

Appendix II – Ornithological Assessment

2017 Ecological Study of Visitor Movement Areas

ENVIRONMENTAL SURVEYING AND MONITORING

FOR THE

WILD ATLANTIC WAY OPERATIONAL PROGRAMME

for: **Fáilte Ireland**
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Section 1 Methodology & Rationale

An assessment of ornithological interest at selected sites along the Wild Atlantic Way was carried out in July and August 2017. Details of the site selection process are explained in the Ecological Monitoring Report (CAAS 2017). This report contributes towards the Wild Atlantic Way Monitoring Program and supplements the floral/habitat assessments of impacts undertaken as part of the Ecological Monitoring Report. Findings from this report were incorporated into the ecological assessment of impacts and subsequent recommendations within the Ecological Monitoring Report.

Tourism at many Wild Atlantic Way discovery point sites rely heavily on the retention of the qualities, character and charm of the site, its landscape, its scenery and its wildlife. In return, tourism has the capacity to underpin the strength of the local economy and well-being of the community through the provision of business and employment. For ecotourism management to work, the potential and actual impacts of recreation on protected areas and ecosystems should be assessed. Visitors can be educated about the site, its environment, its qualities and the need for conservation.

1.1. General Approach

The visits were undertaken by an experienced, professional ornithologist; either Dr. Sinéad Cummins or Alan Lauder. The visit gathered information on the species present during the visit and the habitats of ornithological importance present. Signs of visitor behaviour were noted in relation to ornithological interest and information on the site's importance for birds was collated from published sources and key contacts.

This provided the means for a tabular and narrative analysis of species present and those species likely to occur in other seasons; also, the likelihood of any effects or impacts from visitors on ornithological interest.

1.2. Timing

The timing of the site visits/surveys was seasonally limited by the project duration. A single snapshot visit undertaken for each site in late summer.

Each site was visited for a minimum duration of one hour (e.g. single locus, small sites). On site, a visual survey of habitats was undertaken on arrival and from aerial photography in advance of the visit. The site was walked, surveying all areas of ornithological interest.

Each of the sites was independent and comprised of a variety of habitats and features with varying levels of ornithological interest. Therefore, the timing of the surveys varied across sites. Where there was likely to be significant breeding passerine interest each site was visited between dawn and 1200h, coinciding with high activity levels and hence to aid detectability. Sites of predominantly seabird interest were surveyed at any time during daylight hours. Sites with significant intertidal areas were visited during daylight hours ensuring that tide levels were not at the peak of high or low tidal states and visits were timed to encompass periods before and after high and low tides respectively to ensure detectability of wading birds using the site. Given the non-standard/non-specific survey type this was suitable for a general assessment of site characterisation for ornithological interest.

Seasonality effects, in terms of recording species present, were clearly important and the use of background information (such as IWeBS¹ and Bird Atlas² Data), local knowledge in some cases and in-

¹ Irish Wetland Bird Survey – Waterbird Monitoring in Ireland coordinated by Birdwatch Ireland.

² D. E. Balmer, S. Gillings, B. J. Caffrey, R. L. Swann, I. S. Downie, and R. J. Fuller (2013). *Bird Atlas 2007-11: The Breeding and Wintering Birds of Britain and Ireland*. BTO Books, Thetford, UK.

depth knowledge of bird-habitat associations and distribution enabled an estimation of species likely to occur in other seasons to be provided.

1.3. Survey methods

A general walkover method (akin to CBC³ and other transect style breeding bird survey methods) was used to determine a snapshot of the bird community present, this was augmented by general scanning and counting of offshore or intertidal species. In combination, these methods enabled numbers, distribution and usage of the area to be estimated. The surveyor would spend approx. 1 hour per km² (or 1 hour per 2km on linear sites) carrying out walkover transects on the site (and a minimum of 1 hour where sites were very small.)

Information was captured by visiting primary and secondary visitor impact zones as identified from visitor surveys provided by CAAS and also any adjacent, ornithologically significant, areas.

1.1.3. Information recording and reporting

The following information was recorded and provided:

1. Visit details (date/time/observer/weather & any other significant notes or observations e.g. disturbance levels etc.);
2. A data matrix for species recorded (in table 1) and species predicted to be likely (in table 2). These tables used the format shown below:

Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/Amber)	Area*: Core (1); 2 ⁰ (2); 3 ⁰ (3)	Totals Seen/Heard	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Mute Swan		A	1	26	√	√		A
Sandwich Tern	Y	A	2	1	√		√	R
Grey Heron			1	1		√		R
Lesser Black-backed Gull		A	1	18	√			C
Great Black-backed Gull		A	1	1	√			C

3. A map which included both distribution of key species noted and key bird habitats/features and any related potential conflict areas and images where appropriate – all as annotated notes;
4. A narrative assessment of the status of bird species at the site; and
5. A narrative assessment of potential visitor impacts and opportunities.

Any potential site management recommendations will be identified with regard to managing visitor impacts or enhancing visitor experience in relation to birds.

1.4. Sites Visited on the Wild Atlantic Way, 2017

- Galley Head, Co. Cork
- Lough Hyne, Co. Cork
- Dursey Sound, Co. Cork
- Teach Dhoire Fhíonáin (Derrynane Dunes & Beach), Co. Kerry
- Ballyheigue Beach, Co. Kerry

³ Common Bird Census Method (CBC) used to monitor numbers of common breeding birds.

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- Carrigafoyle Castle, Co. Kerry
- Cappagh Pier, Co. Clare
- Ballyvaughan Pier, Co. Clare
- Silver Strand, Barna, Co. Galway
- Omev Island, Co. Galway
- Oileán Chloigeann (Claggan Island), Co. Mayo
- Strandhill, Co. Sligo
- Murvagh Beach, Co. Donegal
- Magheraroarty, Co. Donegal
- Inch Island Lough (Inch Island Wildfowl Reserve), Co. Donegal

Note: It should also be noted where management recommendations and opportunities are executed by the relevant authority at site level as a result of this monitoring programme that compliance with Article 6 (3) of the Habitats Directive must be adhered to.

Section 2 Galley Head, Co. Cork

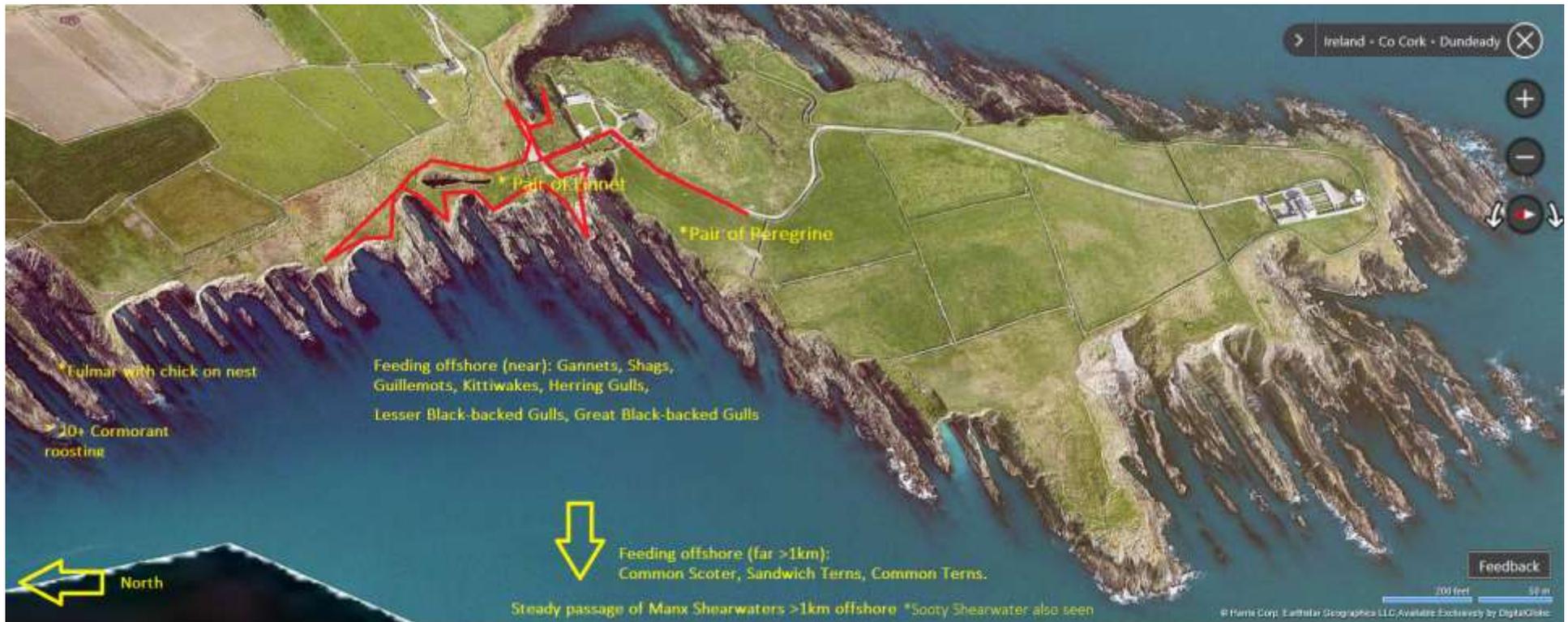
2.1. Site Description

Situated on the southwest coast, Galley Head is a promontory of land, jutting out into the Atlantic Ocean with Seven Heads and the Old Head of Kinsale situated to the east and Toe Head and Cape Clear Island to the west. The site consists of coastal grasslands and heath overlooking rugged rocky shore habitats, sink holes and marine waters. Beyond the main visitor car parking are farmhouses, farmland with some hedges and gardens. Most of the site is underlain by Devonian sandstone, siltstone and mudstone. *See Photo Montage for site photos.*

Galley Head from parts of the Galley Head to Duneen Point SPA and Chough (*Pyrrhocorax pyrrhocorax*) is listed as a feature of interest for the site. Galley Head is a well-known site for sea watching and for falls of migrant birds in spring and autumn (e.g. Black Redstart, Ring Ouzel, Barred Warbler, Yellow-browed Warbler, Firecrest).

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Site Map – Galley Head, Co. Cork



The main areas used by visitors to Galley Head are highlighted in red above. Significant records of bird activity recorded on the site visit (26/7/17) are also annotated on the above aerial photo map.

2.2. Survey

2.3. Species Status Assessment

Galley Head was visited on 26 July 2017, and observers Alan Lauder and Sinéad Cummins recorded all species seen/heard and subdivided any species recorded into those occupying primary or core areas of the site (i.e. (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex). Full details of the species recorded at the study site are given in Table 1. Given the survey methodology, a single visit incorporating look-see count methods was carried out (results presented in Table 1). An additional assessment (see Table 2) was made of any species likely to occur at the site given the habitats present and reviewing known records (e.g. Irish Birding www.irishbirding.com; NPWS reports etc).

Key species recorded on the site visit included the Annex 1-listed⁴ Peregrine Falcon (a pair were observed at the western side of the promontory, see Map above). Breeding was confirmed for Fulmar at the site (on the rocky shelves along the western edge of the site – see Map above) and a pair of Linnets (likely to have bred at the site also) were seen just above the visitor carpark. Offshore, good numbers of Manx Shearwater were seen streaming passed (likely on passage) along with records of feeding Gannets, Guillemot, Common Terns, Sandwich Terns, Kittiwakes and gulls (great Black-backed Gull and Lesser Black-backed Gull). In addition, the seaduck Common Scoter was seen just offshore. Species not recorded on the site visit but which are known to breed at Galley Head include the Annex 1-listed Chough (up to 11 breeding pairs in the Galley Head to Duneen Point SPA).

Table 1. Species Status Assessment based on site survey.

Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area*: Core (1); 2 ^o (2); 3 ^o (3)	Totals Seen / Hear d	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Common Scoter	Y (Wintering)	R (B)	3	√		√		R
Fulmar			1	√	√			C
Sooty Shearwater			3	√			√	S
Manx Shearwater	Y	A	3	√			√	R
Gannet			2	√	√			A
Cormorant		A (B/W)	1	√	√			C
Shag		A	2		√			C
Guillemot		A	2		√			C
Sandwich Tern	Y	A	3	√	√			C
Common Tern	Y	A	3	√	√			R
Kittiwake		A	2		√			R
Lesser Black-backed Gull		A	2		√			R
Herring Gull		R	1		√			R
Great Black-backed Gull		A	2		√			C
Peregrine	Y		1		√			C

⁴ Birds Directive 2009/147/EC.

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Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area*: Core (1); 2 ^o (2); 3 ^o (3)	Totals Seen / Hear d	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Magpie			1		√			C
Swallow			1		√			C
House Martin		A	1		√			R
Wren			2		√			R
Starling		A	2		√			C
Meadow Pipit		R	1		√			C
Rock Pipit			1		√			C
Linnet		A	1		√			C

* Note: Species recorded at the core site (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex).

Table 2. Additional species likely to occur at the site.

This assessment is based on habitats present and a review of relevant historical reports and anecdotal evidence.

Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Scaup		A	3	1		√		S
Red-breasted Merganser			3	1		√		R
Pheasant			2	2	√			R
Red-throated Diver	Y	A	3	1		√		R
Great Northern Diver		A (W)	3	1		√		R
Wilson's Storm Petrel			3	1			√	S
Storm Petrel	Y	A	3	2			√	R
Cory's Shearwater			3	2			√	S
Balearic Shearwater			3	1			√	S
Little Egret	Y		1	1		√		S
Grey Heron			1	1		√		S
Great Crested Grebe		A (B/W)	2	2	√			S
Sparrowhawk		A	1	2				S
Buzzard			1	2				S
Oystercatcher		A (B/W)	1	2		√		C
Ringed Plover			1	2		√		S
Whimbrel			1	1			√	S
Curlew		R	1	2		√		R

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Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Black-tailed Godwit		A	1	1		√		S
Turnstone			1	2		√		R
Dunlin	Y	R	1	1		√		S
Common Sandpiper			1	1		√		S
Greenshank			1	1		√		S
Redshank		R	1	2		√		R
Snipe		A (B/W)	1	2		√		S
Arctic Skua			3	1			√	S
Great Skua			3	1			√	S
Puffin		A	3	2				R
Black Guillemot		A	3	1				R
Razorbill		A	3	2				R
Arctic Tern	Y	A	3	2			√	S
Great Skua			3	1			√	S
Pomarine Skua			3	1			√	S
Arctic Skua			3	1			√	S
Long-tailed Skua			3	1			√	S
Sabine's Gull			3	1			√	S
Black-headed Gull		R	2	2	√			C
Little Gull		A	3	1			√	S
Mediterranean Gull		A	3	1			√	S
Common Gull			3	2	√			R
Ring-billed Gull			3	1			√	S
Yellow-legged Gull			2	1			√	S
Glaucous Gull			2	1			√	S
Rock Dove			1	2	√			R
Stock Dove			2	1	√			R
Woodpigeon			2	2	√			C
Collared Dove			2	1	√			C
Cuckoo			2	1			√	R
Barn Owl	Y	A	2	1				R
Swift		A	2	2			√	S
Kestrel		A	1	2	√			R
Merlin	Y	A	1	2	√			R
Chough	Y	A	1	2	√			C
Jackdaw			1	2	√			C
Rook			1	2	√			C
Hooded Crow			1	2	√			C
Raven			1	2	√			C
Goldcrest			2	1	√			C

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Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Blue Tit			2	1	√			R
Great Tit			2	1	√			R
Coal Tit			2	1	√			R
Skylark		A	1	2	√			C
Sand Martin		A	1	2				R
Long-tailed Tit			2	1	√			R
Chiffchaff			2	1	√			S
Willow Warbler			2	1	√			S
Blackcap			2	1	√			S
Whitethroat			2	1	√			S
Grasshopper Warbler			2	1	√			S
Sedge Warbler			2	1	√			S
Reed Warbler		A	2	1	√			S
Blackbird			2	2	√			R
Song Thrush			2	2	√			R
Fieldfare			2	2		√		R
Redwing			2	2		√		R
Mistle Thrush		A	2	2	√			R
Robin		A	2	2	√			C
Pied Flycatcher			2	2			√	S
Red-breasted Flycatcher			2	1			√	S
Black Redstart			2	1			√	R
Whinchat		R	2	1			√	R
Stonechat		A	2	2	√			R
Wheatear		A	2	1	√			R
Duncock			2	2	√			C
House Sparrow		A	2	2	√			C
Yellow Wagtail		A	2	1			√	S
Grey Wagtail			2	1				S
Pied Wagtail (<i>yarrellii</i>)			2	1	√			R
Chaffinch			2	2	√			R
Bullfinch			2	1	√			R
Greenfinch		A	2	1	√			R
Lesser Redpoll			1	2	√			R
Common Crossbill			1	1			√	S
Goldfinch			1	2	√			R
Siskin			1	1			√	R
Snow Bunting			1	1			√	S
Lapland Bunting			1	1			√	S
Yellowhammer		R	1	2	√			R

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Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Reed Bunting			1	1	√			R

*Note: Species was not recorded on site visit but likelihood of occurrence assessed as possible (1) or probable (2).

2.4. Potential impacts on bird species present and their habitats from visitors

A preliminary assessment was carried out by the survey team of any negative impacts of recreational visitors on the species of interest at this site caused by recreational activities. It would appear that the site receives a relatively small number of visitors each day – given the size of the visitor car park. The potential risks to local bird population of current levels of visitors using the site include a small risk of disturbance to nesting seabirds along the cliffs and rocky promontories; and a small risk of trampling of ground-nesting birds near coastal paths (e.g. Meadow Pipit; Skylark). Overall, the condition of the coastal paths was good, with little evidence of erosion. However, any expansion in visitor numbers to the site may lead to deteriorating habitat quality of coastal heath and grassland and/or condition of the coastal path (particularly on the western side of the car park) and increased disturbance from visitors and associated activities (walking coastal paths, dog-walking, overnight camping etc.) may have a negative impact on breeding birds at the site in particular cliff nesting species (Peregrine Falcon; Chough and seabirds) and ground nesting species (Meadow Pipit, Stonechat, Skylark).

2.5. Management recommendations and opportunities

Suggested management recommendations include:

1. At present, there is no signage at this site to indicate its importance for birds. The erection of signs at the visitor parking area (see Photo Montage) could highlight the key species breeding in the area and provide guidance to visitors to ensure nesting birds are not disturbed.
2. Access to Galley Head Lighthouse is currently restricted. This hinders the overall visitor experience as some of the best vantage points for viewing seabirds on passage are not readily available. Our recommendation is that access is negotiated with the owners of the lighthouse (Commissioner of Irish Lights) to provide some access to visitors to the grounds of the lighthouse (seasonal and daytime restrictions) to allow visitors to truly experience all that this headland has to offer.
3. Any increase in visitor numbers to the site would require a review of current parking facilities which currently are limited (< 10 cars max).

1.2.5. Photo Montage Site photos



Plate 1. Galley Head Lighthouse and headland. *Note low-lying coastal cliffs.*



Plate 2. Stone walls along the coastal pathway provide perches for small passerines (e.g. Meadow Pipit, Stonechat, Wheatear).



Plate 3. Visitor Car Park. *Note lack of signage for visitors.*



Plate 4. Rocky promintories utilised by some nesting seabirds (e.g. Fulmar (Confirmed), Herring Gull (Probable)).

Section 3 Lough Hyne, Co. Cork

3.1. Site Description

Lough Hyne is a semi-enclosed marine lake situated three miles west of Skibbereen Co. Cork. It measures just 0.8 km by 0.6 km and it is believed that the Lough was a freshwater lake up to 4,000 years ago, when a rise in sea levels joined it with the sea. It is now a highly sheltered, seawater basin connected to the North Atlantic Ocean via a narrow inlet called Barloge Creek. At the northern end of Barloge Creek, there is a very narrow, shallow constriction known as the “Rapids”. The “Rapids” are no deeper than 5m at high tide and this highly restrictive sill leads to an asymmetrical tide with water flooding in for 4 hours and ebbing for 8.5 hours. The site is bordered by scrub, deciduous and mixed woodland, with fields above the site suitable for Chough.

Lough Hyne was designated Europe’s first Marine Nature Reserve in 1981 in order to protect the rich biodiversity that occurs within its depths. Lough Hyne Nature Reserve and Environs SAC is designated for the marine Annex I qualifying interests of large shallow inlets and bays, reefs and submerged or partially submerged sea caves. The concentration of the intertidal zone, the warmth and shelter of the waters and the lack of disturbance by the larger predators including man all combine to produce an extremely rich fauna which combines all that can be found in rock pools with species characteristic of shallow inshore areas. The best represented groups are probably the sponges, sea slugs, sea urchins and fish and, amongst the plants, the red seaweeds. Warm water species are especially prominent and for some of them this is their only station outside Iberia or the Mediterranean. The surrounding land contains good populations of passerine birds, including stonechat and linnet and summer migrants (e.g. willow warbler).

Visitor facilities include two car parks, one at the entrance to the Knockomagh Wood overlooking the Lough (owned by Coillte), the other along by the eastern shoreline of the Lough.

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Site Map – Lough Hyne, Co. Cork



The main areas used by visitors to Lough Hyne are highlighted in red above. Significant records of bird activity recorded on the site visit (26/7/17) are also annotated on the above aerial photo map.

3.2. Survey

3.3. Species Status Assessment

Lough Hyne was visited on 26 July 2017, and observers Alan Lauder and Sinéad Cummins recorded all species seen/heard and subdivided any species recorded into those occupying primary or core areas of the site (i.e. (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex). Full details of the species recorded at the study site are given in Table 1. Given the survey methodology (a single visit incorporating look-see count methods) was carried out (results presented in Table 1). An additional assessment (see Table 2) was made of any species likely to occur at the site given the habitats present and reviewing known records (e.g. Irish Birding www.irishbirding.com; NPWS reports etc.). The weather on the site visit was good, with dry conditions and good visibility.

Key species recorded on the site visit (see Table 1) included the Annex 1-listed⁵Chough (a single bird was observed in flight above the eastern shore, see Map above) and the Amber-listed⁶ Mute Swan, Cormorant and House Martin. Breeding was likely for a number of species recorded at the site including Goldcrest, Dunnock, Rook, Wood Pigeon, Mute Swan, Hooded Crow, House Martin and Bullfinch. The range of woodland and scrub habitats adjacent to the Lough are likely home to many breeding and wintering birds which are highlighted in Table 2. An assessment of the likelihood of whether these birds are likely breeding, wintering or on passage is also given along with a qualitative population assessment.

Table 1. Species Status Assessment based on site survey.

Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area: Core (1); 2 ⁰ (2); 3 ⁰ (3)	Totals Seen/ Heard	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Mute Swan		A	1	√				R
Gannet			2	√	√			A
Cormorant		A (B/W)	1	√	√			C
Woodpigeon			2	√	√			C
Chough	Y	A	1	√	√			C
Rook			1	√	√			A
House Martin		A	1	√	√			C
Dunnock			2	√	√			A
Bullfinch			2	√	√			C

* Note: Species recorded at the core site (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex).

⁵ Birds Directive 2009/147/EC.

⁶ Colhoun, K. & Cummins, S. (2013) Birds of Conservation Concern in Ireland 2014–2019. *Irish Birds*. Vol 9, 523-544.

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Table 2. Additional species likely to occur at the site.

This assessment is based on habitats present and a review of relevant historical reports and anecdotal evidence.

Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Scaup		A	3	1		√		S
Common Scoter	Y (Wintering)	R (B)	3	1		√		S
Red-breasted Merganser			3	1		√		R
Pheasant			2	2	√			R
Red-throated Diver	Y	A	3	1		√		R
Great Northern Diver		A (W)	3	1		√		R
Fulmar			1	1				R
Wilson's Storm Petrel			3	1			√	S
Storm Petrel	Y	A	3	2			√	R
Cory's Shearwater			3	2			√	S
Sooty Shearwater			3	1			√	S
Manx Shearwater	Y	A	3	1			√	R
Balearic Shearwater			3	1			√	S
Shag		A	2		√			C
Little Egret	Y		1	1		√		S
Grey Heron			1	1		√		S
Great Crested Grebe		A (B/W)	2	2		√		S
Sparrowhawk		A	1	2	√			S
Buzzard			1	1				S
Oystercatcher		A (B/W)	1	2		√		R
Ringed Plover			1	2		√		S
Whimbrel			1	1			√	S
Curlew		R	1	2		√		R
Black-tailed Godwit		A	1	1		√		S
Turnstone			1	2		√		R
Dunlin	Y	R	1	1		√		S
Common Sandpiper			1	1		√		S
Greenshank			1	1		√		S
Redshank		R	1	2		√		R
Snipe		A (B/W)	1	2		√		S
Arctic Skua			3	1			√	S
Great Skua			3	1			√	S

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area: Core (1); 2 ⁰ (2); 3 ⁰ (3)	Likely occurrenc e at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Puffin		A	3	2				R
Black Guillemot		A	3	1				S
Razorbill		A	3	2				S
Guillemot		A	2	1				S
Sandwich Tern	Y	A	3	1	√			R
Common Tern	Y	A	3	1	√			R
Arctic Tern	Y	A	3	2			√	S
Great Skua			3	1			√	S
Pomarine Skua			3	1			√	S
Arctic Skua			3	1			√	S
Long-tailed Skua			3	1			√	S
Sabine's Gull			3	1			√	S
Kittiwake		A	2					R
Black-headed Gull		R	2	2	√			S
Little Gull		A	3	1			√	S
Mediterranean Gull		A	3	1			√	S
Common Gull			3	2	√			R
Ring-billed Gull			3	1			√	S
Lesser Black-backed Gull		A	2		√			R
Herring Gull		R	1		√			R
Yellow-legged Gull			2	1			√	S
Glaucous Gull			2	1			√	S
Great Black-backed Gull		A	2		√			R
Rock Dove			1	2				R
Stock Dove			2	1	√			R
Collared Dove			2	1	√			R
Cuckoo			2	1			√	R
Barn Owl	Y	A	2	1				S
Swift		A	2	2			√	S
Kestrel		A	1	2	√			R
Merlin	Y	A	1	2	√			R
Peregrine	Y		1		√			R
Magpie			1		√			A
Jackdaw			1	2	√			A
Hooded Crow			1	2	√			A
Raven			1	2	√			R
Goldcrest			2	1	√			A
Blue Tit			2	1	√			A
Great Tit			2	1	√			A
Coal Tit			2	1	√			A

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area: Core (1); 2 ⁰ (2); 3 ⁰ (3)	Likely occurrenc e at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Skylark		A	1	2	√			C
Sand Martin		A	1	2				S
Swallow			1		√			C
Long-tailed Tit			2	1	√			C
Chiffchaff			2	1	√			A
Willow Warbler			2	1	√			A
Blackcap			2	1	√			A
Whitethroat			2	1	√			C
Grasshopper Warbler			2	1	√			S
Sedge Warbler			2	1	√			R
Reed Warbler		A	2	1	√			S
Wren			2	2	√			R
Treecreeper			2	2	√			C
Starling		A	2	2	√			A
Blackbird			2	2	√			A
Song Thrush			2	2	√			A
Fieldfare			2	2		√		R
Redwing			2	2		√		R
Mistle Thrush		A	2	2	√			A
Robin		A	2	2	√			A
Pied Flycatcher			2	2			√	C
Red-breasted Flycatcher			2	1			√	S
Black Redstart			2	1			√	R
Whinchat		R	2	1			√	R
Stonechat		A	2	2	√			C
Wheatear		A	2	1	√			C
House Sparrow		A	2	2	√			A
Yellow Wagtail		A	2	1			√	S
Grey Wagtail			2	1				S
Pied Wagtail (yarrellii)			2	1	√			C
Meadow Pipit		R	1	2	√			C
Rock Pipit			1	2	√			C
Chaffinch			2	2	√			A
Greenfinch		A	2	1	√			A
Linnet		A	1	2	√			A
Lesser Redpoll			1	2	√			C
Common Crossbill			1	1			√	S
Goldfinch			1	2	√			C
Siskin			1	1			√	C
Snow Bunting			1	1			√	S

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area: Core (1); 2 ⁰ (2); 3 ⁰ (3)	Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Lapland Bunting			1	1			√	S
Yellowhammer		R	1	2	√			R
Reed Bunting			1	1	√			R

3.4. Potential impacts on bird species present and their habitats from visitors

A preliminary assessment was carried out by the survey team of any negative impacts of recreational visitors on the species of interest at this site caused by recreational activities.

3.5. Activities at the site

It would appear that the site receives good numbers of visitors each day – with two visitor car parks (see Photo Montage for site photos). On the site visit, both car parks were almost full and activities observed by visitors included open water swimming, kayaking, walking/dog walking, outdoor kick boxing lessons and also other likely activities include scuba-diving and line fishing. The potential risks to local bird population given current levels of visitors using the site are low. There is a small risk of water pollution/litter by visitors themselves and/or from their vehicles, kayaks etc. and a small risk of disturbance to nesting birds in the lands adjacent to the Lough by walkers (no known breeding birds on the Lough itself). The condition of the trails/paths on the circular woodland walk (*Knockomagh Wood, an oak and beech woodland*) overlooking the Lough are reasonable albeit with some evidence of erosion at the summit where there is a viewing point. Any expansion in visitor numbers to the site may lead to deteriorating habitat quality of the woodland walk and increase the risk of pollution/litter to the Lough through increased visitor traffic and activities i.e. walking trails, dog-walking, overnight camping etc. Furthermore, recreational activities such as kayaking should occur at levels that do not adversely disturb any birds feeding in the lough.

3.6. Management Recommendations and opportunities

Suggested management recommendations include:

1. At present, there is some signage at this site to indicate common birds found at Lough Hyne (see Plate 2, Photo Montage) but the signage does not indicate the importance of the site for many species and does not highlight the unique attraction of seeing Gannets feeding in the Lough itself. The erection of new signage at the visitor parking area (see plate 3, Photo Montage) could highlight key species breeding in the area and promote the site to visitors as a place to view feeding Gannets up close and from the comfort of your vehicle. A fixed visitor telescope could be provided to allow visitors to view Gannets and other birds using the Lough.
2. Monitoring of the recreational activities at the reserve could be facilitated by a part-time warden during the peak summer months when visitor numbers are highest, to ensure that these activities do not adversely affect the site interests and to facilitate educational options to visitors (daily nature walks/talks for example).
3. Given the narrow roads leading to the site and at the site itself, future growth in visitor numbers would require a review of existing parking options and visitor facilities. Any new developments would have to ensure that there is no risk to the Lough catchment from pollution.

3.7. Photo Montage Site photos



Plate 1. Lough Hyne (*inner section by visitor car park*).



Plate 2. Visitor signage at Lough Hyne. Note the birds section is limited in its scope and could be updated.



Plate 3. Visitor Car Park adjacent to Lough Hyne.



Plate 4. Woodland and scrub habitats adjacent to Lough Hyne.



Plate 5 Mature hedgerows adjacent to the Lough on the western shoreline.

Section 4 Dursey Sound, Co. Cork

4.1. Site Description

Dursey Sound discovery point is situated on the southwest coast, Lambs Head is a promontory of land, jutting out into the Atlantic Ocean with Sheep's Head situated to the east and the Iveragh Peninsula (Co. Kerry) to the west. Nearby the Bull and the Cow Rocks are home to a large breeding colony of Northern Gannets. The site consists of coastal grasslands, made up of short sward (due to sheep and cattle grazing) and patches of heath overlooking rugged rocky shore habitats and marine waters. Beyond the main visitor car parking is a prominent viewing point on the hill overlooking the cable car which runs from Lamb's Head to Dursey Island for tourists. The island is separated from the mainland by a narrow stretch of water called the Dursey Sound which has a very strong tidal race, with a reef of rocks in the centre of the channel which is submerged at high tides. Most of the site is underlain by Devonian sandstone, siltstone and mudstone, with small areas of igneous rocks occur at Cod's Head, Dursey Island. *See Photo Montage for site photos.*

The site forms part of the Beara Peninsula SPA and Chough (*Pyrrhocorax pyrrhocorax*) is listed as a feature of interest for the site. Dursey Island across the Dursey Sound is a well-known site for sea watching and for falls of migrant birds in spring and autumn (e.g. Black Redstart, Hoopoe, Ring Ouzel, Dusky Warbler, Grasshopper Warbler, Yellow-browed Warbler, Little Bunting, Short-eared Owl).

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Site Map – Garnish Point, Lamb’s Head, Co. Cork



The main areas used by visitors to Garnish Point (Durseys Sound) are highlighted in red above. Significant records of bird activity recorded on the site visit (26/7/17) are also annotated on the above aerial photo map.

4.2. Survey

4.3. Species Status Assessment

Dursey Sound at Lamb's Head (on the Beara Peninsula) was visited on 26 July 2017, and observer Sinéad Cummins recorded all species seen/heard and subdivided any species recorded into those occupying primary or core areas of the site (i.e. (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex). Full details of the species recorded at the study site are given in Table 1. Given the survey methodology (a single visit incorporating look-see count methods) was carried out (results presented in Table 1). An additional assessment (see Table 2) was made of any species likely to occur at the site given the habitats present and reviewing known records (e.g. Irish Birding www.irishbirding.com; NPWS Reports etc.). The site visit was characterised by changeable weather conditions with some heavy rain showers and blustery winds and a large swell offshore.

Key species recorded on the site visit included the Annex 1-listed⁷ Chough (several were observed circling in the area above the cable car station on the mainland, see Map above). Chough are known to breed in the area, with the site lying within the Beara Peninsula SPA. In addition, the Annex-listed Manx Shearwater were also recorded with hundreds of birds seen offshore along with Northern Gannets (both of which are known to breed on the nearby The Bull and the Cow Rocks (SPA). Breeding was confirmed for a pair of Stonechats (with fledged young) which were seen just south of the visitor carpark. Offshore, good numbers of Manx Shearwaters were seen streaming past (breeding birds and likely some on passage) along with a single Sooty Shearwater, records of feeding Gannets, Kittiwakes and gulls (Great Black-backed Gull, Herring Gull, Common Gull and Lesser Black-backed Gull). In addition, Shags and Cormorants were seen feeding just offshore. Species not recorded on the site visit but which are known to breed nearby include the following seabird species: Guillemot, Razorbill and the Annex-listed Storm Petrel (all known to breed at the nearby The Bull and the Cow Rocks (SPA). Other species breeding at this colony include the Atlantic Puffin, Black-legged Kittiwake, Northern Fulmar, Great Black-backed Gull, Herring Gull (Red-listed BoCCI3⁸) and Cormorant.

Table 1. Species Status Assessment based on site survey.

Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area*: Core (1); 2 ⁰ (2); 3 ⁰ (3)	Totals Seen/ Heard	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Northern Fulmar			3	2	√			C
Sooty Shearwater			3	1			√	S
Manx Shearwater	Y	A	3	√	√		√	C
Northern Gannet			2	55+	√			A
Cormorant		A (B/W)	1	6	√			C
Shag		A	2	4	√			C
Black-legged Kittiwake		A	2	√	√			C
Lesser Black-backed Gull		A	2	√	√			C

⁷ Birds Directive 2009/147/EC.

⁸ Colhoun, K. & Cummins, S. (2013) Birds of Conservation Concern in Ireland 2014–2019. *Irish Birds*. Vol 9, 523-544.

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area*: Core (1); 2 ^o (2); 3 ^o (3)	Totals Seen/ Heard	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Herring Gull		R	1	21	√			C
Great Black-backed Gull		A	2	√	√			C
Oystercatcher		A (B/W)	1	2		√		R
Chough	Y	A	1	2	√			C
Swallow			1	2	√			C
Meadow Pipit		R	1	1	√			C
Rock Pipit			1	1	√			C
Stonechat		A	1	4	√			C
Northern Wheatear		A	2	1	√			R
Linnet		A	1	1	√			C
House Sparrow		A	1	2	√			R
Pied Wagtail (<i>yarrellii</i>)		A	2	2	√			C

* Note: Species recorded at the core site (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex).

Table 2. Additional species likely to occur at the site.

This assessment is based on habitats present and a review of relevant historical reports and anecdotal evidence.

Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurren ce at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Common Scoter	Y (Wint ring)	R (B)	3	1		√		S
Scaup		A	3	1		√		S
Red-breasted Merganser			3	1		√		S
Pheasant			2	2	√			R
Red-throated Diver	Y	A	3	1		√		S
Great Northern Diver		A (W)	3	1		√		R
Cory's Shearwater			3	2			√	S
Balearic Shearwater			3	1			√	S
Wilson's Storm Petrel			3	1			√	S
Storm Petrel	Y	A	3	2	√		√	A
Guillemot		A	2	1	√			A
Sandwich Tern	Y	A	3	1			√	R

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Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ⁰ (2); 3 ⁰ (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Common Tern	Y	A	3	1			√	R
Ringed Plover			1	2		√		S
Whimbrel			1	1			√	S
Curlew		R	1	2		√		R
Turnstone			1	2		√		R
Dunlin	Y	R	1	1		√		S
Greenshank			1	1		√		S
Redshank		R	1	2		√		R
Snipe		A (B/W)	1	2		√		S
Arctic Skua			3	1			√	S
Great Skua			3	1			√	S
Puffin		A	3	2				A
Black Guillemot		A	3	1		√		S
Razorbill		A	3	2	√			A
Arctic Tern	Y	A	3	2			√	S
Great Skua			3	1			√	S
Pomarine Skua			3	1			√	S
Arctic Skua			3	1			√	S
Long-tailed Skua			3	1			√	S
Sabine's Gull			3	1			√	S
Black-headed Gull		R	2	2	√			C
Little Gull		A	3	1			√	S
Mediterranean Gull		A	3	1			√	S
Common Gull			3	2	√			C
Ring-billed Gull			3	1			√	S
Yellow-legged Gull			2	1			√	S
Glaucous Gull			2	1			√	S
Rock Dove			1	2	√			R
Stock Dove			2	1	√			S
Woodpigeon			2	2	√			R
Collared Dove			2	1	√			S
Cuckoo			2	1			√	S
Barn Owl	Y	A	2	1				S
House Martin		A	1	1	√			R
Swift		A	2	2			√	S
Kestrel		A	1	2	√			R
Merlin	Y	A	1	2	√			R
Peregrine	Y		1		√			S
Little Egret	Y		1	1		√		S

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Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ⁰ (2); 3 ⁰ (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Grey Heron			1	1		√		S
Great Crested Grebe		A (B/W)	2	2	√			S
Sparrowhawk		A	1	2				S
Magpie			1		√			C
Wren			2		√			R
Jackdaw			1	2	√			C
Rook			1	2	√			C
Hooded Crow			1	2	√			C
Raven			1	2	√			C
Goldcrest			2	1	√			S
Blue Tit			2	1	√			S
Great Tit			2	1	√			S
Coal Tit			2	1	√			S
Skylark		A	1	2	√			C
Sand Martin		A	1	2				R
Long-tailed Tit			2	1	√			S
Chiffchaff			2	1	√			S
Willow Warbler			2	1	√			S
Blackcap			2	1	√			S
Whitethroat			2	1	√			S
Grasshopper Warbler			2	1	√			S
Sedge Warbler			2	1	√			S
Reed Warbler		A	2	1	√			S
Blackbird			2	2	√			R
Song Thrush			2	2	√			R
Fieldfare			2	2		√		S
Redwing			2	2		√		S
Mistle Thrush		A	2	2	√			R
Robin		A	2	2	√			C
Pied Flycatcher			2	2			√	S
Red-breasted Flycatcher			2	1			√	S
Black Redstart			2	1			√	R
Whinchat		R	2	1			√	R
Dunnock			2	2	√			C
House Sparrow		A	2	2	√			C
Yellow Wagtail		A	2	1			√	S
Grey Wagtail			2	1				S
Chaffinch			2	2	√			R
Bullfinch			2	1	√			S

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Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Greenfinch		A	2	1	√			R
Lesser Redpoll			1	2	√			R
Common Crossbill			1	1			√	S
Goldfinch			1	2	√			R
Siskin			1	1			√	S
Snow Bunting			1	1			√	S
Lapland Bunting			1	1			√	S
Yellowhammer		R	1	2	√			S
Reed Bunting			1	1	√			S
Starling		A	2		√			C

*Note: Species was not recorded on site visit but likelihood of occurrence assessed as possible (1) or probable (2).

4.4. Potential impacts on bird species present and their habitats from visitors

Tourism at sites such as Lamb's Head (Durse Island Cable Car), relies heavily on the retention of the qualities, character and charm of the site, its landscape, its scenery and its wildlife. In return, tourism has the capacity to underpin the strength of the local economy and well-being of the community through the provision of business and employment. For ecotourism management to work, the potential and actual impacts of recreation on protected areas and ecosystems should be assessed. Visitors can be educated about the site, its environment, its qualities and the need for conservation.

A preliminary assessment was carried out by survey team member Sinéad Cummins of any negative impacts of recreational visitors on the species of interest at this site caused by recreational activities. It would appear that the site receives a steady number of visitors each day – given the size of the visitor car park, with a permanent catering van pitched at the site. The potential risks to local bird population of current levels of visitors using the site are mainly centred on the risk of increased disturbance to Choughs which use the maritime grasslands along the peninsula to feed and are also known to breed along the coast of the peninsula (Beara Peninsula SPA); and a small risk of trampling of ground-nesting birds near coastal paths (e.g. Meadow Pipit; Skylark, Stonechat). Overall, the condition of the coastal paths was fair, with some evidence of erosion due to visitor numbers. Any expansion in visitor numbers to the site may lead to deteriorating habitat quality of coastal heath and grassland and/or condition of the coastal path (particularly on hillside behind the cable car station which is a popular look-out point and walking trail). Increased associated disturbance from activities (such as walking coastal paths, dog-walking, overnight camping etc.) may have a negative impact on breeding birds at the site in particular sensitive nesting species (Chough) and ground nesting species (Meadow Pipit, Stonechat, Skylark).

4.5. Management recommendations and opportunities

Suggested management recommendations include:

1. At present, there is general signage at this site indicating the history of the site and also the importance of the site for breeding Chough and other wildlife in the area (including seabirds and basking sharks). The erection of additional signage at the visitor parking area (see Photo

Montage) could provide guidance to visitors walking the trails behind the cable car station to stick to the paths provided and avoid unnecessary disturbance and/or trampling of ground-nesting birds.

2. Access to Dursey Island via the cable car is currently marketed as an opportunity for tourists to visit the island. The various wildlife tours of the island and of the neighbouring Bull & Cow Rocks seabird colony, highlight the unique attributes of the area and its wildlife and appear to be currently marketed at a level that does not adversely impinge on the site conservation interests.
3. Any increase in visitor numbers to the site should require a review of current road access from the main Allihies to Castletownbere road which is extremely narrow for larger vehicles such as camper vans and should take into account road safety considerations and local residents.

1.4.5. Photo Montage Site photos



Plate 1. Lamb's Head (Beara Peninsula). *Note cable-car in the distance.*



Plate 2. Cable Car on route to Dursey Island and visitor carpark with on-site mobile catering van.



Plate 3. Visitor Car Park. *Note narrow road access to location.*



Plate 4. Current visitor signage, which includes some information on birds present at the site.



Plate 5. Chough preening on rocks just below visitor car park.



Plate 6. Evidence of erosion of coastal trail paths on hillside behind Cable Car Station.

Section 5 Teach Dhoire Fhíonáin (Derrynane Dunes & Beach), Co. Kerry

5.1. Site Description

Situated on tip of the Iveragh Peninsula in Co. Kerry, Teach Dhoire Fhíonáin (Derrynane) consist of a sandy beach, with offshore rocky islands and is backed by large grass dunes and a sheltered inner sandy bay, with areas of reeds and with the historic Derrynane House located to the rear of the beach surrounded by mature trees (mixed woodland). The Derrynane Dunes Nature Trail consists of a walk across Derrynane Beach, its sand dunes and the woodland walks to the rear.

The site is part of Kenmare River SAC including the significant vegetated sea cliffs in the Derrynane area. The site includes areas of coastal dry heath. There is a long-established population of the mollusc *Vertigo angustior* in the dunes at Derrynane and breeding Natterjack Toads (*Bufo calamita*). See *Photo Montage for site and associated signage photos*.

Nearby Skellig Islands SPA is recognised as being internationally important for breeding seabirds. Skellig Michael supports several thousand pairs of Storm petrels (c. 10,000) and Puffin (c. 4,000 pairs), and smaller numbers of Guillemot, Black-legged Kittiwake, Northern Fulmar, Manx Shearwater and Razorbill, as well as some other seabird species. Little Skellig supports nearly 35,000 pairs of Northern Gannets.

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Site Map - Teach Dhoire Fhíonáin (Derrynane Dunes & Beach), Co. Kerry



The main areas used by visitors to Teach Dhoire Fhíonáin (Derrynane) are highlighted in red above with the main traffic occurring within this boundary. Significant records of bird activity recorded on the site visit (27/7/17) are also annotated on the above aerial photo map.

5.2. Survey

5.3. Species Status Assessment

Derrynane Beach and Nature Trail (on the Iveragh Peninsula, Co. Kerry) was visited on 27 July 2017, and observer Sinéad Cummins recorded all species seen/heard and subdivided any species recorded into those occupying primary or core areas of the site (i.e. (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex). Full details of the species recorded at the study site are given in Table 1. Given the survey methodology (a single visit incorporating look-see count methods) was carried out (results presented in Table 1). An additional assessment (see Table 2) was made of any species likely to occur at the site given the habitats present and reviewing known records (e.g. Irish Birding www.irishbirding.com; NPWS reports etc.). The site visit was characterised by changeable weather conditions with some heavy rain showers and blustery winds and a large swell offshore.

Key species recorded on the site visit included the Annex 1-listed⁹ Chough (an individual was observed flying above the dunes see Map above). Chough are known to breed in the area, with the site lying within the Iveragh Peninsula SPA. In addition, the Annex 1-listed Common Tern was also recorded feeding offshore and breed on nearby Two-Headed Island. Likewise, Northern Gannets (known to breed on the nearby Skellig's (SPA)) were recorded feeding offshore. Breeding was confirmed for Wren (recently fledged young seen) along some woodland edge behind the main visitor carpark. Offshore (including islands and the marine) gulls (Great Black-backed Gull, Herring Gull (Red-listed BoCCI3¹⁰), Common Gull, Black-headed Gull (Red-listed BoCCI3¹¹) and Lesser Black-backed Gull) were seen roosting and feeding. In addition, Shags and Cormorants were also seen feeding just offshore. Species not recorded on the site visit but which are known to breed nearby include the following seabird species: Northern Fulmar, Guillemot, Black-legged Kittiwake, Atlantic Puffin, Razorbill and the Annex 1-listed Storm Petrel and Manx Shearwater (all known to breed at the nearby Skellig's (SPA)). Summer migrants including Sedge Warbler and Sand Martin are likely breeding in the area.

Table 1. Species Status Assessment based on site survey.

Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area*: Core (1); 2 ⁰ (2); 3 ⁰ (3)	Totals Seen/ Heard	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Northern Gannet			1	50+	√			A
Cormorant		A (B/W)	2	√	√			C
Shag		A	2	2	√			C
Common Tern	Y	A	3	1	√		√	R
Lesser Black-backed Gull		A	2	20+	√			C
Herring Gull		R	1		√			C
Great Black-backed Gull		A	2	8+	√			C
Black-headed Gull		R	2	2	√			C

⁹ Birds Directive 2009/147/EC.

¹⁰ Colhoun, K. & Cummins, S. (2013) Birds of Conservation Concern in Ireland 2014–2019. *Irish Birds*. Vol 9, 523-544.

¹¹ Colhoun, K. & Cummins, S. (2013) Birds of Conservation Concern in Ireland 2014–2019. *Irish Birds*. Vol 9, 523-544.

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Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area*: Core (1); 2 ⁰ (2); 3 ⁰ (3)	Totals Seen/ Hear d	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Oystercatcher		A (B/W)	1	58		√		R
Turnstone			1	5		√		R
Ringed plover			1	3		√		R
Chough	Y	A	1	1	√			C
Hooded Crow			1	2	√			C
Chaffinch			1	2	√			C
Goldcrest		A	1	√	√			C
Dunnock			1	√	√			C
Treecreeper			1	√	√			R
Meadow Pipit		R	1	√	√			C
Rock Pipit			1	2	√			C
Linnet		A	1	3	√			C
Skylark		A	1		√			R
Sand martin		A		1	√			R
Pied Wagtail (<i>yarrellii</i>)		A	2	4	√			C
Goldfinch				2	√			R
Magpie				1				C
Woodpigeon					√			C
Lesser Redpoll				2	√			R
Sedge Warbler				1	√			R

* Note: Species recorded at the core site (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex).

Table 2. Additional species likely to occur at the site.

This assessment is based on habitats present and a review of relevant historical reports and anecdotal evidence.

Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ⁰ (2); 3 ⁰ (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Common Scoter	Y (Wintering)	R (B)	3	1		√		S
Scaup		A	3	1		√		S
Red-breasted Merganser			3	1		√		S
Pheasant			2	2	√			R
Red-throated Diver	Y	A	3	1		√		S

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Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ⁰ (2); 3 ⁰ (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Great Northern Diver		A (W)	3	1		√		R
Northern Fulmar			3	√	√			C
Sooty Shearwater			3	√			√	S
Manx Shearwater	Y	A	3	√	√		√	C
Black-legged Kittiwake		A	2		√			C
Cory's Shearwater			3	2			√	S
Balearic Shearwater			3	1			√	S
Wilson's Storm Petrel			3	1			√	S
Storm Petrel	Y	A	3	2	√		√	A
Guillemot		A	2	1	√			A
Sandwich Tern	Y	A	3	1			√	R
Ringed Plover			1	2		√		S
Whimbrel			1	1			√	S
Curlew		R	1	2		√		R
Turnstone			1	2		√		R
Dunlin	Y	R	1	1		√		S
Greenshank			1	1		√		S
Redshank		R	1	2		√		R
Snipe		A (B/W)	1	2		√		S
Arctic Skua			3	1			√	S
Great Skua			3	1			√	S
Puffin		A	3	2				A
Black Guillemot		A	3	1		√		S
Razorbill		A	3	2	√			A
Arctic Tern	Y	A	3	2			√	S
Great Skua			3	1			√	S
Pomarine Skua			3	1			√	S
Arctic Skua			3	1			√	S
Long-tailed Skua			3	1			√	S
Sabine's Gull			3	1			√	S
Little Gull		A	3	1			√	S
Mediterranean Gull		A	3	1			√	S
Common Gull			3	2	√			C
Ring-billed Gull			3	1			√	S
Yellow-legged Gull			2	1			√	S
Glaucous Gull			2	1			√	S
Rock Dove			1	2	√			R
Stock Dove			2	1	√			S
Woodpigeon			2	2	√			R

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Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ⁰ (2); 3 ⁰ (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Collared Dove			2	1	√			S
Cuckoo			2	1			√	S
Barn Owl	Y	A	2	1				S
House Martin		A	1	1	√			R
Swift		A	2	2			√	S
Kestrel		A	1	2	√			R
Merlin	Y	A	1	2	√			R
Peregrine	Y		1		√			S
White-tailed Eagle	Y	R						S
Little Egret	Y		1	1		√		S
Grey Heron			1	1		√		S
Great Crested Grebe		A (B/W)	2	2	√			S
Sparrowhawk		A	1	2				S
Wren			2		√			R
Jackdaw			1	2	√			C
Rook			1	2	√			C
Raven			1	2	√			C
Goldcrest			2	1	√			S
Blue Tit			2	1	√			S
Great Tit			2	1	√			S
Coal Tit			2	1	√			S
Skylark		A	1	2	√			C
Long-tailed Tit			2	1	√			S
Chiffchaff			2	1	√			S
Willow Warbler			2	1	√			S
Blackcap			2	1	√			S
Whitethroat			2	1	√			S
Grasshopper Warbler			2	1	√			S
Sedge Warbler			2	1	√			S
Reed Warbler		A	2	1	√			S
Blackbird			2	2	√			R
Song Thrush			2	2	√			R
Fieldfare			2	2		√		S
Redwing			2	2		√		S
Mistle Thrush		A	2	2	√			R
Robin		A	2	2	√			C
Pied Flycatcher			2	2			√	S
Red-breasted Flycatcher			2	1			√	S

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Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ⁰ (2); 3 ⁰ (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Black Redstart			2	1			√	R
Stonechat		A	1		√			C
Whinchat		R	2	1			√	R
Dunnock			2	2	√			C
House Sparrow		A	2	2	√			C
Yellow Wagtail		A	2	1			√	S
Grey Wagtail			2	1				S
Chaffinch			2	2	√			R
Bullfinch			2	1	√			S
Greenfinch		A	2	1	√			R
Lesser Redpoll			1	2	√			R
Common Crossbill			1	1			√	S
Goldfinch			1	2	√			R
Siskin			1	1			√	S
Snow Bunting			1	1			√	S
Lapland Bunting			1	1			√	S
Yellowhammer		R	1	2	√			S
Reed Bunting			1	1	√			S
Northern Wheatear		A	2		√			R
Starling		A	2		√			C

*Note: Species was not recorded on site visit but likelihood of occurrence assessed as possible (1) or probable (2).

5.4. Potential impacts on bird species present and their habitats from visitors

Tourism at sites such as Teach Dhoire Fhíonáin (Derrynane) is founded on the range of visitor experiences available from appreciation of the stunning landscape, ocean views, wildlife to historic value of the surrounding area to the recreational activities (watersports) on offer.

A preliminary assessment was carried out by survey team member Sinéad Cummins of any negative impacts of recreational visitors on the species of interest at this site caused by recreational activities. It would appear that the site receives good numbers number of visitors each day – given the size of the visitor car park and importance of the beach for recreation (including watersports such as kayaking) and nearby Derrynane House (birth place of Daniel O’ Connell) as visitor attractions in the local area. The potential risks to local bird population of current levels of visitors using the site are mainly centred on the risk of increased disturbance to breeding birds using the sand dunes including a small risk of trampling of ground-nesting birds near trails/paths (e.g. Meadow Pipit; Skylark, Stonechat). Overall, the condition of the paths was relatively good, with the dunes appearing to be in relatively intact condition. The dunes are also home to the Red-listed and rare Natterjack toad. Any expansion in visitor numbers to the site would need to be mindful of the endemic wildlife and sensitive habitats (including the vegetated rocky islets and coastal dunes and grassland). Increased associated disturbance from activities (such as walking coastal paths, dog-walking, water-sports, overnight camping etc.) could have a negative impact on birds and other wildlife at the site if not managed appropriately.

A Derrynane Conservation Management Plan has been drafted (in 2016) and includes plans for Derrynane House which houses a museum dedicated to the life of Daniel O'Connell and a Seashore Nature Trail.

5.5. Management recommendations and opportunities

Suggested management recommendations include:

1. At present, there is general signage at this site indicating the history of the site and also the importance of the site for birds including seabirds and other wildlife in the area (e.g. Natterjack Toads). However, some errors on the existing signage (see Plate 5 (b)) should be amended if not replaced altogether.
2. Access to Sand dunes from both the beach and visitor car park should include a notice of the sensitive nature of the dunes so that visitors are aware of the importance of sticking to the walking routes marked to avoid negative impacts on the site conservation interests.
3. Any increase in visitor numbers to the site should require a review of current road access which is narrow for larger vehicles such as camper vans and should take into account road safety considerations and local residents.

1.5.5. Photo Montage Site photos



Plate 1. Derrynane Beach, Co. Kerry



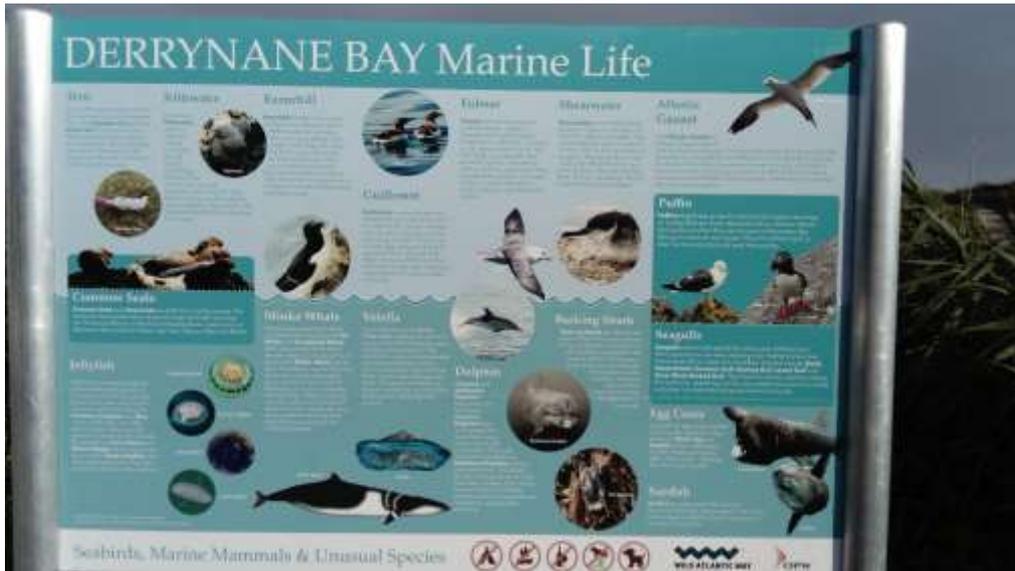
Plate 2. Note sea defences along part of dunes.



Plate 3. Derrynane Beach and dunes.



Plate 4. Watersports activities at the Western end of the beach.



(a)



(b)

Plate 5. Current visitor signage, which includes some information on birds present at the site. Note (b) includes some images on species present which are incorrect (e.g. Pied Wagtail incorrectly labelled as Grey Wagtail above).



Plate 6. Grass Dunes to the rear of Derrynane Beach with walking trails for visitors.



Plate 7. Evidence of horses using the coastal trail paths behind Derrynane beach.



Plate 8. Derrynane House



Plate 9. Inner sandy bay behind the main beach.



Plate 10. Map of the extent of visitor trails at the site.

Section 6 Ballyheigue Beach, Co. Kerry

6.1. Site Description

Situated north of Tralee Co. Kerry, and adjacent to the village of Ballyheigue, Ballyheigue Beach consists of a sandy beach on the seaward side, with holiday camping and mobile home park located nearer the northern end of the beach behind the extensive and grass sand dune complex. With a number of visitor entrances to the beach at Black Rock and at the more northern end (Ballyheigue town), the beach is well served with visitor amenities including a lifeguard hut, visitor toilets etc. Ballyheigue Beach is part of the larger Akeragh, Banna and Barrow Harbour SAC, which is designated for Annex I sand dune habitats i.e. Fixed coastal dunes with herbaceous vegetation, Shifting dunes along the shoreline with *Ammophila arenaria* and Humid dune slacks. In addition, a small area of saltmarsh near Black Rock (with a small area of Annex-listed Atlantic Saltmarsh habitat).

Ballyheigue Beach is also part of the wider wetland complex of Tralee Bay SPA which is designated for 22 wintering waterbird species including Light-bellied Brent Goose, Sanderling, Bar-tailed Godwit, Ringed Plover, Grey Plover, Scaup, Curlew, Redshank and Turnstone. In addition, other wintering waterbird species of note regularly recorded at Ballyheigue include Whimbrel, Long-tailed Duck, Purple Sandpiper, Iceland Gull, Mediterranean Gull, Little Stint and Curlew Sandpiper. Other species also recorded include the Annex 1-listed Chough, Wheatear, Twite (Red-listed¹²), Yellow Wagtail and Grasshopper Warbler. Images of the site are presented in *Photo Montage*.

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Site Map - Ballyheigue Beach, Co. Kerry



The main areas used by visitors to Ballyheigue Beach are highlighted in red above with the main traffic occurring within this boundary. Significant records of bird activity recorded on the site visit (27/7/17) are also annotated on the above aerial photo map.

6.2. Survey

6.3. Species Status Assessment

Ballyheigue Beach (including sand dunes) was visited on 27 July 2017, and observer Sinéad Cummins recorded all species seen/heard and subdivided any species recorded into those occupying primary or core areas of the site (i.e. (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex). Full details of the species recorded at the study site are given in Table 1. Given the survey methodology (a single visit incorporating look-see count methods) was carried out (results presented in Table 1). An additional assessment (see Table 2) was made of any species likely to occur at the site given the habitats present and reviewing known records (e.g. Irish Birding www.irishbirding.com; NPWS Reports etc.). The weather on the site visit was characterised by heavy rain showers, strong winds at times and big swells offshore.

Key species recorded on the site visit included the Red-listed Black-legged Kittiwake¹², which was seen onshore near the main car parking area. An important discovery was a Sand Martin breeding colony at cliffs at the north end of the beach (see Site Map above) with a minimum of 8 nest holes occupied and a total of 35 holes visible. Breeding Sand Martins were constantly flying into the occupied holes to feed young. The Sand Martin is Amber-listed¹ and is sensitive to disturbance at nest sites. Other Hirundines (Swallows and House Martins) were also recorded and likely breeding in suitable man-made sites nearby. Pied Wagtails foraged in the seaweed along the upper beach, along with Starlings. Skylarks and Meadow Pipits were recorded along the dunes and very likely breed at the site. The site was visited late July which is still quite early for wintering waders and other waterbirds to be recorded in significant numbers. Species present included Oystercatcher, Little Egret, Cormorant and Shag. Along the tide edge, gulls were recorded in small groups and included Great Black-backed Gull, Herring Gull (Red-listed BoCCI3¹²), Common Gull and Black-headed Gull (Red-listed BoCCI3²). No birds were recorded feeding offshore due to the very large swells and difficult weather conditions. Waterbird species not recorded on the site visit but which are known to occur at the site during winter months or on passage include the following species: Red-breasted Merganser, Red-throated Diver, Great Northern Diver, Black-throated Diver, Scaup, Great Crested Grebe, Common Scoter, Long-tailed Duck, Glaucous Gull, Iceland Gull, Light-bellied Brent Goose, Sanderling, Ringed Plover and Bar-tailed Godwit. Other species which have been recorded at the site in the past include Annex 1-listed Chough and Hen Harrier.

Table 1. Species Status Assessment based on site survey.

Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area*: Core (1); 2 ⁰ (2); 3 ⁰ (3)	Totals Seen/ Heard	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Cormorant		A (B/W)	1	13	√			C
Black-legged Kittiwake		A	1	2	√			R
Common Gull		A	1	13	√			C
Herring Gull		R	1	1	√			C
Great Black-backed Gull		A	1	√	√			C
Black-headed Gull		R	1	10	√			C
Oystercatcher		A (B/W)	1	1		√		C

¹² Colhoun, K. & Cummins, S. (2013) Birds of Conservation Concern in Ireland 2014–2019. *Irish Birds*. Vol 9, 523-544.

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area*: Core (1); 2 ⁰ (2); 3 ⁰ (3)	Totals Seen/ Heard	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Hooded Crow			1	10	√			C
Meadow Pipit		R	1	√	√			C
Pied Wagtail (<i>yarrellii</i>)		A	1	√	√			C
Starling		A	1	20	√			C
Skylark		A	1	√	√			C
Sand martin		A	1	7+	√			R
Little Egret	Y		1	1		√		R
House Martin		A	1	1	√			C
Swallow			1	√	√			C

* Note: Species recorded at the core site (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex).

Table 2. Additional species likely to occur at the site.

This assessment is based on habitats present and a review of relevant historical reports and anecdotal evidence.

Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area: Core (1); 2 ⁰ (2); 3 ⁰ (3)	*Likely occurren ce at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Common Scoter	Y (Winteri ng)	R (B)	3	1		√		R
Velvet Scoter			3	1		√		S
Scaup		A	3	1		√		R
Red-breasted Merganser			3	1		√		R
Pheasant			2	2	√			R
Red-throated Diver	Y	A	3	1		√		R
Great Northern Diver		A (W)	3	1		√		R
Black-throated Diver		A (W)	3	1		√		S
Northern Gannet			1	2	√			R
Shag		A	2	2	√			C
Northern Fulmar			3	2	√			R
Sooty Shearwater			3	1			√	S
Manx Shearwater	Y	A	3	2	√		√	S
Cory's Shearwater			3	1			√	S
Balearic Shearwater			3	1			√	S
Wilson's Storm Petrel			3	1			√	S

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Environmental Surveying and Monitoring for the Wild Atlantic Way Operational Programme

Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurren ce at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Storm Petrel	Y	A	3	2	√		√	R
Guillemot		A	2	2	√			C
Sandwich Tern	Y	A	3	2			√	R
Ringed plover			1	3		√		R
Dunlin	Y	R	1	5		√		R
Whimbrel			1	2			√	S
Curlew		R	1	2		√		R
Turnstone			1	2		√		R
Greenshank			1	2		√		R
Redshank		R	1	2		√		R
Snipe		A (B/W)	1	2		√		R
Arctic Skua			3	1			√	S
Puffin		A	3	2				S
Black Guillemot		A	3	1		√		S
Razorbill		A	3	2	√			R
Common Tern	Y	A	3	1	√		√	R
Sandwich Tern	Y	A	3	1			√	R
Arctic Tern	Y	A	3	2			√	S
Great Skua			3	1			√	S
Pomarine Skua			3	1			√	S
Arctic Skua			3	1			√	S
Long-tailed Skua			3	1			√	S
Sabine's Gull			3	1			√	S
Little Gull		A	3	1			√	S
Mediterranean Gull		A	1	1			√	S
Lesser Black-backed Gull			1	2	√			C
Ring-billed Gull			1	1			√	S
Yellow-legged Gull			1	1			√	S
Glaucous Gull			1	1			√	S
Iceland Gull			1	1			√	S
Stock Dove			2	1	√			S
Woodpigeon			2	2	√			R
Collared Dove			2	1	√			S
Cuckoo			2	1			√	S
Barn Owl	Y	A	2	1				S
Swift		A	1	2			√	S
Kestrel		A	1	2	√			R
Hen Harrier	Y	A	1				√	R
Marsh Harrier			1					S

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurren ce at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Merlin	Y	A	1	2	√			R
Peregrine	Y		2		√			S
Grey Heron			1	1		√		R
Great Crested Grebe		A (B/W)	1	2	√			R
Raven			1	2	√			C
Chough	Y	A	1	1	√			S
Magpie			1	1	√			C
Dunnock			2	√	√			C
Treecreeper			2	√	√			R
Chaffinch			2	2	√			C
Goldcrest		A	2	√	√			C
Woodpigeon			2		√			C
Rock Pipit			2	2	√			R
Sparrowhawk		A	1	2	√			S
Wren			2	2	√			R
Jackdaw			1	2	√			C
Rook			1	2	√			C
Blue Tit			2	1	√			R
Great Tit			2	1	√			R
Coal Tit			2	1	√			R
Long-tailed Tit			2	1	√			S
Chiffchaff			2	1	√			R
Willow Warbler			2	1	√			R
Blackcap			2	1	√			S
Whitethroat			2	1	√			S
Grasshopper Warbler			2	1	√			S
Sedge Warbler			2	1	√			R
Reed Warbler		A	2	1	√			S
Blackbird			2	2	√			R
Song Thrush			2	2	√			R
Fieldfare			2	2		√		S
Redwing			2	2		√		S
Mistle Thrush		A	2	2	√			R
Robin		A	2	2	√			R
Pied Flycatcher			2	2			√	S
Red-breasted Flycatcher			2	1			√	S
Black Redstart			2	1			√	S
Stonechat		A	1	9	√			C
Whinchat		R	2	1			√	S

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Environmental Surveying and Monitoring for the Wild Atlantic Way Operational Programme

Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Linnet		A	1	3	√			C
Dunnock			2	2	√			C
House Sparrow		A	2	2	√			C
Yellow Wagtail		A	1	1			√	S
Grey Wagtail			2	1				S
Chaffinch			2	2	√			R
Bullfinch			2	1	√			S
Greenfinch		A	2	1	√			R
Lesser Redpoll			1	2	√			R
Common Crossbill			1	1			√	S
Siskin			2	1			√	S
Snow Bunting			1	1			√	S
Lapland Bunting			1	1			√	S
Goldfinch			1	2	√			R
Reed Bunting			1	1	√			R
Yellowhammer		R	1	2	√			S
Northern Wheatear		A	1		√			S

*Note: Species was not recorded on site visit but likelihood of occurrence assessed as possible (1) or probable (2).

6.4. Potential impacts on bird species present and their habitats from visitors

A preliminary assessment was carried out by survey team member Sinéad Cummins of any negative impacts of recreational visitors on the species of interest at this site caused by their activities. It would appear that the site receives good numbers of visitors each day – with a large visitor car park at Ballyheigue and an additional car park and access road further south at Black Rock. The importance of the beach for recreation (including walkers/dog walkers, swimmers, surfers etc) and the nearby Holiday village located behind the dune system to both local residents and holiday-makers is evident. Although the beach is large (quite extensive) there are a number of potential risks to local bird populations. The location of the Sand Martin colony at the north end of the beach (on cliffs adjacent to existing man-made sea defences and below apartments) is precarious. Certainly, disturbance by walkers along this section of the beach is a consideration and any works to stop further coastal erosion would need to be mindful of the existing colony. Disturbance by walkers/dog walkers to breeding birds using the sand dunes include a small risk of trampling of ground-nesting birds near trails/paths (e.g. Meadow Pipit; Skylark). While most visitors would appear to stick to the beach itself, to ensure adequate protection of the sand dunes system, there should be guidance to walkers etc. No watercraft are allowed 300m seaward and vehicular access and horse-riding are prohibited on the beach.

In terms of bird interests, the site is most important for wintering waterbirds when visitor numbers are likely to be somewhat lower. Therefore, it is unlikely that visitors will cause significant disturbance during peak winter months except for the risks of disturbance from any loose dogs. Ideally owners would ensure their dogs are kept on leads, especially near the rocky shore section at the north end of the beach and at Black Rock where most of the intertidal feeding by waterbirds occurs.

6.5. Management recommendations and opportunities

Suggested management recommendations include:

1. At present, there is limited signage at this site to indicate the importance of the site for wintering waterbirds and for breeding Sand Martins. New signage could be put in place to educate visitors of its importance for wildlife (including the priority sand dune habitats).
2. Access to Sand dunes from both the beach and visitor car park should include a notice of the sensitive nature of the dunes so that visitors are aware of the importance of sticking to the walking routes marked to avoid negative impacts on the site conservation interests.

1.6.5. Photo Montage Site photos



Plate 1. Ballyheigue Beach, Co. Kerry



Plate 2. Ballyheigue Beach – Northern end of beach.



Plate 3. Ballyheigue Beach Dunes with mobile home holiday park situated behind the dunes.



Plate 4. Cliffs at northern end of beach with nesting Sand Martins. Note the holiday apartments above the cliffs.



Plate 5. Sea defences adjacent to nesting colony of Sand Martins



Plate 6. Sand Martin nesting holes visible below the top of the cliff.

Section 7 Carrigafoyle Castle, Co. Kerry

7.1. Site Description

Carrigafoyle Castle, Ballylongford, Co. Kerry was built by Conor Liath O'Connor-Kerry in the 1490s and sits on a rock in Ballylongford Creek off the Shannon estuary. The castle is a popular tourist attraction in the area with Ballylongford Creek part of the wider Lower Shannon River SAC. The site's importance is also recognised by the designation of the wider wetland complex of the River Shannon and River Fergus Estuaries SPA under the EU Birds Directive. The combination within this site of feeding areas and safe resting and roosting sites makes this site important local wetland in the region for wintering waders and waterfowl.

The larger River Shannon and River Fergus Estuaries SPA is designated for four wintering waterbird species that occur in numbers of international importance including Light-bellied Brent Goose, Black-tailed Godwit, Redshank. In addition, 17 species have populations of national importance including Cormorant and wildfowl species (Whooper Swan, Shelduck, Wigeon, Teal, Pintail, Shoveler, Scaup) and wader species (Ringed Plover, Golden Plover, Grey Plover, Lapwing, Knot, Bar-tailed Godwit, Curlew, Greenshank) and Black-headed Gull. Images of the site are presented in *Photo Montage*.

Site Map - Carrigafoyle Castle, Co. Kerry



The main areas used by visitors to the reserve are highlighted in red above with the main traffic occurring within this boundary. Significant records of bird activity recorded on the site visit (27/7/17) are also annotated on the above aerial photo map.

7.2. Survey

7.3. Species Status Assessment

Carrigafoyle Castle (accessed by the main visitor car park) was visited on 27 July 2017, and observer Sinéad Cummins recorded all species seen/heard and subdivided any species recorded into those occupying primary or core areas of the site (i.e. (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex). Full details of the species recorded at the study site are given in Table 1. Given the survey methodology (a single visit incorporating look-see count methods) was carried out (results presented in Table 1). An additional assessment (see Table 2) was made of any species likely to occur at the site given the habitats present and reviewing known records (e.g. Irish Birding www.irishbirding.com; NPWS Reports etc.). The weather on the site visit was characterised by strong winds.

Key species recorded on the site visit included the Annex 1-listed¹³ Little Egret which was seen feeding along the intertidal mud and wintering wader species including Annex 1-listed Dunlin and Redshank, and Curlew (both Red-listed) and Common Sandpiper (Amber-listed), Turnstone and Greenshank. Breeding was likely for the Amber-listed Little Grebe¹⁴ (adult in breeding plumage seen). Other common birds recorded in the general vicinity of the castle included Blackbird, Starling, Rooks, Great Tits and summer migrants Swallows were a common sight across the estuary. Several Rock Doves were seen flying around the high castle walls and breeding was confirmed for Swallow at the castle, with at least two active nests within the castle walls seen (both with young being fed by parent birds) – see Photo Montage, Plate 5.

Waterbird species not recorded on the site visit but which are known to occur at the site during winter months or on passage include the following species: Whooper Swan, Shelduck, Wigeon, Teal, Pintail, Shoveler, Scaup, Ringed Plover, Golden Plover, Grey Plover, Lapwing, Knot, Bar-tailed Godwit, Curlew, Greenshank. Other species which have been recorded at the site in the past include Kingfisher (Annex 1-listed¹³), Garganey, Curlew Sandpiper, Spotted Redshank, Spoonbill and Black-bellied Brent Goose.

Table 1. Species Status Assessment based on site survey.

Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area*: Core (1); 2 ^o (2); 3 ^o (3)	Totals Seen/ Heard	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Common Sandpiper		A		2				R
Little Grebe		A		1				R
Greenshank			1	1		√		R
Shelduck			1	2				C
Cormorant		A (B/W)	1	24	√			C
Little Egret	Y		1	2	√	√		R
Common Gull		A	1	1	√			C
Herring Gull		R	1	12	√			C

¹³Birds Directive 2009/147/EC.

¹⁴ Colhoun, K. & Cummins, S. (2013) Birds of Conservation Concern in Ireland 2014–2019. *Irish Birds*. Vol 9, 523-544.

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Environmental Surveying and Monitoring for the Wild Atlantic Way Operational Programme

Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/Amber)	Area*: Core (1); 2 ^o (2); 3 ^o (3)	Totals Seen/Heard	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Great Black-backed Gull		A	1	3	√			C
Black-tailed Godwit		A	1	1		√		C
Dunlin	Y	R	1	1		√		R
Curlew		R	1	2		√		C
Black-headed Gull		R	1	50	√			C
Magpie			2	1				C
Redshank		R	1	66		√		C
Oystercatcher		A (B/W)	2	2		√		C
Hooded Crow			2	√	√			C
Rock Dove			1	5	√			R
Blackbird			1	2	√			R
Linnet		A	2	2	√			C
Grey Wagtail		R	1	1	√			R
Great Tit			2	1	√			C
Starling		A	2	50+	√			C
Rook			2	7	√			C
Swallow			1	50+	√			C

* Note: Species recorded at the core site (1) centred across the main visitor areas used, secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex).

Table 2. Additional species likely to occur at the site.

This assessment is based on habitats present and a review of relevant historical reports and anecdotal evidence.

Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Red-breasted Merganser			1	1		√		R
Pheasant			2	2	√			R
Red-throated Diver	Y	A	1	1		√		S
Great Northern Diver		A (W)	1	1		√		S
Bar-tailed Godwit	Y	A	1	2				
Ringed plover			1	2		√		R
Whimbrel			1	2			√	S
Turnstone			1	2		√		R

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Snipe		A (B/W)	2	2		√		R
Arctic Tern	Y	A	1	2			√	S
Sabine's Gull			1	1			√	S
Little Gull		A	1	1			√	S
Mediterranean Gull		A	1	1			√	S
Lesser Black-backed Gull		A	1	2	√			C
Ring-billed Gull			1	1			√	S
Yellow-legged Gull			1	1			√	S
Glaucous Gull			1	1			√	S
Iceland Gull			1	1			√	S
Collared Dove			2	1	√			S
Cuckoo			2	1			√	S
Barn Owl	Y	A	2	1				S
Swift		A	2	2			√	S
Kestrel		A	2	2	√			R
Marsh Harrier			1	1				S
Merlin	Y	A	2	2	√			R
Peregrine	Y		2	2	√			S
Raven			2	2	√			C
Chough	Y	A	2	1	√			S
Treecreeper			2	1	√			S
Chaffinch			2	2	√			C
Goldcrest		A	2	2	√			C
Skylark		A	2	2	√			R
Sand martin		A	2	1	√			R
Rock Pipit			2	2	√			R
Jackdaw			2	2	√			C
Blue Tit			2	1	√			R
Coal Tit			2	1	√			R
Skylark		A	2	2	√			C
Long-tailed Tit			2	1	√			S
Chiffchaff			2	1	√			R
Blackcap			2	1	√			S
Whitethroat			2	1	√			S
Grasshopper Warbler			2	1	√			S
Sedge Warbler			2	1	√			R
Reed Warbler		A	2	1	√			S
Song Thrush			2	2	√			R
Fieldfare			2	2		√		S

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Redwing			2	2		√		S
Mistle Thrush		A	2	2	√			R
Pied Flycatcher			2	2			√	S
Red-breasted Flycatcher			2	1			√	S
Black Redstart			2	1			√	S
Whinchat		R	2	1			√	S
House Sparrow		A	2	2	√			C
Yellow Wagtail		A	2	1			√	S
Chaffinch			2	2	√			R
Lesser Redpoll			2	2	√			R
Common Crossbill			2	1			√	S
Siskin			2	1			√	S
Snow Bunting			2	1			√	S
Lapland Bunting			2	1			√	S
Northern Wheatear		A	2		√			S

*Note: Species was not recorded on site visit but likelihood of occurrence assessed as possible (1) or probable (2).

7.4. Potential impacts on bird species present and their habitats from visitors

A preliminary assessment was carried out by survey team member Sinéad Cummins of any negative impacts of recreational visitors on the species of interest at this site caused by recreational activities. It would appear that the site receives a small number of visitors each day. The visitor car park is small with the castle located a few kilometres outside Ballylongford village on a promontory overlooking the estuary. It is open from June-September inclusive. The surrounding habitats are mostly farmland and deciduous woodland with the estuary itself also featuring areas of saltmarsh, important for roosting waterbirds. The site is very unspoilt, with an important heritage (built and natural) and precautions should be taken to ensure the character of the site is not affected by any new visitor facilities.

In terms of bird interests, the site is most important for wintering waterbirds which arrive in early autumn and peak in mid-winter, when visitor numbers are likely to be lower, particularly as the castle is closed through the winter months. Therefore, it is unlikely that visitors will cause significant disturbance during peak winter months. The castle itself is home to a number of breeding pairs of swallows (summer migrants) which can have 2-3 broods through the summer months (May-Aug). There was no interpretative signage or guidance to visitors to explain the sensitive nature of the nesting swallows and likely nests of Rock Doves higher up on the castle walls.

7.6. Management recommendations and opportunities

Suggested management recommendations include:

1. At present, there is no general signage at this site indicating the importance of the site for waterbirds (see Plate 3 in Photo Montage). The current signage is inadequate.
2. The castle itself is home to a number of pairs of breeding Swallows (see Plate 5 in Photo Montage). Given the access and suitability of the castle for nesting Swallows, it is important that visitors over the summer months are made aware of the sensitivity of the nests (which are accessible by humans) and advised to be mindful of activities that may adversely disturb adults/chicks.

1.7.6. Photo Montage Site photos



Plate 1. Carrigafoyle Castle, Ballylongford Creek, Co. Kerry.



Plate 2 Ballylongford Creek looking from Carrigafoyle Castle towards Ballylongford village.

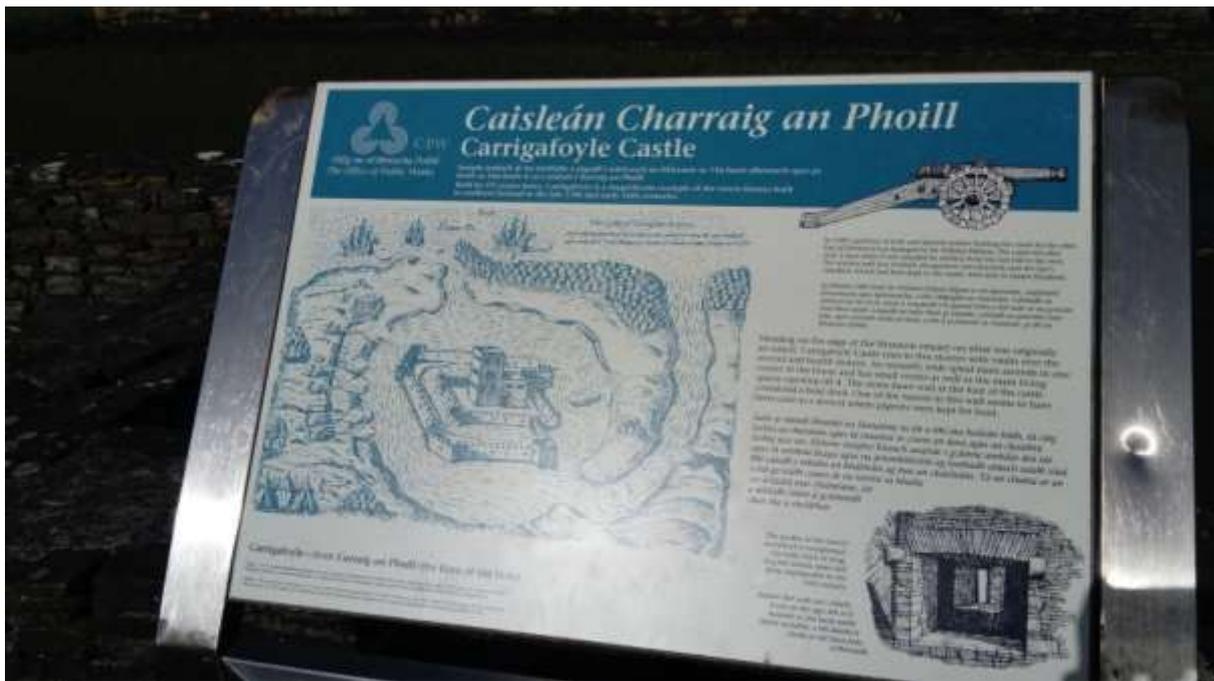


Plate 3. Current visitor signage, which includes some information on Castle's history but no information on birds present at the site in winter (e.g. wildfowl) or breeding birds within the castle (i.e. Swallows).



Plate 4. Interior of Castle Carrigafoyle looking upwards towards castle ceiling. Note castle ceiling is not intact and provides access to the internal structure for nesting swallows.



Plate 5. Active Swallow nest above doorway of castle.

Section 8 Cappagh Pier, Co. Clare

8.1. Site Description

Situated in west Clare, Cappagh Pier positioned on the Shannon Estuary is used for fishing and transport purposes. Kilrush Creek, now the location for Kilrush Marina, is an exceptionally well-sheltered area for boats. Hog Island and Scatterry Island lie across from Claddagh pier in the main estuary. The estuary shoreline is primarily gravel and shingle. Hog Island and Scatterry Island lie across from Claddagh pier in the main estuary. The estuary shoreline is primarily gravel and shingle. The main pier car park (small) is adjacent to the pier from which boat tours of the Shannon Estuary depart in peak season. Kilrush, together with Carrigaholt, are the main departure points for those who wish to view the large group of bottlenose dolphins that reside in the Shannon Estuary. With 3-4 sailings daily during the peak season (April-October), the boat tour operators adhere to a strict code of standards to protect and preserve the dolphin's environment. Kilrush Pier sites on the Lower River Shannon Estuary SAC, which is designated for multiple habitats along with Common Bottlenose Dolphin, Otter, River Lamprey, Sea Lamprey, Brook Lamprey, Salmon and Freshwater Pearl Mussel. Other sea mammals to be seen here throughout the year include Grey and Common Seals which are also regularly seen in Kilrush Creek Marina.

Kilrush is counted as part of the Irish Wetland Bird Survey (I-WeBs) and lies within subsite *Money Point - Baurnahard Pt* and part of the overall site Lower River Shannon. Wintering waterbird species known to regularly occur in this site include wildfowl species (e.g. Coot, Tufted Duck, Wigeon, Teal, Mallard, Shelduck, Pale-bellied Brent Goose), Cormorant, Black-headed Gull and wader species (e.g. Oystercatcher, Curlew and Lapwing). Kilrush is also part of the River Shannon and River Fergus Estuaries Special Protection Area (SPA) which is Ireland's largest wetland complex and is designated for 21 wintering waterbird species. Other bird species often found along the coastline at Kilrush include Black Guillemot, Common Tern, Redshank, Rock Pipits, Turnstone and Dunlin. Birds of prey include the Kestrel and Sparrowhawk. Hogg Island, just off Cappagh Pier, is known to hold roosting birds. Images of the site are presented in *Photo Montage*.

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Site Map - Cappagh Pier, Kilrush, Co. Clare



The main areas used by visitors to Cappagh Pier are highlighted in red above with the main traffic occurring within this boundary. Significant records of bird activity recorded on the site visit (28/7/17) are also annotated on the above aerial photo map. Please note weather conditions at the time of the site visit included blustery winds and showers and a strong swell offshore.

8.2. Survey

8.3. Species Status Assessment

Cappagh Pier was visited on 28 July 2017, and observer Sinéad Cummins recorded all species seen/heard and subdivided any species recorded into those occupying primary or core areas of the site (i.e. (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex). Full details of the species recorded at the study site are given in Table 1. Given the survey methodology (a single visit incorporating look-see count methods) was carried out (results presented in Table 1). An additional assessment (see Table 2) was made of any species likely to occur at the site given the habitats present and reviewing known records (e.g. Irish Birding www.irishbirding.com; NPWS reports etc.). The weather on the site visit was characterised by heavy rain showers and strong gusts and swells offshore.

With the strong onshore winds, few species were recorded on the site visit. Those that were included the Annex 1-listed Little Egret¹⁵ and the Red-listed Curlew feeding along the shingle intertidal margins. Cormorants were recorded feeding offshore, and a Rock Pipit and Pied Wagtails feeding along seaweed on the shingle shoreline. Visibility to Hog Island and Scattery Island was poor given the weather conditions. Some gulls were seen sheltering near the pier and along the shingle shore given the poor weather conditions. Other species recorded included Grey Heron, House Sparrow, Hooded Crow and House Martin.

Waterbird species not recorded on the site visit but which are known to occur at the site during winter months or on passage include the following species: Light-bellied Brent Goose, Great Crested Grebe, Redshank and Shelduck.

Table 1. Species Status Assessment based on site survey.

Species	Annex 1 (EU Birds Directive)	BoCCl3 (Red/ Amber)	Area*: Core (1); 2 ⁰ (2); 3 ⁰ (3)	Totals Seen/ Heard	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Cormorant		A (B/W)	2	2	√			C
Little Egret	Y		1	1	√			R
Grey Heron			2	1	√			R
Common Gull		A	2	4	√			C
Herring Gull		R	1	3	√			C
Great Black-backed Gull		A	2	√	√			C
Black-headed Gull		R	2	7	√			C
Curlew		R	1	2		√		R
Hooded Crow			1	2	√			C
Pied Wagtail (<i>yarrellii</i>)		A	2	6	√			C
Rook			1	1	√			C
Jackdaw			1	20+	√			C
Woodpigeon			2	2	√			C
House Sparrow		A	2	4	√			C

¹⁵ Birds Directive 2009/147/EC.

Appendix II - Ornithological Assessment for the 2017 Ecological Study of Visitor Movement Areas
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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area*: Core (1); 2 ^o (2); 3 ^o (3)	Totals Seen/ Heard	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
House Martin		A	1	2	√			R
Rock Pipit			1	1	√			C

* Note: Species recorded at the core site (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex).

Table 2. Additional species likely to occur at the site.

This assessment is based on habitats present and a review of relevant historical reports and anecdotal evidence.

Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Common Scoter	Y (Wintering)	R (B)	3	1		√		S
Velvet Scoter			3	1		√		S
Shag		A	3	2		√		C
Scaup		A	3	1		√		S
Red-breasted Merganser			3	1		√		R
Red-throated Diver	Y	A	3	1		√		S
Great Northern Diver		A (W)	3	1		√		R
Black-throated Diver		A (W)	3	1		√		S
Northern Gannet			1	2	√			R
Northern Fulmar			3	2	√			R
Sooty Shearwater			3	1			√	S
Manx Shearwater	Y	A	3	2	√		√	R
Black-legged Kittiwake		A	2	2	√			R
Cory's Shearwater			3	1			√	S
Balearic Shearwater			3	1			√	S
Wilson's Storm Petrel			3	1			√	S
Storm Petrel	Y	A	3	2	√		√	R
Guillemot		A	2	2	√			R
Sandwich Tern	Y	A	2	2	√		√	R

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Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Whimbrel			1	2			√	S
Oystercatcher		A (B/W)	1	2		√	√	R
Turnstone			1	2		√		R
Greenshank			1	2		√		R
Redshank		R	1	2		√		R
Ringed Plover			1	2		√	√	R
Dunlin		R	1	2			√	R
Snipe		A (B/W)	2	2		√		R
Arctic Skua			3	1			√	S
Puffin		A	3	2				R
Black Guillemot		A	3	1		√		S
Razorbill		A	3	2	√			R
Common Tern	Y	A	2	2	√		√	R
Arctic Tern	Y	A	3	2			√	S
Great Skua			3	1			√	S
Pomarine Skua			3	1			√	S
Arctic Skua			3	1			√	S
Long-tailed Skua			3	1			√	S
Sabine's Gull			3	1			√	S
Little Gull		A	3	1			√	S
Mediterranean Gull		A	1	1			√	S
Ring-billed Gull			1	1			√	S
Yellow-legged Gull			1	1			√	S
Glaucous Gull			1	1			√	S
Iceland Gull			1	1			√	S
Stock Dove			2	1	√			S
Woodpigeon			2	2	√			R
Collared Dove			2	1	√			S
Cuckoo			2	1			√	S
Barn Owl	Y	A	2	1				S
Swallow		A	1	2	√			R
Swift		A	2	2			√	S
Kestrel		A	2	2	√			R
Marsh Harrier			1					S
Merlin	Y	A	1	2	√			R
Peregrine	Y		2		√			S
Little Egret	Y		1	1		√		R

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Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Grey Heron			1	1		√		R
Great Crested Grebe		A (B/W)	1	2	√			R
Chough	Y	A	1	1	√			R
Magpie			2	1				C
Dunnock			2	√	√			C
Treecreeper			2	√	√			R
Chaffinch			2	2	√			C
Goldcrest		A	2	√	√			C
Meadow Pipit		R	2	2	√			R
Skylark		A	2		√			R
Sand martin		A	2	1	√			R
Woodpigeon			2		√			C
Sparrowhawk		A	1	2				S
Wren			2		√			R
Starling		A	1	2	√			R
Jackdaw			1	2	√			C
Rook			1	2	√			C
Blue Tit			2	1	√			R
Great Tit			2	1	√			R
Coal Tit			2	1	√			R
Skylark		A	1	2	√			C
Long-tailed Tit			2	1	√			S
Chiffchaff			2	1	√			R
Willow Warbler			2	1	√			R
Blackcap			2	1	√			S
Whitethroat			2	1	√			S
Sedge Warbler			2	1	√			S
Grasshopper Warbler			2	1	√			S
Reed Warbler		A	2	1	√			S
Blackbird			2	2	√			R
Song Thrush			2	2	√			R
Fieldfare			2	2		√		S
Redwing			2	2		√		S
Mistle Thrush		A	2	2	√			R
Robin		A	2	2	√			R
Pied Flycatcher			2	2			√	S
Red-breasted Flycatcher			2	1			√	S

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Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Black Redstart			2	1			√	S
Stonechat		A	2	1	√			S
Whinchat		R	2	1			√	S
Dunnock			2	2	√			C
House Sparrow		A	2	2	√			C
Yellow Wagtail		A	2	1			√	S
Grey Wagtail			2	1				S
Chaffinch			2	2	√			R
Bullfinch			2	1	√			S
Greenfinch		A	2	1	√			R
Lesser Redpoll			1	2	√			R
Common Crossbill			1	1			√	S
Linnet		A	2	1	√			R
Siskin			2	1			√	S
Snow Bunting			1	1			√	S
Lapland Bunting			1	1			√	S
Yellowhammer		R	1	2	√			S
Northern Wheatear		A	2		√			R

*Note: Species was not recorded on site visit but likelihood of occurrence assessed as possible (1) or probable (2).

8.4. Potential impacts on bird species present and their habitats from visitors

A preliminary assessment was carried out by survey team member Sinéad Cummins of any negative impacts of recreational visitors on the species of interest at this site caused by recreational activities. The visitor car park adjacent to the pier is small, but there is additional parking nearby. Likely that the visitors that do use the pier, do so to depart on the sailings of local boat tours to see the River Shannon Common Bottlenose Dolphins etc. The pier and adjoining paths are also likely important for local residents (including walkers/dog walkers). There are no obvious risks to local bird populations given the current levels of visitors using the site are small. Disturbance to waterbirds feeding along the upper intertidal shore is likely to be minimal, given the numbers recorded at the site and the presence of a sea wall. The wildlife tours to see dolphins adhere to strict protocols and are therefore unlikely to cause undue disturbance to waterbirds and seabirds roosting or feeding in the main channel.

8.5. Management recommendations and opportunities

No clear management recommendations for this site given the current visitor numbers, the numbers of waterbirds likely using the site in summer and winter and the existing amenities (e.g. Car park, signage etc).

1.8.5. Photo Montage Site photos



Plate 1. Cappagh Pier, Kilrush, Co. Clare. Note Scattery Island offshore.



Plate 2. Shingle and gravel intertidal shoreline adjacent to Cappagh pier.



Plate 3. Existing signage at Cappagh Pier, Kilrush.



Plate 4. Hog Island offshore.

Section 9 Ballyvaughan Pier, Co. Clare

9.1. Site Description

Situated in northwest Clare, Ballyvaughan Pier positioned in Ballyvaughan Bay at the most westerly end the wider Galway Bay wetland complex is popular with day trippers and tourists as a stop off point on the north Clare coast. The estuary shoreline is primarily gravel and shingle. The main pier car park (parking for 30+ cars) is adjacent to the pier which has moorings for a few sailboats. The pier is sheltered from the big expansive bay beyond. Ballyvaughan Pier is located in Galway Bay SAC, which is designated for multiple habitats including priority habitats e.g. limestone pavement, coastal lagoons, turloughs, Cladium fens and Common (Harbour Seal) and Otter. A few hundred metres further west along the shore is a small woodland walk with a bird hide and bug hotel (see Plate 4-7, Photo Montage).

Ballyvaughan Bay is counted as part of the Irish Wetland Bird Survey (I-WeBs) as part of the overall site Inner Galway Bay site. Wintering waterbird species known to regularly occur in this site include wildfowl species (e.g. Wigeon, Teal, Mallard, Shelduck, Pale-bellied Brent Goose), Cormorant, Black-headed Gull and wader species (e.g. Oystercatcher, Curlew, Ringed Plover, Sanderling and Lapwing). Inner Galway Bay SPA is designated for 20 wintering waterbird species including Great Northern Diver, Grey Heron, Red-breasted Merganser, Common Tern, Sandwich Tern, Ringed Plover and Light-bellied Brent Goose. In addition, other wintering waterbird species of note recorded include Common Scoter, Velvet Scoter, Surf Scoter. Annex 1-listed species (including Chough, Merlin, Manx Shearwater) have also been recorded using Ballyvaughan Bay. Images of the site are presented in *Photo Montage*.

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Site Map – Ballyvaughan Pier, Co. Clare



The main areas used by visitors to Ballyvaughan Pier are highlighted in red above with the main traffic occurring within this boundary. Significant records of bird activity recorded on the site visit (28/7/17) are also annotated on the above aerial photo map.

9.2. Survey

9.3. Species Status Assessment

Ballyvaughan Pier was visited on 28 July 2017, and observer Sinéad Cummins recorded all species seen/heard and subdivided any species recorded into those occupying primary or core areas of the site (i.e. (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex). Full details of the species recorded at the study site are given in Table 1. Given the survey methodology (a single visit incorporating look-see count methods) was carried out (results presented in Table 1). An additional assessment (see Table 2) was made of any species likely to occur at the site given the habitats present and reviewing known records (e.g. Irish Birding www.irishbirding.com; NPWS Reports etc.). The weather on the site visit was characterised by a strong onshore breeze.

With the onshore westerly winds on the day of the site visit, Sandwich Terns and Common Terns (both Annex 1-listed) could be seen feeding for sprat over sandbanks close to the pier. Other species recorded included the Red-listed Curlew feeding along the shingle intertidal margins. Cormorants and Shags were recorded feeding offshore and roosting along shoreline further east (from the fishing boat pier). Common Gulls roosted along the western shore of the bay. Other bird species recorded along the roadside gardens and woodland walk included Goldcrest, Chaffinch, Willow Warbler, Chiff Chaff, Robin, Dunnock, Bullfinch, House Sparrow, Woodpigeon, Starling, Jackdaw.

Waterbird species not recorded on the site visit but which are known to occur at the site during winter months or on passage include the following species: Light-bellied Brent Goose, Great Crested Grebe, Sanderling, Greenshank and Shelduck.

Table 1. Species Status Assessment based on site survey.

Species	Annex 1 (EU Birds Directive)	BoCCl3 (Red/ Amber)	Area*: Core (1); 2 ^o (2); 3 ^o (3)	Totals Seen/ Heard	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Cormorant		A (B/W)	2	30+	√			C
Shag		A	2	10+				C
Common Gull		A	2	45+	√			C
Herring Gull		R	1	1	√			C
Great Black-backed Gull		A	2	2	√			C
Black-headed Gull		R	2	√	√			C
Lesser Black-backed Gull		A	1	1	√			C
Sandwich Tern	Y	A	1	c. 20	√			R
Common Tern	Y	A	1	c. 40	√			R
Curlew		R	1	3		√		R
Hooded Crow			1	2	√			C
Pied Wagtail (<i>yarrellii</i>)		A	2	6	√			C
Rook			1	1	√			C
Starling		A	2	1				C

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area*: Core (1); 2 ⁰ (2); 3 ⁰ (3)	Totals Seen/ Heard	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Jackdaw			1	15	√			C
Woodpigeon			2	2	√			C
Wren			2	1	√			C
Dunnock			2	1	√			C
Chaffinch			2	1	√			C
Goldcrest		A	2	1	√			C
Robin		A	2	1	√			C
Bullfinch			2	1	√			R
Chiff Chaff			2	1	√			R
Willow Warbler			2	1	√			R
Linnet		A	2	1	√			R
House Sparrow		A	2	1	√			C

* Note: Species recorded at the core site (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex).

Table 2. Additional species likely to occur at the site.

This assessment is based on habitats present and a review of relevant historical reports and anecdotal evidence.

Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ⁰ (2); 3 ⁰ (3)	*Likely occurren ce at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Common Scoter	Y (Winterin g)	R (B)	3	1		√		S
Velvet Scoter			3	1		√		S
Scaup		A	3	1		√		S
Red-breasted Merganser			3	1		√		R
Red-throated Diver	Y	A	3	1		√		S
Great Northern Diver		A (W)	3	1		√		R
Black-throated Diver		A (W)	3	1		√		S
Northern Gannet			1	2	√			R
Northern Fulmar			3	2	√			R
Sooty Shearwater			3	1			√	S
Manx Shearwater	Y	A	3	2	√		√	R
Black-legged Kittiwake		A	2	2	√			R

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Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurren ce at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Cory's Shearwater			3	1			√	S
Balearic Shearwater			3	1			√	S
Wilson's Storm Petrel			3	1			√	S
Storm Petrel	Y	A	3	2	√		√	R
Guillemot		A	2	2	√			R
Whimbrel			1	2			√	S
Oystercatcher		A (B/W)	1	2		√	√	R
Turnstone			1	2		√		R
Greenshank			1	2		√		R
Redshank		R	1	2		√		R
Ringed Plover			1	2		√	√	R
Dunlin		R	1	2			√	R
Snipe		A (B/W)	2	2		√		R
Arctic Skua			3	1			√	S
Puffin		A	3	2				R
Black Guillemot		A	3	1		√		S
Razorbill		A	3	2	√			R
Arctic Tern	Y	A	3	2			√	S
Great Skua			3	1			√	S
Pomarine Skua			3	1			√	S
Arctic Skua			3	1			√	S
Long-tailed Skua			3	1			√	S
Sabine's Gull			3	1			√	S
Little Gull		A	3	1			√	S
Mediterranean Gull		A	1	1			√	S
Ring-billed Gull			1	1			√	S
Yellow-legged Gull			1	1			√	S
Glaucous Gull			1	1			√	S
Iceland Gull			1	1			√	S
Stock Dove			2	1	√			S
Woodpigeon			2	2	√			R
Collared Dove			2	1	√			S
Cuckoo			2	1			√	S
Barn Owl	Y	A	2	1				S
Swallow		A	1	2	√			R
Swift		A	2	2			√	S

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Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurren ce at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Kestrel		A	2	2	√			R
Marsh Harrier			1					S
Merlin	Y	A	1	2	√			R
Peregrine	Y		2		√			S
Little Egret	Y		1	1		√		R
Grey Heron			1	1		√		R
Great Crested Grebe		A (B/W)	1	2	√			R
Chough	Y	A	1	1	√			R
Magpie			2	1				C
Treecreeper			2	√	√			R
Meadow Pipit		R	2	2	√			R
Skylark		A	2		√			R
Sand martin		A	2	1	√			R
Woodpigeon			2		√			C
Sparrowhawk		A	1	2				S
Wren			2		√			R
Starling		A	1	2	√			R
Jackdaw			1	2	√			C
Rook			1	2	√			C
Blue Tit			2	1	√			R
Great Tit			2	1	√			R
Coal Tit			2	1	√			R
Skylark		A	1	2	√			C
Long-tailed Tit			2	1	√			S
Blackcap			2	1	√			S
Whitethroat			2	1	√			S
Sedge Warbler			2	1	√			S
Grasshopper Warbler			2	1	√			S
Reed Warbler		A	2	1	√			S
Blackbird			2	2	√			R
Song Thrush			2	2	√			R
Fieldfare			2	2		√		S
Redwing			2	2		√		S
Mistle Thrush		A	2	2	√			R
Robin		A	2	2	√			R
Pied Flycatcher			2	2			√	S
Red-breasted Flycatcher			2	1			√	S

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Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurren ce at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Black Redstart			2	1			√	S
Stonechat		A	2	1	√			S
Whinchat		R	2	1			√	S
Yellow Wagtail		A	2	1			√	S
Grey Wagtail			2	1				S
Greenfinch		A	2	1	√			R
Lesser Redpoll			1	2	√			R
Common Crossbill			1	1			√	S
Siskin			2	1			√	S
Snow Bunting			1	1			√	S
Lapland Bunting			1	1			√	S
Yellowhammer		R	1	2	√			S
Northern Wheatear		A	2		√			R

*Note: Species was not recorded on site visit but likelihood of occurrence assessed as possible (1) or probable (2).

9.4. Potential impacts on bird species present and their habitats from visitors

A preliminary assessment was carried out by survey team member Sinéad Cummins of any negative impacts of recreational visitors on the species of interest at this site caused by recreational activities. The visitor car park adjacent to the pier is a reasonable size. Most visitors walk to the end of the pier for a photo opportunity. The pier and adjoining paths are also likely important for local residents (including walkers/dog walkers). There are no obvious risks to local bird populations given the current levels of visitors using the site is relatively small. Disturbance to waterbirds feeding along the upper intertidal shore is likely to be minimal, given the numbers recorded behind the pier, particularly in summer when visitor numbers are greater.

9.5. Management recommendations and opportunities

Ballyvaughan pier lies within Ballyvaughan Bay which is a popular tourist destination along the Wild Atlantic Way. Suggested management recommendations include:

1. At present, there is limited signage at this site to indicate the importance of the site for wintering waterbirds and for breeding terns, which can be seen feeding offshore. New signage could be put in place to educate visitors of the bay's importance for both breeding and wintering birds.
2. Opportunity to inform visitors of the nearby woodland walk and bird hide by including signage at the pier and marking the walk more clearly so that visitors can appreciate the local birdlife.
3. Opportunity to create a local wildlife walk to highlight key local birding spots from which visitors can watch feeding terns in summer, divers and scoters offshore in winter for example.

1.9.5. Photo Montage Site photos



Plate 1. Ballyvaughan Pier, Co. Clare. View looking across to the eastern pier in the distance.



Plate 2. Shingle and gravel intertidal shoreline along the sea wall adjacent to pier and visitor car park.



Plate 3. Existing visitor signage at Ballyvaughan Pier.



Plate 4. Entrance to local bird walk.



Plate 5. Signage at entrance to local bird walk and bird hide.



Plate 6. Bird Hide overlooking Ballyvaughan Bay.



Plate 7. Bug hotel located in woodland bird walk.

Section 10 Silver Strand, Barna, Co. Galway

10.1. Site Description

Situated 5km due west of Galway City and nearby to the village of Barna, Silver Strand consists of a shallow, sandy beach, bounded on one side by a by rocks and boulders i.e. on the seaward side, with tall sandy cliffs backing onto a high grassy hill in the centre of the site with a more sheltered inner estuary to the north of the site which is connected via a narrow entrance to the open sea. The beach is well served with visitor amenities including a large car park, lifeguard hut, visitor toilets etc. Silver Strand is part of the much larger Galway Bay Complex SAC.

Silver Strand is also part of the wider wetland complex of Inner Galway Bay SPA which is designated for 20 wintering waterbird species including Great Northern Diver, Grey Heron, Red-breasted Merganser, Common Tern, Sandwich Tern, Ringed Plover and Light-bellied Brent Goose. In addition, other wintering waterbird species of note regularly recorded include Whimbrel, Red-throated Diver, Black-throated Diver and Surf Scoter. Other species also recorded include the Annex 1-listed Little Tern, Hen Harrier and Black Redstart have also been recorded at the site. Images of the site are presented in *Photo Montage*.

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Site Map - Silver Strand, Barna, Co. Galway



The main areas used by visitors to Silver Strand are highlighted in red above with the main traffic occurring within this boundary. Significant records of bird activity recorded on the site visit (28/7/17) are also annotated on the above aerial photo map.

10.2. Survey

10.3. Species Status Assessment

Silver Strand was visited on 28 July 2017, and observer Sinéad Cummins recorded all species seen/heard and subdivided any species recorded into those occupying primary or core areas of the site (i.e. (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex). Full details of the species recorded at the study site are given in Table 1. Given the survey methodology (a single visit incorporating look-see count methods) was carried out (results presented in Table 1). An additional assessment (see Table 2) was made of any species likely to occur at the site given the habitats present and reviewing known records (e.g. Irish Birding www.irishbirding.com; NPWS Reports etc.). The weather on the site visit was characterised by strong winds at times and swells offshore.

Key species recorded on the site visit included the Annex 1-listed¹⁶ Common tern and Sandwich Tern, which were recorded roosting on the intertidal lagoon at the back of the beach. Little Egrets were also recorded at the site. Red-listed Curlew¹² were also recorded. An important Sand Martin breeding colony was located along high cliffs above the boulder beach (see Site Map above) with a minimum of 15 nest holes occupied and a total of 98 holes visible. Breeding Sand Martins were constantly flying into the occupied holes to feed young. The Sand Martin is Amber-listed¹ and is sensitive to disturbance at nest sites. Goldfinches and Linnets were recorded on the grassy hill behind the beach and very likely breed at the site, with a confirmed breeding record for Stonechat. The site was visited late July which is still quite early for wintering waders and other waterbirds to be recorded in significant numbers. Species present included Oystercatcher, Little Egret, Grey Heron, Greenshank, Cormorant and Redshank. Along the tide edge, gulls were recorded in small groups and included Great Black-backed Gull, Herring Gull (Red-listed BoCCI3¹⁷), Common Gull and Black-headed Gull (Red-listed BoCCI3²). Offshore, Guillemots were feeding and Common Terns. Other seabirds which can be found offshore include Gannet, Arctic Tern, Manx Shearwater, Storm Petrel, Great Skua and Arctic Skua, Waterbird species not recorded on the site visit but which are known to occur at the site during winter months or on passage include the following species: Red-breasted Merganser, Red-throated Diver, Great Northern Diver, Black-throated Diver, Surf Scoter, Great Crested Grebe, Pomarine Skua, Little Gull and Sabine's Gull. Other species which have been recorded at the site in the past include Wheatear, Whinchat and Black Redstart.

Table 1. Species Status Assessment based on site survey.

Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area*: Core (1); 2 ⁰ (2); 3 ⁰ (3)	Tota ls Seen / Hear d	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Common Gull		A	1	17	√			C
Herring Gull		R	1	5	√			C
Great Black-backed Gull		A	1	4	√			C
Black-headed Gull		R	1	23	√			C
Common Tern	Y	A	3	7	√		√	R
Sandwich Tern	Y	A	3	25			√	R

¹⁶ Birds Directive 2009/147/EC.

¹⁷ Colhoun, K. & Cummins, S. (2013) Birds of Conservation Concern in Ireland 2014–2019. *Irish Birds*. Vol 9, 523-544.

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area*: Core (1); 2 ^o (2); 3 ^o (3)	Tota ls Seen / Hear d	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Oystercatcher		A (B/W)	1	12		√		C
Redshank		R	1	60		√		R
Greenshank			1	2		√		R
Curlew		R	1	1		√		R
Hooded Crow			1	10	√			C
Pied Wagtail (<i>yarrellii</i>)		A	1	18	√			C
Starling		A	1	35	√			C
Sand martin		A	1	20+	√			R
Little Egret	Y		1	2		√		R
Grey Heron			1	1		√		R
Goldfinch			1	2	√			R
Stonechat		A	1	3	√			C

* Note: Species recorded at the core site (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex).

Table 2. Additional species likely to occur at the site.

This assessment is based on habitats present and a review of relevant historical reports and anecdotal evidence.

Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrenc e at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Common Scoter	Y (Wintering)	R (B)	3	1		√		R
Velvet Scoter			3	1		√		S
Scaup		A	3	1		√		S
Red-breasted Merganser			3	1		√		R
Pheasant			2	2	√			R
Red-throated Diver	Y	A	3	1		√		R
Great Northern Diver		A (W)	3	1		√		R
Black-throated Diver		A (W)	3	1		√		S
Northern Gannet			1	2	√			R
Shag		A	2	2	√			C
Cormorant		A (B/W)	2	2	√			C
Northern Fulmar			3	2	√			R
Sooty Shearwater			3	1			√	S

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Manx Shearwater	Y	A	3	2	√		√	R
Cory's Shearwater			3	1			√	S
Balearic Shearwater			3	1			√	S
Wilson's Storm Petrel			3	1			√	S
Storm Petrel	Y	A	3	2	√		√	R
Guillemot		A	2	2	√			C
Ringed plover			1	3		√		R
Dunlin	Y	R	1	5		√		R
Whimbrel			1	2			√	S
Turnstone			1	2		√		R
Snipe		A (B/W)	1	2		√		R
Arctic Skua			3	1			√	S
Puffin		A	3	2				S
Black Guillemot		A	3	1		√		S
Razorbill		A	3	2	√			S
Arctic Tern	Y	A	3	2			√	S
Great Skua			3	1			√	S
Pomarine Skua			3	1			√	S
Arctic Skua			3	1			√	S
Long-tailed Skua			3	1			√	S
Sabine's Gull			3	1			√	S
Black-legged Kittiwake		A	1	2	√			R
Little Gull		A	3	1			√	S
Mediterranean Gull		A	1	1			√	S
Lesser Black-backed Gull			1	2	√			R
Ring-billed Gull			1	1			√	S
Yellow-legged Gull			1	1			√	S
Glaucous Gull			1	1			√	S
Iceland Gull			1	1			√	S
Stock Dove			2	1	√			S
Woodpigeon			2	2	√			R
Collared Dove			2	1	√			S
Cuckoo			2	1			√	S
Barn Owl	Y	A	2	1				S
House Martin		A	1	1	√			C
Swift		A	1	2			√	S
Kestrel		A	1	2	√			R

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Hen Harrier	Y	A	1				√	S
Marsh Harrier			1					S
Merlin	Y	A	1	2	√			R
Peregrine	Y		2		√			S
Great Crested Grebe		A (B/W)	1	2	√			R
Raven			1	2	√			C
Chough	Y	A	1	1	√			S
Magpie			1	1	√			C
Meadow Pipit		R	1	√	√			C
Swallow			1		√			C
Dunnock			2	√	√			C
Treecreeper			2	√	√			R
Chaffinch			2	2	√			C
Goldcrest		A	2	√	√			C
Woodpigeon			2		√			C
Rock Pipit			2	2	√			R
Sparrowhawk		A	1	2	√			S
Wren			2	2	√			R
Jackdaw			1	2	√			C
Rook			1	2	√			C
Blue Tit			2	1	√			R
Great Tit			2	1	√			R
Coal Tit			2	1	√			R
Skylark		A	1	2	√			C
Long-tailed Tit			2	1	√			S
Chiffchaff			2	1	√			R
Willow Warbler			2	1	√			R
Blackcap			2	1	√			S
Whitethroat			2	1	√			S
Grasshopper Warbler			2	1	√			S
Sedge Warbler			2	1	√			R
Reed Warbler		A	2	1	√			S
Blackbird			2	2	√			R
Song Thrush			2	2	√			R
Fieldfare			2	2		√		S
Redwing			2	2		√		S
Mistle Thrush		A	2	2	√			R
Robin		A	2	2	√			R
Pied Flycatcher			2	2			√	S

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Red-breasted Flycatcher			2	1			√	S
Black Redstart			2	1			√	S
Whinchat		R	2	1			√	S
Linnet		A	1	3	√			C
Dunnock			2	2	√			C
House Sparrow		A	2	2	√			C
Yellow Wagtail		A	1	1			√	S
Grey Wagtail			2	1				S
Chaffinch			2	2	√			R
Bullfinch			2	1	√			S
Greenfinch		A	2	1	√			R
Lesser Redpoll			1	2	√			R
Common Crossbill			1	1			√	S
Siskin			2	1			√	S
Snow Bunting			1	1			√	S
Lapland Bunting			1	1			√	S
Reed Bunting			1	1	√			R
Yellowhammer		R	1	2	√			S
Northern Wheatear		A	1		√			S

*Note: Species was not recorded on site visit but likelihood of occurrence assessed as possible (1) or probable (2).

10.4. Potential impacts on bird species present and their habitats from visitors

A preliminary assessment was carried out by survey team member Sinéad Cummins of any negative impacts of recreational visitors on the species of interest at this site caused by their activities. It would appear that the site receives good numbers number of visitors each day – with a large visitor car park at Silver Strand. The importance of the beach for recreation (including walkers/dog walkers, swimmers, wind-surfers etc) to both local residents and holiday-makers is evident. The nature of the site leads to a number of potential risks to local bird populations. The location of the Sand Martin colony along high cliffs above the sandy boulder beach is vulnerable to adverse and prolonged disturbance from visitors and vulnerable to coastal erosion which is evident with the high grass hill section behind the cliffs restricted in terms of access to walkers (although some still accessed the area). Certainly, disturbance by walkers etc. along this section of the beach is a consideration and any works to stop further coastal erosion would need to be mindful of the existing colony. Due to the access restrictions to the hill behind the main cliffs, the risk of trampling of ground-nesting birds (e.g. Meadow Pipit; Skylark) is minimal. Most visitors would appear to stick to the beach itself for walking.

In terms of bird interests, the site is most important for wintering waterbirds and it is unlikely that visitors will cause significant disturbance during peak winter months except for the risks of disturbance from any loose dogs. Ideally owners would ensure their dogs are kept on leads, especially if walkers are crossing the intertidal section to the rear of the main beach.

10.5. Management recommendations and opportunities

Suggested management recommendations include:

1. At present, there is limited signage at this site to indicate the importance of the site for wintering waterbirds and for breeding Sand Martins. New signage could be put in place to educate visitors of its importance for wildlife and to highlight restrictions with regards to photographing Sand Martins too near their breeding colony.
2. Access to hill above the Sand Martin breeding cliffs is restricted by the local landowner, although some walkers still use this access route. Due to the sensitive nature of the cliffs (breeding Sand Martins and vulnerability to erosion from the sea) access should remain restricted.

1.10.5. Photo Montage Site photos



Plate 1. Silver Strand, Barna, Co. Galway



Plate 2. Boulders along sandy substrate – Silver Strand, Co. Galway.



Plate 3. Inner estuary on landward side of beach with car park and visitor toilet block visible.



Plate 4. Tall cliffs along the beach with nesting Sand Martins. Note the walkers below the cliffs.



Plate 5. Note photographer right below nesting colony of Sand Martins.



Plate 6. View from the eastern end of the beach looking towards the cliffs with breeding Sand martins. Note grassy hill above cliffs which remains popular with some walkers despite restricted access.

Section 11 Omey Island, Co. Galway

11.1. Site Description

Situated off the west Connemara coast, 9km from Clifden, Omey Island is a unique visitor attraction connected to the mainland by a sandy causeway (300m wide) at low tide. The northern and western sides of the island support unfenced machair and dry sandy grassland. The remainder largely consists of small extensively farmed fields with herb-rich meadows grazed by cattle reflecting the small agricultural holdings. The main bedrock in the area is granite.

Omey Island is a SAC designated for Machair and Hard-water lake habitats. Omey Island holds one of the largest remaining areas of machair in Co. Galway albeit it is severely eroded in places. The problem of widespread erosion on the machair is not helped by the large rabbit population on the island. Fahy Lough, lies to the east of the machair and is a shallow freshwater lake. *See Photo Montage for site and associated signage photos.*

Anecdotal records indicate the island can support feeding parties of Chough (Annex 1-listed¹⁸) on the machair and dry grassland. Golden Plover (also Annex 1-listed) are known to occur on the island during autumn and winter. The area of intertidal between the island and the mainland supports feeding waterbirds in winter including Ringed Plover and Sanderling (which can occur in numbers of national importance). Omey Island is also designated under the Birds Directive¹⁸ as part of Inishbofin, Omey Island and Turbot Island SPA. Omey Island was designated on the basis it supported a breeding population of Corncrake (up to 10 pairs), and IUCN Red List Species (Globally threatened). Most recent records (for 2015) indicated at least eight calling males on the island (Dermot Breen, NPWS).

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Site Map - Omey Island, Co. Galway



The main areas used by visitors to Omey Island are highlighted in red above with the main traffic occurring within this boundary. Significant records of bird activity recorded on the site visit (28/7/17) are also annotated on the above aerial photo map.

11.2. Survey

11.3. Species Status Assessment

Omev Island was visited on 28 July 2017, and observer Sinéad Cummins recorded all species seen/heard and subdivided any species recorded into those occupying primary or core areas of the site (i.e. (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex). Full details of the species recorded at the study site are given in Table 1. Given the survey methodology (a single visit incorporating look-see count methods) was carried out (results presented in Table 1). An additional assessment (see Table 2) was made of any species likely to occur at the site given the habitats present and reviewing known records (e.g. Irish Birding www.irishbirding.com; NPWS Reports etc.). The site visit was characterised by reasonably good weather conditions, dry with a strong breeze.

Key species recorded on the site visit included the Annex 1-listed¹⁸ Sandwich Tern (an individual was observed flying above the dunes see Map above). Other Annex 1-listed species, i.e. Corncrake and Chough, known to occur on the island, were not recorded on the survey visit. Chough are highly mobile and likely any resident birds may have been feeding on the nearby mainland or neighbouring islands. Breeding was confirmed for Wheatear (recently fledged young seen) on the south-eastern side of the island. Fahy Lough had reasonable numbers of Oystercatchers and gulls roosting there, considering it was mid-summer, with notable numbers of Mute Swans also recorded there. In winter, Fahy Lough and Omev supports additional waterbird species including Whooper Swan, Light-bellied Brent Goose, Ringed Plover, Sanderling, Dunlin, Curlew and Redshank (*Irish Wetland Bird Survey* unpublished data). Summer migrants including Sedge Warbler and Willow Warbler are likely breeding on the island also. Red-listed¹⁹ Twite and Meadow Pipit were seen on the island along with large feeding flocks of finches including Linnets, Lesser Redpolls and Goldfinches.

Table 1. Species Status Assessment based on site survey.

Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area*: Core (1); 2 ^o (2); 3 ^o (3)	Totals Seen/ Heard	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Mute Swan		A	1	26	√	√		A
Sandwich Tern	Y	A	2	1	√		√	R
Grey Heron			1	1		√		R
Lesser Black-backed Gull		A	1	18	√			C
Great Black-backed Gull		A	1	1	√			C
Common Gull		A	1	1				
Oystercatcher		A (B/W)	1	27		√		C
Meadow Pipit		R	1	√	√			C
Linnet		A	1	40+	√			C
Duncock			1	2	√			C
Pied Wagtail (<i>yarrellii</i>)		A	1	√	√			C

¹⁸ Birds Directive 2009/147/EC.

¹⁹ Colhoun, K. & Cummins, S. (2013) Birds of Conservation Concern in Ireland 2014–2019. *Irish Birds*. Vol 9, 523-544.

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area*: Core (1); 2 ^o (2); 3 ^o (3)	Totals Seen/ Heard	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Twite		R	1	1	√			S
Goldfinch			1	40+	√			R
House Sparrow		A	1	√	√			C
Reed Bunting			1	1	√			R
Northern Wheatear		A	1	8	√			R
Starling		A	1	30+	√			C
Wren			1	1	√			R
Swallow		A	1	√	√			R
House Martin		A	1	√	√			R
Lesser Redpoll		A	1	2	√			R

* Note: Species recorded at the core site (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex).

Table 2. Additional species likely to occur at the site.

This assessment is based on habitats present and a review of relevant historical reports and anecdotal evidence.

Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Cormorant		A (B/W)	2	√	√			C
Northern Gannet			2	50+	√			R
Shag		A	2	2	√			C
Common Scoter	Y (Wintering)	R (B)	2	1		√		S
Scaup		A	2	1		√		S
Red-breasted Merganser			2	1		√		S
Pheasant			1	2	√			R
Red-throated Diver	Y	A	2	1		√		R
Great Northern Diver		A (W)	2	1		√		R
Northern Fulmar			3	√	√			C
Sooty Shearwater			3	√			√	S
Manx Shearwater	Y	A	3	√	√		√	C
Black-legged Kittiwake		A	2		√			C
Cory's Shearwater			3	2			√	S
Balearic Shearwater			3	1			√	S
Wilson's Storm Petrel			3	1			√	S

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Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ⁰ (2); 3 ⁰ (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Storm Petrel	Y	A	3	2	√		√	A
Guillemot		A	2	1	√			R
Common Tern	Y	A	2	1			√	R
Herring Gull		R	1		√			C
Black-headed Gull		R	1	2	√			C
Ringed Plover			1	2		√		S
Whimbrel			1	1			√	S
Curlew		R	1	2		√		R
Turnstone			1	2		√		R
Dunlin	Y	R	1	1		√		R
Greenshank			1	1		√		S
Redshank		R	1	2		√		R
Snipe		A (B/W)	1	2		√		S
Arctic Skua			3	1			√	S
Great Skua			3	1			√	S
Puffin		A	3	2				R
Black Guillemot		A	3	1		√		S
Razorbill		A	3	2	√			R
Arctic Tern	Y	A	3	2			√	R
Great Skua			3	1			√	S
Pomarine Skua			3	1			√	S
Arctic Skua			3	1			√	S
Long-tailed Skua			3	1			√	S
Sabine's Gull			2	1			√	S
Little Gull		A	2	1			√	S
Mediterranean Gull		A	2	1			√	S
Common Gull			1	2	√			C
Ring-billed Gull			2	1			√	S
Yellow-legged Gull			2	1			√	S
Glaucous Gull			2	1			√	S
Rock Dove			1	2	√			R
Stock Dove			1	1	√			S
Woodpigeon			1	2	√			R
Collared Dove			2	1	√			S
Cuckoo			1	2			√	R
Barn Owl	Y	A	1	1				S
Swift		A	1	2			√	S
Kestrel		A	1	2	√			R
Merlin	Y	A	1	2	√			R
Peregrine	Y		1	1	√			S

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Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ⁰ (2); 3 ⁰ (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
White-tailed Eagle	Y	R	1	1				S
Little Egret	Y		1	1		√		S
Great Crested Grebe		A (B/W)	2	2	√			S
Turnstone			1	5		√		R
Ringed plover			1	3		√		R
Chough	Y	A	1	1	√			C
Hooded Crow			1	2	√			C
Chaffinch			1	2	√			C
Goldcrest		A	1	√	√			C
Duncock			1	√	√			C
Treecreeper			1	√	√			S
Sparrowhawk		A	1	2				R
Jackdaw			1	2	√			C
Rook			1	2	√			C
Raven			1	2	√			C
Blue Tit			1	1	√			S
Great Tit			1	1	√			S
Coal Tit			1	1	√			S
Sand martin		A	1	1	√			S
Skylark		A	1	2	√			C
Long-tailed Tit			1	1	√			S
Chiffchaff			1	1	√			S
Willow Warbler			1	1	√			R
Blackcap			1	1	√			S
Whitethroat			1	1	√			R
Grasshopper Warbler			1	1	√			S
Sedge Warbler			1	1	√			R
Reed Warbler		A	1	1	√			S
Blackbird			1	2	√			R
Song Thrush			1	2	√			R
Fieldfare			1	2		√		S
Redwing			1	2		√		S
Mistle Thrush		A	1	2	√			R
Robin		A	1	2	√			C
Pied Flycatcher			1	2			√	S
Red-breasted Flycatcher			1	1			√	S
Black Redstart			1	1			√	R
Stonechat		A	1	2	√			C
Whinchat		R	1	1			√	S
Yellow Wagtail		A	1	1			√	S

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Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Grey Wagtail			1	1				S
Magpie			1	1				C
Woodpigeon			1	2	√			C
Chaffinch			1	2	√			R
Bullfinch			1	1	√			S
Greenfinch		A	1	1	√			R
Common Crossbill			1	1			√	S
Siskin			1	1			√	S
Snow Bunting			1	1			√	S
Lapland Bunting			1	1			√	S
Yellowhammer		R	1	2	√			S

*Note: Species was not recorded on site visit but likelihood of occurrence assessed as possible (1) or probable (2).

11.4. Potential impacts on bird species present and their habitats from visitors

Tourism at Omeý Island offers a unique experience to visitors, the opportunity to drive across the sandy causeway to the island at low tide or to cross-over on foot and explore the island.

A preliminary assessment was carried out by survey team member Sinéad Cummins of any negative impacts of recreational visitors on the species of interest at this site caused by recreational activities. It would appear during the summer months at least; the site receives good numbers of visitors each day – given the size of the visitor car parks and the unique experience it offers in terms of a visitor attraction in the local area. The potential risks to local bird population of current levels of visitors using the site are mainly centred on the risk of increased disturbance to breeding birds in the machair and sand dunes including a small risk of trampling of ground-nesting birds near trails/paths the condition of these habitats is not as good as it should be with very obvious erosion due to a combination of factors (overgrazing, natural erosion and visitor traffic). The machair and dunes support the Annex 1-listed Chough and the herb-rich meadows support a breeding population of Corncrake (Annex 1-listed and Red-listed). An expansion in visitor numbers to the site would be of concern given the sensitive nature of the breeding birds which occur on the island and sensitive habitats (including the machair and coastal sand dunes). Increased associated disturbance from activities (such as walking coastal paths, dog-walking, water-sports, overnight camping etc.) could have a negative impact on birds and other wildlife at the site if not managed appropriately. For example, campfires lit on the ground damage the very sensitive habitats. Omeý's wildlife includes the unusual staghorn beetles.

11.5. Management recommendations and opportunities

Suggested management recommendations include:

1. No additional signage required at present (see plate 6). There is general signage at this site indicating the history of the site and also the importance of the site for birds including the Corncrake.
2. Access to the Machair and Sand dunes should be clearly marked and include a notice of the sensitive nature of these habitats so that visitors are aware of the importance of

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sticking to the walking routes marked to avoid negative impacts on the site conservation interests.

3. Any increase in visitor numbers to the site should require a review of current road access across the causeway taking into account health & safety considerations and local residents.
4. Opportunities for a wildlife trail along the main road of the island heading southwest, with interpretive signage on the islands wildlife and guidance for visitors on activities permissible.

1.11.5. Photo Montage Site photos



Plate 1. Omey Island, Co. Galway



Plate 2. Note small unimproved pastures on the island and areas of scrub.



Plate 3. Stonewalls are a common feature.



Plate 4. Fahy Lough. Note low-level cattle grazing.



Plate 5. Machair and sand dunes with exposed sandier areas caused by access vehiculaar access and visitors etc.



Plate 6. Current visitor signage, which includes some information on birds present at the site. Located at the main visitor car park on the mainland.

Section 12 Oileán Chloigeann (Claggan Island), Co. Mayo

12.1. Site Description

Oileán Chloigeann (Claggan Island) is situated on the north-eastern corner of Blacksod Bay, about 12kms from Belmullet, in the townland of Bunnahowen. The island is linked to the mainland by a narrow, sandy causeway that divides Trawmore Bay from Blacksod Bay. Srah beach, on the shores of Blacksod Bay, is a long, curved, sandy beach, popular with bathers and with views of Achill Island to the south. Srah Beach is part of the wider wetland complex of Broadhaven and Blacksod SPA and is designated for eleven wintering waterbird species including Light-bellied Brent Goose, Sanderling, Bar-tailed Godwit, Ringed Plover, Great Northern Diver, Sandwich Tern and Common Scoter. In addition, other species of note regularly recorded within the site include Knot and rarities including Slavonian Grebe, Surf Scoter and Eider. Images of the site are presented in *Photo Montage*.

See Photo Montage for site and associated signage photos.

Along the northern shore, the more sheltered area of intertidal (largely sandy) between the island and the mainland supports feeding waterbirds in winter while Oileán Chloigeann (Claggan Island) supports more typical grassland and hedgerow species e.g. Goldfinch, Linnet and Meadow Pipit.

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Site Map - Srah Beach & Oileán Chloigeann (Claggan Island), Co. Mayo



The main areas used by visitors to Oileán Chloigeann (Claggan Island) & Srah Beach are highlighted in red above with the main traffic occurring within this boundary. Significant records of bird activity recorded on the site visit (30/7/17) are also annotated on the above aerial photo map.

12.2. Survey

12.3. Species Status Assessment

Oileán Chloigeann (Claggan Island) and Srah Beach was visited on 30 July 2017, and observer Sinéad Cummins recorded all species seen/heard and subdivided any species recorded into those occupying primary or core areas of the site (i.e. (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex). Full details of the species recorded at the study site are given in Table 1. Given the survey methodology (a single visit incorporating look-see count methods) was carried out (results presented in Table 1). An additional assessment (see Table 2) was made of any species likely to occur at the site given the habitats present and reviewing known records (e.g. Irish Birding www.irishbirding.com; NPWS Reports etc.). The site visit was characterised by reasonably good weather conditions, dry with a strong breeze.

Key species recorded on the site visit included the Annex 1-listed²⁰ Common Tern (28 seen feeding offshore see Map above), Arctic Tern, Dunlin (89 feeding birds) and Bar-tailed Godwit (flock of 322 feeding). Other waders recorded on the site visit included Red Knot, Ringed Plover, Oystercatcher and Curlew (Red-listed²¹). The site is part of the Blacksod/Trawmore Bay I-WeBs subsite and part of the larger Blacksod/Tullaghan Bays site which is counted through the winter months. The larger site complex supports significant numbers of Whooper Swan, Light-bellied Brent Goose, Barnacle Goose, Bar-tailed Godwit, Ringed Plover, Sanderling, Dunlin, Curlew and Redshank through the winter months (*Irish Wetland Bird Survey* unpublished data). Likely breeding on the island include the Red-listed²¹ Meadow Pipit along with Linnet and Goldfinch.

Table 1. Species Status Assessment based on site survey.

Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area*: Core (1); 2 ^o (2); 3 ^o (3)	Totals Seen/ Heard	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Black-headed Gull		R	1	3	√			C
Ringed Plover			1	2		√		S
Cormorant		A (B/W)	2	4	√			C
Curlew		R	1	4		√		R
Turnstone			1	2		√		R
Arctic Tern	Y	A	1	1	√		√	R
Common Tern	Y	A	1	26	√		√	R
Common Gull		A	1	6				R
Oystercatcher		A (B/W)	1	27		√		C
Dunlin	Y	R	1	89		√		R
Bar-tailed Godwit	Y	A						
Knot		A						
Turnstone			1	4		√		R
Ringed plover			1	26		√		R

²⁰ Birds Directive 2009/147/EC.

²¹ Colhoun, K. & Cummins, S. (2013) Birds of Conservation Concern in Ireland 2014–2019. *Irish Birds*. Vol 9, 523-544.

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area*: Core (1); 2 ⁰ (2); 3 ⁰ (3)	Totals Seen/ Heard	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Meadow Pipit		R	1	1	√			C
Linnet		A	1	7	√			C
Pied Wagtail (<i>yarrellii</i>)		A	1	1	√			C
Goldfinch			1	3	√			R
House Sparrow		A	1	2	√			C
Starling		A	1	11	√			C
Hooded Crow			1	1	√			C
Swallow		A	1	7	√			R

* Note: Species recorded at the core site (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex).

Table 2. Additional species likely to occur at the site.

This assessment is based on habitats present and a review of relevant historical reports and anecdotal evidence.

Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area: Core (1); 2 ⁰ (2); 3 ⁰ (3)	*Likely occurren ce at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Mute Swan		A	1	2	√	√		R
Northern Gannet			2	1	√			R
Shag		A	2	2	√			R
Common Scoter	Y (Wintering)	R (B)	3	2		√		R
Scaup		A	3	2		√		S
Red-breasted Merganser			2	2		√		R
Pheasant			1	2	√			R
Red-throated Diver	Y	A	2	2		√		R
Great Northern Diver		A (W)	2	2		√		R
Northern Fulmar			3	1	√			C
Sooty Shearwater			3	1			√	S
Manx Shearwater	Y	A	3	1	√		√	C
Black-legged Kittiwake		A	3	2	√			C
Cory's Shearwater			3	1			√	S
Balearic Shearwater			3	1			√	S
Wilson's Storm Petrel			3	1			√	S

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurren ce at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Storm Petrel	Y	A	3	1	√		√	A
Guillemot		A	2	1	√			R
Grey Heron			1	1		√		R
Whimbrel			1	2			√	S
Greenshank			1	2		√		S
Redshank		R	1	2		√		R
Snipe		A (B/W)	1	2		√		S
Arctic Skua			3	1			√	S
Great Skua			3	1			√	S
Puffin		A	3	1				R
Black Guillemot		A	3	1		√		S
Razorbill		A	3	1	√			R
Great Skua			3	1			√	S
Pomarine Skua			3	1			√	S
Arctic Skua			3	1			√	S
Long-tailed Skua			3	1			√	S
Sabine's Gull			2	1			√	S
Little Gull		A	2	1			√	S
Herring Gull		R	1	1	√			C
Lesser Black-backed Gull		A	1	1	√			C
Great Black-backed Gull		A	1	1	√			C
Mediterranean Gull		A	2	1			√	S
Ring-billed Gull			2	1			√	S
Yellow-legged Gull			2	1			√	S
Glaucous Gull			2	1			√	S
Rock Dove			1	1	√			R
Stock Dove			1	1	√			S
Woodpigeon			1	2	√			R
Collared Dove			2	1	√			S
Cuckoo			1	2			√	R
Barn Owl	Y	A	1	1				S
Swift		A	1	1			√	S
Wren			1	2	√			R
Kestrel		A	1	2	√			R
Merlin	Y	A	1	2	√			R
Peregrine	Y		1	1	√			S
White-tailed Eagle	Y	R	1	1				S
Little Egret	Y		1	1		√		S

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurren ce at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Great Crested Grebe		A (B/W)	2	2	√			S
Chough	Y	A	1	1	√			C
Chaffinch			1	2	√			C
Goldcrest		A	1	1	√			C
Dunnock			1	2	√			C
Treecreeper			1	1	√			S
Sparrowhawk		A	1	2				R
Jackdaw			1	2	√			C
Rook			1	2	√			C
Raven			1	2	√			C
Blue Tit			1	1	√			S
Great Tit			1	1	√			S
Coal Tit			1	1	√			S
Reed Bunting			1	2	√			R
Northern Wheatear		A	1	2	√			R
Sand martin		A	1	1	√			S
Skylark		A	1	2	√			C
Long-tailed Tit			1	1	√			S
Chiffchaff			1	1	√			S
Willow Warbler			1	2	√			R
Blackcap			1	1	√			S
Whitethroat			1	2	√			R
Grasshopper Warbler			1	1	√			S
Sedge Warbler			1	2	√			R
Reed Warbler		A	1	1	√			S
Blackbird			1	2	√			R
Song Thrush			1	2	√			R
Fieldfare			1	2		√		S
Redwing			1	2		√		S
Mistle Thrush		A	1	2	√			R
Robin		A	1	2	√			C
Pied Flycatcher			1	2			√	S
Red-breasted Flycatcher			1	1			√	S
Black Redstart			1	1			√	R
Stonechat		A	1	2	√			C
Whinchat		R	1	1			√	S
Yellow Wagtail		A	1	1			√	S
Grey Wagtail			1	1				S

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurren ce at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Magpie			1	1				C
Twite		R	1	1	√			S
Woodpigeon			1	2	√			C
Chaffinch			1	2	√			R
Bullfinch			1	1	√			S
Greenfinch		A	1	1	√			R
Lesser Redpoll			1	2	√			R
House Martin		A	1	√	√			R
Common Crossbill			1	1			√	S
Siskin			1	1			√	S
Snow Bunting			1	1			√	S
Lapland Bunting			1	1			√	S
Yellowhammer		R	1	2	√			S

*Note: Species was not recorded on site visit but likelihood of occurrence assessed as possible (1) or probable (2).

12.4. Potential impacts on bird species present and their habitats from visitors

Srah Beach juts out from the mainland and reaches Oileán Chloigeann (Claggan Island) across a narrow causeway which provides the main access of local residents on the island. The landscape is shaped by the elements, with the outer beach section popular with walkers.

A preliminary assessment was carried out by survey team member Sinéad Cummins of any negative impacts of recreational visitors on the species of interest at this site. On the site visit, kite surfers were using the inner more sheltered section of the site (on the northern side of the beach). Although the site visit was carried out at the end of July, there were good numbers of waders feeding along the northern section of the site. Activities such as kite-surfing, could cause some disturbance to feeding or roosting birds using this section of the beach. The other potential risks to local bird population of current levels of visitors using the site are mainly centred on the risk of increased disturbance to breeding birds in the sand dunes including a small risk of trampling of ground-nesting birds near trails/paths. Increased associated disturbance from activities (such as walking coastal paths, dog-walking, water-sports, overnight camping etc.) could have a negative impact on birds and other wildlife at the site if not managed appropriately.

12.5. Management recommendations and opportunities

Suggested management recommendations include:

1. There is signage at this site to indicate the sensitive nature of the dunes, but there is no information for visitors on the importance of the site for wintering waders and other waterbirds. There is an opportunity to upgrade the visitor signage and educate visitors on the nature conservation interests of the site.
2. Any increase in visitor numbers to the site should require a review of current road access across the causeway taking into account health & safety considerations and local residents.

3. Activities such as kite-surfing should be restricted to the outer beach (southern seaward side) where fewer waterbirds are likely to be feeding along the shore.

1.12.5. Photo Montage Site photos



Plate 1. Oileán Chloigeann (Claggan Island) and Srah Beach, Co. Mayo



Plate 2. Seaward side of beach.



Plate 3. Stonewalls are a common feature on Claggan Island.



Plate 4. Inner sheltered bay, Claggan, Co. Mayo.



Plate 5 Fields adjacent to the inner bay.



Plate 6. Current visitor signage, which includes information on the importance of the dunes. Located at the main visitor car park on the mainland.

Section 13 Strandhill, Co. Sligo

13.1. Site Description

Strandhill Beach is situated adjacent to the village of Strandhill and approximately 8km west of Sligo Town. At the southern end of Strandhill's main beach, the sand dunes give way to a wide tidal estuary, stretching all the way back to Ballysadare. Inside this estuary are the sweeping sandbanks of Culleenamore in the shadow of Knocknarea Mountain. The outer beach is popular with surfers, kite-surfers, dog-walkers, runners and holiday-makers. The sandy beaches around the Strandhill peninsula are used by roosting birds. Strandhill is part of the Ballysadare Bay SAC, which is designated for a number of habitats including the priority fixed grey sand dune habitat.

Strandhill is part of the wider Ballysadare Bay SPA with bird conservation interests including Light-bellied Brent Goose, Grey Plover, Dunlin (Annex 1-listed²²), Bar-tailed Godwit (Annex 1-listed) and Redshank (Red-listed²³).

Other wintering waterbird species known to regularly occur at the site include Annex 1-listed species Whooper Swan. Cough (Annex 1) can occur at the site but were not recorded on the site visit. Images of the site are presented in *Photo Montage*.

²² Birds Directive 2009/147/EC.

²³ Colhoun, K. & Cummins, S. (2013) Birds of Conservation Concern in Ireland 2014–2019. *Irish Birds*. Vol 9, 523-544.

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Site Map - Strandhill Beach, Co. Sligo



The main areas used by visitors to Strandhill Beach are highlighted in red above with the main traffic occurring within this boundary. Significant records of bird activity recorded on the site visit (31/7/17) are also annotated on the above aerial photo map.

13.2. Survey

13.3. Species Status Assessment

Strandhill Beach (including sand dunes) was visited on 31 July 2017, and observer Sinéad Cummins recorded all species seen/heard and subdivided any species recorded into those occupying primary or core areas of the site (i.e. (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex). Full details of the species recorded at the study site are given in Table 1. Given the survey methodology (a single visit incorporating look-see count methods) was carried out (results presented in Table 1). An additional assessment (see Table 2) was made of any species likely to occur at the site given the habitats present and reviewing known records (e.g. Irish Birding www.irishbirding.com; NPWS Reports etc.). The weather on the site visit was characterised by heavy rain showers and sunny spells with strong offshore winds.

Key species recorded on the site visit included Annex 1-listed²² Common Scoter, with a small flock (25) feeding inshore due to the large swells offshore on the seaward side of the beach. In addition, Common Terns and Sandwich Terns (both Annex 1 species) were seen feeding just offshore. Further out, Gannets and Great Black-backed Gulls were seen feeding, and reasonable numbers of Common Gulls were recorded along the seaward exposed side of the beach (total of 27) with a larger flock roosting behind the dunes (57) along with Oystercatchers seen feeding on an area of exposed sand. Meadow Pipits (Red-listed²³) were recorded in the dunes along with Linnets, Skylark (both Amber-listed). Breeding was confirmed for the Amber-listed Stonechat² (pair in the dunes with juveniles recently fledged). The site was visited on a dropping tide. On the site visit, only once species of wader was recorded with Oystercatchers taking advantage of the inner sheltered bay to feed. The main beach was very busy with surf lessons and walkers and dog walkers.

Waterbird species not recorded on the site visit, but which are known to occur at the site during winter months or on passage include the following species: Teal, Wigeon, Bar-tailed Godwit, Dunlin and Ringed Plover. Other scarce wintering birds which can occur include Velvet Scoter, Surf Scoter, Iceland Gull and Arctic Skua. Other species known to occur at the site include the Annex 1-listed Chough (often seen flying over the dunes) and Snow Bunting, Wheatear and Raven.

Table 1. Species Status Assessment based on site survey.

Species	Annex 1 (EU Birds Directive)	BoCC13 (Red/ Amber)	Area*: Core (1); 2 ^o (2); 3 ^o (3)	Total s Seen/ Hear d	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Cormorant		A (B/W)	2	2	√		√	C
Gannet		A	3	14	√			C
Common Scoter	Y Winterin g	R	2	25		√	√	R
Sandwich Tern	Y	A	1	1	√		√	R
Common Tern	Y	A	1	3	√		√	R
Common Gull		A	2	41	√			C
Herring Gull		R	1	√	√			C

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area*: Core (1); 2 ^o (2); 3 ^o (3)	Total Seen/ Hear d	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Great Black-backed Gull		A	2	√	√			C
Black-headed Gull		R	2	2	√			C
Grey Heron			1	3	√			R
Little Egret	Y		1	3	√			R
Oystercatcher		A (B/W)	1	16		√		R
Curlew		R	1	1		√		R
Hooded Crow			1	1	√			C
Meadow Pipit		R	1	3	√			C
Skylark		A	1	2	√			C
Linnet		A	1	3	√			C
Pied Wagtail (<i>yarrellii</i>)		A	2	2	√			C
Stonechat		A	1	2+	√			R
Wren			1	2	√			C
Rook			1	2	√			C
House Martin		A	1	10	√			R
Swallow			1	2	√			C

* Note: Species recorded at the core site (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex).

Table 2. Additional species likely to occur at the site.

This assessment is based on habitats present and a review of relevant historical reports and anecdotal evidence.

Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrenc e at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Velvet Scoter			3	1		√		S
Shag		A	3	1	√			R
Scaup		A	3	1		√		S
Red-breasted Merganser			3	1		√		R
Red-throated Diver	Y	A	3	1		√		S
Great Northern Diver		A (W)	3	1		√		R
Black-throated Diver		A (W)	3	1		√		S
Northern Gannet			1	2	√			R

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Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrenc e at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Northern Fulmar			3	2	√			R
Sooty Shearwater			3	1			√	S
Manx Shearwater	Y	A	3	2	√		√	R
Black-legged Kittiwake		A	2	2	√			R
Cory's Shearwater			3	1			√	S
Balearic Shearwater			3	1			√	S
Wilson's Storm Petrel			3	1			√	S
Storm Petrel	Y	A	3	2	√		√	R
Guillemot		A	2	2	√			R
Whimbrel			1	2			√	S
Turnstone			1	2		√		R
Greenshank			1	2		√		R
Redshank		R	1	2		√		R
Ringed Plover								
Snipe		A (B/W)	2	2		√		R
Arctic Skua			3	1			√	S
Puffin		A	3	2				R
Black Guillemot		A	3	1		√		S
Razorbill		A	3	2	√			R
Common Tern	Y	A	2	2	√		√	R
Arctic Tern	Y	A	3	2			√	S
Great Skua			3	1			√	S
Pomarine Skua			3	1			√	S
Arctic Skua			3	1			√	S
Long-tailed Skua			3	1			√	S
Sabine's Gull			3	1			√	S
Little Gull		A	3	1			√	S
Lesser Black-backed Gull		A	1	2			√	S
Mediterranean Gull		A	1	1			√	S
Ring-billed Gull			1	1			√	S
Yellow-legged Gull			1	1			√	S
Glaucous Gull			1	1			√	S
Iceland Gull			1	1			√	S
Stock Dove			2	1	√			S
Woodpigeon			2	2	√			R
Collared Dove			2	1	√			S
Cuckoo			2	1			√	S
Barn Owl	Y	A	2	1				S
Swift		A	2	2			√	S

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Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrenc e at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Kestrel		A	2	2	√			R
Marsh Harrier			1					S
Merlin	Y	A	1	2	√			R
Peregrine	Y		2		√			S
Great Crested Grebe		A (B/W)	1	2	√			R
Chough	Y	A	1	1	√			R
Magpie			2	1				C
Dunnock			2	√	√			C
Treecreeper			2	√	√			R
Chaffinch			2	2	√			C
Goldcrest		A	2	√	√			C
Sand Martin		A	2	1	√			R
Woodpigeon			2		√			C
Sparrowhawk		A	1	2				S
Jackdaw			1	2	√			C
Rook			1	2	√			C
Blue Tit			2	1	√			R
Great Tit			2	1	√			R
Coal Tit			2	1	√			R
Skylark		A	1	2	√			C
Long-tailed Tit			2	1	√			S
Chiffchaff			2	1	√			R
Willow Warbler			2	1	√			R
Blackcap			2	1	√			S
Whitethroat			2	1	√			S
Grasshopper Warbler			2	1	√			S
Reed Warbler		A	2	1	√			S
Blackbird			2	2	√			R
Song Thrush			2	2	√			R
Fieldfare			2	2		√		S
Redwing			2	2		√		S
Mistle Thrush		A	2	2	√			R
Robin		A	2	2	√			R
Pied Flycatcher			2	2			√	S
Red-breasted Flycatcher			2	1			√	S
Black Redstart			2	1			√	S
Whinchat		R	2	1			√	S
Dunnock			2	2	√			C

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Species	Annex 1 (EU Birds Directive)	BoCCI 3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrenc e at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
House Sparrow		A	2	2	√			C
Yellow Wagtail		A	2	1			√	S
Grey Wagtail			2	1				S
Chaffinch			2	2	√			R
Bullfinch			2	1	√			S
Greenfinch		A	2	1	√			R
Lesser Redpoll			1	2	√			R
Common Crossbill			1	1			√	S
Siskin			2	1			√	S
Snow Bunting			1	1			√	S
Lapland Bunting			1	1			√	S
Yellowhammer		R	1	2	√			S
Northern Wheatear		A	2		√			R

*Note: Species was not recorded on site visit but likelihood of occurrence assessed as possible (1) or probable (2).

13.4. Potential impacts on bird species present and their habitats from visitors

A preliminary assessment was carried out by survey team member Sinéad Cummins of any negative impacts of recreational visitors on the species of interest at this site caused by recreational activities. Strandhill is a very popular seaside town with many day-trippers, tourists and local residents frequenting the beach for walks, surf lessons etc. The importance of the beach for recreation and the dune system to both local residents and holiday-makers is evident. Although the beach is quite extensive, the dune system has suffered from coastal erosion in recent years due to storm surge events and the current habitat management includes excluding visitors from the most damaged areas. However, fencing is not wholly adequate and on the day of the site visit, there were several individuals attempting to climb up the highest dune which appears quite eroded with little grass cover. The potential risks to local breeding bird populations given the current levels of visitors are relatively low although there is a reasonable amount of traffic by walkers criss-crossing the dunes, as evident by the many paths, and therefore any increase in the magnitude of this activity would need to be monitored. The main risks would be disturbance to breeding birds using the sand dunes including a small risk of trampling of ground-nesting birds near trails/paths (e.g. Meadow Pipit; Skylark, Stonechat). Any expansion in visitor numbers to the site would be an additional pressure to the sensitive dune habitats and the important feeding and roosting sites for wintering waterbirds, particularly along the more sheltered inner sections. In terms of bird interests, the site is most important for wintering waterbirds when visitor numbers are likely to be lower. However, given the site's proximity to Sligo town, the number of visitors during winter months is still likely to be significant and therefore recommendations to have dogs on lead would help to minimise disturbance of feeding flocks of waders for example.

13.5. Management recommendations and opportunities

Suggested management recommendations include:

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1. At present, there is no general signage at this site indicate its importance for wintering waterbirds. The addition of signage could highlight the site's importance to visitors and better indicate activities which are likely to cause disturbance (e.g. dogs off the lead) given it is part of the wider Ballysadare Bay SAC and SPA.
2. While access to Sand dunes from the visitor car park includes a notice of the sensitive nature of the dunes, clearer guidance is needed to indicate the damage visitors can do by entering the fenced off section of the dunes and to advise visitors to stick to the walking routes marked to avoid negative impacts on the site conservation interests.
3. Surf Schools (see Photo Montage, Plate 7) use the site to conduct surf lessons and the beach is a well-known popular surf/kite-surf spot. Making sure such activities do not adversely affect the conservation interests of the site is important, particularly for offshore seaduck and diver species in winter which are likely to be more sensitive to disturbance from water-based sports activities than other waterbirds or seabirds.

1.13.5. Photo Montage Site photos



Plate 1. Strandhill Beach (Seaward side) looking westwards. Note visitor access path from visitor car park.



Plate 2. Strandhill Beach – Note signage on dune management and fence to prevent visitors from gaining access, however, the fence only goes part-way and visitors still climb the dunes despite the signs and obvious erosion.



Plate 3. Inner more sheltered bay behind Strandhill dunes with Knockrea in the background.



Plate 4. Mix of flowering plants (e.g. Blue Harebells) along the dune trails and pathway.



Plate 5. Tall sand dune in the background with obvious trails by climbers and obvious erosion.



Plate 6. View eastwards towards Benbulbin.



Plate 7. Surf School on the beach.



Plate 8. View across inner Ballysadare Bay.

Section 14 Murvagh Beach, Co. Donegal

14.1. Site Description

Situated south of Donegal town, Murvagh Beach consists of a sandy beach on the seaward side, with Donegal Golf Course located behind the extensive and high grass sand dune complex. To the south, the visitor entrance and beach car park is characterised by planted area of mature trees (conifers) on the eastern side of the road. Murvagh Beach is part of the larger Donegal Bay (Murvagh) SAC, which is designated for two sand dune Annex I habitats: Fixed coastal dunes with herbaceous vegetation (grey dunes) and Humid dune slacks.

Murvagh Beach is also part of the wider wetland complex of Donegal Bay SPA which is designated for wintering waterbird species including Light-bellied Brent Goose, Sanderling, Great Northern Diver and Common Scoter. In addition, other species of note regularly recorded within the site include Long-tailed Duck (wintering) and Red Throated Diver and Black-throated Diver (wintering). Images of the site are presented in *Photo Montage*.

Site Map - Murvagh Beach, Co. Donegal



The main areas used by visitors to Murvagh Beach are highlighted in red above with the main traffic occurring within this boundary. Significant records of bird activity recorded on the site visit (8/8/17) are also annotated on the above aerial photo map.

14.2. Survey

14.3. Species Status Assessment

Murvagh Beach (including sand dunes) was visited on 8 August 2017, and observer Sinéad Cummins recorded all species seen/heard and subdivided any species recorded into those occupying primary or core areas of the site (i.e. (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex). Full details of the species recorded at the study site are given in Table 1. Given the survey methodology (a single visit incorporating look-see count methods) was carried out (results presented in Table 1). An additional assessment (see Table 2) was made of any species likely to occur at the site given the habitats present and reviewing known records (e.g. Irish Birding www.irishbirding.com; NPWS Reports etc.). The weather on the site visit was characterised by heavy rain showers and sunny spells with winds relatively light.

Key species recorded on the site visit included the Annex 1-listed²⁴ Common Tern, which was recorded feeding offshore and a few Dunlin. Breeding was confirmed for the Amber-listed Stonechat² (recently fledged young seen) with three pairs holding territories along the edge of the sand dunes on the beachward side. Swallows and House Martins were a common sight across the dunes, with Goldfinches and Linnets also recorded there. Pied Wagtails foraged in the seaweed along the upper beach, along with Starlings. The site was visited at low tide, with most waders seen along the northern tip of the beach (i.e. Oystercatchers, Ringed Plover and Dunlin). Along the tide edge, gulls were recorded in small groups and included Great Black-backed Gull, Herring Gull (Red-listed BoCCI3²⁵), Common Gull and Black-headed Gull (Red-listed BoCCI3²). In addition, Cormorants were also seen feeding just offshore. Waterbird species not recorded on the site visit but which are known to occur at the site during winter months or on passage include the following species: Red-breasted Merganser, Red-throated Diver, Great Northern Diver, Black-throated Diver, Great Crested Grebe, Common Scoter, Velvet Scoter, Long-tailed Duck, Scaup, Surf Scoter, Glaucous Gull, Iceland Gull, King Eider. Other species which have been recorded at the site in the past include Marsh Harrier, Peregrine Falcon, Snow Bunting.

Table 1. Species Status Assessment based on site survey.

Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area*: Core (1); 2 ⁰ (2); 3 ⁰ (3)	Totals Seen/ Heard	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Cormorant		A (B/W)	2	13	√			C
Common Tern	Y	A	3	1	√		√	R
Common Gull		A	2	68	√			C
Herring Gull		R	1	12	√			C
Great Black-backed Gull		A	2	3	√			C
Black-headed Gull		R	2	10	√			C
Oystercatcher		A (B/W)	1	218		√		R
Ringed plover			1	3		√		R
Dunlin	Y	R	1	5		√		S

²⁴ Birds Directive 2009/147/EC.

²⁵ Colhoun, K. & Cummins, S. (2013) Birds of Conservation Concern in Ireland 2014–2019. *Irish Birds*. Vol 9, 523-544.

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area*: Core (1); 2 ^o (2); 3 ^o (3)	Totals Seen/ Heard	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Hooded Crow			1	10	√			C
Meadow Pipit		R	1	√	√			C
Linnet		A	1	3	√			C
Pied Wagtail (<i>yarrellii</i>)		A	2	18	√			C
Stonechat		A	1	9	√			C
Goldfinch				2	√			R
Reed Bunting			1	1	√			S
Starling		A	2		√			C
House Martin		A	1	1	√			R
Swallow			1		√			C
Raven			1	2	√			C

* Note: Species recorded at the core site (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex).

Table 2. Additional species likely to occur at the site.

This assessment is based on habitats present and a review of relevant historical reports and anecdotal evidence.

Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurren ce at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Common Scoter	Y (Wintering)	R (B)	3	1		√		S
Velvet Scoter			3	1		√		S
Scaup		A	3	1		√		S
Red-breasted Merganser			3	1		√		S
Pheasant			2	2	√			R
Red-throated Diver	Y	A	3	1		√		R
Great Northern Diver		A (W)	3	1		√		R
Black-throated Diver		A (W)	3	1		√		S
Northern Gannet			1	2	√			R
Shag		A	2	2	√			R
Northern Fulmar			3	2	√			R
Sooty Shearwater			3	1			√	S
Manx Shearwater	Y	A	3	2	√		√	R
Black-legged Kittiwake		A	2	2	√			R
Cory's Shearwater			3	1			√	S

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Balearic Shearwater			3	1			√	S
Wilson's Storm Petrel			3	1			√	S
Storm Petrel	Y	A	3	2	√		√	R
Guillemot		A	2	2	√			R
Sandwich Tern	Y	A	3	2			√	R
Whimbrel			1	2			√	S
Curlew		R	1	2		√		R
Turnstone			1	2		√		R
Greenshank			1	2		√		R
Redshank		R	1	2		√		R
Snipe		A (B/W)	2	2		√		R
Arctic Skua			3	1			√	S
Puffin		A	3	2				R
Black Guillemot		A	3	1		√		S
Razorbill		A	3	2	√			R
Arctic Tern	Y	A	3	2			√	S
Great Skua			3	1			√	S
Pomarine Skua			3	1			√	S
Arctic Skua			3	1			√	S
Long-tailed Skua			3	1			√	S
Sabine's Gull			3	1			√	S
Little Gull		A	3	1			√	S
Mediterranean Gull		A	1	1			√	S
Lesser Black-backed Gull			1	2	√			C
Ring-billed Gull			1	1			√	S
Yellow-legged Gull			1	1			√	S
Glaucous Gull			1	1			√	S
Iceland Gull			1	1			√	S
Stock Dove			2	1	√			S
Woodpigeon			2	2	√			R
Collared Dove			2	1	√			S
Cuckoo			2	1			√	S
Barn Owl	Y	A	2	1				S
Swift		A	2	2			√	S
Kestrel		A	2	2	√			R
Marsh Harrier			1					S
Merlin	Y	A	1	2	√			R
Peregrine	Y		2		√			S
Little Egret	Y		1	1		√		R

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Grey Heron			1	1		√		R
Great Crested Grebe		A (B/W)	1	2	√			R
Chough	Y	A	1	1	√			S
Magpie			2	1				C
Dunnock			2	√	√			C
Treecreeper			2	√	√			R
Chaffinch			2	2	√			C
Goldcrest		A	2	√	√			C
Skylark		A	2		√			R
Sand martin		A	2	1	√			R
Woodpigeon			2		√			C
Rock Pipit			2	2	√			R
Sparrowhawk		A	1	2				S
Wren			2		√			R
Jackdaw			1	2	√			C
Rook			1	2	√			C
Blue Tit			2	1	√			R
Great Tit			2	1	√			R
Coal Tit			2	1	√			R
Skylark		A	1	2	√			C
Long-tailed Tit			2	1	√			S
Chiffchaff			2	1	√			R
Willow Warbler			2	1	√			R
Blackcap			2	1	√			S
Whitethroat			2	1	√			S
Grasshopper Warbler			2	1	√			S
Sedge Warbler			2	1	√			R
Reed Warbler		A	2	1	√			S
Blackbird			2	2	√			R
Song Thrush			2	2	√			R
Fieldfare			2	2		√		S
Redwing			2	2		√		S
Mistle Thrush		A	2	2	√			R
Robin		A	2	2	√			R
Pied Flycatcher			2	2			√	S
Red-breasted Flycatcher			2	1			√	S
Black Redstart			2	1			√	S
Whinchat		R	2	1			√	S
Dunnock			2	2	√			C

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
House Sparrow		A	2	2	√			C
Yellow Wagtail		A	2	1			√	S
Grey Wagtail			2	1				S
Chaffinch			2	2	√			R
Bullfinch			2	1	√			S
Greenfinch		A	2	1	√			R
Lesser Redpoll			1	2	√			R
Common Crossbill			1	1			√	S
Siskin			2	1			√	S
Snow Bunting			1	1			√	S
Lapland Bunting			1	1			√	S
Yellowhammer		R	1	2	√			S
Northern Wheatear		A	2		√			R

*Note: Species was not recorded on site visit but likelihood of occurrence assessed as possible (1) or probable (2).

14.4. Potential impacts on bird species present and their habitats from visitors

A preliminary assessment was carried out by survey team member Sinéad Cummins of any negative impacts of recreational visitors on the species of interest at this site caused by recreational activities. It would appear that the site receives good numbers number of visitors each day – given the size of the visitor car park. The importance of the beach for recreation (including walkers/dog walkers, horse-riding) and the nearby Donegal Golf Course located behind the dune system to both local residents and holiday-makers is evident. Given the size of the beach (quite extensive) the potential risks to local bird populations of current levels of visitors using the site are small. Any risks would be disturbance to breeding birds using the sand dunes including a small risk of trampling of ground-nesting birds near trails/paths (e.g. Meadow Pipit; Skylark, Stonechat). Overall, the condition of the dunes was good, with the dunes appearing to be in relatively intact condition. Most visitors would appear to stick to the beach itself. With the Golf Course nestled behind the dunes, it is likely that visitors do not traverse the interior of the dunes that much. Any expansion in visitor numbers to the site would be an additional pressure to the sensitive dune habitats. In terms of bird interests, the site is most important for wintering waterbirds when visitor numbers are likely to be lower. Therefore, it is unlikely that visitors will cause significant disturbance during peak winter months.

14.5. Management recommendations and opportunities

Suggested management recommendations include:

1. At present, there is general signage at this site indicating the importance of the site for Red-throated Divers (albeit the images are of breeding Red-throated Divers. Ideally, images of these birds in winter plumage along with other diver and scoter species would be useful guide for visitors). See Plate 5 in Photo Montage. The sign could be updated to reflect these suggested changes.

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2. Access to Sand dunes from both the beach and visitor car park should include a notice of the sensitive nature of the dunes so that visitors are aware of the importance of sticking to the walking routes marked to avoid negative impacts on the site conservation interests.

1.14.5. Photo Montage Site photos



Plate 1. Murravagh Beach, Co. Donegal



Plate 2. Murravagh Beach – Tip of beach.



Plate 3. Murvagh Beach Dunes.



Plate 4. Golf Course, Murvagh.



Plate 5. Current visitor signage, which includes some information on birds present at the site in winter (Red-throated Diver), although image shown is of an adult in breeding plumage (not winter plumage).



Plate 6. Forestry behind visitor carpark.

Section 15 Magheraroarty, Co. Donegal

15.1. Site Description

Situated in north west Donegal, west of Horn Head, Magheraroarty consists of a sandy beach on the seaward side, extensive high grass sand dunes and inner sheltered areas of saltmarsh and sandy mudflats. To the west, the visitor entrance and beach car park (with space for 50+ cars) is adjacent to the pier from which daily ferries (weather permitting) to Tory Island and Inishbofin depart. The beach is popular with surfers, kite-surfers, dog-walkers, runners and holiday-makers. Magheraroarty is part of the Ballyness Bay SAC, which is designated for a number of habitats including the priority fixed grey sand dune habitat.

Wintering waterbird species known to regularly occur at the site include Golden Plover, Curlew, Light-bellied Brent Goose, Red-breasted Merganser, Ringed Plover, Sanderling and Greenshank. The Corncrake has been recorded adjacent to the cSAC. At some locations just outside the SAC, meadow grassland is managed for Corncrake as part of the Falcarragh to Meenlaragh Important Bird Area (IBA) & SPA for Corncrakes. An annual mean of 13 Corncrakes were recorded in this IBA from 1993-2001. Images of the site are presented in *Photo Montage*.

Site Map - Magheraroarty Beach, Co. Donegal



The main areas used by visitors to Magheraroarty Beach are highlighted in red above with the main traffic occurring within this boundary. Significant records of bird activity recorded on the site visit (7/8/17) are also annotated on the above aerial photo map.

15.2. Survey

15.3. Species Status Assessment

Magheraroarty Beach (including sand dunes) was visited on 7 August 2017, and observer Sinéad Cummins recorded all species seen/heard and subdivided any species recorded into those occupying primary or core areas of the site (i.e. (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex). Full details of the species recorded at the study site are given in Table 1. Given the survey methodology (a single visit incorporating look-see count methods) was carried out (results presented in Table 1). An additional assessment (see Table 2) was made of any species likely to occur at the site given the habitats present and reviewing known records (e.g. Irish Birding www.irishbirding.com; NPWS Reports etc.). The weather on the site visit was characterised by heavy rain showers and sunny spells with winds relatively light.

Key species recorded on the site visit included Eider feeding around the pier (young birds of the year recorded indicating likely breeding at or near the site) and the Red-listed Curlew feeding in the sheltered intertidal flats to the rear of the beach. Cormorants and Shags were recorded feeding offshore, and reasonable numbers of Common Gulls were recorded along the seaward exposed side of the beach along with several Rock Pipits feeding along the boulder section of the beach. Breeding was confirmed for the Amber-listed Stonechat² (pair with 3 juveniles recently fledged) behind the edge of the sand dunes on the inner side of the bay. The site was visited on a lower tide, with most waders seen using the inner sheltered bay to roost and feed (i.e. Oystercatchers, Curlew) along with a few Black-headed Gulls (Red-listed).

Waterbird species not recorded on the site visit but which are known to occur at the site during winter months or on passage include the following species: Great Northern Diver, Red-breasted Merganser, Sanderling, Greenshank, Golden Plover and Wigeon. Other species which have been recorded at the site in the past include Wheatear, Long-tailed Duck, Sandwich Tern, Pintail and Arctic Skua. Finally, the fields adjacent to the pier road have held breeding Corncrake (Red-listed²⁶) in past years. While no birds were recorded on this visit (the time of the visit was not ideal for this purpose, with nocturnal visits likely to prove more successful in detection of calling males during the summer months).

Table 1. Species Status Assessment based on site survey.

Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area*: Core (1); 2 ^o (2); 3 ^o (3)	Totals Seen/ Heard	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Cormorant		A (B/W)	2	2	√			C
Shag		A		2	√			C
Common Tern	Y	A	3	1	√		√	R
Common Gull		A	2	41	√			C
Herring Gull		R	1	√	√			C
Great Black-backed Gull		A	2	10	√			C

²⁶ Colhoun, K. & Cummins, S. (2013) Birds of Conservation Concern in Ireland 2014–2019. *Irish Birds*. Vol 9, 523-544.

Appendix II - Ornithological Assessment for the 2017 Ecological Study of Visitor Movement Areas
Environmental Surveying and Monitoring for the Wild Atlantic Way Operational Programme

Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area*: Core (1); 2 ^o (2); 3 ^o (3)	Totals Seen/ Heard	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Black-headed Gull		R	2	2	√			C
Lesser Black-backed Gull		A	1	1	√			C
Eider		A	1	5	√			R
Oystercatcher		A (B/W)	1	16		√		R
Ringed plover			1	3		√		R
Curlew		R	1	2		√		R
Hooded Crow			1	1	√			C
Meadow Pipit		R	1	√	√			C
Linnet		A	1	3	√			C
Sedge Warbler			1	1	√			R
Pied Wagtail (<i>yarrellii</i>)		A	2	18	√			C
Stonechat		A	1	5	√			C
Robin		A	1	2	√			C
Wren			1	2	√			C
Starling		A	2		√			C
House Martin		A	1	1	√			R
Swallow			1		√			C
Rock Pipit			1	1	√			C

* Note: Species recorded at the core site (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex).

Table 2. Additional species likely to occur at the site.

This assessment is based on habitats present and a review of relevant historical reports and anecdotal evidence.

Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Common Scoter	Y (Winterin g)	R (B)	3	1		√		S
Velvet Scoter			3	1		√		S
Scaup		A	3	1		√		S
Red-breasted Merganser			3	1		√		R

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Red-throated Diver	Y	A	3	1		√		S
Great Northern Diver		A (W)	3	1		√		R
Black-throated Diver		A (W)	3	1		√		S
Northern Gannet			1	2	√			R
Northern Fulmar			3	2	√			R
Sooty Shearwater			3	1			√	S
Manx Shearwater	Y	A	3	2	√		√	R
Black-legged Kittiwake		A	2	2	√			R
Cory's Shearwater			3	1			√	S
Balearic Shearwater			3	1			√	S
Wilson's Storm Petrel			3	1			√	S
Storm Petrel	Y	A	3	2	√		√	R
Guillemot		A	2	2	√			R
Sandwich Tern	Y	A	2	2	√		√	R
Whimbrel			1	2			√	S
Turnstone			1	2		√		R
Greenshank			1	2		√		R
Redshank		R	1	2		√		R
Dunlin		R	1	2			√	R
Snipe		A (B/W)	2	2		√		R
Arctic Skua			3	1			√	S
Puffin		A	3	2				R
Black Guillemot		A	3	1		√		S
Razorbill		A	3	2	√			R
Common Tern	Y	A	2	2	√		√	R
Arctic Tern	Y	A	3	2			√	S
Great Skua			3	1			√	S
Pomarine Skua			3	1			√	S
Arctic Skua			3	1			√	S
Long-tailed Skua			3	1			√	S
Sabine's Gull			3	1			√	S
Little Gull		A	3	1			√	S
Mediterranean Gull		A	1	1			√	S
Ring-billed Gull			1	1			√	S
Yellow-legged Gull			1	1			√	S
Glaucous Gull			1	1			√	S

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Iceland Gull			1	1			√	S
Stock Dove			2	1	√			S
Woodpigeon			2	2	√			R
Collared Dove			2	1	√			S
Cuckoo			2	1			√	S
Barn Owl	Y	A	2	1				S
Swift		A	2	2			√	S
Kestrel		A	2	2	√			R
Marsh Harrier			1					S
Merlin	Y	A	1	2	√			R
Peregrine	Y		2		√			S
Little Egret	Y		1	1		√		R
Grey Heron			1	1		√		R
Great Crested Grebe		A (B/W)	1	2	√			R
Chough	Y	A	1	1	√			R
Magpie			2	1				C
Dunnock			2	√	√			C
Treecreeper			2	√	√			R
Chaffinch			2	2	√			C
Goldcrest		A	2	√	√			C
Skylark		A	2		√			R
Sand martin		A	2	1	√			R
Woodpigeon			2		√			C
Sparrowhawk		A	1	2				S
Wren			2		√			R
Jackdaw			1	2	√			C
Rook			1	2	√			C
Blue Tit			2	1	√			R
Great Tit			2	1	√			R
Coal Tit			2	1	√			R
Skylark		A	1	2	√			C
Long-tailed Tit			2	1	√			S
Chiffchaff			2	1	√			R
Willow Warbler			2	1	√			R
Blackcap			2	1	√			S
Whitethroat			2	1	√			S
Grasshopper Warbler			2	1	√			S
Reed Warbler		A	2	1	√			S
Blackbird			2	2	√			R
Song Thrush			2	2	√			R

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Fieldfare			2	2		√		S
Redwing			2	2		√		S
Mistle Thrush		A	2	2	√			R
Robin		A	2	2	√			R
Pied Flycatcher			2	2			√	S
Red-breasted Flycatcher			2	1			√	S
Black Redstart			2	1			√	S
Whinchat		R	2	1			√	S
Dunnock			2	2	√			C
House Sparrow		A	2	2	√			C
Yellow Wagtail		A	2	1			√	S
Grey Wagtail			2	1				S
Chaffinch			2	2	√			R
Bullfinch			2	1	√			S
Greenfinch		A	2	1	√			R
Lesser Redpoll			1	2	√			R
Common Crossbill			1	1			√	S
Siskin			2	1			√	S
Snow Bunting			1	1			√	S
Lapland Bunting			1	1			√	S
Yellowhammer		R	1	2	√			S
Northern Wheatear		A	2		√			R

*Note: Species was not recorded on site visit but likelihood of occurrence assessed as possible (1) or probable (2).

15.4. Potential impacts on bird species present and their habitats from visitors

A preliminary assessment was carried out by survey team member Sinéad Cummins of any negative impacts of recreational visitors on the species of interest at this site caused by recreational activities. It would appear that the site receives good numbers number of visitors each day – given the size of the visitor car park, the local ferry which departs to Tory Island along with boats to Inishbofin and fishing boats. The importance of the beach for recreation (including walkers/dog walkers, surfers etc.) and the dune system to both local residents and holiday-makers is evident. Given the size of the beach (quite extensive) the potential risks to local bird populations of the current levels of visitors using the site are small. Any risks would be disturbance to breeding birds using the sand dunes including a small risk of trampling of ground-nesting birds near trails/paths (e.g. Meadow Pipit; Skylark, Stonechat). Overall, the condition of the dunes was good, with the dunes appearing to be in relatively intact condition. Most visitors would appear to stick to the beach itself. Some surfers were camping near their cars parked on the track behind the dunes (non-seaward side) but it is likely that most visitors stick to the paths which are easier to walk along. Any expansion in visitor numbers to the site would be an additional pressure

to the sensitive dune habitats. In terms of bird interests, the site is most important for wintering waterbirds when visitor numbers are likely to be lower. Therefore, it is unlikely that visitors will cause significant disturbance during peak winter months. Any suitable breeding habitat for Corncrakes locally is unlikely to be affected by the visitor activity along the beach and at the main visitor car park (with perhaps a few campers overnighing in the car park).

15.5. Management recommendations and opportunities

Suggested management recommendations include:

1. At present, there is no general signage at this site indicate its importance for wintering waterbirds. The addition of signage could highlight the site's importance to visitors and better indicate activities which are prohibited at the site (e.g. campfires etc.) given its part of the wider Ballyness Bay SAC.
2. Access to Sand dunes from both the beach and visitor car park should include a notice of the sensitive nature of the dunes so that visitors are aware of the importance of sticking to the walking routes marked to avoid negative impacts on the site conservation interests.
3. Access by cars to the rear of the sand dunes should probably be restricted to ensure that the sensitive dune habitats are not adversely impacted by any increase in vehicular activity.

1.15.5. Photo Montage Site photos



Plate 1. Magheraroarty Beach, Co. Donegal



Plate 2. Magheraroarty Beach – Note shingle in foreground (western end of beach) with sandy beach further towards the tip.



Plate 3. Inner more sheltered Ballyness Bay (SAC).



Plate 4. Mix of tall grasses and herbs along dune trails and pathway.



Plate 5. Tall sand dune in the background and wide channel connecting the sea to the inner bay.



Plate 6. Meadow grassland above pier where Corncrakes have been recorded in previous years.

Section 16 Inch Island Lough (Inch Island Wildfowl Reserve), Co. Donegal

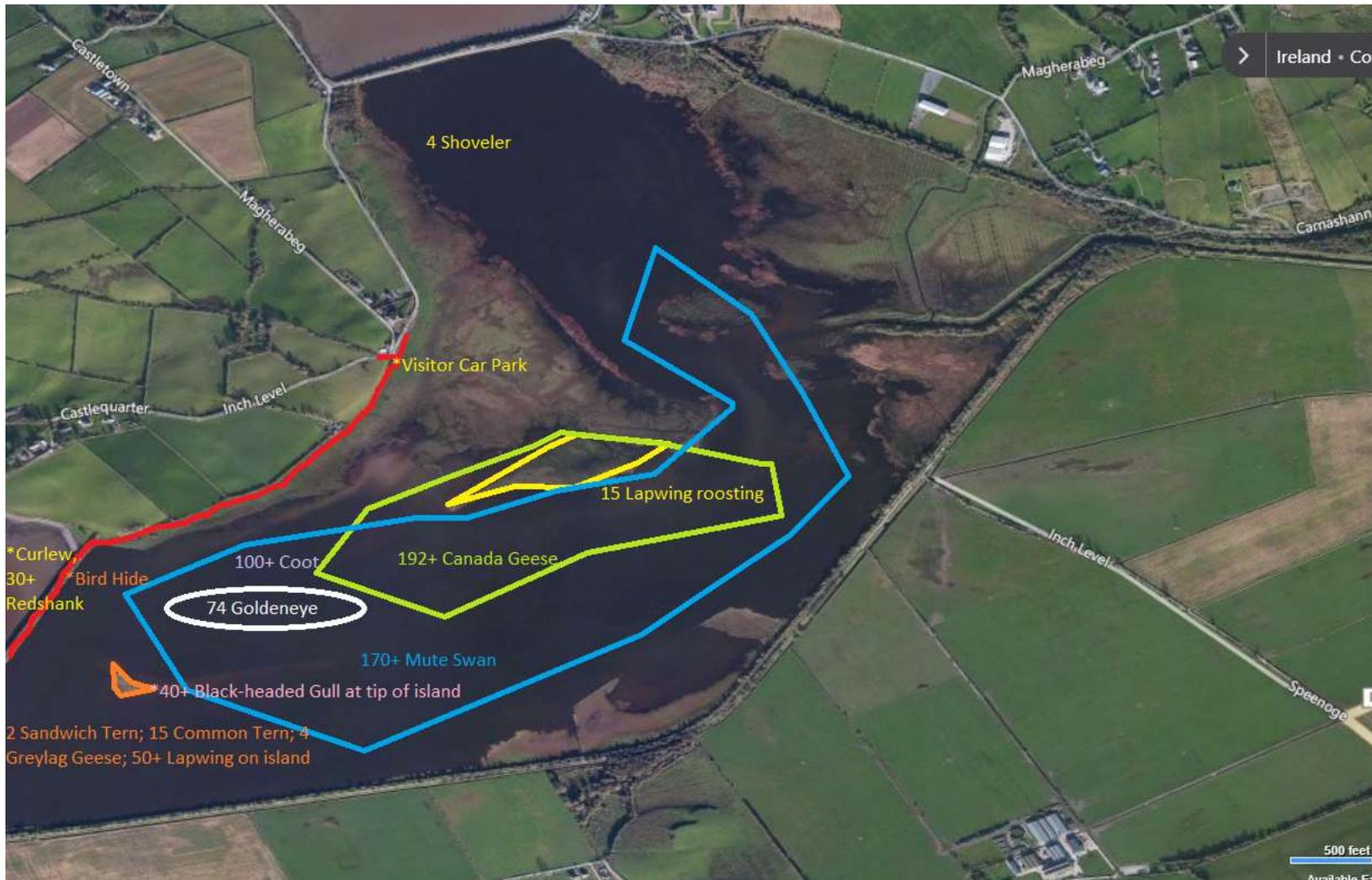
16.1. Site Description

Situated almost 40km north of Letterkenny, Inch Wildfowl Reserve is situated to the east of Lough Swilly and approximately 8 km to the south of Buncrana. Inch is recognised as an internationally significant destination and staging ground for migrating birds from three continents. This global importance is recognised by the area's designation as a SPA under the EU Birds Directive. The combination within this site of extensive feeding areas and safe resting and roosting sites makes this site one of the most important wetlands in the north-west of the country for wintering waterfowl.

Inch Lough was created from the estuarine mud of Lough Swilly in the late 19th Century when two embankments were built to link Inch Island to the mainland (for the Derry and Lough Swilly Railway works). A railway embankment was then built dividing the area - the inner part (Inch Levels) being further drained to create polders or sloblands for agricultural use which are now important for wintering geese and swans during the winter months. Inch Lough acts as a holding reservoir or lake for drainage water. A sluice gate in one of the original embankments allows drainage to the sea at low tide. Inch is part of the Lough Swilly SPA which is designated for 24 wintering waterbird species including wildfowl (e.g. Greenland White-fronted Goose, Greylag Goose, Whooper Swan, Teal, Wigeon, Goldeneye) and waders (Knot, Dunlin, Curlew, Redshank, Greenshank) and breeding gull (Black-headed Gull and Common Gull) and breeding tern species (Sandwich Tern and Common Tern). Images of the site are presented in *Photo Montage*.

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Site Map - Inch Island, Co. Donegal:



The main areas used by visitors to the reserve are highlighted in red above with the main traffic occurring within this boundary. Significant records of bird activity recorded on the site visit (7/8/17) are also annotated on the above aerial photo map.

16.2. Survey

16.3. Species Status Assessment

Inch Levels (accessed by the main visitor car park and walks) was visited on 7 August 2017, and observer Sinéad Cummins recorded all species seen/heard and subdivided any species recorded into those occupying primary or core areas of the site (i.e. (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex). Full details of the species recorded at the study site are given in Table 1. Given the survey methodology (a single visit incorporating look-see count methods) was carried out (results presented in Table 1). An additional assessment (see Table 2) was made of any species likely to occur at the site given the habitats present and reviewing known records (e.g. Irish Birding www.irishbirding.com; NPWS Reports etc.). The weather on the site visit was characterised by sunny spells with relatively light winds.

Key species recorded on the site visit included the Annex 1-listed²⁷ Common Tern and Sandwich Tern which were seen on the island at Inch Levels and are known to breed on the site. Reasonable numbers of likely resident species (Mute Swan, Canada Goose, Coot and Goldeneye) were recorded. Common Sandpiper (Amber-listed) were recorded along the causeway (on the levels side). Breeding was confirmed for the Amber-listed Stonechat²⁸ (recently fledged young seen) with a pair holding a territory along main visitor walk towards the bird hide. A pair of Shoveler were recorded with two ducklings. Other common passerines recorded on the visitor walk along the levels included Robin, Dunnock, Blackbird, Magpie, and summer migrants (Willow warbler) and Swallows and House Martins were a common sight across the levels, with Goldfinch, Greenfinch, Reed Bunting, Yellowhammer (Red-listed) and Linnet also recorded there. With farmland adjoining the site, good views of a Sparrowhawk hunting along hedgerows and several Stock Doves were also observed. The water levels were relatively high at the Inch Levels (where the most birds were observed) despite the tidal state being relatively low outside the causeway. Here, waders were feeding in exposed mud on the castle-side of the levels (i.e. Oystercatchers, Curlew).

Waterbird species not recorded on the site visit but which are known to occur at the site during winter months or on passage include the following species: Red-breasted Merganser, Scaup, Greenland White-fronted Goose, Barnacle Goose, Light-bellied Brent Goose, Pink-footed Goose, Bean Goose, Ruddy Shelduck and Whooper Swan. Other species which have been recorded at the site in the past include Dipper, Kingfisher (Annex 1-listed¹³), Buzzard, Mediterranean Gull, Gadwall and Whimbrel.

Table 1. Species Status Assessment based on site survey.

Species	Annex 1 (EU Birds Directive)	BoCC13 (Red/ Amber)	Area*: Core (1); 2 ^o (2); 3 ^o (3)	Totals Seen/ Heard	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Greylag Goose		A	1	4				R
Canada Goose			1	192+				A
Coot		A		100+				A
Common Sandpiper		A		2				R

²⁷Birds Directive 2009/147/EC.

²⁸ Colhoun, K. & Cummins, S. (2013) Birds of Conservation Concern in Ireland 2014–2019. *Irish Birds*. Vol 9, 523-544.

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/ Amber)	Area*: Core (1); 2 ^o (2); 3 ^o (3)	Totals Seen/ Heard	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Great-crested Grebe		A		12				R
Little Grebe		A		1				R
Goldeneye		R		74				A
Mallard				54				A
Greenshank			1	1		√		R
Ruddy Shelduck			1	4				R
Shoveler			1	12	√			R
Teal		A	1	16				R
Cormorant		A (B/W)	1	1	√			C
Common Tern	Y	A	1	1	√		√	R
Sandwich Tern	Y	A	1	2	√		√	R
Common Gull		A	1	68	√			C
Herring Gull		R	1	12	√			C
Great Black-backed Gull		A	1	3	√			C
Curlew		R	1	2		√		R
Black-headed Gull		R	1	10	√			C
Magpie			2	1				C
Dunnock			1	√	√			C
Redshank		R	1	2		√		R
Oystercatcher		A (B/W)	2	218		√		R
Robin		A	1	2	√			R
Stock Dove			2	1	√			S
Woodpigeon			2	2	√			R
Hooded Crow			1	10	√			C
Willow Warbler			1	1	√			R
Meadow Pipit		R	1	√	√			C
Grey Heron			1	1		√		R
Great Crested Grebe		A (B/W)	1	2	√			R
Sparrowhawk		A	1	2				S
Wren			1		√			R
Woodpigeon			1		√			C
Blackbird			1	2	√			R
Bullfinch			1	1	√			S
Greenfinch		A	1	1	√			R
Linnet		A	1	3	√			C
Pied Wagtail (<i>yarrellii</i>)		A	1	18	√			C
Stonechat		A	1	9	√			C
Goldfinch			1	2	√			R

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/Amber)	Area*: Core (1); 2 ^o (2); 3 ^o (3)	Totals Seen/Heard	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Reed Bunting			1	1	√			S
Starling		A	2		√			C
House Martin		A	1	1	√			R
Yellowhammer		R	1	2	√			S
Swallow			1		√			C

* Note: Species recorded at the core site (1) centred across the main visitor areas used), secondary areas ((2) adjacent to the main visitor areas) and tertiary areas ((3) further away from the core site, but still considered to be connected to the core site and forming part of the site complex).

Table 2. Additional species likely to occur at the site.

This assessment is based on habitats present and a review of relevant historical reports and anecdotal evidence.

Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Common Scoter	Y (Wintering)	R (B)	3	1		√		S
Velvet Scoter			3	1		√		S
Scaup		A	3	1		√		S
Red-breasted Merganser			3	1		√		S
Pheasant			2	2	√			R
Red-throated Diver	Y	A	3	1		√		R
Great Northern Diver		A (W)	3	1		√		R
Black-throated Diver		A (W)	3	1		√		S
Northern Gannet			1	2	√			R
Shag		A	2	2	√			R
Northern Fulmar			3	2	√			R
Black-legged Kittiwake		A	2	2	√			R
Guillemot		A	2	2	√			R
Ringed plover			1	3		√		R
Dunlin	Y	R	1	5		√		S
Whimbrel			1	2			√	S
Turnstone			1	2		√		R
Snipe		A (B/W)	2	2		√		R
Arctic Skua			3	1			√	S
Puffin		A	3	2				R
Black Guillemot		A	3	1		√		S
Razorbill		A	3	2	√			R
Arctic Tern	Y	A	3	2			√	S
Great Skua			3	1			√	S
Pomarine Skua			3	1			√	S

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Arctic Skua			3	1			√	S
Long-tailed Skua			3	1			√	S
Sabine's Gull			3	1			√	S
Little Gull		A	3	1			√	S
Mediterranean Gull		A	1	1			√	S
Lesser Black-backed Gull			1	2	√			C
Ring-billed Gull			1	1			√	S
Yellow-legged Gull			1	1			√	S
Glaucous Gull			1	1			√	S
Iceland Gull			1	1			√	S
Collared Dove			2	1	√			S
Cuckoo			2	1			√	S
Barn Owl	Y	A	2	1				S
Swift		A	2	2			√	S
Kestrel		A	2	2	√			R
Marsh Harrier			1	1				S
Merlin	Y	A	1	2	√			R
Peregrine	Y		2	2	√			S
Little Egret	Y		1	1		√		R
Raven			1	2	√			C
Chough	Y	A	1	1	√			S
Treecreeper			2	1	√			S
Chaffinch			2	2	√			C
Goldcrest		A	2	2	√			C
Skylark		A	2	2	√			R
Sand martin		A	2	1	√			R
Rock Pipit			2	2	√			R
Jackdaw			1	2	√			C
Rook			1	2	√			C
Blue Tit			2	1	√			R
Great Tit			2	1	√			R
Coal Tit			2	1	√			R
Skylark		A	1	2	√			C
Long-tailed Tit			2	1	√			S
Chiffchaff			2	1	√			R
Blackcap			2	1	√			S
Whitethroat			2	1	√			S
Grasshopper Warbler			2	1	√			S
Sedge Warbler			2	1	√			R
Reed Warbler		A	2	1	√			S
Song Thrush			2	2	√			R
Fieldfare			2	2		√		S
Redwing			2	2		√		S
Mistle Thrush		A	2	2	√			R
Pied Flycatcher			2	2			√	S

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Species	Annex 1 (EU Birds Directive)	BoCCI3 (Red/Amber)	Area: Core (1); 2 ^o (2); 3 ^o (3)	*Likely occurrence at site - possible (1); probable (2)	B	W	P	Population Assessment Abundant (A); Common (C); Regular (R); Scarce (S)
Red-breasted Flycatcher			2	1			√	S
Black Redstart			2	1			√	S
Whinchat		R	2	1			√	S
House Sparrow		A	2	2	√			C
Yellow Wagtail		A	2	1			√	S
Grey Wagtail			2	1				S
Chaffinch			2	2	√			R
Lesser Redpoll			1	2	√			R
Common Crossbill			1	1			√	S
Siskin			2	1			√	S
Snow Bunting			1	1			√	S
Lapland Bunting			1	1			√	S
Northern Wheatear		A	2		√			S

*Note: Species was not recorded on site visit but likelihood of occurrence assessed as possible (1) or probable (2).

16.4. Potential impacts on bird species present and their habitats from visitors

A preliminary assessment was carried out by survey team member Sinéad Cummins of any negative impacts of recreational visitors on the species of interest at this site caused by recreational activities. It would appear that the site receives good numbers number of visitors each day – given the size of the visitor car park. The importance of the reserve for recreation (including cyclists, walkers, birdwatchers and nature-lovers) to both local residents and holiday-makers is evident. Given the size of the reserve (quite extensive), the potential risks to local bird populations of current levels of visitors using the site are small. Precautions such as screening of walkways behind roosting locations of birds are already in place. A visitor hide overlooking the main tern and gull breeding island ensures visitors can enjoy the spectacle of the colony without undue disturbance of breeding birds. In terms of bird interests, the site is most important for wintering waterbirds which arrive in early autumn and peak in mid-winter, when visitor numbers are likely to be lower. Therefore, it is unlikely that visitors will cause significant disturbance during peak winter months.

16.5. Management recommendations and opportunities

Suggested management recommendations include:

1. At present, there is general signage at this site indicating the importance of the site for waterbirds (See Plate 5 and Plate 6 in Photo Montage). The current signage is adequate.
2. Access to Inch Levels Reserve is from a causeway road, which although narrow, has good visibility from both sides on approach. With a number of visitor car parks at various entry points to the Inch Wildfowl Reserve itself, the overall site is well-served for visitor access.

1.16.5. Photo Montage Site photos



Plate 1. Inch Levels, Co. Donegal



Plate 2 Visitor path at Inch Levels. Note screening to avoid disturbance to waterbirds.



Plate 3. Visitor hide at Inch Levels.



Plate 4. Tidal area behind visitor hide. Note castle in the background at the tip of the headland on the left and an area of mud exposed on the falling tide.



Plate 5. Current visitor signage, which includes some information on birds present at the site in winter (e.g. wildfowl).

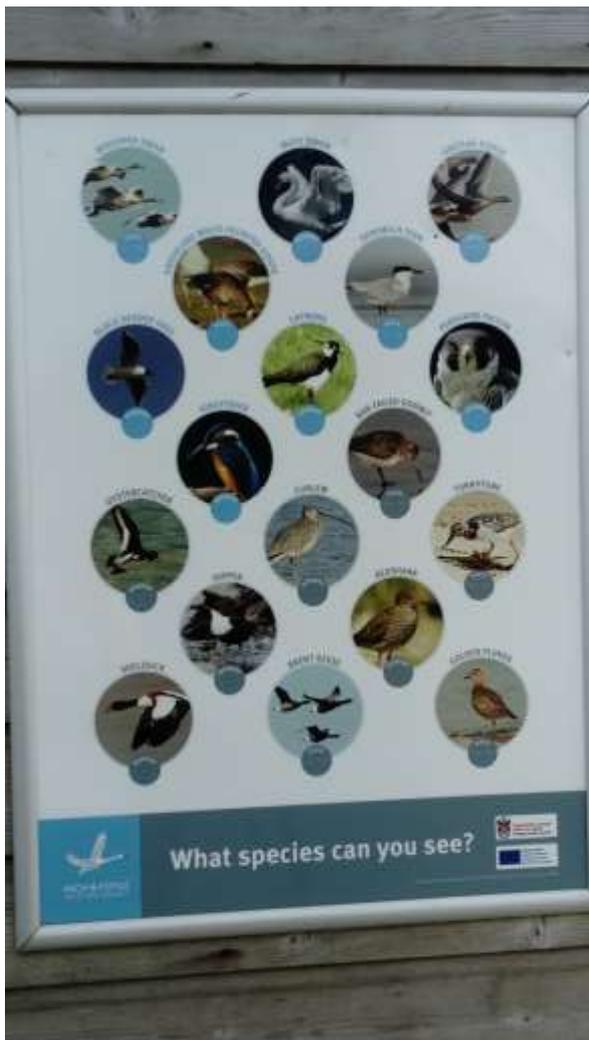


Plate 6. Visitor Signage (at hide) on birds which can be found at Inch Levels.



Plate 7. Visitor signage at the main visitor car park at Inch Island

Section 17 Conclusion

The sites visited were assessed on the basis of their bird and other known wildlife interests and any potential management issues and recommendations were provided for each site. Building on this portfolio of knowledge is important to ensure that visitors have a positive experience while ensuring the many attractions of these sites (including local biodiversity) are not adversely impacted by growth at each site.

The main risks to populations of birds at these sites from visitor numbers and activities (walking, dog walking, biking etc.) depend on the species assemblages occurring there, but include risk of disturbance to nesting birds (especially ground-nesting birds along coastal dunes and paths and to sensitive burrow-nesting birds e.g. Sand Martins); damage to priority habitats e.g. sand dunes, machair, coastal heath and indirect impacts such as habitat loss or deterioration in habitat quality (i.e. soil erosion around trails/paths) through creation of visitor amenities or existing visitor amenities, noise and air pollution and risk of alien species. A summary of the main management recommendations for those sites visited is presented below.

17.1. Summary of Management Recommendations for Sites

No.	Management	Site
1	Signage needed to inform visitors of local bird interests and unique site attractions	Galley Head; Lough Hyne; Ballyheigue Beach; Carrigafoyle Castle; Silver Strand; Oileán Chloigeann (Claggan Island); Strandhill Beach; Murvagh Beach; Magheraroarty Beach;
2	Allow and manage access to entire site to enhance visitor experience	Galley Head
3	Future growth in visitor numbers would require a review of existing parking options and visitor facilities.	Galley Head; Lough Hyne; Lamb's Head (Dursey)
4	Monitoring of the recreational activities could be facilitated by a part-time warden during the peak summer months when visitor numbers are highest (daily nature walks/talks for example).	Lough Hyne
5.	Signage to inform visitors to stick to trails and pathways provided to avoid adverse impacts on nesting birds and sensitive habitats	Lamb's Head (Dursey); Teach Dhoire Fhionáin (Derrynane); Ballyheigue Beach; Carrigafoyle Castle; Omey Island; Murvagh Beach; Magheraroarty Beach;
6.	Any increase in visitor numbers to the site should require a review of current road access	Lamb's Head (Dursey); Teach Dhoire Fhionáin (Derrynane); Silver

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		Strand; Omev Island; Oileán Chloigeann (Claggan Island)
7.	Signage to inform visitors of the nearby amenities e.g. woodland walk and bird hide	Ballyvaughan
8.	Opportunity to create a local wildlife walk/trail to highlight key local birding spots from visitors	Ballyvaughan; Omev Island
9.	Maintain restrictions in access to sensitive habitats on site	Silver Strand; Strandhill Beach;
10.	Restrict vehicular access and/or overnight camping to dunes	Murvagh Beach; Magheraroarty Beach
11.	Ensure visitor recreation activities do not adversely affect site conservation interests	Oileán Chloigeann (Claggan Island); Strandhill Beach

In general, the sites are unlikely to suffer significant impacts at current or slightly increased tourist levels but the report makes recommendations which will enhance visitor experience and potential reduce potential impact. Ongoing monitoring will be important and appropriate management measures put in place where needed. Incorporating elements to enhance the visitor experience, whether it be better signage, nature trail and talks development, visitor facilities and amenities (where appropriate) amongst others, whilst restricting access to very sensitive habitats and/or nest sites or colonies of priority bird species will ensure a more sustainable future for both the sites and for ecotourism.

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Appendix 1 – Survey conditions recorded on site

Site Details			Visit Details			Weather Details					
Site Name	Site No.	County	Date	Time Start	Time Finish	Wind (Beaufort)	Wind Direction	Precipitation	Cloud Cover	Cloud Height	Visibility
Galley Head	156	Cork	26/7/17	07:30	09:30	6	SW	0	33-66%	<1km	Good
Lough Hyne	154	Cork	26/7/17	10:00	12:15	5	W	0	66-100%	<1km	Good
Dursey Sound	EP16	Cork	26/7/17	14:50	16:21	6	W	4	67-100%	<1km	Good
Teach Dhoire Fhionáin	135a	Kerry	27/7/17	09:08	11:46	6	W	0	67-100%	<1km	Good
Ballyheigue Beach	117	Kerry	27/7/17	14:30	16:10	6-8	WSW	4	67-100%	750m	Good
Carrigafoyle Castle	114	Kerry	27/07/17	17:00	18:20	6	W	4	67-100%	<1km	Good
Cappagh Pier, Kilrush	110a	Clare	27/7/17	07:44	08:55	6	W	4	67-100%	1km	Good
Ballyvaughan Pier	94	Clare	27/7/17	10:44	12:15	5-6	W	0	67-100%	1km	Good
Trá na gCeann, Barna	89	Galway	28/7/17	14:10	15:46	3	SW	0	67-100%	750m	Good
Omev Island	78	Galway	28/7/17	17:42	19:26	4-5	W	0	67-100%	<1km	Good
Oilean Chloigeann	56	Mayo	30/7/17	15:45	17:47	4-5	W	4	67-100%	<1km	Good
Strandhill	40	Sligo	31/07/17	15:05	17:00	5	WSW	4	67-100%	<1km	Good
Murvagh Beach	34	Donegal	08/08/17	14:30	16:50	2-3	W	4	67-100%	1km	Good
Ce Mhachaire Uí Rabhartaigh	EP1	Donegal	07/08/17	17:40	19:26	3	SW	4	33-66%	1km	Good
Inch Island	10	Donegal	07/08/17	14:00	15:45	2	W	0	67-100%	1km	Good