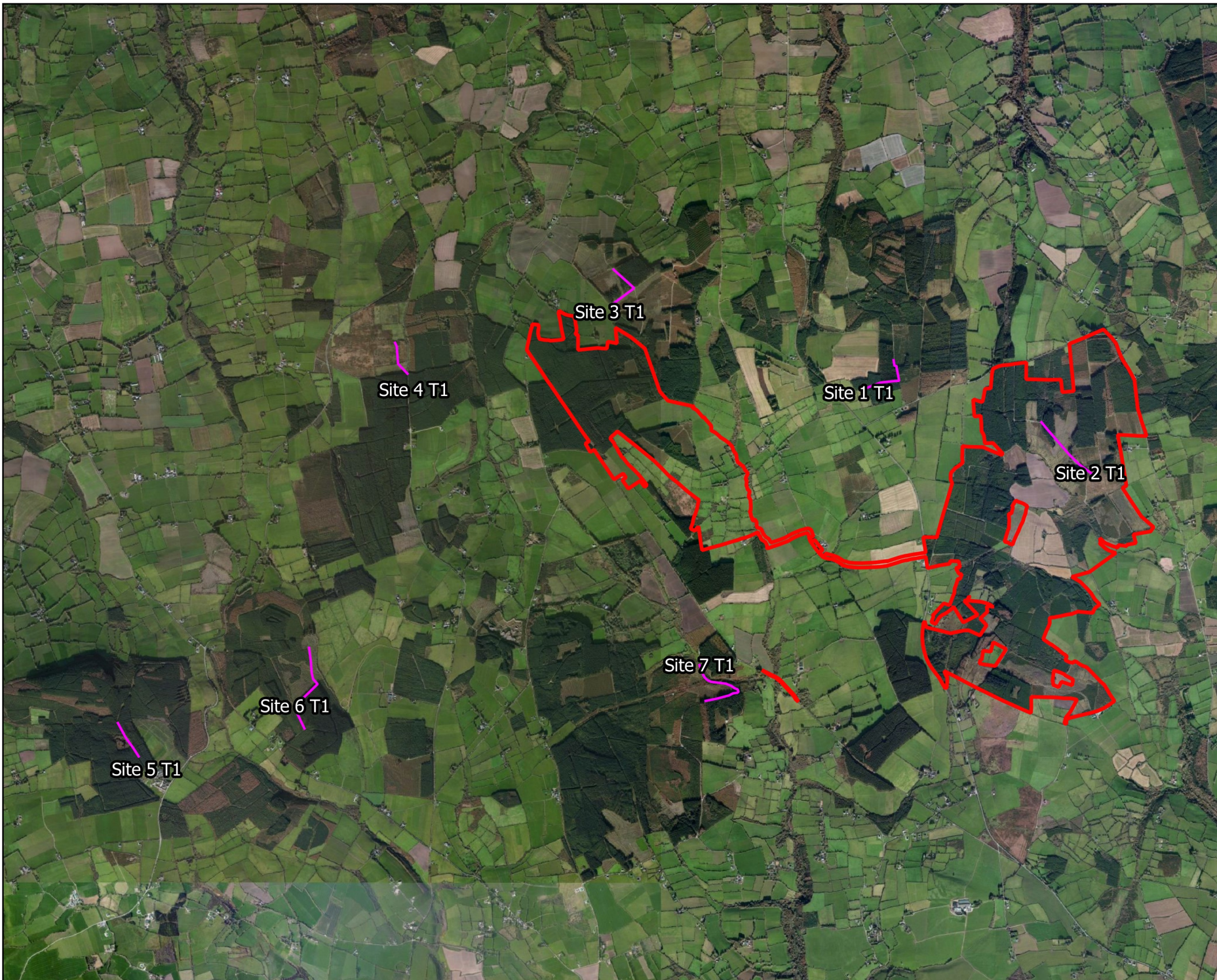
Date	Survey Method	Transect Number	Survey Duration	Weather Conditions	Comments	Surveyor
19/01/2017	Winter Transect Survey	Site 5 T1	00:30 starting at 08:50	Wind Speed and Direction: Calm, SE; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 30 Rain: None; Frost: None; Snow: None		TN
21/01/2017	Winter Transect Survey	Site 1 T1	00:30 starting at 08:15	Wind Speed and Direction: Calm, SE; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN
25/01/2017	Winter Transect Survey	Site 4 T1	00:30 starting at 09:30	Wind Speed and Direction: Light Breeze, S; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN
11/02/2017	Winter Transect Survey	Site 2 T1	00:30 starting at 09:45	Wind Speed and Direction: Light Breeze, N; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 65 Rain: None; Frost: None; Snow: None		TN
15/02/2017	Winter Transect Survey	Site 3 T2	00:30 starting at 15:00	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 95 Rain: Drizzle Mist; Frost: None; Snow: None		TN
20/02/2017	Winter Transect Survey	Site 1 T1	00:30 starting at 08:30	Wind Speed and Direction: Light Breeze, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN
21/02/2017	Winter Transect Survey	Site 4 T1	00:30 starting at 08:45	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 95 Rain: None; Frost: None; Snow: None		TN
23/02/2017	Winter Transect Survey	Site 6 T1	01:00 starting at 08:25	Wind Speed and Direction: Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 65 Rain: Light Showers; Frost: None; Snow: None		TN
05/03/2017	Winter Transect Survey	Site 2 T2	00:30 starting at 08:45	Wind Speed and Direction: Gentle Breeze, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 60 Rain: Light Showers; Frost: None; Snow: None		TN
06/03/2017	Winter Transect Survey	Site 3 T1	00:30 starting at 08:45	Wind Speed and Direction: Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 80 Rain: Light Showers; Frost: None; Snow: None		TN
07/03/2017	Winter Transect Survey	Site 3 T2	00:35 starting at 09:30	Wind Speed and Direction: Light Breeze, S; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: Drizzle Mist; Frost: None; Snow: None		TN
11/03/2017	Winter Transect Survey	Site 1 T1	00:30 starting at 14:30	Wind Speed and Direction: Calm, SW; Visibility: Moderate (1-2km); Cloud Height: Cloud Cover %: 80 Rain: Drizzle Mist; Frost: None; Snow: None		TN
21/03/2017	Winter Transect Survey	Site 5 T1	00:30 starting at 09:15	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN
22/03/2017	Winter Transect Survey	Site 6 T1	00:30 starting at 09:00	Wind Speed and Direction: Gentle Breeze, N; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: Drizzle Mist; Frost: None; Snow: None		TN
23/03/2017	Winter Transect Survey	Site 4 T1	00:30 starting at 09:00	Wind Speed and Direction: Gentle Breeze, NE; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 75 Rain: None; Frost: None; Snow: None		TN
03/10/2017	Winter Transect Survey	Site 1 T1	00:30 starting at 09:30	Wind Speed and Direction: Light Air, NW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 60 Rain: None; Frost: None; Snow: None		TN
04/10/2017	Winter Transect Survey	Site 2 T1	00:30 starting at 10:30	Wind Speed and Direction: Gentle Breeze, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 95 Rain: None; Frost: None; Snow: None		TN

Date	Survey Method	Transect Number	Survey Duration	Weather Conditions	Comments	Surveyor
17/10/2017	Winter Transect Survey	Site 3 T2	00:30 starting at 09:00	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 30 Rain: None; Frost: None; Snow: None		TN
06/11/2017	Winter Transect Survey	Site 2 T2	00:30 starting at 09:00	Wind Speed and Direction: Light Breeze, S; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: Drizzle Mist; Frost: None; Snow: None		TN
14/11/2017	Winter Transect Survey	Site 3 T2	00:30 starting at 10:00	Wind Speed and Direction: Calm, W; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 85 Rain: None; Frost: None; Snow: None		TN
20/11/2017	Winter Transect Survey	Site 3 T1	01:00 starting at 09:30	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 100 Rain: Drizzle Mist; Frost: None; Snow: None		TN
28/11/2017	Winter Transect Survey	Site 1 T1	00:30 starting at 09:10	Wind Speed and Direction: Light Air, NW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 15 Rain: None; Frost: None; Snow: None		TN
01/12/2017	Winter Transect Survey	Site 2 T1	01:00 starting at 09:30	Wind Speed and Direction: Light Air, N; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 30 Rain: None; Frost: None; Snow: None		TN
07/12/2017	Winter Transect Survey	Site 1 T1	00:30 starting at 09:00	Wind Speed and Direction: Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 60 Rain: Light Showers; Frost: None; Snow: None		TN
11/12/2017	Winter Transect Survey	Site 3 T1	00:30 starting at 09:15	Wind Speed and Direction: Light Breeze, NW; Visibility: Good (>2km); Cloud Height: Cloud Cover %: 50 Rain: None; Frost: None; Snow: None		TN
18/12/2017	Winter Transect Survey	Site 3 T2	00:30 starting at 09:30	Wind Speed and Direction: Light Air, SE; Visibility: Moderate (1-2km); Cloud Height: Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN
04/01/2018	Winter Transect Survey	Site 3 T1	00:30 starting at 09:45	Wind Speed and Direction: Light Breeze, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 95 Rain: Light Showers; Frost: None; Snow: None		TN
05/01/2018	Winter Transect Survey	Site 3 T2	00:30 starting at 09:45	Wind Speed and Direction: Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 45 Rain: None; Frost: None; Snow: None		TN
08/01/2018	Winter Transect Survey	Site 1 T1	00:30 starting at 09:20	Wind Speed and Direction: Calm, SE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 100 Rain: Light Showers; Frost: None; Snow: None		TN
17/01/2018	Winter Transect Survey	Site 2 T2	00:30 starting at 08:10	Wind Speed and Direction: Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 75 Rain: Light Showers; Frost: None; Snow: None		TN
05/02/2018	Winter Transect Survey	Site 1 T1	00:30 starting at 09:30	Wind Speed and Direction: Calm, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 35 Rain: None; Frost: None; Snow: None		TN
06/02/2018	Winter Transect Survey	Site 2 T1	00:30 starting at 09:25	Wind Speed and Direction: Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 25 Rain: None; Frost: None; Snow: None		TN
09/02/2018	Winter Transect Survey	Site 3 T1	00:30 starting at 09:45	Wind Speed and Direction: Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 50 Rain: None; Frost: On site; Snow: Ground		TN
19/02/2018	Winter Transect Survey	Site 3 T2	00:30 starting at 09:15	Wind Speed and Direction: Light Air, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 65 Rain: None; Frost: None; Snow: None		TN



Date	Survey Method	Transect Number	Survey Duration	Weather Conditions	Comments	Surveyor
12/03/2018	Winter Transect Survey	Site 2 T1	01:00 starting at 09:30	Wind Speed and Direction: Light Air, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 90 Rain: Light Showers; Frost: None; Snow: None		TN
19/03/2018	Winter Transect Survey	Site 1 T1	00:30 starting at 09:30	Wind Speed and Direction: Light Breeze, NE; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 75 Rain: None; Frost: None; Snow: None		TN
20/03/2018	Winter Transect Survey	Site 3 T2	00:30 starting at 09:10	Wind Speed and Direction: Calm, N; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 7 Rain: None; Frost: None; Snow: None		TN
23/03/2018	Winter Transect Survey	Site 3 T1	00:30 starting at 09:00	Wind Speed and Direction: Calm, W; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 100 Rain: Light Showers; Frost: None; Snow: None		TN
23/10/2018	Winter Transect Survey	Site 2 T2	00:30 starting at 16:15	Wind Speed and Direction: Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 85 Rain: None; Frost: None; Snow: None		TN
23/10/2018	Winter Transect Survey	Site 1 T1	00:30 starting at 09:15	Wind Speed and Direction: Light Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 90 Rain: None; Frost: None; Snow: None		TN
26/10/2018	Winter Transect Survey	Site 3 T1	00:30 starting at 11:30	Wind Speed and Direction: Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 45 Rain: Light Showers; Frost: None; Snow: None		TN
26/10/2018	Winter Transect Survey	Site 3 T2	00:30 starting at 10:30	Wind Speed and Direction: Gentle Breeze, NW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 45 Rain: Light Showers; Frost: None; Snow: None		TN
12/11/2018	Winter Transect Survey	Site 2 T1	00:30 starting at 16:15	Wind Speed and Direction: Light Breeze, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 90 Rain: Light Showers; Frost: None; Snow: None		TN
12/11/2018	Winter Transect Survey	Site 1 T1	00:30 starting at 09:10	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 95 Rain: Light Showers; Frost: None; Snow: None		TN
18/11/2018	Winter Transect Survey	Site 3 T1	00:30 starting at 11:45	Wind Speed and Direction: Light Breeze, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 3 Rain: None; Frost: None; Snow: None		TN
23/11/2018	Winter Transect Survey	Site 3 T2	00:30 starting at 12:45	Wind Speed and Direction: Light Air, E; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 100 Rain: Light Showers; Frost: None; Snow: None		TN
06/12/2018	Winter Transect Survey	Site 2 T1	00:30 starting at 09:30	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN
06/12/2018	Winter Transect Survey	Site 1 T1	00:30 starting at 08:30	Wind Speed and Direction: Light Air, SW; Visibility: Good (>2km); Cloud Height: >500m; Cloud Cover %: 100 Rain: None; Frost: None; Snow: None		TN





### Map Legend

- Proposed Development Area
- Transect Routes



Drawing Title  
**Breeding & Winter Transect Survey Locations**

Project Title  
**Lyrenacarriga Windfarm**

Drawn By <b>Patrick Manley</b>	Checked By <b>Padraig Cregg</b>
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Project No. <b>170749</b>	Drawing No. <b>Fig. 8.10</b>
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Scale <b>1:50000</b>	Date <b>18.11.2020</b>
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Table 4 Golden Plover Supporting Data – Vantage Point Surveys

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-20m)	Band 2 (20-140m)	Band 3 (140-175m)	Band 4 (>175m)	Notes on habitat and activity	Surveyor
GP101	17/10/2016	Site 6 VP1	Golden Plover	130	13:15:00	320			320		Flock split into several smaller flocks	T. Nagle
GP101	17/10/2016	Site 6 VP1	Golden Plover	130	13:15:00	320			320		Flock split into several smaller flocks	T. Nagle
GP102	23/11/2016	Site 6 VP1	Golden Plover	130+	15:56:00	440		310	230			T. Nagle
GP103	23/11/2016	Site 6 VP1	Golden Plover	130+	16:10:00	600		40	600			T. Nagle
GP102	23/11/2016	Site 6 VP1	Golden Plover	130+	15:56:00	440		310	230			T. Nagle
GP103	23/11/2016	Site 6 VP1	Golden Plover	130+	16:10:00	600		40	600			T. Nagle
GP005	28/11/2016	Site 1 VP1	Golden Plover	58	10:36:00	120		120				T. Nagle
GP006	28/11/2016	Site 1 VP1	Golden Plover	14	10:41:00	240	30	210				T. Nagle
GP007	28/11/2016	Site 1 VP1	Golden Plover	50	10:47:00	140		140				T. Nagle
GP008	28/11/2016	Site 1 VP1	Golden Plover	65	11:05:00	420		420				T. Nagle
GP009	28/11/2016	Site 1 VP1	Golden Plover	15	11:20:00	210	30	180				T. Nagle
GP010	28/11/2016	Site 1 VP1	Golden Plover	9	13:36:00	240	180	60				T. Nagle
GP011	28/11/2016	Site 1 VP1	Golden Plover	45	15:21:00	200	180	20				T. Nagle
GP012	28/11/2016	Site 1 VP1	Golden Plover	11	16:21:00	120		120				T. Nagle
GP015	21/01/2017	Site 1 VP1	Golden Plover	1	09:53:00	8	8				Deer hunters present until 11	T. Nagle
GP104	21/03/2017	Site 5 VP1	Golden Plover	14	12:23:00	8	8					T. Nagle
GP104	21/03/2017	Site 5 VP1	Golden Plover	14	12:23:00	8	8					T. Nagle





Table 5 Golden Plover Supporting Data – VP Survey Non-Flight Observation

Date	VP	BTO	Species	No. of Birds	Surveyor
18/12/2016	Site 1 VP1	GP	Golden Plover	136	T. Nagle

Table 6 Hen Harrier Supporting Data – Vantage Point Surveys

Map Ref. No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-20m)	Band 2 (20-140m)	Band 3 (> 140 m)	Band 4 (>175m)	Notes on Habitat and Activity	Surveyor
HH001	14/09/2016	Site 1 VP1	Hen Harrier	1	12:47:00	50		50			Flew around west side of forest at 50m for 50 seconds and then dived into forest.	T. Nagle
HH101	28/10/2016	Site 7 VP1	Hen Harrier	1	15:52:00	45	30	15				T. Nagle
HH102	30/12/2016	Site 4 VP1	Hen Harrier	1	08:37:00	30	30				Male Hen Harrier flew from perched position on Gorse bush, possibly just emerging from roost site.	T. Nagle
HH103	20/03/2017	Site 7 VP1	Hen Harrier	1	11:42:00	15	15					T. Nagle
HH104	20/03/2017	Site 7 VP1	Hen Harrier	1	13:59:00	10	10					T. Nagle
HH007	03/10/2017	Site 1 VP1a	Hen Harrier	1	11:53:00	80		80			Flew in from west at 50m and then glided north at 50-60m before turning west and out of view (80 seconds).	T. Nagle

Table 7 Merlin Supporting Data – Vantage Point Surveys

Map Ref No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-20m)	Band 2 (20-140m)	Band 3 (140-175m)	Band 4 (>175m)	Notes on habitat and activity	Surveyor
ML001	07/12/2017	Site 1 VP1a	Merlin	1	15:05:00	15	15				Female Merlin flew from forest edge W over stubble at 1-2m. It flew at a flock of Starlings and Thrushes and disappeared out of view.	T. Nagle

Table 8 Peregrine Supporting Data – Vantage Point Surveys

Map Ref No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-20m)	Band 2 (20-140m)	Band 3 (140-175m)	Band 4 (>175m)	Notes on Habitat and Activity	Surveyor
PE003	20/02/2017	Site 1 VP1	Peregrine Falcon	1	10:15:00	25		25				T. Nagle
PE004	20/02/2017	Site 1 VP1	Peregrine Falcon	1	13:27:00	420		480				T. Nagle
	23/02/2017	Site 6 VP1	Peregrine Falcon	1	12:43:00	20		8	12			T. Nagle
PE005	07/04/2017	Site 1 VP1	Peregrine Falcon	1	10:25:00	15		15				T. Nagle
PE008	03/10/2017	Site 1 VP1a	Peregrine Falcon	1	11:51:00	7	7				Flew west at 15m - seen briefly (7 seconds).	T. Nagle

Table 9 Lapwing Supporting Data – Vantage Point Surveys

Map Ref No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-20m)	Band 2 (20-140m)	Band 3 (140-175m)	Band 4 (>175m)	Notes on habitat and activity	Surveyor
	30/12/2018	Site 4 VP1	Lapwing	1	14:37:00	25		25				T. Nagle

Table 10 Woodcock Supporting Data – Vantage Point Surveys

Map Ref No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-20m)	Band 2 (20-140m)	Band 3 (140-175m)	Band 4 (>175m)	Notes on habitat and activity	Surveyor
	06/12/2018	Site 2 VP2a	Woodcock	1	16:28:00	3	3				Conifer forest	T. Nagle

Table 11 Woodcock Supporting Data – VP Survey Non-Flight Observation

Date	VP	BTO	Species	Comments	Surveyor
30/12/2016	Site 4 VP1	WK	Woodcock	1	T. Nagle

Table 12 Woodcock Winter Transect Survey Data

Date	Transect	Species	No. of Birds	Comments
30/11/2016	Site 4 T1	Woodcock	1	
11/12/2017	Site 3 T1	Woodcock	1	

Table 13 Lesser Black-backed Gull Supporting Data – Vantage Point Surveys

Map Ref No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-20m)	Band 2 (20-140m)	Band 3 (140-175m)	Band 4 (>175m)	Comments	Surveyor
LB008	25/09/2016	Site 4 VP1	Lesser Black-backed Gull	1	15:42:00	20		20			Flew from N to SE.	T. Nagle
LB012	27/11/2016	Site 7 VP1	Lesser Black-backed Gull	6	10:20:00	45		45				T. Nagle
LB013	27/11/2016	Site 7 VP1	Lesser Black-backed Gull	1	10:29:00	35		35				T. Nagle
LB014	27/11/2016	Site 7 VP1	Lesser Black-backed Gull	59	10:44:00	125		125				T. Nagle
LB015	30/11/2016	Site 4 VP1	Lesser Black-backed Gull	3	15:59:00	45		45				T. Nagle
LB024	20/06/2017	Site 6 VP1	Lesser Black-backed Gull	5	09:35:00	25		25				T. Nagle
LB025	29/06/2017	Site 7 VP1	Lesser Black-backed Gull	1	11:22:00	15		15				T. Nagle
LB029	21/07/2017	Site 6 VP1	Lesser Black-backed Gull	1	16:57:00	15		15				T. Nagle
LB036	17/08/2017	Site 6 VP1	Lesser Black-backed Gull	2	09:52:00	45		45				T. Nagle
LB037	17/08/2017	Site 6 VP1	Lesser Black-backed Gull	4	10:17:00	50		50				T. Nagle
LB038	17/08/2017	Site 6 VP1	Lesser Black-backed Gull	4	11:23:00	30	30					T. Nagle
LB039	14/09/2017	Site 1 VP1	Lesser Black-backed Gull	34	12:24:00	20	20					T. Nagle
LB040	14/09/2017	Site 1 VP1	Lesser Black-backed Gull	34	12:43:00	240		240			Tractor in field north of VP for much of third hour.	T. Nagle
	18/11/2018	Site 3 VP1	Lesser Black-backed Gull	1	15:13:00	7		7			Conifer Forest	T. Nagle

Table 14 Buzzard Supporting Data – Vantage Point Surveys

Map Ref No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-20m)	Band 2 (20-140m)	Band 3 (140-175m)	Band 4 (>175m)	Comments	Surveyor
BZ001	14/09/2016	Site 1 VP1	Buzzard	1	14:26:00	35		35			Adult Buzzard flew out from forest and circled at 75m and then flew east out of sight.	T. Nagle
BZ002	14/09/2016	Site 1 VP1	Buzzard	1	14:52:00	120		120			Adult Buzzard flew south over forest at 100m height for 120 seconds and out of sight.	T. Nagle
BZ003	14/09/2016	Site 1 VP1	Buzzard	2	14:54:00	200		140	60		2 Buzzards soared together from 100 to 175m circling the west side of forest before separating.	T. Nagle
BZ101	25/09/2016	Site 4 VP1	Buzzard	2	14:54:00	20		20			2 Buzzards (probably a pair) flew over site, calling.	T. Nagle
BZ102	28/09/2016	Site 5 VP1	Buzzard	2	15:18:00	240		240			One Buzzard joined by a second for 20 seconds.	T. Nagle
BZ103	29/09/2016	Site 6 VP1	Buzzard	2	11:34:00	260	20	240			Buzzard pair soaring around valley before separating	T. Nagle
BZ104	30/09/2016	Site 7 VP1	Buzzard	1	12:56:00	90		90				T. Nagle
BZ105	30/09/2016	Site 7 VP1	Buzzard	2	13:52:00	260		260			Buzzard soaring joined by a second bird for 30 seconds	T. Nagle
BZ106	30/09/2016	Site 7 VP1	Buzzard	1	14:30:00	10		10				T. Nagle
BZ009	20/10/2016	Site 1 VP1	Buzzard	1	13:42:00	320		15	305		3 Buzzards, probably a pair and an intruder	T. Nagle
BZ010	20/10/2016	Site 1 VP1	Buzzard	1	13:42:00	320		15	305			T. Nagle
BZ011	20/10/2016	Site 1 VP1	Buzzard	1	13:42:00	320		15	305			T. Nagle
BZ012	20/10/2016	Site 1 VP1	Buzzard	1	14:29:00	320	5	315			3 Buzzards, probably a pair and an intruder (probably the same birds as above)	T. Nagle
BZ013	20/10/2016	Site 1 VP1	Buzzard	1	14:29:00						Flight duration likely included within obs. no. 38	T. Nagle
BZ014	20/10/2016	Site 1 VP1	Buzzard	1	14:29:00						Flight duration likely included within obs. no. 38	T. Nagle



Map Ref No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-20m)	Band 2 (20-140m)	Band 3 (140-175m)	Band 4 (>175m)	Comments	Surveyor
BZ015	20/10/2016	Site 1 VP1	Buzzard	1	15:23:00	20		20				T. Nagle
BZ107	27/10/2016	Site 5 VP1	Buzzard	1	14:35:00	180	35	145				T. Nagle
BZ108	23/11/2016	Site 6 VP1	Buzzard	1	10:02:00	10	10					T. Nagle
BZ109	30/12/2016	Site 4 VP1	Buzzard	1	08:36:00	60		60				T. Nagle
BZ110	31/12/2016	Site 6 VP1	Buzzard	1	14:44:00	16	16				Buzzard was flying from fence post to ground for short distances - worming.	T. Nagle
BZ111	25/01/2017	Site 4 VP1	Buzzard	1	12:56:00	18		18				T. Nagle
BZ112	17/02/2017	Site 7 VP1	Buzzard	1	11:30:00	6	15					T. Nagle
BZ028	20/02/2017	Site 1 VP1	Buzzard	1	10:11:00	240		240				T. Nagle
BZ029	20/02/2017	Site 1 VP1	Buzzard	2	10:26:00	20		20				T. Nagle
BZ030	20/02/2017	Site 1 VP1	Buzzard	2	10:32:00	50		50				T. Nagle
BZ031	20/02/2017	Site 1 VP1	Buzzard	1	11:21:00	240		240				T. Nagle
BZ032	20/02/2017	Site 1 VP1	Buzzard	1	11:40:00	780	40	740				T. Nagle
BZ033	20/02/2017	Site 1 VP1	Buzzard	5	13:04:00	840		840			5 Buzzards soaring in same area up to 90m	T. Nagle
BZ034	20/02/2017	Site 1 VP1	Buzzard	2	13:58:00	720		720				T. Nagle
BZ035	20/02/2017	Site 1 VP1	Buzzard	1	14:20:00	120		120				T. Nagle
BZ036	20/02/2017	Site 1 VP1	Buzzard	2	15:16:00	45		45				T. Nagle

Map Ref No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-20m)	Band 2 (20-140m)	Band 3 (140-175m)	Band 4 (>175m)	Comments	Surveyor
BZ113	23/02/2017	Site 6 VP1	Buzzard	1	09:47:00	35	35					T. Nagle
BZ114	23/02/2017	Site 6 VP1	Buzzard	1	12:35:00	10	35					T. Nagle
BZ046	11/03/2017	Site 1 VP1	Buzzard	1	13:54:00	5		5				T. Nagle
BZ115	20/03/2017	Site 7 VP1	Buzzard	2	10:10:00	90	10	80				T. Nagle
BZ116	21/03/2017	Site 5 VP1	Buzzard	1	13:35:00	360	70	290				T. Nagle
BZ117	21/03/2017	Site 5 VP1	Buzzard	3	14:46:00	390	390					T. Nagle
BZ118	22/03/2017	Site 6 VP1	Buzzard	1	11:40:00	35	4	31				T. Nagle
BZ119	22/03/2017	Site 6 VP1	Buzzard	1	12:26:00	35	10	25				T. Nagle
BZ047	07/04/2017	Site 1 VP1	Buzzard	1	13:50:00	15		15				T. Nagle
BZ048	07/04/2017	Site 1 VP1	Buzzard	1	14:00:00	120		120				T. Nagle
BZ049	07/04/2017	Site 1 VP1	Buzzard	3	14:10:00	20		20				T. Nagle
BZ120	22/04/2017	Site 7 VP1	Buzzard	2	12:20:00	240		240				T. Nagle
BZ121	23/04/2017	Site 5 VP1	Buzzard	1	10:36:00	210		210				T. Nagle
BZ058	01/05/2017	Site 1 VP1	Buzzard	3	12:42:00	240		240				T. Nagle
BZ059	01/05/2017	Site 1 VP1	Buzzard	2	12:46:00	180		180				T. Nagle
BZ060	01/05/2017	Site 1 VP1	Buzzard	2	13:25:00	180		145	35			T. Nagle

Map Ref No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-20m)	Band 2 (20-140m)	Band 3 (140-175m)	Band 4 (>175m)	Comments	Surveyor
BZ122	18/05/2017	Site 4 VP1	Buzzard	2	12:35:00	240		240				T. Nagle
BZ123	19/05/2017	Site 6 VP1	Buzzard	1	12:49:00	140		140				T. Nagle
BZ124	22/05/2017	Site 5 VP1	Buzzard	1	12:47:00	10		10			Digger working in forest on top of hill causing disturbance over a limited area	T. Nagle
BZ125	22/05/2017	Site 5 VP1	Buzzard	1	15:14:00	30		30			Digger working in forest on top of hill causing disturbance over a limited area	T. Nagle
BZ126	25/05/2017	Site 7 VP1	Buzzard	1	11:09:00	120		120				T. Nagle
BZ127	25/05/2017	Site 7 VP1	Buzzard	1	12:27:00	75		75				T. Nagle
BZ128	25/05/2017	Site 7 VP1	Buzzard	1	13:38:00	25		25				T. Nagle
BZ129	25/05/2017	Site 7 VP1	Buzzard	1	15:12:00	90	90					T. Nagle
BZ069	02/06/2017	Site 1 VP1	Buzzard	1	10:33:00	180		180				T. Nagle
BZ070	02/06/2017	Site 1 VP1	Buzzard	3	10:36:00	300		300				T. Nagle
BZ071	02/06/2017	Site 1 VP1	Buzzard	1	13:29:00	35	35					T. Nagle
BZ072	02/06/2017	Site 1 VP1	Buzzard	1	13:36:00	20		20				T. Nagle
BZ073	02/06/2017	Site 1 VP1	Buzzard	3	13:46:00	480		480				T. Nagle
BZ074	02/06/2017	Site 1 VP1	Buzzard	1	16:12:00	25		25				T. Nagle
BZ130	20/06/2017	Site 6 VP1	Buzzard	1	09:34:00	70		70				T. Nagle
BZ131	20/06/2017	Site 6 VP1	Buzzard	2	09:52:00	1380		1380				T. Nagle

Map Ref No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-20m)	Band 2 (20-140m)	Band 3 (140-175m)	Band 4 (>175m)	Comments	Surveyor
BZ132	20/06/2017	Site 6 VP1	Buzzard	1	11:43:00	360		320	40			T. Nagle
BZ133	20/06/2017	Site 6 VP1	Buzzard	1	12:55:00	600		600				T. Nagle
BZ134	20/06/2017	Site 6 VP1	Buzzard	1	13:25:00	240			240			T. Nagle
BZ135	29/06/2017	Site 7 VP1	Buzzard	1	09:02:00	10		10			Flying to nest	T. Nagle
BZ136	29/06/2017	Site 7 VP1	Buzzard	1	13:24:00	6	6				Flew from nest	T. Nagle
BZ137	29/06/2017	Site 7 VP1	Buzzard	1	13:29:00	1680		1680				T. Nagle
BZ084	06/07/2017	Site 1 VP1	Buzzard	1	10:28:00	25	25					T. Nagle
BZ138	18/07/2017	Site 5 VP1	Buzzard	1	15:29:00	8	8					T. Nagle
BZ139	21/07/2017	Site 5 VP1	Buzzard	1	10:56:00	25		25			Tractor cutting hedges in 2 fields	T. Nagle
BZ140	22/07/2017	Site 7 VP1	Buzzard	1	10:34:00	300		300				T. Nagle
BZ141	22/07/2017	Site 7 VP1	Buzzard	1	10:36:00	540		540				T. Nagle
BZ142	22/07/2017	Site 7 VP1	Buzzard	1	12:10:00	300		300				T. Nagle
BZ143	22/07/2017	Site 7 VP1	Buzzard	1	12:36:00	300		300				T. Nagle
BZ090	01/08/2017	Site 1 VP1	Buzzard	1	11:02:00	120		120				T. Nagle
BZ091	01/08/2017	Site 1 VP1	Buzzard	1	11:09:00	40	40					T. Nagle
BZ092	01/08/2017	Site 1 VP1	Buzzard	1	12:52:00	60		60				T. Nagle

Map Ref No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-20m)	Band 2 (20-140m)	Band 3 (140-175m)	Band 4 (>175m)	Comments	Surveyor
BZ093	01/08/2017	Site 1 VP1	Buzzard	2	15:46:00	480		480				T. Nagle
BZ144	14/08/2017	Site 5 VP1	Buzzard	1	19:12:00	5	5					T. Nagle
BZ145	14/08/2017	Site 5 VP1	Buzzard	1	19:17:00	35	35					T. Nagle
BZ146	17/08/2017	Site 6 VP1	Buzzard	1	11:13:00	45	45					T. Nagle
BZ110	03/10/2017	Site 1 VP1a	Buzzard	3	12:31:00	780		780			3 Buzzards flew from south at 40m and began to drift north at 40-60m circling. Lost sight of one after 50 secs. The other 2 soared, one disappeared after 150 secs	T. Nagle
BZ115	28/11/2017	Site 1 VP1a	Buzzard	1	14:05:00	85		85				T. Nagle
BZ116	28/11/2017	Site 1 VP1a	Buzzard	2	14:11:00	75		75				T. Nagle
BZ118	07/12/2017	Site 1 VP1a	Buzzard	2	09:45:00	20		20				T. Nagle
BZ119	07/12/2017	Site 1 VP1a	Buzzard	1	11:26:00	252	252					T. Nagle
BZ126	05/02/2018	Site 1 VP1a	Buzzard	1	15:16:00	10	10				Flew low (5-7m) over post-thicket forest bordering field.	T. Nagle
BZ138	19/03/2018	Site 1 VP1a	Buzzard	1	14:10:00	30	30					T. Nagle
BZ147	28/04/2018	Site 1 VP1a	Buzzard	1	19:21	35		35				
BZ154	27/05/2018	Site 1 VP1a	Buzzard	1	13:53:00	105	105					T. Nagle
BZ160	10/07/2018	Site 1 VP1a	Buzzard	2	12:15:00	60		60				T. Nagle
BZ169	03/08/2018	Site 1 VP1a	Buzzard	1	15:48:00	8	8					T. Nagle

Map Ref No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-20m)	Band 2 (20-140m)	Band 3 (140-175m)	Band 4 (>175m)	Comments	Surveyor
BZ170	03/08/2018	Site 1 VP1a	Buzzard	1	18:11:00	16	16					T. Nagle
BZ175	03/09/2018	Site 1 VP1a	Buzzard	1	15:23:00	360		360				T. Nagle
BZ179	23/10/2018	Site 1 VP1a	Buzzard	1	12:45:00	20	20					T. Nagle
BZ180	12/11/2018	Site 1 VP1a	Buzzard	1	11:10:00	5	5					T. Nagle
BZ181	06/12/2018	Site 1 VP1a	Buzzard	1	11:21:00	5	5					T. Nagle
BZ182	06/12/2018	Site 1 VP1a	Buzzard	2	11:27:00	150	30	120				T. Nagle

Table 15 Buzzard Supporting Data – VP Survey Non-Flight Observation

Date	VP	BTO	Species	Comments	Surveyor
21/07/2017	Site 6 VP1	BZ	Buzzard	1 (on tree)	T. Nagle
22/07/2017	Site 7 VP1	BZ	Buzzard	2 + 2 chicks	T. Nagle
25/08/2017	Site 7 VP1	BZ	Buzzard	1 (heard)	T. Nagle

Table 16 Buzzard Breeding Transect Survey Data

Date	Transect	Species	No. of Birds	Comments
03/04/2017	Site 2 T1	Buzzard	1	

Table 17 Buzzard Winter Transect Data

Date	Transect	Species	No. of Birds	Comments
14/11/2017	Site 3 T2	Buzzard	1	On Tree
23/11/2018	Site 3 T2	Buzzard	1	Short Survey Effort

Table 18 Sparrowhawk Supporting Data – Vantage Point Surveys

Map Ref No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-20m)	Band 2 (20-140m)	Band 3 (140-175m)	Band 4 (>175m)	Comments	Surveyor
SH004	20/10/2016	Site 1 VP1	Sparrowhawk	1	16:09:00	15	15				Male	T. Nagle
SH0040	28/10/2016	Site 7 VP1	Sparrowhawk	1	12:05:00	8	8					T. Nagle
SH0041	24/11/2016	Site 5 VP1	Sparrowhawk	1	13:58:00	10		10				T. Nagle
SH0042	27/11/2016	Site 7 VP1	Sparrowhawk	1	09:54:00	40		40				T. Nagle
SH0043	27/11/2016	Site 7 VP1	Sparrowhawk	1	10:52:00	10		10				T. Nagle
SH0044	27/11/2016	Site 7 VP1	Sparrowhawk	1	11:13:00	31	4	27				T. Nagle
SH0045	30/11/2016	Site 4 VP1	Sparrowhawk	1	16:19:00	16	16					T. Nagle
SH0046	29/12/2016	Site 7 VP1	Sparrowhawk	1	15:12:00	12		12				T. Nagle
SH0047	14/01/2017	Site 7 VP1	Sparrowhawk	1	09:08:00	10	10					T. Nagle
SH0048	14/01/2017	Site 7 VP1	Sparrowhawk	1	09:46:00	75		75				T. Nagle
SH0049	14/01/2017	Site 7 VP1	Sparrowhawk	1	09:47:00	7		7				T. Nagle
SH0050	16/02/2017	Site 5 VP1	Sparrowhawk	1	14:45:00	200		200				T. Nagle
SH020	07/04/2017	Site 1 VP1	Sparrowhawk	1	13:25:00	510		510				T. Nagle
SH0051	22/04/2017	Site 7 VP1	Sparrowhawk	1	11:10:00	150		150				T. Nagle
SH0052	24/04/2017	Site 6 VP1	Sparrowhawk	1	14:10:00	7		7				T. Nagle
SH0053	19/05/2017	Site 6 VP1	Sparrowhawk	2	11:05:00	30		30				T. Nagle

Map Ref No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-20m)	Band 2 (20-140m)	Band 3 (140-175m)	Band 4 (>175m)	Comments	Surveyor
SH0054	19/05/2017	Site 6 VP1	Sparrowhawk	1	11:51:00	12		12				T. Nagle
SH0055	20/06/2017	Site 6 VP1	Sparrowhawk	1	09:28:00	15	15					T. Nagle
SH024	06/07/2017	Site 1 VP1	Sparrowhawk	1	12:51:00	240		240				T. Nagle
SH025	06/07/2017	Site 1 VP1	Sparrowhawk	1	14:11:00	210		210				T. Nagle
SH026	01/08/2017	Site 1 VP1	Sparrowhawk	1	15:38:00	150		150				T. Nagle
SH0056	14/08/2017	Site 5 VP1	Sparrowhawk	1	17:08:00	4	4					T. Nagle
SH032	28/11/2017	Site 1 VP1a	Sparrowhawk	1	11:17:00	10	10					T. Nagle
SH038	28/04/2018	Site 1 VP1a	Sparrowhawk	1	15:56	10	10					T. Nagle
	28/10/2018	Site 3 VP3	Sparrowhawk	1	11:54:00	120		60	60		Conifer Forest	T. Nagle

Table 19 Sparrowhawk Supporting Data – VP Survey Non-Flight Observation

Date	VP	BTO	Species	Target Spp. Y/N	Comments	Surveyor
18/07/2017	Site 4 VP1	SH	Sparrowhawk	Y	1 juv. heard	T. Nagle
12/08/2017	Site 4 VP1	SH	Sparrowhawk	Y	2 juveniles	T. Nagle

Table 20 Sparrowhawk Winter Transect Survey Data

Date	Transect	Species	No. of Birds	Comments
13/10/2016	Site 3 T1	Sparrowhawk	1	
07/11/2016	Site 2 T2	Sparrowhawk	1	



Table 21 Kestrel Supporting Data – Vantage Point Surveys

Map Ref No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-20m)	Band 2 (20-140m)	Band 3 (140-175m)	Band 4 (>175m)	Comments	Surveyor
K004	14/09/2016	Site 1 VP1	Kestrel	1	15:08:00	8	8				Female Kestrel flew along forest edge at 15m for 8 seconds.	T. Nagle
K0104	30/09/2016	Site 7 VP1	Kestrel	1	10:41:00	10	10				Flew to tree and flew off without being seen.	T. Nagle
K0105	17/10/2016	Site 6 VP1	Kestrel	1	12:23:00	100	100					T. Nagle
K0106	17/10/2016	Site 6 VP1	Kestrel	1	12:41:00	8	8					T. Nagle
K0107	17/10/2016	Site 6 VP1	Kestrel	1	14:23:00	120	20					T. Nagle
K0108	27/10/2016	Site 5 VP1	Kestrel	1	14:56:00	25	25					T. Nagle
K0109	27/10/2016	Site 5 VP1	Kestrel	1	16:15:00	35	35					T. Nagle
K0110	24/11/2016	Site 5 VP1	Kestrel	1	09:06:00	240	20	220				T. Nagle
K0111	24/11/2016	Site 5 VP1	Kestrel	1	09:24:00	360	340	20				T. Nagle
K0112	24/11/2016	Site 5 VP1	Kestrel	1	10:40:00	65		65				T. Nagle
K0113	29/12/2016	Site 7 VP1	Kestrel	1	12:25:00	35	10	25				T. Nagle
K0114	29/12/2016	Site 7 VP1	Kestrel	1	13:18:00	10	10					T. Nagle
K0115	29/12/2016	Site 7 VP1	Kestrel	1	13:34:00	20	20					T. Nagle
K026	21/01/2017	Site 1 VP1	Kestrel	1	10:01:00	6	6				Deer hunters present until 11	T. Nagle
K027	21/01/2017	Site 1 VP1	Kestrel	1	10:10:00	8	8				Deer hunters present until 11	T. Nagle
K028	20/02/2017	Site 1 VP1	Kestrel	1	11:19:00	20	5	15				T. Nagle

Map Ref No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-20m)	Band 2 (20-140m)	Band 3 (140-175m)	Band 4 (>175m)	Comments	Surveyor
K029	20/02/2017	Site 1 VP1	Kestrel	1	11:23:00	15	15					T. Nagle
K030	20/02/2017	Site 1 VP1	Kestrel	1	13:21:00	7	7					T. Nagle
K031	20/02/2017	Site 1 VP1	Kestrel	1	14:21:00	60		60				T. Nagle
K0116	22/04/2017	Site 7 VP1	Kestrel	1	12:04:00	50		50				T. Nagle
K0117	24/04/2017	Site 6 VP1	Kestrel	1	10:10:00	360	25	335				T. Nagle
K033	01/05/2017	Site 1 VP1	Kestrel	1	18:10:00	45		45				T. Nagle
K0118	19/05/2017	Site 6 VP1	Kestrel	1	09:09:00	120		120				T. Nagle
K037	02/06/2017	Site 1 VP1	Kestrel	1	13:29:00	15	15					T. Nagle
K038	02/06/2017	Site 1 VP1	Kestrel	1	14:04:00	18	18					T. Nagle
K042	01/08/2017	Site 1 VP1	Kestrel	1	12:30:00	5	5					T. Nagle
K043	01/08/2017	Site 1 VP1	Kestrel	1	15:03:00	15	15					T. Nagle
K048	14/09/2017	Site 1 VP1	Kestrel	1	12:40:00	8		8				T. Nagle
K054	07/12/2017	Site 1 VP1a	Kestrel	1	14:24:00	130		130				T. Nagle
K067	19/03/2018	Site 1 VP1a	Kestrel	1	11:20:00	30	15	15				T. Nagle
K068	19/03/2018	Site 1 VP1a	Kestrel	1	13:35:00	25	25					T. Nagle
K091	03/09/2018	Site 1 VP1a	Kestrel	1	10:10:00	8	8					T. Nagle
K092	03/09/2018	Site 1 VP1a	Kestrel	1	12:54:00	30	30					T. Nagle

Map Ref No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-20m)	Band 2 (20-140m)	Band 3 (140-175m)	Band 4 (>175m)	Comments	Surveyor
K097	26/10/2018	Site 3 VP1	Kestrel	1	12:27:00	35		35			Conifer forest	T. Nagle
K098	28/10/2018	Site 3 VP3	Kestrel	1	11:51:00	15	15				Conifer forest	T. Nagle
K099	12/11/2018	Site 2 VP1	Kestrel	1	13:48:00	145		145			Conifer forest	T. Nagle
K100	17/11/2018	Site 3 VP3	Kestrel	1	12:47:00	20		20			Conifer forest	T. Nagle
K101	17/11/2018	Site 3 VP3	Kestrel	1	13:40:00	60	60				Conifer forest	T. Nagle
K102	23/11/2018	Site 3 VP2	Kestrel	1	13:30:00	8	8				Conifer forest	T. Nagle
K103	23/11/2018	Site 3 VP2	Kestrel	1	15:19:00	5	5				Conifer forest	T. Nagle

Table 22 Kestrel Breeding Transect Survey Data

Date	Transect	Species	No. of Birds	Comments
25/09/2017	Site 2 T2	Kestrel	1	On Tree

Table 23 Kestrel Winter Transect Survey Data

Date	Transect	Species	No. of Birds	Comments
23/09/2016	Site 3 T1	Kestrel	1	
27/10/2016	Site 5 T1	Kestrel	1	
04/10/2017	Site 2 T1	Kestrel	1	On Tree

Table 24 Common Snipe Supporting Data – Vantage Point Surveys

Map Ref No.	Date	VP	Species	No. of Birds	Time of flight	Duration of flight (s)	Band 1 (0-20m)	Band 2 (20-140m)	Band 3 (140-175m)	Band 4 (>175m)	Notes on habitat and activity	Surveyor
	17/11/2018	Site 2 VP2a	Common Snipe	2	10:40:00	12		12			Conifer forest	T. Nagle
	12/11/2018	Site 1 VP1a	Common Snipe	6	10:33:00	7		7			Conifer forest	T. Nagle
	12/11/2018	Site 1 VP1a	Common Snipe	6	10:38:00	8		8			Conifer forest	T. Nagle
	06/12/2018	Site 1 VP1a	Common Snipe	1	13:13:00	7	5				Conifer forest	T. Nagle
	17/10/2016	Site 6 VP1	Common Snipe	1	14:36:00	40		40			Flushed by a Fallow Deer	T. Nagle
	19/04/2017	Site 4 VP1	Common Snipe	1	12:28:00	5	3					T. Nagle