

Tyrone - Cavan Interconnector

Appendix 7.7
Wintering Birds Report (2019)

SONI

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Quality information

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1. Introduction

1.1 Background

AECOM was commissioned by SONI to conduct an updated assessment of wintering birds, specifically whooper swans *Cygnus cygnus* along the Tyrone – Cavan Interconnector.

This document describes the results of the updated assessment to determine any changes to the status of wintering birds along the Tyrone - Cavan Interconnector and to detect any potential additional impacts.

Information on the relevant legislation and policy pertaining to wintering birds is presented in Chapter 7 (Ecology) of the Consolidated ES (2013) and the Addendum (2015).

1.2 Previous Work

A corridor along the Tyrone - Cavan Interconnector, including lands extending 500 m from the route and lands around along the Blackwater River valley were surveyed on 11 occasions over the winter months (of 2006 – 2007, 2007 – 2008 and 2008 – 2009) to evaluate the use of the area by whooper swans and identify any feeding sites.

Several site visits were also carried out over the winter periods listed above to identify if whooper swans were likely to cross over the Tyrone - Cavan Interconnector whilst foraging in the Blackwater River valley or in the area of the Keady Lakes. Full details can be viewed in Section 10.3.3 of the Consolidated ES Appendix 10G Wintering Birds (SONI, 2013).

Updated surveys were carried out over the winter 2016 / 2017 period, full details can be viewed in the Wintering Bird Survey Report (2017). This was included in the Technical Report 08 (Ecology) as part of the submission for the 2017 Public Inquiry. These surveys followed the methodology outlined in the Consolidated ES (2013) report and presented the same conclusions.

1.3 Site description

Habitats, and their potential to host whooper swans, have not significantly changed since previous surveys conducted between 2009 and 2012 as presented in the Consolidated ES (2013). Details in habitats are presented in Chapter 7 of the 2019 Addendum. No new suitable sites were identified for whooper swans.

1.4 Survey Aims

The survey aims are unchanged from the Consolidated ES (2013).

2. Methods

The methods used for the wintering bird survey remain unchanged from the Consolidated ES (2013). Site names and their alphanumeric codes as previously used, are referred to throughout this document. Some changes were made to the sites visited. As there had not been previous records of whooper swans at Creeve Lough, this site was not visited. To ensure all relevant sites were surveyed any sites not previously visited were checked for whooper swans during the 2018 / 2019 survey period, these sites are the M1 motorway - Blackwater River intersection, (54.491693, -6.639410 - which lies between Lough Neagh and the Tyrone - Cavan Interconnector and known anecdotally to be along a route used by migrating whooper swans), Seagahan Reservoir, Church Hill Road, Caledon (adjacent to RB05 in the Consolidated ES (2013)) and Knockaginny Road (3 km west of Caledon adjacent to the River Blackwater).

2.1 Limitations

No limitations were identified during the current survey that would influence the findings and conclusions of this work.

2.2 Survey Personnel Experience

Wintering bird surveys were led by Dr Paul Lynas, spread over five visits during the 2018 / 2019 wintering period. Assistance was provided by Dr Emma Boston (Principal Ecologist), Jenny Jones (Consultant Ecologist), Rachel Whyte (Graduate Ecologist), Scott McCollum (Graduate Ecologist), and Ashleen Higgins (Consultant Ecologist). Ecologist surveyor experience is provided in Appendix 7.2 of the 2019 Addendum.

These surveyors were accompanied for one morning survey only by Niall Dalton (Environmental Consultant, AECOM), Ben Hunter (Ecological Field Assistant, AECOM), David McGall (Environmental Consultant, AECOM), and Rebecca Furlong (GIS Consultant in Environment Team, AECOM), who were positioned at sites to record presence / absence of wintering bird flocks and numbers of any swans arriving or leaving site.

2.3 Weather During Surveys

Weather conditions and any additional notes from each survey were recorded and are presented in Table 2.1.

Table 2.1: Weather conditions during surveys.

Date	Precipitation	Wind	Cloud cover (%)	Temperature (°C)	Water levels in sites comprising flooded fields
03/12/2018	Dry	Calm	30	4	High water levels in Clonbeg and N70.
18/12/2018	Mainly dry with showers	with Light breeze	80	4	High water levels in Clonbeg, N70, BR02, BR03.
08/02/2019	Some light rain in morning, dry in evening.	Gusts of wind in	70	9	High water levels in BR02 only.
19/03/2019	Dry	Light breeze	100	9	High water levels in Clonbeg, N70, BR02, BR03. Higher water levels than usual.
20/03/2019	Dry	Light breeze	100	9	High water levels in Clonbeg, N70, BR02, BR03.

3. Results

Numbers of whooper swans at each site are recorded in Table 3.1.

Table 3.1: Maximum counts of whooper swans over the 2018 / 2019 survey period.

Date	3 Dec	18 Dec	8 Feb	19 Mar	20 Mar
Location reference					
Clonbeg	6	17	0	14	10
N70	10 R	12 R	0	0	0
N71	0	0	0	0	0
TY02 (Legane Lough)	2	0	NC	0	NC
TY03 (Brantry Lough)	0	0	0	0	0

Location reference	Date	3 Dec	18 Dec	8 Feb	19 Mar	20 Mar
RB01		0	NC	NC	0	0
RB02		54	0	63 R	85	0
RB03		63	84	90	104	104
RB05 (Caledon)		0	0	0	0	NC
RB06 (Annaghroe)		23	76	36	61	NC
Ballymacully Road		18	0	0	0	NC
Clay Lake		NC	18	16	NC	15
Gentle Owens Lake		NC	0	0	NC	0
Tullynowood Lake		NC	0	0	NC	0
Darkley reservoir		NC	12	1	NC	25
Enagh Lough		0	0	39 R	0	NC
Seagahan reservoir		NC	NC	0	NC	NC
At M1 crossing		NC	NC	NC	0	0
Church Hill Road		NC	15	NC	0	NC
Knockaginny Road		NC	5	6	0	NC

NC = site not checked, R = swans roosting on site

Some fluctuations in numbers across sites throughout the survey period are associated with varying water levels in feeding sites. Anecdotal evidence from local farmers at Clonbeg and N70 site also confirm whooper swans only appear in certain sites when fields are flooded; this was corroborated by results of previous surveys. Water levels in feeding sites were subjectively much higher in the 2018 / 2019 wintering period than in previous years, with large areas of the fields often covered with ponded water. As a result of this, swans were much more sedentary than in previous years and were often observed to be roosting within traditional feeding sites. Otherwise, results from the 2018 / 2019 survey period reflect data presented in previous reports. Further details of the 2018 / 2019 survey are presented in Table 3.2.

Table 3.2: Comparison of 2018 / 2019 survey findings with previous results.

Previous Survey Elements	2018 / 2019 Findings	Comparison to Previous Surveys
Potential for whooper swans foraging in the Blackwater River valley to commute across the Tyrone - Cavan Interconnector	Swans were recorded commuting between daytime feeding sites within the Blackwater River Valley around Caledon (RB02 & RB03) and Enagh Lough (immediately north of Caledon) at night. These locations are approximately 6 km west from the Tyrone - Cavan Interconnector. Swans recorded feeding in the Blackwater River valley are not considered to be commuting across the Tyrone - Cavan Interconnector and no foraging or roosting swans were identified within 500 m of the Tyrone - Cavan Interconnector planning application boundaries. During times of high water levels, the birds did not leave their feeding sites, but instead moved into deeper ponded water to remain overnight. This sedentary behaviour further reduces any potential contact with overhead lines. This was recorded around Caledon and also at Clonbeg to the north of the Tyrone - Cavan Interconnector.	This result reflects those found in previous years. However, more birds were sedentary than previously recorded due to the higher water levels.

Use of Blackwater River valley as a commuting / migration route for whooper swans
 No swans were found to be commuting along the Blackwater River Valley.
 This result reflects those found in previous years.

Potential for whooper swans using the Keady lakes to cross the Tyrone - Cavan Interconnector
 Whooper swans were recorded feeding at Clay lake and Darkley reservoir, as in previous years and it is assumed that these swans also roost in these waterbodies.
 This result reflects those found in previous years.

Use of the Tyrone - Cavan Interconnector by whooper swans
 A maximum of 17 whooper swans were recorded at Clonbeg across the survey period. Swans were recorded flying from the site to the south-east to roost close by. When water levels were high, swans were also noted to roost at Clonbeg, about 500 m from the Tyrone - Cavan Interconnector planning application boundaries.
 This result reflects those found in previous years.
 No new suitable sites for feeding or commuting whooper swans within the vicinity of the Tyrone - Cavan Interconnector were identified.

3.1 Other Wintering Species

Mute swan *Cygnus olor* were noted at several sites over the survey period (TY03, TY02, N70, BR02, Darkley Reservoir, Clay Lake, Brantry Road lake and Tullynawood Lake). Lapwing *Vanellus vanellus* were noted at N70 (20 individuals in December), Clonbeg and Annaghroe (70 individuals in December). Approximately 200 black-headed gull *Chroicocephalus ridibundus* were also noted at Clonbeg during one survey. A flock of 76 greylag geese *Anser anser* was recorded during the survey in December at Annaghroe (BR06). Three flocks (numbering 36, 49 and 38) of greylag geese were recorded at the location during the February survey and a further individual greylag goose was recorded at Knockaginny Road in February.

No new wintering bird species were identified, and these four species described above have been discussed in previous reports. Further details on other wintering bird species can be found in the Consolidated ES (2013) and the 2016 - 2017 Wintering Bird Survey Update (2017).

4. Impacts

The impacts identified in the previously submitted reports remain unchanged as a result of these updated surveys.

5. Mitigation Measures

Mitigation measures identified in the previously submitted reports remain unchanged as a result of these updated surveys.

6. Residual Impact Assessment

The residual impacts identified in the previously submitted reports remain unchanged as a result of these updated surveys.

7. Conclusion

The updated results from the 2018 / 2019 survey period further affirms the conclusions of the existing body of work in relation to the wintering birds in the study area presented in the Consolidated ES (2013) and the 2016 – 2017 Wintering Bird Survey Update (2017).

No evidence was collected during the 2018 / 2019 surveys to alter the conclusions drawn during the preparation of the Consolidated ES and 2017 update survey. It remains that there is unlikely to be a significant risk of collision and any risks are likely to be largely limited to arrival and departure from the Blackwater River valley at the beginning and end of the winter period. Any collisions that may occur are unlikely to be significant at a local or national population level.

8. References

Griffin, L., Rees, E. and Hughes, B. (2010) The Migration of Whooper Swans in Relation to Offshore Wind Farms. Report to COWRIE Ltd. (COWRIE Project Code: SWAN-06-08). Wildfowl and Wetlands Trust, Slimbridge.

Robinson, J.A., Colhoun., K., McElwaine, J.G. and Rees, E.C. (2004) Whooper Swan *Cygnus cygnus* (Iceland population) in Britain and Ireland 1960/61 – 1999/2000. Waterbird Review Series, The Wildfowl & Wetlands Trust/Joint Nature Conservation Committee, Slimbridge.

SONI (2013) Tyrone – Cavan Interconnector Consolidated Environmental Statement (including specifically Appendix 10G Wintering Birds).

SONI (2017) October 2016 – February 2017 Wintering Bird Survey Update. This was included in the Technical Report 08 (Ecology) as part of the submission for the 2017 Public Inquiry. .

