

Volume 10: Appendices (Onshore)

Appendix 23.3

Desktop Results

Appendix 23.3 Desk Study Results

Table 1 – National Biodiversity Data Centre (NBDC) records for notable or protected bird species with potential to occur within the onshore development area.

(Source: NBDC Website 10km Grid Squares O14, O15, O16, O24, O25 and O26)

Species	Scientific Name	BoCCI 2020-2026	Birds Directive Annex I	Wildlife Acts	Date of Last Record
Arctic Tern	<i>Sterna paradisaea</i>	A	Y	Y	2011
Atlantic Puffin	<i>Fratercula arctica</i>	R	-	Y	2011
Barn Owl	<i>Tyto alba</i>	R	-	Y	2019
Barn Swallow	<i>Hirundo rustica</i>	A	-	Y	2011
Barnacle Goose	<i>Branta leucopsis</i>	A	-	Y	2011
Bar-tailed Godwit	<i>Limosa lapponica</i>	R	Y	Y	2011
Black Guillemot	<i>Cephus grylle</i>	A	-	Y	2011
Black-headed Gull	<i>Larus ridibundus</i>	A	-	Y	2016
Black-legged Kittiwake	<i>Rissa tridactyla</i>	R	-	Y	2011
Black-necked Grebe	<i>Podiceps nigricollis</i>	R	-	Y	2011
Black-tailed Godwit	<i>Limosa limosa</i>	R	-	Y	2011
Black-throated Diver	<i>Gavia arctica</i>	A	Y	Y	2011
Brambling	<i>Fringilla montifringilla</i>	A	-	Y	2018
Brent Goose	<i>Branta bernicla</i>	A	-	Y	2011
Common Coot	<i>Fulica atra</i>	A	-	Y	2019
Common Eider	<i>Somateria mollissima</i>	R	-	Y	2011
Common Goldeneye	<i>Bucephala clangula</i>	R	-	Y	2011
Common Grasshopper Warbler	<i>Locustella naevia</i>	A	-	Y	2011
Common Greenshank	<i>Tringa nebularia</i>	A	-	Y	2011
Common Guillemot	<i>Uria aalge</i>	A	-	Y	2011
Common Kestrel	<i>Falco tinnunculus</i>	R	-	Y	2018
Common Kingfisher	<i>Alcedo atthis</i>	A	Y	Y	2013
Common Linnet	<i>Carduelis cannabina</i>	A	-	Y	2019
Common Pheasant	<i>Phasianus colchicus</i>	A	-	Y	2011
Common Pochard	<i>Aythya ferina</i>	A	-	Y	2011
Common Redshank	<i>Tringa totanus</i>	R	-	Y	2011
Common Sandpiper	<i>Actitis hypoleucos</i>	A	-	Y	2011
Common Scoter	<i>Melanitta nigra</i>	R	-	Y	2011
Common Shelduck	<i>Tadorna tadorna</i>	A	-	Y	2012
Common Snipe	<i>Gallinago gallinago</i>	R	-	Y	2011
Common Starling	<i>Sturnus vulgaris</i>	A	-	Y	2011
Common Swift	<i>Apus apus</i>	R	-	Y	2022

Species	Scientific Name	BoCCI 2020- 2026	Birds Directive Annex I	Wildlife Acts	Date of Last Record
Common Wood Pigeon	<i>Columba palumbus</i>	A	-	Y	2016
Corn Crane	<i>Crex crex</i>	R	Y	Y	2011
Curlew Sandpiper	<i>Calidris ferruginea</i>	R	Y	Y	2011
Dunlin	<i>Calidris alpina</i>	R	Y	Y	2011
Eurasian Curlew	<i>Numenius arquata</i>	R	-	Y	2020
Eurasian Oystercatcher	<i>Haematopus ostralegus</i>	R	-	Y	2011
Eurasian Teal	<i>Anas crecca</i>	A	-	Y	2020
Eurasian Tree Sparrow	<i>Passer montanus</i>	A	-	Y	2011
Eurasian Wigeon	<i>Anas penelope</i>	A	-	Y	2011
Eurasian Woodcock	<i>Scolopax rusticola</i>	R	-	Y	2011
European Golden Plover	<i>Pluvialis apricaria</i>	R	Y	Y	2011
European Greenfinch	<i>Carduelis chloris</i>	A	-	Y	2018
European Shag	<i>Phalacrocorax aristotelis</i>	A	-	Y	2011
European Storm-petrel	<i>Hydrobates pelagicus</i>	A	Y	Y	2011
Gadwall	<i>Anas strepera</i>	A	-	Y	2018
Goldcrest	<i>Regulus regulus</i>	A	-	Y	2019
Great Black-backed Gull	<i>Larus marinus</i>	A	-	Y	2016
Great Cormorant	<i>Phalacrocorax carbo</i>	A	-	Y	2020
Great Crested Grebe	<i>Podiceps cristatus</i>	A	-	Y	2020
Great Northern Diver	<i>Gavia immer</i>	A	Y	Y	2011
Greater Scaup	<i>Aythya marila</i>	R	-	Y	2011
Greater White-fronted Goose	<i>Anser albifrons</i>	A	Y	Y	2011
Greylag Goose	<i>Anser anser</i>	A	-	Y	2011
Grey Partridge	<i>Perdix perdix</i>	A	-	Y	2011
Grey Plover	<i>Pluvialis squatarola</i>	R	-	Y	2011
Grey Wagtail	<i>Motacilla cinerea</i>	R	-	Y	2012
Hen Harrier	<i>Circus cyaneus</i>	A	Y	Y	2011
Herring Gull	<i>Larus argentatus</i>	A	-	Y	2011
House Martin	<i>Delichon urbicum</i>	A	-	Y	2017
House Sparrow	<i>Passer domesticus</i>	A	-	Y	2011
Lesser Black-backed Gull	<i>Larus fuscus</i>	A	-	Y	2011
Lesser Whitethroat	<i>Sylvia curruca</i>	A	-	Y	2011
Little Egret	<i>Egretta garzetta</i>	-	Y	Y	2019
Little Grebe	<i>Tachybaptus ruficollis</i>	A	-	Y	2011
Little Gull	<i>Larus minutus</i>	A	Y	Y	2011
Little Tern	<i>Sternula albifrons</i>	A	Y	Y	2011

Species	Scientific Name	BoCCI 2020- 2026	Birds Directive Annex I	Wildlife Acts	Date of Last Record
Long-tailed Duck	<i>Clangula hyemalis</i>	A	-	Y	2011
Mallard	<i>Anas platyrhynchos</i>	A	-	Y	2020
Meadow Pipit	<i>Anthus pratensis</i>	A	Y	Y	2011
Mediterranean Gull	<i>Larus melanocephalus</i>	A	Y	Y	2011
Merlin	<i>Falco columbarius</i>	A	Y	Y	2018
Mew Gull	<i>Larus canus</i>	A	-	Y	2011
Mute Swan	<i>Cygnus olor</i>	A	-	Y	2017
Northern Fulmar	<i>Fulmarus glacialis</i>	A	-	Y	2011
Northern Gannet	<i>Morus bassanus</i>	A	-	Y	2011
Northern Lapwing	<i>Vanellus vanellus</i>	R	-	Y	2017
Northern Pintail	<i>Anas acuta</i>	A	-	Y	2011
Northern Shoveler	<i>Anas clypeata</i>	R	-	Y	2011
Northern Wheatear	<i>Oenanthe oenanthe</i>	A	-	Y	2011
Peregrine Falcon	<i>Falco peregrinus</i>	-	Y	Y	2021
Razorbill	<i>Alca torda</i>	R	-	Y	2011
Red Knot	<i>Calidris canutus</i>	R	-	Y	2011
Red-breasted Merganser	<i>Mergus serrator</i>	A	-	Y	2011
Red-throated Diver	<i>Gavia stellata</i>	A	Y	Y	2011
Redwing	<i>Turdus iliacus</i>	R	-	Y	2011
Ringed Plover	<i>Charadrius hiaticula</i>	A	-	Y	2011
Rock Pigeon	<i>Columba livia</i>	A	-	Y	2011
Ruff	<i>Philomachus pugnax</i>	A	Y	Y	2011
Sand Martin	<i>Riparia riparia</i>	A	-	Y	2011
Short-eared Owl	<i>Asio flammeus</i>	A	Y	Y	2011
Sky Lark	<i>Alauda arvensis</i>	A	-	Y	2011
Slavonian Grebe	<i>Podiceps auratus</i>	R	-	Y	2011
Spotted Flycatcher	<i>Muscicapa striata</i>	A	-	Y	2011
Spotted Redshank	<i>Tringa erythropus</i>	A	-	Y	2011
Stock Pigeon	<i>Columba oenas</i>	A	-	Y	2018
Tufted Duck	<i>Aythya fuligula</i>	A	-	Y	2019
Twite	<i>Carduelis flavirostris</i>	R	-	Y	2011
Water Rail	<i>Rallus aquaticus</i>	A	-	Y	2020
White-tailed Eagle	<i>Haliaeetus albicilla</i>	R	-	Y	2021
Whooper Swan	<i>Cygnus cygnus</i>	A	Y	Y	2011
Willow Warbler	<i>Phylloscopus trochilus</i>	A	Y	Y	2019
Yellowhammer	<i>Emberiza citronella</i>	R	-	Y	2021

Table 2 - NBDC records for notable or protected species with potential to occur within the onshore development area.

(Source: NBDC Website 10km Grid Squares O14, O15, O16, O24, O25 and O26)

Species Group	Species	Scientific Name	Habitats Directive (Annex II/IV)	Wildlife Acts	Date of Last Record
Amphibian					
	Common Frog	<i>Rana temporaria</i>	-	Y	2020
	Smooth Newt	<i>Lissotriton vulgaris</i>	-	Y	2013
Marine Mammal					
	Common Porpoise	<i>Phocoena phocoena</i>	II, IV	Y	2018
Reptile					
	Common Lizard	<i>Zootoca vivipara</i>	-	Y	2018
Terrestrial Mammal					
	<i>Brown Long-eared Bat</i>	<i>Plecotus auritus</i>	IV	Y	2012
	<i>Daubenton's Bat</i>	<i>Myotis daubentonii</i>	IV	Y	2008
	<i>Eurasian Badger</i>	<i>Meles meles</i>	-	Y	2016
	<i>Eurasian Pygmy Shrew</i>	<i>Sorex minutus</i>	-	Y	2018
	<i>European Otter</i>	<i>Lutra lutra</i>	II, IV	Y	2015
	<i>Irish Hare</i>	<i>Lepus timidus subsp. hibernicus</i>	-	Y	2018
	<i>Irish Stoat</i>	<i>Mustela erminea subsp. hibernica</i>	-	Y	2017
	<i>Lesser Noctule</i>	<i>Nyctalus leisleri</i>	IV	Y	2013
	<i>Mountain Hare</i>	<i>Lepus timidus</i>	-	Y	2010
	<i>Nathusius's Pipistrelle</i>	<i>Pipistrellus nathusii</i>	IV	Y	2011
	<i>Pine Marten</i>	<i>Martes martes</i>	-	Y	2021
	<i>Pipistrelle</i>	<i>Pipistrellus pipistrellus sensu lato</i>	IV	Y	2012
	<i>Red Fox</i>	<i>Vulpes vulpes</i>	-	Y	2018
	<i>Soprano Pipistrelle</i>	<i>Pipistrellus pygmaeus</i>	IV	Y	2013
	<i>West European Hedgehog</i>	<i>Erinaceus europaeus</i>	-	Y	2021

Table 3 - NBDC records for notable invasive species with potential to occur within the onshore development area.

(Source: NBDC Website 10km Grid Squares O14, O15, O16, O24, O25 and O26)

Species Group	Species	Scientific Name	Impact of Invasive Species	Date of Last Record
Algae				
	Wireweed	<i>Sargassum muticum</i>	High	2020
Birds				
	Ruddy Duck	<i>Oxyura jamaicensis</i>	High	2014
Flatworm				
	New Zealand Flatworm	<i>Arthurdendyus triangulatus</i>	High	2019
	Flatworm	<i>Australoplana sanguinea</i>	Medium	2020
Flowering Plants				
	Butterfly-bush	<i>Buddleja davidii</i>	Medium	2022
	Canadian Fleabane	<i>Conyza canadensis</i>	Medium	2014
	Cherry Laurel	<i>Prunus laurocerasus</i>	High	2017
	Common Cord-grass	<i>Spartina anglica</i>	High	2014
	Evergreen Oak	<i>Quercus ilex</i>	Medium	2020
	Giant Hogweed	<i>Heracleum mantegazzianum</i>	High	2022
	Himalayan Honeysuckle	<i>Leycesteria formosa</i>	Medium	2020
	Japanese Knotweed	<i>Fallopia japonica</i>	High	2021
	Sycamore	<i>Acer pseudoplatanus</i>	Medium	2020
	Three-cornered Garlic	<i>Allium triquetrum</i>	Medium	2022
	Wild Parsnip	<i>Pastinaca sativa</i>	Medium	2020
Mollusc				
	Jenkins' Spire Snail	<i>Potamopyrgus antipodarum</i>	Medium	2017
Reptile				
	Red-eared Terrapin	<i>Trachemys scripta</i>	Medium	2021
Terrestrial Mammal				
	Brown Rat	<i>Rattus norvegicus</i>	High	2017
	Eastern Grey Squirrel	<i>Sciurus carolinensis</i>	High	2017
	European Rabbit	<i>Oryctolagus cuniculus</i>	Medium	2018
	House Mouse	<i>Mus musculus</i>	High	2015

Table 4 - Irish Wetland Bird Survey (IWeBS) Data for Malahide Estuary (Source IWeBS Data Request)

Species	1% national	1% international	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Mean	Peak Months
Mute Swan	90.00	100.00	90*	47*	50*	89*		66*	61*	68*	62	54	62	Sep
Whooper Swan	150.00	340.00	2		1*								0	Jan, Mar, Nov, Dec
Light-bellied Brent Goose	350.00	400.00	943	1980	710			1565*	605	1121	242*	1177	942	Nov
Shelduck	100.00	2500.00	8*	262	120			569	321	416*	9	455	354	Nov
Wigeon	560.00	14000.00		157		1*		94	215	135	12*	104	112	Dec
Gadwall	20.00	1200.00		120	4*				4*	2*			1	Mar
Teal	360.00	5000.00	41	80	119	8*		163	196*	190*	70	85*	141	Dec
Mallard	280.00	53000.00	95	167	112	23*		81*	110*	127*	82	136*	107	Nov
Pintail	20.00	600.00		29	6			12*	39*	16*		12	16	Feb
Shoveler	20.00	650.00						24*	30	20*		1	15	Feb
Pochard	110.00	2000.00		2									0	Jan
Tufted Duck	270.00	8900.00										3	1	Nov
Scaup	25.00	3100.00							1*				0	Feb
Long-tailed Duck				3				1					0	Jan, Nov
Common Scoter	110.00	7500.00		30									0	Nov
Goldeneye	40.00	11400.00	51	50	36*			43*	14	24	20		20	Jan, Feb, Dec
Red-breasted Merganser	25.00	860.00	87*	57*	80			237*	23*	37	33	74	81	Feb, Oct, Nov, Dec
Red-throated Diver	20.00	3000.00		4					3*		8*	2*	3	Oct
Great Northern Diver	20.00	50.00			3*								0	Feb
Little Grebe	20.00	4700.00	23	11	8*	5*		33	84	39	52	35*	49	Jan
Great Crested Grebe	30.00	6300.00	34*	120	60	10*		83*	54	29	26	15*	41	Nov

Species	1% national	1% international	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Mean	Peak Months
Slavonian Grebe								1*					0	Feb
Cormorant	110.00	1200.00	6	101*	101*	21*		118*	99*	39*	97*	121*	95	Sep
Shag				32	8			12	2*	4	4	23	9	Jan
Little Egret	20.00	1100.00	2	17*	13	1*		35*	22*	20*	17*	15*	22	Oct
Grey Heron	25.00	5000.00	12*	16	19*	7*		30*	21*	17*	12	21*	20	Feb, Sep, Oct
Moorhen			4*	4*	6	6*		3*	4*	8	7	5*	5	Feb, Sep
Oystercatcher	610.00	8200.00	78	1300*	1833	2*		1523*	1242	1150	1863	1438	1443	Dec
Ringed Plover	120.00	540.00		71				75	240*	160*	170*	72	143	Oct, Nov
Golden Plover	920.00	9300.00	260	940*	200	5*			10*	10*	4*		5	Oct
Grey Plover	30.00	2000.00	3*	140	9			38	82*	50	2	85	51	Jan, Feb, Nov, Dec
Lapwing	850.00	72300.00	1180	900	590	29*		331	202	305	246	153*	247	Jan
Knot	160.00	5300.00	4*	440*	110			202	760	950*	200	156	454	Feb, Dec
Sanderling	85.00	2000.00		2	80			13	2*				3	Nov
Curlew Sandpiper				2*									0	Sep
Dunlin	460.00	13300.00	23	480	94*	1*		838	445*	299	57*	123*	352	Oct, Nov
Ruff			4	1*	2*	5*			1*	2*		3*	1	Sep
Jack Snipe				1					1*				0	Jan, Mar, Nov
Snipe			20*	25	56	4*		25*	3	17*	22	8*	15	Nov
Black-tailed Godwit	200.00	1100.00	296*	355	206*	167*		146*	245*	699*	577	214	376	Feb
Bar-tailed Godwit	170.00	1500.00	62*	213*	133			93*	107*	185	9	78	94	Feb
Whimbrel												1*	0	Sep
Curlew	350.00	7600.00	1	500	244*			363*	349*	232*	328	387	332	Oct, Nov
Redshank	240.00	2400.00	87	374*	145*	77*		473*	575*	410*	331*	355*	429	Sep, Oct
Greenshank	20.00	3300.00	26	43*	64*	1*		32*	43*	61*	25	35*	39	Sep, Oct

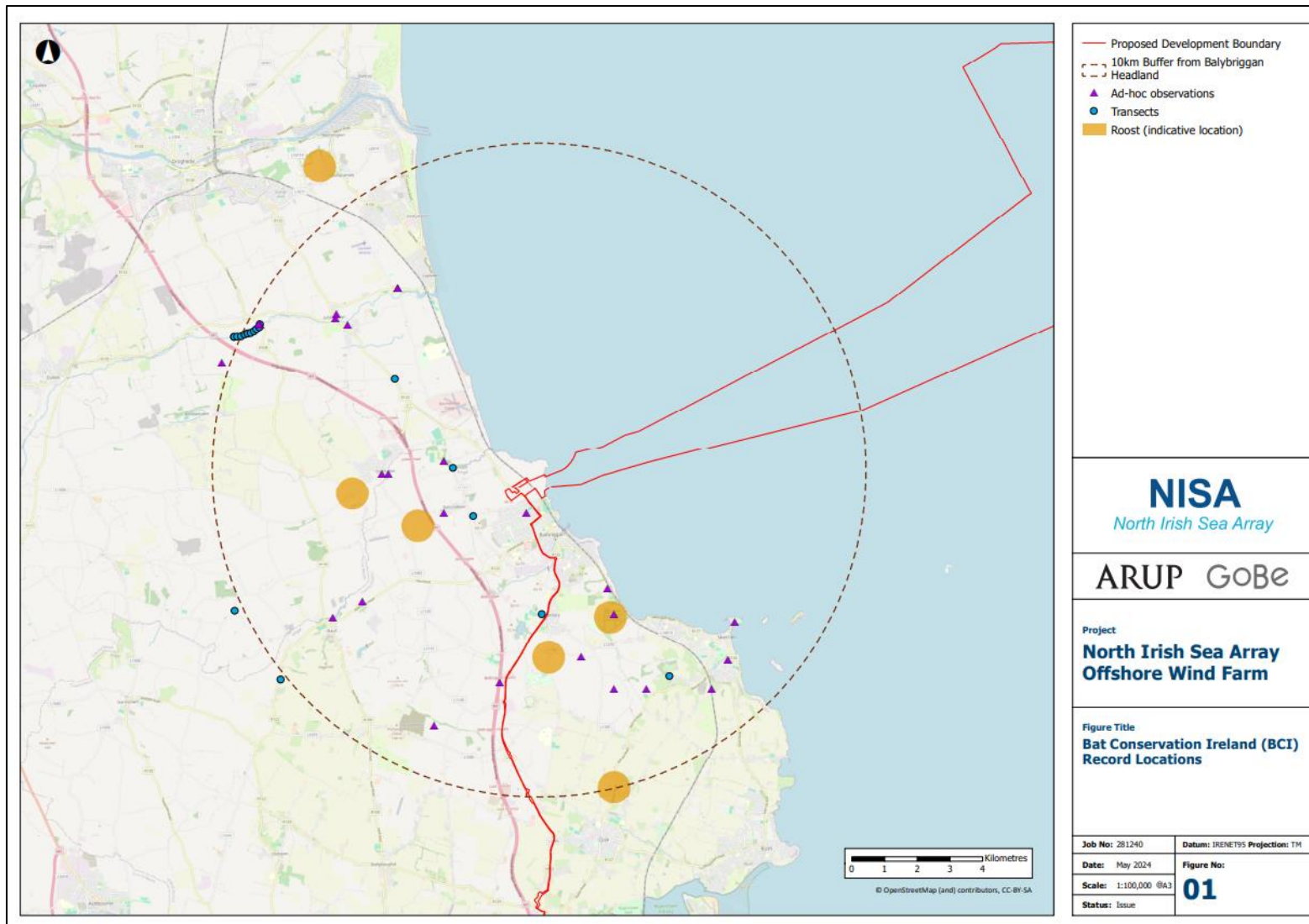


Figure 1 - Bat Conservation Ireland (BCI) roost records returned for a 10km search area of the landfall site. These roost sites are not exclusive and a buffer has been indicated to protect the exact location of the roost sites.