

Appendix 1

SPA Site Synopsis

SITE SYNOPSIS

SITE NAME: RIVER SHANNON AND RIVER FERGUS ESTUARIES SPA

SITE CODE: 004077

The estuaries of the River Shannon and River Fergus form the largest estuarine complex in Ireland. The site comprises the entire estuarine habitat from Limerick City westwards as far as Doonaha in Co. Clare and Dooneen Point in Co. Kerry.

The site has vast expanses of intertidal flats which contain a diverse macro-invertebrate community, e.g. *Macoma-Scrobicularia-Nereis*, which provides a rich food resource for the wintering birds. Salt marsh vegetation frequently fringes the mudflats and this provides important high tide roost areas for the wintering birds. Elsewhere in the site the shoreline comprises stony or shingle beaches.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Cormorant, Whooper Swan, Light-bellied Brent Goose, Shelduck, Wigeon, Teal, Pintail, Shoveler, Scaup, Ringed Plover, Golden Plover, Grey Plover, Lapwing, Knot, Dunlin, Black-tailed Godwit, Bar-tailed Godwit, Curlew, Redshank, Greenshank and Black-headed Gull. It is also of special conservation interest for holding an assemblage of over 20,000 wintering waterbirds. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.

The site is the most important coastal wetland site in the country and regularly supports in excess of 50,000 wintering waterfowl (57,133 - five year mean for the period 1995/96 to 1999/2000), a concentration easily of international importance. The site has internationally important populations of Light-bellied Brent Goose (494), Dunlin (15,131), Black-tailed Godwit (2,035) and Redshank (2,645). A further 17 species have populations of national importance, i.e. Cormorant (245), Whooper Swan (118), Shelduck (1,025), Wigeon (3,761), Teal (2,260), Pintail (62), Shoveler (107), Scaup (102), Ringed Plover (223), Golden Plover (5,664), Grey Plover (558), Lapwing (15,126), Knot (2,015), Bar-tailed Godwit (460), Curlew (2,396), Greenshank (61) and Black-headed Gull (2,681) - figures are five year mean peak counts for the period 1995/96 to 1999/2000. The site is among the most important in the country for several of these species, notably Dunlin (13 % of national total), Lapwing (6% of national total) and Redshank (9% of national total).

The site also supports a nationally important breeding population of Cormorant (93 pairs in 2010).

Other species that occur include Mute Swan (103), Mallard (441), Red-breasted Merganser (20), Great Crested Grebe (50), Grey Heron (38), Oystercatcher (551),

Turnstone (124) and Common Gull (445) - figures are five year mean peak counts for the period 1995/96 to 1999/2000.

Apart from the wintering birds, large numbers of some species also pass through the site whilst on migration in spring and/or autumn.

The River Shannon and River Fergus Estuaries SPA is an internationally important site that supports an assemblage of over 20,000 wintering waterbirds. It holds internationally important populations of four species, i.e. Light-bellied Brent Goose, Dunlin, Black-tailed Godwit and Redshank. In addition, there are 17 species that have wintering populations of national importance. The site also supports a nationally important breeding population of Cormorant. Of particular note is that three of the species which occur regularly are listed on Annex I of the E.U. Birds Directive, i.e. Whooper Swan, Golden Plover and Bar-tailed Godwit. Parts of the River Shannon and River Fergus Estuaries SPA are Wildfowl Sanctuaries.

30.5.2015

Appendix 2

Survey Recording Form

WATERBIRD COUNT FORM

Guidelines for Data Entry

Brief guidelines for data entry are given below. The numbers refer to sections in the following pages. Please also refer to the detailed methodology within 'Baseline waterbird surveys within Irish Coastal SPAs – survey methods and guidance notes.'

1. **Counter Code:** Please enter this code in the box provided.
2. **Survey type:** Please mark whether this data form refers to a low-tide or high-tide count.
3. **Site Details:** Please enter the site code and name, followed by the count unit code and count unit name.
4. **Date and Time:** Please enter the date in the section provided (dd/mm/yyyy) and the start and finish times of your count in the appropriate boxes – please use 24-hour clock (e.g. 11:45)
5. **Tidal State:** Record the tidal state that best represents the times period during which you conduct the survey. 1 = Rising (3- hour period after LT); 2 = High (3- hour period with HT in the middle); 3 = Falling (3- hour period after HT) and 4 = Low (3-hour period with LT in the middle). Ice Cover: please circle the percentage cover of ice as appropriate.
6. **Weather Conditions:** Please record weather conditions in the boxes provided, referring to the conditions / categories outlined. If weather conditions change during the survey, please select a category based upon the one which best represents the overall conditions.
7. **Bird Counts:** Please enter the numbers of each waterbird species counted in the appropriate columns with regards to their location (intertidal, subtidal, supratidal, terrestrial and terrestrial (aquatic)) and behaviour (foraging or roosting / other). Blank lines are provided to record additional species not listed on the form.
For all counts please:
 - Use square brackets around a count number e.g. [540] to denote a count that is considered to underestimate the total number present.
 - Put a circle around a count number to denote a count that is not considered to be accurate or which was not taken in the standard manner, e.g. when you have not had time to count a large flock because the birds fly off mid-count and a crude estimate is therefore provided.
Write "NC" (no count) in the appropriate box if a species was present but you were not able to count it. (e.g. flock flew off).
 - An empty box for a species represents a nil-record i.e. the species was not present during the count session.
8. **Records of disturbance events:**
Spaces are provided to record each disturbance event that occurs during your count period. Please use circled numbers that correspond to the disturbances type e.g. ② and cross if the disturbance is affecting birds, e.g. ~~⊗~~.
In the additional space provided, please indicate:
 - the main species affected by the disturbance (species code)
 - species response, weak (W), moderate (M) or high (H), and
 - the duration of the disturbance events: (A) short, (B) 50% of count, (C) more than 50% of count or (D) continuing after the count has ended.
 - a star * (e.g. A*) to represent an activity that was already occurring within the subsite when you started the count of that subsite
9. **Raptors** - Please record the presence of raptor species during your count session by circling the species code. Indicating the raptor is causing a disturbance (e.g. attack) by crossing the circle.

MAP PRODUCTION – For each subsite (and for each survey date) please provide (1) a flock map and (2) an activity / events map.

Flock Data				Tidal Position		Feeding/Roosting	
Observation number (on map)	BTO Code	No. of Birds	Habitat	High	Low	F	R

(8) Disturbance

Please record each disturbance event in a separate space below. Please use circled numbers that corresponds to disturbances type e.g 2 and cross if disturbance is affecting birds e.g ⊕

In the additional space provided please indicate the main species affected by the disturbance (spp code), whether their response was weak (W), moderate (M) or high (H) and the duration of disturbance events: short (A), 50% of count (B), more than 50% (C) or continuing after the count has ended (D) plus the addition of a star * (e.g A*) to represent an activity that was already occurring within the subsite when you started the count of that subsite.

②				
CU (M, B)				

1: Human on foot -shoreline. 2: Human on foot - intertidal aquaculture. 3-Bait diggers 4 – non-powered watercraft 5 powered watercraft 6 water based recreation - 7 jet skis and wind-surfers 8 dogs 9 aircraft 10 shooting 11 other 12 winkle pickers 13 Aquaculture machinery 14 other vehicles

(9) Birds of Prey

Circle species codes for the birds of prey present during your count session, indicate which were causing a disturbance with a crossed circle

Species (BTO)	MR	HH	SH	K.	ML	PE	BZ	SE	O.
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