



GALETECH
ENERGY SERVICES

Islandmore Wind Farm

Environmental Impact Assessment
Report

Annex 5.8: Confidential Hen Harrier
Annex

Islandmore Wind Farm Limited

5.1 INTRODUCTION

This additional confidential annex to the Islandmore Wind Farm Ornithological Baseline Report collates sensitive information relating to confidential wintering species; hen harrier; which should not be released into the public domain. This follows guidance on confidentiality within *Environmental Statements and Annexes of Environmentally Sensitive Bird Information* produced by NatureScot (2016)¹.

5.2 HEN HARRIER ROOST SEARCH RESULTS

Hen Harrier Roost Searches were undertaken during all five years of baseline surveys in line with guidance, as outlined in **Annex 5.7**. Hen harrier roost locations were recorded during four non-breeding season baseline survey periods: 2020-21, 2021-22, 2022-23 and 2024-25.

There were three main areas where hen harrier was recorded roosting during surveys as follows:

- Roost 1 – Located to the south-west of the project site in an area of bog habitat where birds were recorded roosting in 2020-21, 2021-22 and 2022-23;
- Roost 2 - Located to the west of the project site in an area of bog habitat where birds were recorded roosting in 2020-21, 2022-23 and 2024-25; and
- Roost 3 – Located to the north of the project site in an area of bog habitat where birds were recorded roosting in 2020-21 only.

Birds were recorded roosting within these main areas, with specific roost locations varying, rather than a single discrete location which was habitually used for roosting. Locations where birds were recorded roosting are shown on **Figure 1** and **Figure 2**. Flights recorded during Hen Harrier Roost Searches are shown on **Figure 3**, **Figure 4**, **Figure 5** and **Figure 6**.

There was a mix of birds roosting communally and individually, with a highest count of three birds roosting together during a single survey visit. A summary of activity recorded during Hen Harrier Roost Searches is displayed in **Table 1** below.

Species	Non-breeding season 2020-21	Non-breeding season 2021-22	Non-breeding season 2022-23	Non-breeding season 2024-25
Hen harrier	A total of 25 observations were recorded during the survey season between October and February. Flights were recorded throughout the non-breeding season, with 12 records of roosting birds across all three roost areas (records 1A-F, 2A-B and 3A-C).	A total of 25 observations were recorded during the survey season between October and March. Flights were recorded throughout the non-breeding season, with six records of roosting birds across one roost area (records 1G-K). All records related	A total of 15 observations over the survey season December to February. Flights were recorded throughout the non-breeding season, with four records of roosting birds across two roost areas (records 1L-N and 2C). All records related	A total of 20 observations over the survey season October – March. Flights were recorded throughout the non-breeding season, with four records of roosting birds across one roost areas (records 2E-2K). Records 2E and 2F related to two birds roosting nearby on

¹ NatureScot (2016) *Environmental Statements and Annexes of Environmentally Sensitive Bird Information*. Available online at <https://www.nature.scot/doc/environmental-statements-and-annexes-environmentally-sensitive-bird-information>. Accessed on 09/07/26.

	All records related to single roosting birds other than 3A where two birds were present on 22 nd October 2020 and 2A/2B where two or three birds were present on 8 th February 2021.	to single roosting birds although records 1H and 1I, and 1J and 1K were individual birds roosting nearby (150-250m apart) in the same area on 11 th February and 1 st March 2022.	to single roosting birds although records 1M and 1N were individual birds roosting nearby (approx. 150 apart) in the same area on 15 th February 2023.	24 th October 2024. Records 2G and 2G related to three birds roosting nearby on 21 st November 2024, while on 29 th January 2025 three male birds roosted nearby (2I-K).
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Table 1: Hen harrier roost summary table

5.3 HEN HARRIER IMPACT ASSESSMENT

There is the potential for impacts on hen harrier roost sites recorded during baseline surveys. As the locations of these roost sites are confidential and should not be disclosed to the public, the impact assessment for roosting hen harrier is contained within this annex, which should be read alongside **Chapter 5**.

5.3.1 CONSTRUCTION PHASE

There is the potential for disturbance/displacement effects on roosting hen harrier during the construction phase. As roosting birds were recorded during surveys between 2020-2025, it is likely that roosting birds will be present during the construction phase.

There is the potential for disturbance/displacement to roosting birds where roosts are present within 750m (the maximum disturbance distance stated in guidance) of any planned construction activities during the non-breeding season (Goodship and Furness, 2022).

There is no infrastructure proposed to be located within 750m of any of the Roost area 2 locations, and therefore there is likelihood of disturbance/displacement where birds to roost at this location.

All of the roost locations at Roost Area 3 and all but three of those 3 no. of those at Roost Area 1 are within 750m of infrastructure and construction activities and therefore there is the potential of disturbance/displacement to birds roosting at these locations. Construction phase effects are assessed to be medium-term and reversible and it should be acknowledged that birds are adaptable and regularly change their roost location, with suitable roosting habitat in the surrounding area including at Roost Area 2. No roosting birds have been recorded in Roost Area 3 during the most recent 3 years of survey.

Following embedded mitigation, pre-construction surveys will be undertaken ahead of works during the non-breeding season to identify roost sites. Where these are present then following proposed embedded mitigation the ECoW will implement exclusion zones around roosts, with no works permitted within 750 m (or as amended based on the advice of the ECoW) of an active roost. Within this buffer, no works shall be permitted between 1 hour before dusk and 1 hour after dawn, which will ensure birds are not disturbed when travelling to/from roosts, and birds at a roost will not be disturbed/displaced. The implementation of embedded mitigation will ensure that there are no construction phase disturbance/displacement effects on roosting hen harrier.

5.3.2 OPERATION PHASE

As hen harrier was recorded breeding roosting during baseline surveys, there is the potential for disturbance and displacement of roosting birds during the operation phase. There is the potential for displacement of roosting birds within 300 m of operational turbines based on guidance (Goodship and Furness, 2022) which states birds are unlikely to nest (comparable to roosting) within 200-300 m of turbines, although there is evidence that this is overly precautionary.

None of the roost locations recorded during surveys were located within 300m of a proposed turbine location, and therefore there would be no direct effects on roost sites during the operation phase.

There is also the potential for disturbance from other activities during the operational phase associated with ad-hoc maintenance during the non-breeding season. However, it is assessed that these impacts are likely to be limited in duration, scale and magnitude and that the potential for disturbance/displacement of roost sites is limited. Where any significant works are planned during the operation phase, a pre-works check for roosts shall be undertaken if works are planned within 1 hour before dusk to 1 hour after dawn and have the potential to disturb roosts. As described for the construction phase, where any roosts are present within 750m of works, an exclusion zone shall be implemented to avoid any impacts on roosting birds.

As all roosts are outside of the project site, it is assessed that barrier effects on roost sites would be negligible and are assessed in conjunction with assessment of displacement from foraging habitat within **Chapter 5** of the EIAR.

Implementation of embedded mitigation will ensure that there are no operation phase disturbance/displacement effects on roosting hen harrier.

5.3.3 DECOMMISSIONING PHASE

It is assessed that operation phase effects would be comparable in nature to those during construction, and therefore there would be no decommissioning phase disturbance/displacement effects on roosting hen harrier.

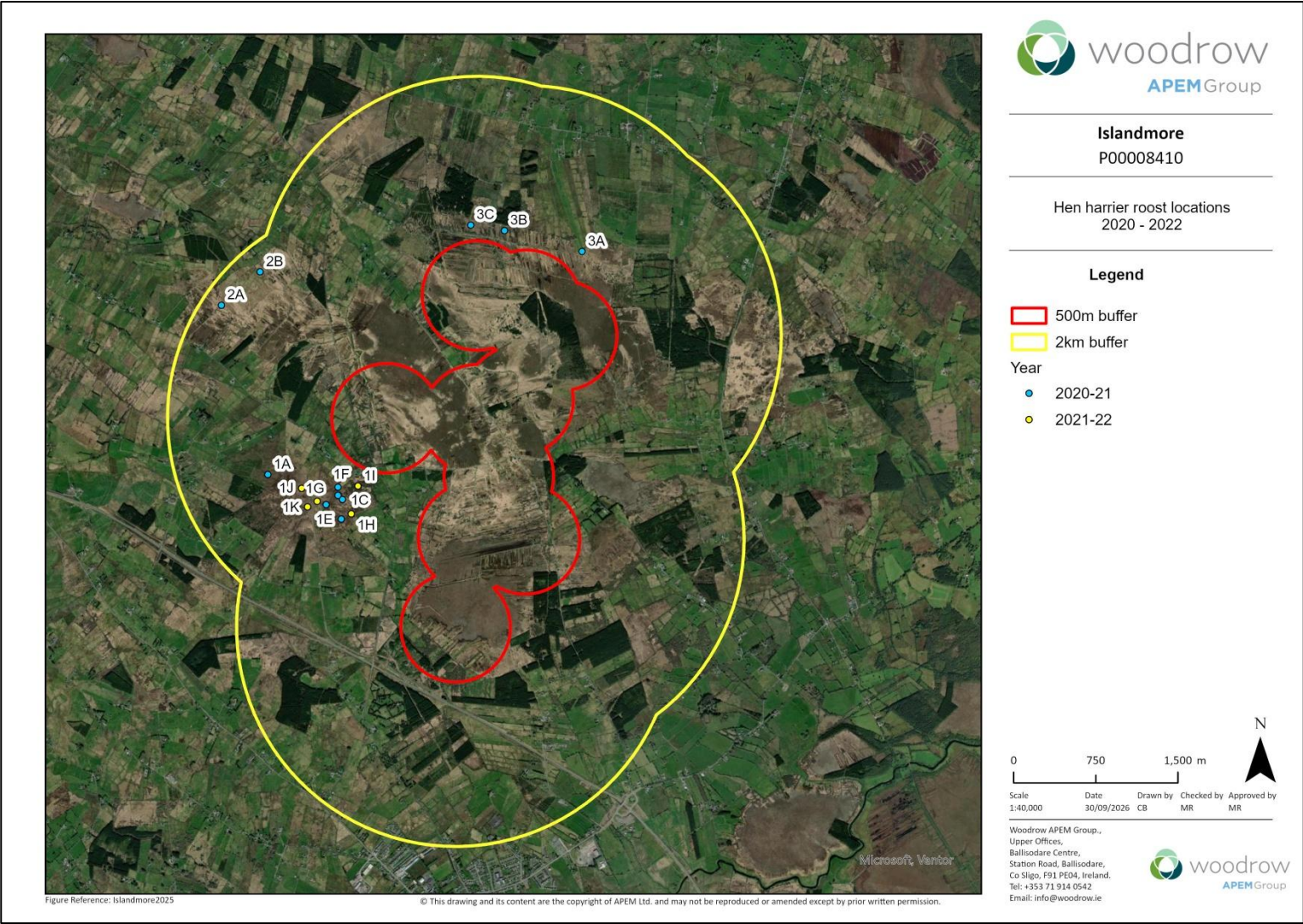


Figure 1: Hen Harrier Roost Locations 2020-2022

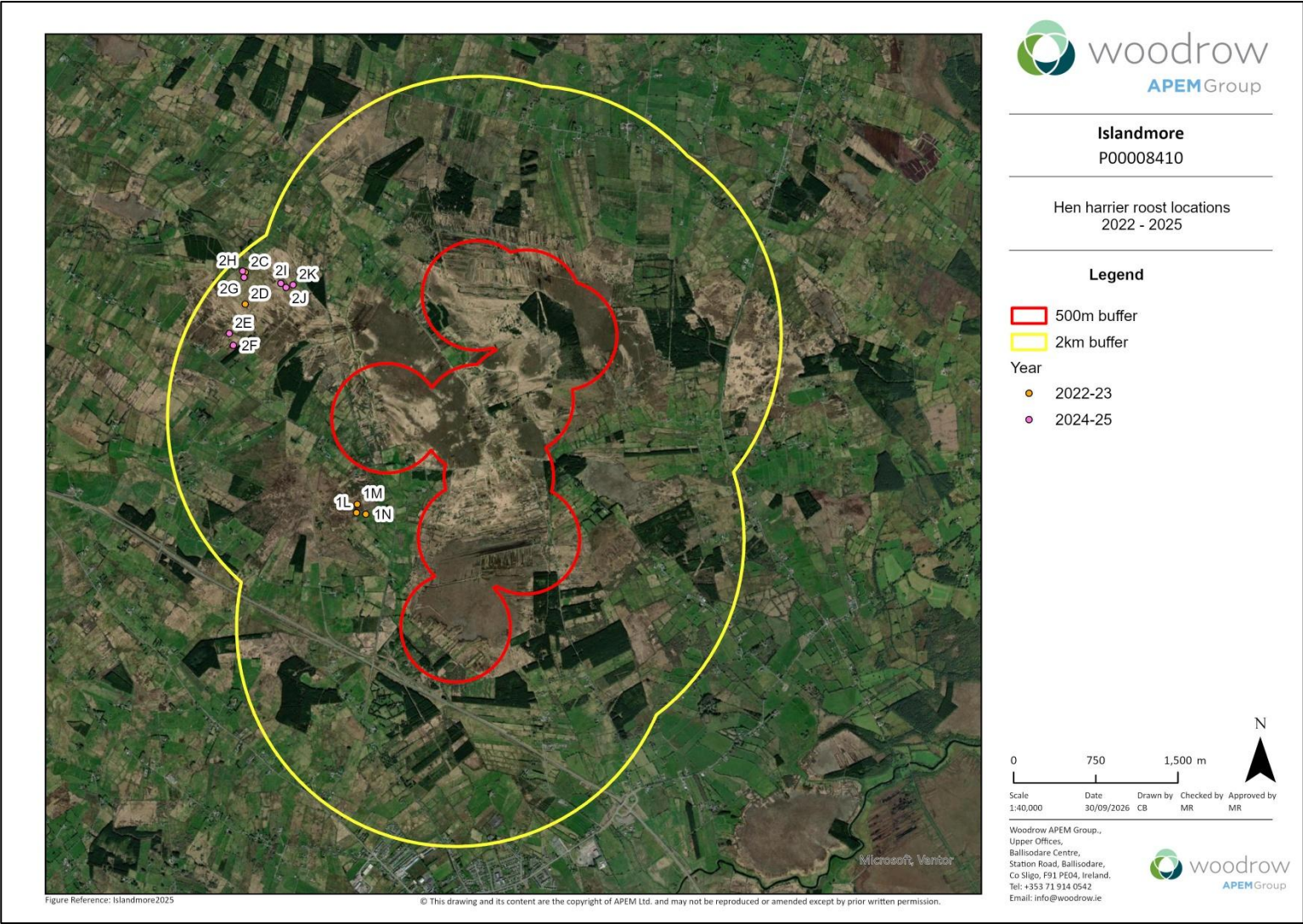


Figure 2: Hen Harrier Roost Locations 2022-2025

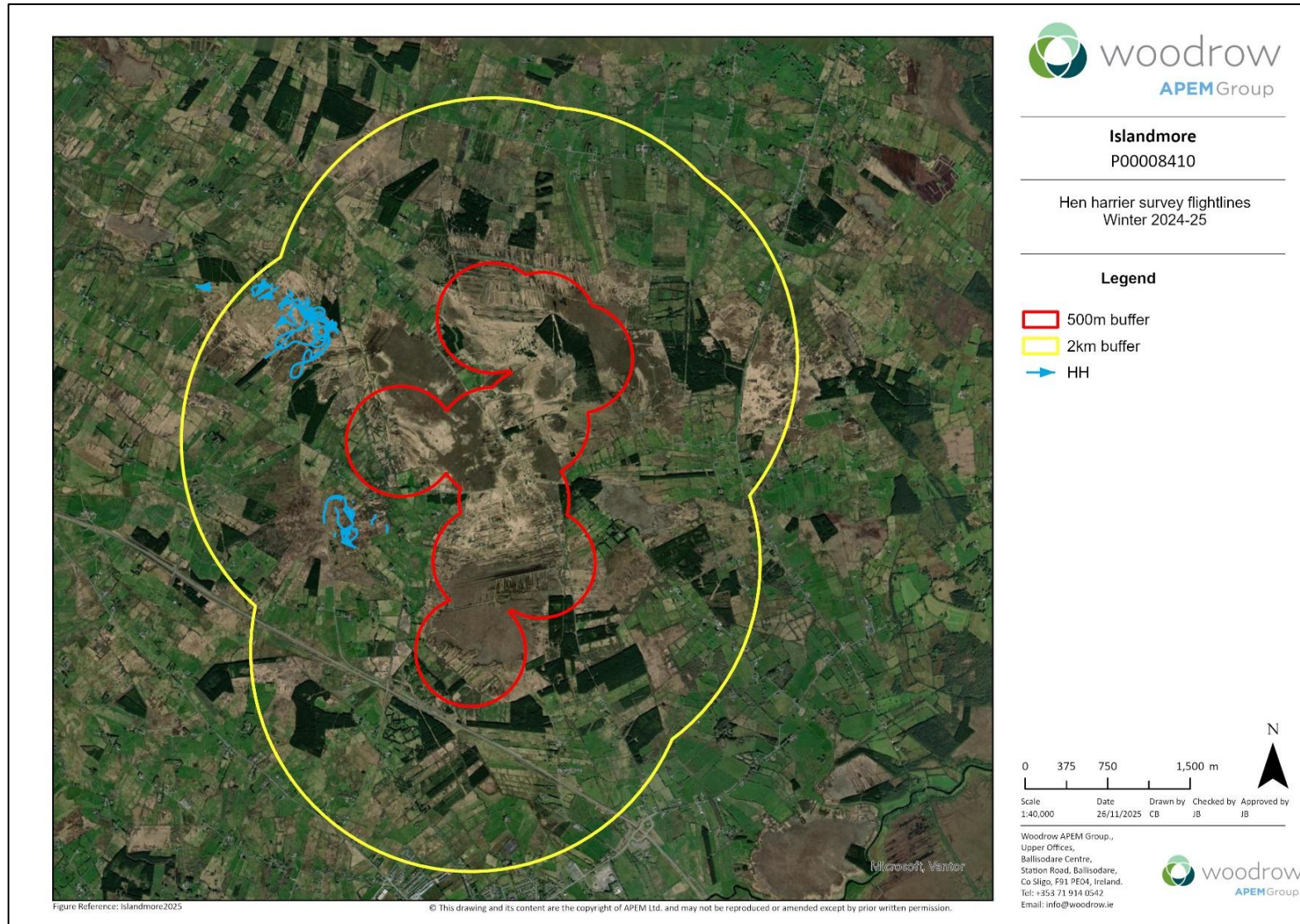


Figure 3: Non-breeding Season 2024-25 Hen Harrier Flightlines

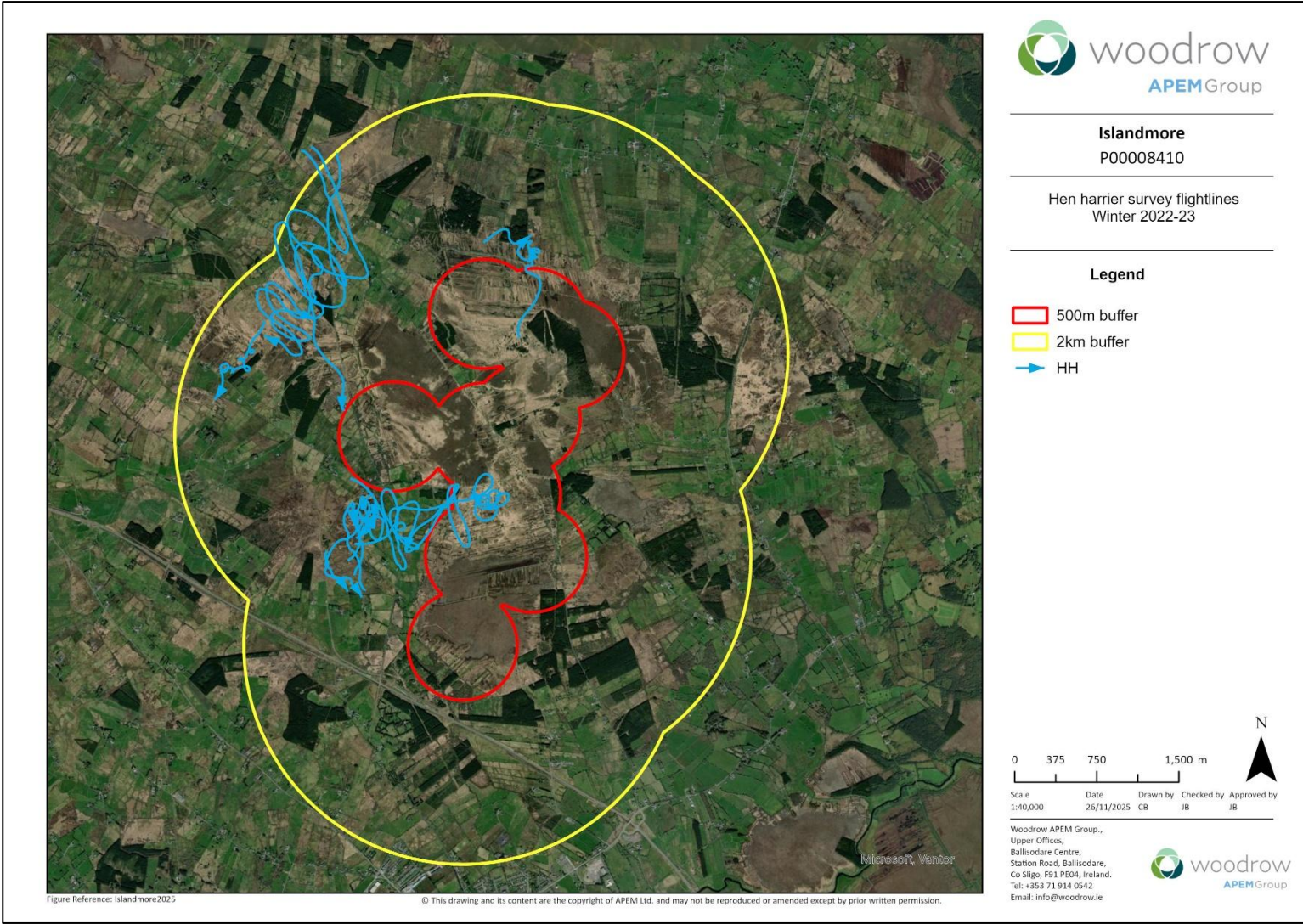


Figure 4: Non-breeding Season 2022-23 Hen Harrier Flightlines

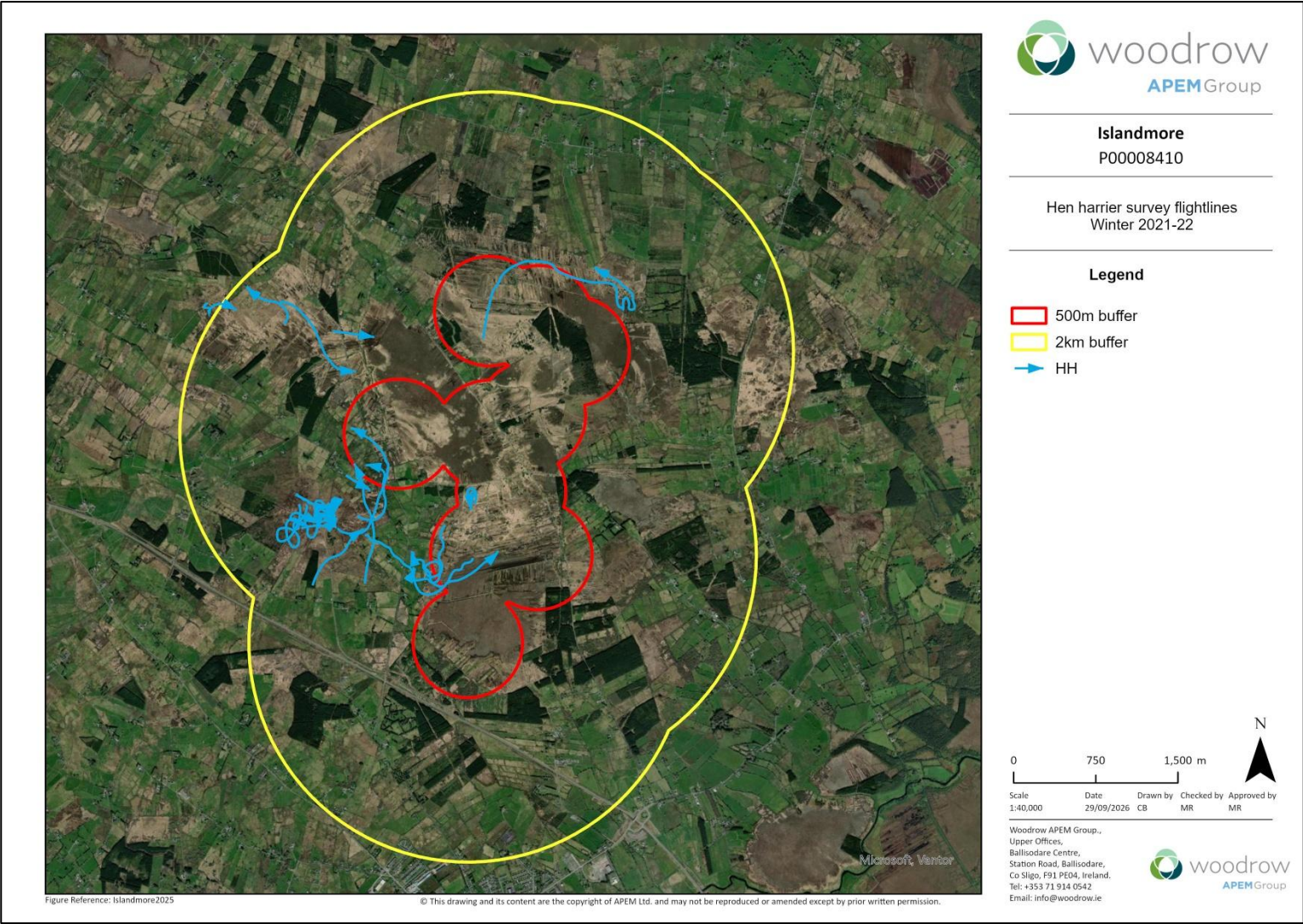


Figure 5: Non-breeding Season 2021-22 Hen Harrier Flightlines

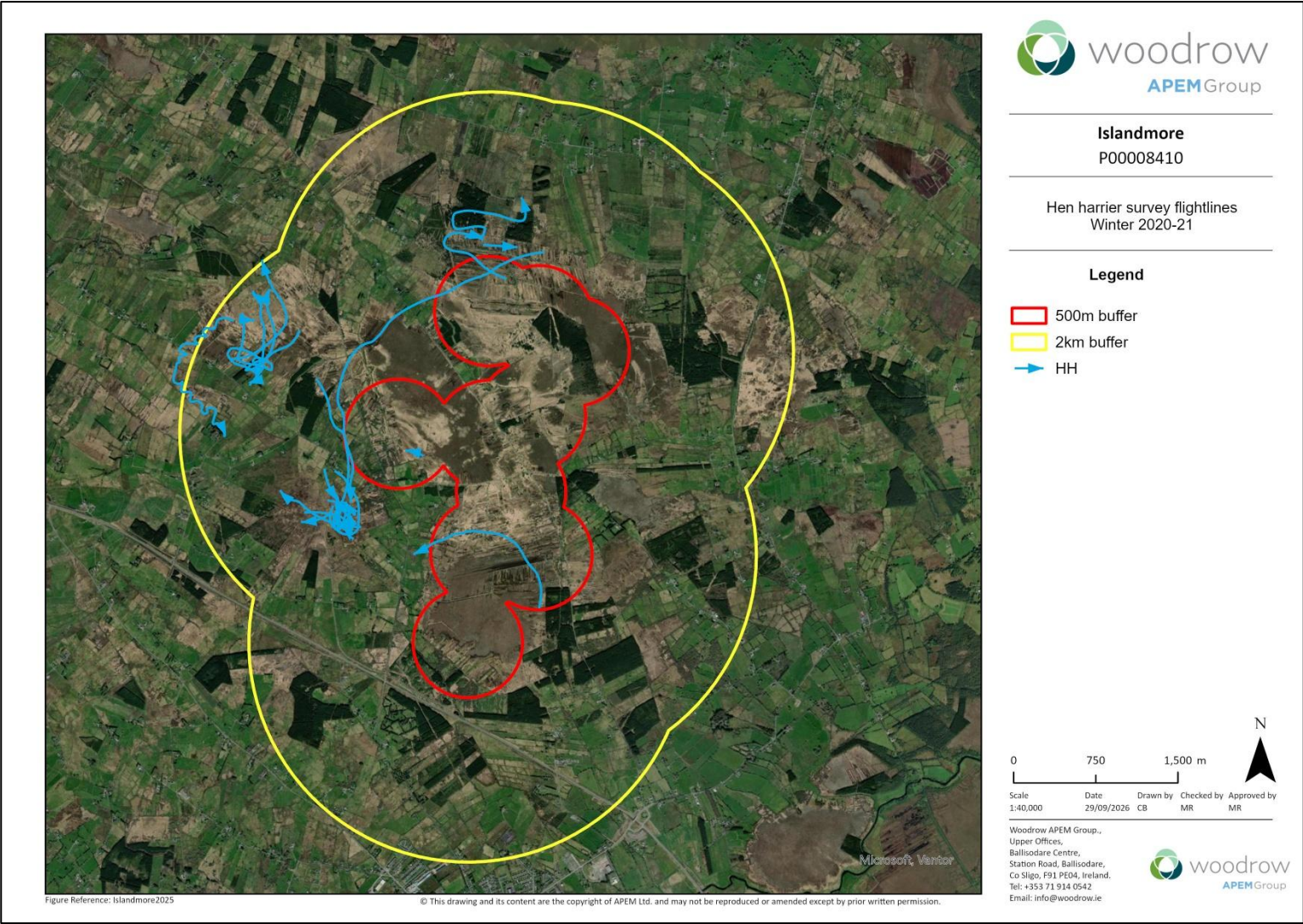


Figure 6: Non-breeding Season 2020-21 Hen Harrier Flightlines

Date	Flight ID No	Time	Direction of arrival	No. of birds	Type/Sex	Age	Behaviour	Notes	Roost ID
21/10/2020	3.1.1	1824	SSE	1	Male	Adult	Flying	Came in over forestry block then out of view. Behind scrub willows then reappeared and went back over forestry. and oov behind it.	
22/10/2020	3.2.1.	1710		1	Male	Adult	Circling	Circling area at start of watch then moved out of view behind willow scrub.	
22/10/2020	3.2.2	1750		1	Male	Adult	Flying	Bird reappeared cruised site, oov in behind scrub. then flew out of site behind scrub	
22/10/2020	3.2.3	1834	NNW	2	Male	Adult	Roosting	Birds settled together	3A
22/10/2020	3.2.3.1.	1836	NNW	1	Male	Adult	Roosting	Birds settled together then moved 10m and resettled.	3A
07/11/2020	3.3.1	1635	N	2	Male	Adult	Flying	Birds flew in together but visibility limited and couldn't see them settle.	
08/11/2020	3.4.1	1550		1		Ringtail	Roosting	Seen in original roost location	1A
08/11/2020	3.4.2	1649	N	1	Male	Adult	Flying	. Tried to settle on top of bockagh hill but mobbed away by ravens.	1B
12/12/2020	3.7.1	1630		1	Male	Adult	Roosting	At original roost location	1C
12/12/2020	3.7.2	1636	N	1	Male	Adult	Roosting	Flew back and forth over roost before settling.	1D
06/01/2021	3.8.1	1613	E	1	Male	Adult	Flying	Traversed roost for 2 mins.	
06/01/2021	3.8.2	1632	E	1	Male	Adult	Roosting	Direct flight into roost.	3B
07/01/2021	3.9.1	0821	W	1	Male	Adult	Roosting	Bird seen leaving roost at 08:21 flew briefly then settled out of view near roost.	1E

07/01/2021	3.9.1.1	0854		1	Male	Adult	Flying	Bird from flew away westwards	
07/01/2021	3.9.2	0855		1	Male	Adult	Hunting/Preening	08:55 bird seen perching /preening near roost. 08:58 hunting near roost then heading north.	
06/02/2021	3.11.1	1633	W	1	Male	Adult	Flying	A lot of flying over roost area, going out of view behind scrub and probably perching out of view then flying again. No confirmed roosting	
06/02/2021	3.11.2	1710	NW	1	Male	Adult	Roosting	Direct flight to roost.	1F
06/02/2021	3.11.4	1701	W	1	Male	Adult	Roosting	Flew in from west and looked to go to ground behind willow scrub. 17:03 flew behind willow and settled behind willow scrub	3C
06/02/2021	3.11.3			1	Male	Adult	Flying	Seen briefly within 500m of turbines flying low over project site, possibly bird 1.	
08/02/2021	3.12.1			1	Male	Adult	Flying/Perching	Perching on site at start of watch, mobbed by sparrowhawk at 16:53 with bird 2 then went -south-east out of view at 17:11.	
08/02/2021	3.12.2	1630	NNW	1	Male	Adult	Flying/Perching	Perched near bird 1 in willow scrubs. Mobbed by sparrowhawk at 16:53 and flew out of view at 17:01	
08/02/2021	3.12.3	1738	WSW	1/2	Male	Adult	Flying/Roosting	Birds flew in together with male roosting. The other bird flew north-west out of view.	2A
08/02/2021	3.12.4	1747	NE	1		Ringtail	Roosting	Flew in from NE north-east to search along plantation. Settled with male. Male was	2B

								seen flying up and resettling when joined by ringtail.	
08/02/2021	3.12.5			2	Male		Flying	Two males seen flying. A male bird had already been seen to settle, potentially third bird.	
09/02/2021	3.13.1	829	W	1	Male	Adult	Flying	Bird seen flying briefly west behind willow scrubs. Not seen again so either remained behind scrub or could have flown on	

Table 2: Hen Harrier Roost Survey Results Non-breeding Season 2020-21

Date	Flight ID No	Time	Direction of arrival	No. of birds	Type Sex	Age	Behaviour	Notes	Roost ID
20/10/2021	1	1742	SW	1	Female	Adult	Hunting	Hunting at and around Bochagh hill peak	
20/10/2021	2	1747	SW	1	Male	Adult	Flying	flew from over Bochagh hill and through roost site	
20/10/2021	3	1608	NE	1	Male	Adult	Flying	Disturbed and emerged from heather and flew north-east	
21/10/2021	1	820	SW	1	Male	Adult	Flying/Hunting/Roosting	Flew across roost site, hunted, then landed in heather.	
19/01/2022	1.1	1614	-	1		Ringtail	Roosting	Settled in heather to the north-west of mast.	1G
19/01/2022	1.2	1616	-	1		Ringtail	Roosting	Same bird flew for 20-30 sec then settled.	1G
19/01/2022	2	1653	SW	1		Ringtail	Flying	Similar location to 1st sighting.	
19/01/2022	3	1700	WNW	1	Male		Flying	Both arrived together from west-north-west.	

Date	Flight ID No	Time	Direction of arrival	No. of birds	Type Sex	Age	Behaviour	Notes	Roost ID
								Flew and split up over heather.	
19/01/2022	4	1700	WNW	1	Male		Flying	Both arrived together from west-north-west. Flew and split up over heather.	
19/01/2022	5	1706	W	1	Male		Flying	Flew direct from behind trees. Could be same male.	
20/01/2022	1	903	NW	1		Ringtail	Flying	Flew from behind hill and settled.	
20/01/2022	2	822	-	1	Male		Perching/ Loafing/Preening	Perched on heather/loafing, flew to south-east	
20/01/2022	3	844	SE	1		Ringtail	Flying	Not followed closely due to male bird present. Likely flew north-west	
20/01/2022	4	905	-	1	Male		Flying	Heading east/north-east. Possibly same bird.	
26/01/2022	1	1610	NW	1	Male	Adult	Flying	Looking for roosting area with low/slow flight. Unsure if settled as went out of sight.	
26/01/2022	1	1638	N	1	Male	Adult	Flying	Intermittent views through scrub over bog flying east.	
26/01/2022	2	1639	E	1	Male	Adult	Flying	Male reappeared flying west over bog valley in scrub	
26/01/2022	3	1642	N	1	Male	Adult	Flying	Bird appeared east of VP (possibly female). Flew south over bog, out of sight.	

Date	Flight ID No	Time	Direction of arrival	No. of birds	Type Sex	Age	Behaviour	Notes	Roost ID
26/01/2022	4	1651	N	2	Male	Adult	Flying	2 males appeared east of VP, flying south fast. Went into bog, circled over valley to south. Maybe landed.	
11/02/2022	1	1600	NW	1		Ringtail	Roosting	Seen settling	1H
11/02/2022	2	1620	SW	1		Ringtail	Roosting	Out of sight behind small rise, presumed settled	1I
01/03/2022	1	1753	S	1	Male	Adult	Flying	Flying north and lost from view	
01/03/2022	2	1817	N	1	Male	Adult	Roosting	Circled around roost then settled.	1J
01/03/2022	3	1825	-	1	Male	Adult	Roosting	Flew around roost then settled.	1K
03/03/2022	1	1737	W	1	Male	Adult	Flying	Landed behind rise. Not seen afterwards.	

Table 2: Hen Harrier Roost Survey Results Non-breeding Season 2021-22

Date	Flight ID No	Time	Direction of arrival	No. of birds	Type/Sex	Age	Behaviour	Notes	Roost ID
14/12/2022	1	1627	W	1	-	Ringtail	Calling	Calling while looking for roosting site for 4-5 min	
14/12/2022	2	1638	W	1	Male	-	Flying		
15/12/2022	1	1522	S	1	-	Ringtail	Flying	Dropped down behind small hill, can't confirm if roosted. Spotted hunting earlier.	
17/01/2023	1	1630	W	1	Male	-	Roosting	Roosted quickly	1L
23/01/2023	1	1601	SW	1	-	Ringtail	Flying	Disappeared behind small hill	
09/02/2023	1	1743	N	1	Male	-	Roosting	Settled quickly, calling to other bird	
09/02/2023	2	1743	N	1	Male	-	Flying	Moved in the direction of VP1	
09/02/2023	3	1746	NE	1	Male	-	Roosting	Roosting and calling to other bird	2C
13/02/2023	1	-	-	1	Male	-	Roosting	Lifted at 0815 and circled up to 50-60m then went south	
15/02/2023	1.1	1704	NNW	1	Male	-	Hunting	Disappeared behind treeline	
15/02/2023	2.1	1705	-	1	-	Ringtail	Hunting	Disappeared behind treeline	
15/02/2023	2.2	1713	S	1	-	Ringtail	Mobbed	Mobbed to ground by hooded crow	
15/02/2023	2.3	1715	Ground	1	-	Ringtail	Roosting	Flew around site and roosted after 1 min	1M
15/02/2023	1.2	1722	S	1	Male	-	Calling		
15/02/2023	1.3	1723	-	1	Male	-	Roosting	Roosted beside ringtail	1N

Table 3: Hen Harrier Roost Survey Results Non-breeding Season 2022-23

Islandmore Wind Farm

Date	Flight ID No	Time	Direction of arrival	No. of birds	Type/Sex	Age	Behaviour	Notes	Roost ID
24/10/2024	1.1	1750	WNW	1	Male	-	Roosting	Flew in from west, circled general area before settling	2E
24/10/2024	2	1758	WNW	1	Male	-	Roosting	Roosting with other male in same area.	2F
24/10/2024	1.2	1812	WE	1	Male	-	Roosting	Flew in from previous roost, circled and returned	2E
21/11/2024	1.1	1627	E	1	Male	-	Flying		
21/11/2024	1.2	1636	E	1	Male	-	Flying		
21/11/2024	2	1641	E	2	Male	-	Roosting	Flew then roosted	2G
21/11/2024	INCD. 1	1635		1		-	Roosting	Bird landed in willow then roosted	2H
21/11/2024	2	1650		1	Male	-		Potential hen harrier heard not seen.	
09/01/2025	1	1648		1	Male	-	Flying	Dipped into scrub briefly	
17/01/2025	1	1641	NE	1	Male	-	Flying/Landing	Seen dipping into scrub very briefly	
17/01/2025	2	1644	N	1		Ringtail	Perching	Perched on stand	
17/01/2025	3	1707		1	Male	-	Gliding		
29/01/2025	1	1640	NE	1	Male	-	Roosting	Roosting male	2I
29/01/2025	1.1	1700		1	Male	-	Roosting	Male moving briefly	
29/01/2025	2	1723	NE	1	Male	-	Roosting	Brief hunt before roosting near the other male	2J
29/01/2025	3	1738	E	1	Male	-	Hunting/ Roosting	Came in from trees in the east and roosted with other males	2K

24/02/2025	1	1730	N	1	Male	-	Calling	Briefly seen flying over trees lost out of view, Calling	
24/02/2025	1	1813	E	1	Male	-	Flying	Flying south, slow, cruising	
24/02/2025	1	1717	W	1	Male	-	Commuting	Seen briefly, heading west calling and dipped behind hill.	
24/02/2025	1.1	1757	W	1	Male	-	Hunting		

Table 3: Hen Harrier Roost Survey Results Non-breeding Season 2024



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