

Appendix 12.2

Winter and Breeding Bird Surveys 2024 and 2025

12.2 Winter and breeding bird surveys 2024 and 2025 for a proposed Ringaskiddy Resource Recovery Centre at Ringaskiddy, Co. Cork.

A1 Introduction

DixonBrosnan Environmental Consultants carried out an appraisal of the potential impacts of the proposed development of the Ringaskiddy Resource Recovery Centre at Ringaskiddy, County Cork on birds utilising the development site and the coastal areas adjacent to it. The information in this report was used to help determine the impacts on bird populations in **Chapter 12 (Biodiversity)** of the EIS and also informed the conclusions of the NIS which specifically addresses impacts on designated Natura 2000 sites including the Cork Harbour SPA.

A2 Methodology

A2.1 Desktop Review

A desktop review was carried out to identify designated SPAs in the surrounding landscape and to assess information from other surveys in this general area. From the information provided in the desktop review and based on the information provided by previous reports, it was decided to carry out winter bird surveys and breeding bird surveys.

A2.2 Winter bird survey - methodology

The winter bird surveys were undertaken on the following dates: 22nd October 2024, 12th November 2024, 29th November 2024, 18th December 2024, 16th January 2025, 7th February 2025 and 11th March 2025.

The survey methodology was based on that used by the British Trust for Ornithology (BTO), Wetland Bird Survey (WeBS) and also that for the Irish Wetland Bird Survey (I-WeBS), as outlined in Gilbert et al. (1998). The winter bird survey and breeding bird survey were undertaken using 5×45 binoculars and a Hawke Endurance Ed Spotting Scope 15-45×60 spotting scope. Survey vantage point locations for the winter bird counts are shown in **Figure 1**. It is noted that many of these birds were recorded overflying the channel and that the survey covered a radius of approximately 300m from each vantage point. Transect surveys on the agricultural grassland to the south of the site.



Figure 1 Vantage point and transect count locations.

A2.3 Breeding bird surveys - methodology

The breeding bird survey was undertaken on the 1st April 2025, 1st May 2025 and 22nd June 2025. The survey methodology utilised a scaled down version of the British Trust for Ornithology's (BTO) Common Bird Census (CBC) Technique (Bibby *et al.*, 2000 and Gilbert *et al.*, 1998), with aspects of species specific survey methodologies employed where required (Gilbert *et al.*, 1998). All bird locations, numbers, behaviour were recorded by annotating field maps and by taking notes.

All bird species encountered during the survey were mapped and coded using standard BTO 'Species Codes' and 'Categories of Breeding Evidence' e.g. singing male, agitated behaviour, carrying food, recently fledged downy young.

No attempts were made to locate nests as bird behaviour is generally sufficient to determine probable or confirmed breeding. Survey visits commenced shortly after dawn and were completed before mid-day to coincide with the peak bird activity period. Visits were not made during adverse weather conditions, and a route was chosen to ensure all parts of the proposed development area were effectively surveyed. The survey route through and around the proposed development area is shown in **Figure 2**. The breeding bird surveys focused primarily on the proposed development area where there is the potential for permanent impacts due to the removal of nesting habitat.



Figure 2 Breeding bird survey- routes outlined in red.

A3 Designated sites

The closest Special Protection Area for birds is the Cork Harbour SPA (Site code 004030) which is located 0.5km south of the study area at its closest point. The closed proposed Natural Heritage Area is the Lough Beg pNHA (Site code 001066) which is located 0.3km south of the study area. Large areas of Cork Harbour have received formal designations, primarily on the basis of important bird populations. These areas are interrelated, with bird populations moving between different areas at different times. **Table 1** below lists the Special Conservation Interests for the Cork Harbour SPA. A site synopsis for the Cork Harbour SPA is attached as **Appendix 12.5** of the EIS.

Table 1 Cork Harbour SPA –Special Conservation Interest for Cork Harbour SPA and Qualifying Populations.

Cork Harbour SPA [IE0004030] SCIs			Season
[A004]	Little Grebe	Tachybaptus ruficollis	Wintering
[A005]	Great Crested Grebe	Podiceps cristatus	Wintering
[A017]	Cormorant	Phalacrocorax carbo	Wintering
[A028]	Grey Heron	Ardea cinerea	Wintering
[A048]	Shelduck	Tadorna tadorna	Wintering
[A050]	Wigeon	Anas penelope	Wintering
[A052]	Teal	Anas crecca	Wintering
[A056]	Pintail	Anas acuta	Wintering
[A065]	Shoveler	Anas clypeata	Wintering
[A069]	Red-breasted Merganser	Mergus serrator	Wintering
[A130]	Oystercatcher	Haematopus ostralegus	Wintering
[A140]*	Golden Plover	Pluvialis apricaria	Wintering
[A141]	Grey Plover	Pluvialis squatarola	Wintering
[A142]	Lapwing	Vanellus vanellus	Wintering
[A149]*	Dunlin	Calidris alpina	Wintering
[A156]	Black-tailed Godwit	Limosa limosa	Wintering
[A157]*	Bar-tailed Godwit	Limosa lapponica	Wintering
[A160]	Curlew	Numenius arquata	Wintering
[A162]	Redshank	Tringa totanus	Wintering
[A179]	Black-headed Gull	Larus ridibundus	Wintering
[A182]	Common Gull	Larus canus	Wintering
[A183]	Lesser Black-backed Gull	Larus fuscus	Wintering
[A193]*	Common Tern	Sterna hirundo	Breeding
[A999]	Wetlands & Waterbirds		

A4 Results

A4.1 Winter bird surveys

Four vantage point count locations and transect surveys were utilised for the winter bird survey 2024/25, as shown in **Figure 1**. These all overlooked the open estuarine habitat and the Cork Harbour West Channel between Ringaskiddy and Spike Island. The cobble beach and terrestrial habitats along the eastern boundary of the study area were also covered. The fields to the south of the proposed development site are grazed and the short sward provides potential foraging and roosting habitat for SCI birds. Tides and weather conditions for each day are described in **Table 2**. Tide times at Ringaskiddy are based on the tidal tables for Cobh.

Table 2 Tide and survey conditions – winter bird survey

Date	Tides	Weather	Notes
22/10/24	High 09:21 Low 15:49	Sunny. Mild. Light SW wind. Cloud 2/8. Excellent visibility	High tide count. Levels of disturbance quite high with people on the Gobby Beach and at the parking area
12/11/24	High 14:11 Low 08:06	Sunny. Mild. Light SW wind. Cloud 1/8. Excellent visibility	High tide count. Birds actively disturbed by dogs on upper shore of Gobby Beach.
29/11/24	High 16:10 Low 10:13	Misty rain. Cool. SW wind. Cloud 8/8. Good visibility.	Low tide count. No disturbance due to poor weather conditions.
18/12/24	High 07:05 Low 13:34	Dry. Mild. Moderate SW wind. Cloud 5/8. Good visibility.	Low tide count. No disturbance. Cattle grazing in southern field.
16/01/25	High 06:52 Low 13:19 High: 19:09	Dry. Cool. Light SW wind. Cloud 6/8. Good visibility	Mid tide count. No disturbance. Cattle grazing in southern field.
07/02/25	Low: 06:25 High: 12:35 Low: 19:05	Dry. Cool. Light SW wind. Cloud 6/8. Good visibility	Mid tide count. Walkers (c.20) on Gobby Beach
11/03/25	Low: 10:02 High:15:59	Dry. Mild Light SW wind. Cloud 4/8. Good visibility	High tide count. No disturbance

Peak numbers of birds recorded during the winter bird surveys in 2024/2025 are shown in **Table 3**.

Table 3 Peak counts of birds recorded during 2024/2025 winter bird surveys

Peak counts	High tide	High tide	Low tide	Low tide	Mid tide	Mid tide	High tide
	22/10/2024	12/11/2024	29/11/2024	18/12/2024	16/01/2025	07/02/2025	11/03/2025
Black headed gull	4	7	4		3	3	3
Blackbird	1		2	1	2		
Brent goose					12		
Common gull		2		1			1
Cormorant	2	5	3			6	2
Curlew			7	6	3		
Dunlin			12				
Goldfinch		4		2			1
Great crested grebe		1					
Great northern diver						1	
Greenshank					1		
Grey heron		1			1		1
Herring gull		3	1	3		2	
Kestrel		1					
Lesser black-backed gull							
Little egret		1			1		2
Magpie				2	1		
Meadow pipit		3		2		2	

Peak counts	High tide	High tide	Low tide	Low tide	Mid tide	Mid tide	High tide
	22/10/2024	12/11/2024	29/11/2024	18/12/2024	16/01/2025	07/02/2025	11/03/2025
Oystercatcher			3	4	6		
Redwing					5		
Robin				1			
Rook		5					
Sanderling			2				
Snipe	3		3	2		2	1
Skylark		2		1			
Starling	4	5		5	23		
Turnstone	12	4					
Woodpigeon					2		
Wren		1			1		1

A4.2 Breeding bird surveys

The breeding bird survey was undertaken on the beach front, adjoining roadside and in all of the accessible tracks within the development area, as shown in **Figure 2**. The majority of the development area (at the east of the proposed development site) has developed a scrub /immature woodland habitat dominated by gorse and bramble with small areas of semi-natural grassland. The tracks through the site are generally open, and the most southerly section of track provides good vantage points over the entire site as it is on an elevated position. The British Trust for Ornithology (BTO) breeding bird codes are shown in **Table 4**. The breeding status of all species encountered during surveys were classified into four categories: Confirmed (Br), Probable (Pr), Possible (Po) and Nonbreeder (N), based on BTO categories of breeding evidence. A full list of bird species recorded during the 2025 surveys is provided in **Table 5**.

Table 4 British Trust for Ornithology breeding bird survey codes

Breeding status	Confirmed breeder (Br)	Probable breeder (Pr)	Possible breeder (Po)	Non-breeder (N)
Observed behaviours	Distractiondisplay or injury feigning (DD)	Pair in suitable nesting habitat (P)	Observed in suitable nesting habitat (H)	Flying Over (F)
	Used nest or eggshells found from current season (UN)	Permanent Territory (T)	Singing Male (S)	Migrant (M)
	Recently fledged young or downy young (FL)	Courtship and Display (D)		Summering nonbreeder (U)
	Adults entering or leaving nestsite indicating occupied nest (ON)	Visiting probable nest site (N)		
	Adult carrying faecal sac or food for young (FF)	Agitated Behaviour (A)		
	Nest containing eggs (NE)	Brood patch of incubating bird (I)		
	Nest with young seen or heard (NY)	Nest Building or excavating nesthole (B)		

Table 5 Breeding bird survey results

Bird species	Breeding status	Estimated No. of Pairs	Conservation status*
Blackbird	Br-FF	2	
Blackcap	Po-S	1	
Black-headed gull	N-F	0	Amber List

Bird species	Breeding status	Estimated No. of Pairs	Conservation status*
Blue tit	Br-FL	3	
Bullfinch	Pr- A	1	
Chaffinch	Br-FL	2	
Chiffchaff	Pr-D	2-3	
Common gull	N-F	0	Amber List
Common tern	N-F	0	Amber List/Annex I
Common Whitethroat	Pr-A	1	
Dunnock	Po- S	1	
Goldcrest	Pr-D	1	Amber List
Goldfinch	PR-N	1	
Great tit	Br-DD	1	
Greenfinch	Pr-P	1	Amber list
Grey Heron	N-F	0	
Herring gull	N-F	0	Amber list
Hooded crow	N-F	0	
House martin	N-F	0	Amber List
Kestrel	N-F	0	Red list
Long tailed tit	Pr-P	1	
Oystercatcher	N-F	0	Red List
Robin	Br-UN	1	
Rook	N-F	0	
Song thrush	Pr-N	1	
Starling	N-F	0	Amber List
Swallow	N-F	0	Amber List
Willow warbler	Po-S	2	Amber List
Woodpigeon	Pr-D	2-3	
Wren	Br-ff	2	

A4.3 Common Tern

No breeding terns occur within or in immediate proximity to the study area. A breeding population of Common Tern are known to occur near the entrance to the Port of Cork, approximately 750m west of the study area. This colony was identified by the Port of Cork Environmental Impact Statement (Port of Cork/RPS, 2014), which recorded 45-50 breeding pairs on concrete structures (mooring dolphins) adjacent to the entrance to the Port of Cork.

Other sites within the Lower Harbour area which have been occupied in recent years are the rocky island in Lough Beg, Ballybricken Point ADM jetty, the island within the Pfizer Golf Course Lagoon and Raffeen Creek (O'Mahony and Smiddy, 2017).

Common Terns were recorded overflying the proposed development site during the 2025 breeding bird surveys. While Common Tern are likely to forage in the waters of Cork Harbour to the east of the proposed development site, there are no breeding areas for Common Tern located in the vicinity of the proposed development site.

A4.4 Seals and cetaceans

DixonBrosnan recorded a small haul-out of four seals near Paddy's Point (South of Haulbowline Island) in May 2025. Although there is nothing to indicate that the area in the immediate vicinity of the proposed development site is of particular value for seals, it is within the feeding range for local Harbour Seal populations. During the 2015 surveys seals were recorded moving through the channel between Ringaskiddy and Spike Island.

A5 Discussion of results

A5.1 Birds considered of conservation value

Species recorded during the site surveys which have received some form of conservation designation as shown in **Table 6**. Birds species listed in Annex I of the Birds Directive are considered a conservation priority. Four species (Dunlin, Great Northern Diver, Little Egret and Common Tern) are listed on

Annex I of the Birds Directive. Certain bird species are listed by BirdWatch Ireland as Birds of Conservation Concern in Ireland. Red List bird species are of high conservation concern and the Amber List species are of medium conservation. Eight red listed species were recorded namely Curlew, Dunlin, Kestrel, Meadow pipit, Oystercatcher, Redshank, Redwing and Snipe.

Fourteen Amber list species were recorded i.e. Lesser black-backed gull, Brent goose, Common gull, Great-crested Grebe, Herring gull, Skylark, Starling, Turnstone, Common Tern, Goldcrest, Greenfinch, House martin, Swallow and Willow warbler.

Table 6 Conservation status for species recorded.

Species	Birds Directive Annex I	BOCCI Red List*	BOCCI Amber List*	Cork Harbour SCI Species**
Winter birds				
Black-headed Gull			X	X
Brent Goose			X	
Common Gull			X	X
Cormorant			X	X
Curlew		X		X
Dunlin	X	X		X

Species	Birds Directive Annex I	BOCCI Red List*	BOCCI Amber List*	Cork Harbour SCI Species**
Great black-backed Gull				
Great Northern Diver	X			
Great-crested Grebe			X	X
Greenshank				
Grey Heron				X
Herring Gull			X	
Kestrel		X		
Lesser black-backed Gull			X	X
Little Egret	X			
Magpie				
Meadow pipit		X		
Oystercatcher		X		X
Redshank		X		X
Redwing		X		
Skylark			X	
Snipe		X		
Starling			X	
Turnstone			X	
Breeding birds				
Common tern	X		X	X
Goldcrest			X	
Greenfinch			X	
Grey Heron				X
Herring gull			X	
Hooded crow				
House martin			X	
Kestrel	X	X		
Oystercatcher		X		X
Starling			X	

Species	Birds Directive Annex I	BOCCI Red List*	BOCCI Amber List*	Cork Harbour SCI Species**
Swallow			X	
Willow warbler			X	
*Gilbert G, Stanbury A and Lewis L (2021), “Birds of Conservation Concern in Ireland 2020 –2026”. Irish Birds 9: 523—544; ** • NPWS (2014) Conservation Objectives: Cork Harbour SPA 004030. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.				

A5.2 Results in relation to designated sites

Only the one Special Protection Area (Cork Harbour SPA Site Code 004030) is located within 5km of the proposed Ringaskiddy Resource Recovery Centre. This SPA is shown in **Figure 3**. The qualifying interests for Cork Harbour SPA are shown in **Table 8** together with the conservation objectives for each species.). A total of ten species listed as qualifying interests for the Cork Harbour SPA were recorded, namely, Black-headed Gull, Common Gull, Cormorant, Lesser black-backed Gull, Curlew, Dunlin, Oystercatcher, Redshank, Grey Heron and Great-crested Grebe. Common Tern was recorded during the breeding bird survey overflying the channel. This species does not breed in proximity to the site.



Figure 3 Cork Harbour SPA in relation to the study area (red circle).

A6 Summary

Four Annex I bird species were recorded (Dunlin, Little Egret, Great Northern Diver and Common Tern). Eight red listed species were recorded namely Curlew, Dunlin, Kestrel, Meadow pipit, Oystercatcher, Redshank, Redwing and Snipe.

A total of eleven species listed as qualifying interests for the Cork Harbour SPA were recorded, namely, Black-headed Gull, Common Gull, Common Tern, Cormorant, Lesser black-backed Gull, Curlew, Dunlin, Oystercatcher, Redshank, Grey Heron and Great-crested Grebe. Common Tern was recorded during the breeding bird survey overflying the channel.

An important breeding colony of Common Tern is located approximately 750m from the development site on concrete structures adjacent to the Port of Cork entrance.

None of the wintering birds recorded by vantage point counts in proximity to the proposed development site were recorded in high numbers and numbers were low in-comparison to the figures which would be considered nationally significant (i.e. 1% or more of the all-Ireland population of an Annex I species or 1% or more of the bio-geographical population of a migratory species).

A7 Conclusions

A7.1 Conclusions- Breeding bird surveys

A total of 32 bird species were recorded during the breeding bird surveys. The mosaic of semi-natural grassland, scrub and dense scrub/immature woodland was noted as particularly beneficial for warblers, with Blackcap, Whitethroat, Willow Warbler and Chiffchaff recorded. Typical woodland edge and/or urban species were also recorded including Blackbird, Song thrush, Robin etc. It is noted that Skylark and Meadow Pipit were recorded in fields to the south of the proposed development (during winter bird surveys), but these species were not recorded during the breeding bird surveys.

A number of BOCCI species were recorded including the Red List species Kestrel. This species was recorded foraging at the proposed development site, but no signs of breeding were recorded. Other Red List species i.e. Oystercatcher, was recorded foraging along the shoreline of Gobby Beach. A number of Amber listed species were recorded within the proposed development site including Goldcrest, Greenfinch, House Martin, Swallow and Willow Warbler. A number of waterbirds were recorded overflying the proposed development site including Herring Gull, Common Gull, Oystercatcher and Common Tern, but there is no suitable breeding or foraging habitat for these species within the proposed development site boundary.

No rare or uncommon species were noted as breeders or potential breeders.

A7.2 Conclusions - Winter bird surveys

Three species (Dunlin, Little Egret and Great Northern Diver) which are listed on Annex I of the Birds Directive were recorded during the winter bird surveys. Certain bird species are listed by BirdWatch Ireland as Birds of Conservation Concern in Ireland. Red List bird species are of high conservation concern and the Amber List species are of medium conservation. Eight red listed species were recorded namely Curlew, Dunlin, Kestrel, Meadow pipit, Oystercatcher, Redshank, Redwing and Snipe. Eleven species recorded are Amber listed Black-headed Gull, Brent Goose, Common Gull, Cormorant, Great-crested Grebe, Herring Gull, Lesser black-backed Gull, Skylark, Starling, Swallow and Turnstone.

The majority of waterbirds and waders were recorded along the shoreline and waters of Cork Harbour to the east of the proposed development site. However, occasional Curlew and Oystercatcher were recorded in the fields to the south of the proposed development site on several occasions. These fields were also surveyed as part of the EIS for the M28 motorway (RPS 2015). These surveys recorded peak numbers of 42 Curlew, but Curlew were regularly recorded in small flocks during site surveys. Oystercatchers were recorded on one occasion during the M28 surveys as well as occasional Snipe. The shorter sward within these fields, which are subject to low levels of grazing provide some terrestrial foraging habitats for wading birds. The grassland within the proposed development site is not actively managed and is too long for wading birds. While occasional Snipe were recorded within the proposed development site, overall, the long grass and scrub habitat is not suitable for wading birds and/or waterfowl.

A8 References

Bibby, C.J., Burgess, N.D., Hill, D.A. & Mustoe, S.H. 2000. Bird Census Techniques. Academic Press, London.

Gilbert, G., Gibbons, D.W. & Evans, J. (1998) Bird Monitoring Methods - a Manual of Techniques for Key UK Species. RSPB: Sandy.

Gilbert G, Stanbury A and Lewis L (2021), "Birds of Conservation Concern in Ireland 2020 –2026". Irish Birds 9: 523—544; Ringaskiddy Port Redevelopment EIS (Port of Cork/RPS, 2014)

NPWS (2014) Conservation Objectives: Cork Harbour SPA 004030. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

Port of Cork /RPS (2014) Ringaskiddy Port Redevelopment. Environmental Impact Statement. RPS