



APPENDIX 5

BIRD SUMMARY REPORT



Table of Contents

1.	INTRODUCTION	1
2.	METHODOLOGY	2
2.1	Field Surveys	2
2.1.1.1	Initial Site Assessment.....	2
2.2	Statement of Authority.....	3
3.	RESULTS	4
3.1	Field Survey Results.....	4

1.

INTRODUCTION

MKO were appointed to carry out ornithological surveys at the Ballivor Bog Group, Counties Meath and Westmeath (hereafter “the Application Site”). This report describes the survey methods employed and survey results collected at the Application Site for the period October 2021 to March 2023 inclusive. It is structured as follows:

- An introduction describing the site.
- A description of the ornithological surveys carried out, including a statement of authority and limitations.
- The results of ornithological surveys carried out.

2. METHODOLOGY

2.1 Field Surveys

The bird survey work was undertaken between October 2021 and March 2023. Field survey methodologies were devised to survey for the bird species composition and assemblages that occur within the Application Site. The study area/ area surveyed for each type of survey is discussed in the methodology section below.

2.1.1.1 Initial Site Assessment

Based on the results of the desk study, consultation and reconnaissance site visits, the likely importance of the Application Site for bird species was ascertained. Based on the collated information available from the above preliminary assessment and adopting a precautionary approach, a site-specific scope for the ornithological survey was developed. The various survey types undertaken are described below.

2.1.1.1.1 Vantage Point Surveys

Vantage point surveys were undertaken at the Application Site from October 2021 to March 2023. Surveys were conducted monthly throughout the survey period from sixteen fixed point vantage points to allow as comprehensive as possible coverage of the Application Site.

Data Recording and Digitisation

Data on bird observations and flight activity was collected from a scanning arc of 180° and a 2km radius by an observer at each fixed location for six hours per month. Surveys were scheduled to provide a spread over the full daylight period including dawn and dusk watches to coincide with the highest periods of bird activity.

Each flight observation was assigned a unique identifier when mapped in the field and subsequently digitised using GIS software.

2.1.1.1.2 Breeding Walkover Surveys (Brown & Shepherd Survey)

Breeding walkover surveys were undertaken to determine the presence of bird species of high conservation concern and identify areas of possible, probable, or confirmed breeding territories for bird species observed within the Application Site. The survey methodology followed the Brown and Shepherd (1993) and Calladine et al. (2009).

Transect routes were devised to ensure the required coverage of different habitat was achieved within the Application Site. Transects were selected to ensure all areas of suitable breeding/foraging habitat were approached to within 100m. Target species included waders, raptors, waterbirds, gulls and other birds of conservation concern. Along with target species, all additional species observed were recorded to inform the evaluation of supporting habitat.

Walkover surveys were carried out between daylight hours during the core breeding season months of April, May, June and July 2022, with the site being visited four to six days per month on each occasion. The timing of visits followed the recommendations of Brown and Shepherd (1993). Following all survey visits, the field maps were analysed to determine the number and location of breeding territories. All non-breeding individuals and species encountered were also recorded.

2.1.1.1.3 **Breeding Woodcock Surveys**

Breeding woodcock surveys were undertaken in accordance with Gilbert *et al.* (1998). Surveys were undertaken at the Application Site in May and June 2022, in areas of suitable habitat. The survey area extended 500m beyond the Application Site boundary and was focused in areas of suitable habitat. Surveys commenced one hour before sunset and continued for one hour after sunset or until it was too dark to see. Transects were slowly walked through areas of suitable woodland habitat. All observations of woodcock (as well as the areas covered) are recorded on to a map. The aim of the survey was to record the presence of roding (displaying) male woodcock and thereby establish the distribution and abundance of the species on the site. This survey method also allowed the observer to survey for owls, i.e. barn owls and long-eared owls.

2.1.1.1.4 **Winter Walkover Surveys**

Winter transect surveys were undertaken to record the presence of bird species of high conservation concern within areas of potentially suitable habitat in the Application Site.

Transect routes were devised to ensure coverage of different habitat complexes throughout the Application Site, during the winter months. The methodology was broadly based on methods described in Bibby *et al.* (2000) and adapted Brown and Shepherd surveys'. Target species were raptors, waterbirds, gulls and ground birds of conservation interest. Along with target species, all additional species observed were recorded to inform the evaluation of supporting habitat.

2.1.1.1.5 **Barn Owl Surveys**

Breeding barn owl surveys were undertaken at the Belvue Bord na Mona Works within the Ballivor Bog and at Martinstown Castle, approximately 400m north of Lisclogher West Bog. The aim of the survey was to identify breeding barn owl territories near or within the Application Site by locating nest sites. Survey methodology followed TII (2021). The surveyor conducted a watch at potential nest sites from 30 mins before sunset until 1 hour after sunset, searching for barn owls provisioning young, listening for the sound of chicks, and observing for barn owl pellets, feathers or whitewash. All such observations were recorded and mapped and a breeding status was assigned following TII (2021). Each potential nest site was surveyed three times during the core breeding season April to July 2022.

2.2 **Statement of Authority**

This report has been prepared by Kathryn Sheridan (M.Sc.), Project Ornithologist of MKO, and reviewed by Patrick Manley (B.Sc.), Senior Ornithologist. Both are suitably qualified ornithologists with experience in conducting ornithological assessments and competent for the purposes of the preparation of this end of season report. Field surveys were undertaken by Eamonn O'Brien, EH, Enda Flynn, Franck Le Moënner, Declan Manley, Donnacha Woods, John McMahon, Kate Bismilla, Kathryn Sheridan, Matt Worsdale, Neil Campbell, Niall Murray, Ian Hynes, Padraig Cregg, Sean Pierce and Tom Siekaniec. Surveyors are all experienced and competent field ornithologists.

3. RESULTS

3.1 Field Survey Results

The target species listed below were recorded during the ornithological surveys. The list is ordered in accordance with conservation significance: Annex I species, SCIs of designated sites, Red listed species and raptors.

- > Golden Plover (Annex I)
- > Hen Harrier (Annex I)
- > Kingfisher (Annex I; SCI species of the River Boyne and River Blackwater SPA)
- > Little Egret (Annex I)
- > Merlin (Annex I)
- > Peregrine (Annex I)
- > Red Kite (Annex I)
- > Short-eared Owl (Annex I)
- > Whooper Swan (Annex I)
- > Barn Owl (BoCCI Red Listed)
- > Kestrel (BoCCI Red Listed)
- > Lapwing (BoCCI Red Listed)
- > Redshank (BoCCI Red Listed)
- > Snipe (BoCCI Red Listed)
- > Woodcock (BoCCI Red Listed)
- > Buzzard (Raptor)
- > Long-eared Owl (Raptor)
- > Sparrowhawk (Raptor)
- > BoCCI Red listed passerine species (Grey Wagtail, Meadow Pipit, Redwing, Stock Dove, Swift, Yellowhammer)

A summary of observations for each of the species mentioned above is presented in table 3-1 below.

Table 3-1 Summary of target species recorded during surveys

Species Name	No. of Observations	Flock Range	Locations	Notes on Activity
Golden Plover	288	1 to 1,000	Lisclogher West, Lisclogher, Bracklin, Carranstown, Ballivor	Circling and commuting over bogs. Birds were observed utilising bog habitats on 21 occasions for foraging or roosting.
Hen Harrier	10	1	Lisclogher, Bracklin, Ballivor	Hunting observed on five occasions, all remaining observations were of birds commuting through the bogs.
Kingfisher	1	1	Lisclogher	The observation was of an individual commuting along drains in July 2022.
Little Egret	2	1 to 2	Bracklin, Carranstown	Observations were of bird travelling over the bogs.
Merlin	25	1	Lisclogher West, Lisclogher, Bracklin, Carranstown, Ballivor	No breeding evidence was observed. There were 12 observations of individuals hunting, the remaining observations were of individuals travelling.
Peregrine	65	1 to 2	Lisclogher West, Lisclogher, Bracklin, Carranstown, Ballivor	The majority of observations were of birds hunting or commuting. There was one observation of an adult peregrine chasing a juvenile peregrine and another of two peregrine chasing each other
Red Kite	1	1	Ballivor	Observation was of an individual soaring/circling over the bog in March 2023.
Short-eared Owl	1	2	Bracklin	Pair flushed from the bog during a walkover survey on one occasion in March 2022.
Whooper Swan	27	1 to 11	Lisclogher West, Lisclogher, Bracklin, Carranstown, Ballivor	The majority of observations were of birds travelling across the bogs, one record was of a whooper swan heard calling but not seen.
Barn owl	15	1 to 2	Lisclogher West and Belvue Bord na Mona works between Carranstown and Ballivor bogs	There was one nest in a shed at the Belvue Bord na Mona Works between Carranstown and Ballivor bogs. The second nest site was at Martinstown Castle to the NW of Lisclogher West. Begging calls were heard at both locations, confirming successful breeding.

Species Name	No. of Observations	Flock Range	Locations	Notes on Activity
Kestrel	386	1 to 2	Lisclogher West, Lisclogher, Bracklin, Carranstown, Ballivor	The majority of observations were of birds hunting, commuting or perched. There were two confirmed breeding territories in 2022. One at Lisclogher West bog and one south of Ballivor bog. Additionally, there were four probable breeding territories identified in 2022, one north of Lisclogher bog, two within Bracklin bog, and one at Ballivor bog.
Lapwing	25	1 to 200	Lisclogher, Bracklin, Carranstown and Ballivor bogs	The majority of observations were of birds commuting or circling over the Ballivor Bog Group.
Redshank	1	1	Lisclogher West	One bird observed travelling low over bog in September 2022.
Snipe	256	1 to 22	Lisclogher West, Lisclogher, Bracklin, Carranstown, Ballivor	The majority of observations were of birds commuting, calling or being flushed by the observer. There were a total of ten probable snipe territories identified during the 2022 breeding season. All of these territories were on, or adjacent to, the Ballivor group of bogs.
Woodcock	113	1 to 3	Lisclogher West, Lisclogher, Bracklin, Carranstown, Ballivor	The majority of woodcock observations were during the dedicated breeding woodcock surveys and were associated with breeding territories. There were eleven breeding woodcock territories identified during 2022 breeding season. Each of the five of bogs within the Ballivor Bog Group contained at least one woodcock breeding territory.
Buzzard	601	1 to 6	Lisclogher West, Lisclogher, Bracklin, Carranstown, Ballivor	The majority of buzzard observations were of birds commuting, hunting or soaring. In 2022 there were three confirmed breeding territories and six probable breeding territories. All confirmed breeding territories were adjacent to the Ballivor Bog Group (north of Lisclogher, west of Carranstown and south of Ballivor bogs). Four of the six probable territories were on the Ballivor Bog Group (two at Carranstown and two at Ballivor Bog). The remaining two probable territories were between 1 and 2.5km off-site.
Long-eared owl	3	1	Lisclogher and Ballivor	All observations were of individuals recorded on the bogs. Birds were observed commuting on two occasions. Begging was heard at Lisclogher in September 2022, indicating a breeding territory in this bog.
Sparrowhawk	109	1 to 2	Lisclogher West, Lisclogher, Bracklin, Carranstown, Ballivor	The majority of sparrowhawk observations were of birds commuting, hunting or soaring. In 2022, there were four probable breeding territories on Bracklin (two territories), Lisclogher and Lisclogher West Bogs.
Passerines (Red Listed)	-	-	Lisclogher West, Lisclogher, Bracklin,	The BoCCI Red listed species grey wagtail, meadow pipit, redwing, stock dove, swift and yellowhammer were recorded during the surveys undertaken at the Ballivor Bog Group. Grey



Species Name	No. of Observations	Flock Range	Locations	Notes on Activity
			Carranstown, Ballivor	wagtail were observed on two occasions, with up to two birds recorded. Meadow pipit were observed on 535 occasions, with up to 65 birds being recorded. Redwing were observed on 89 occasions, with up to 300 birds being recorded. Stock dove were observed on seven occasions with up to two birds being recorded. Swift were observed on 23 occasions, with up to 13 birds being recorded. Yellowhammer were observed on eight occasions, with up to two birds being recorded.