

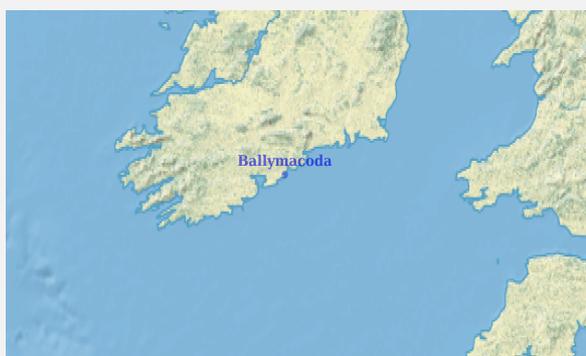


Ramsar Information Sheet

Published on 6 July 2022

Update version, previously published on : 11 June 1996

Ireland Ballymacoda



Designation date	7 June 1996
Site number	831
Coordinates	51°54'20"N 07°53'56"W
Area	375,00 ha

Color codes

Fields back-shaded in light blue relate to data and information required only for RIS updates.

Note that some fields concerning aspects of Part 3, the Ecological Character Description of the RIS (tinted in purple), are not expected to be completed as part of a standard RIS, but are included for completeness so as to provide the requested consistency between the RIS and the format of a 'full' Ecological Character Description, as adopted in Resolution X.15 (2008). If a Contracting Party does have information available that is relevant to these fields (for example from a national format Ecological Character Description) it may, if it wishes to, include information in these additional fields.

1 - Summary

Summary

Ballymacoda is a coastal site located near the eastern border of Co. Cork 5 km, south-west of Youghal Town. The site comprises the estuary of the Womanagh River, a substantial river which drains a large agricultural catchment and which flows into Youghal Bay. The inner part of the estuary is well sheltered by the Ring peninsula, a stabilised sand spit with sand dunes at its northern end and flanked by reclaimed marshy fields and saltmarsh on the landward side. Though moderate in size, it has a good diversity of marine and coastal habitats and is of high ornithological importance as it regularly supports over 20,000 wintering waterbirds.

The site is designated as a Special Area of Conservation (SAC) under the EU Habitats Directive, as it contains representative examples of marine habitats and natural wetland types within the Atlantic biogeographic region. There are extensive saltmarshes (Salicornia flats, Atlantic and Mediterranean salt meadows), estuaries and intertidal sand and mudflats within the site. Sheltered areas are comprised of extensive intertidal mud flats, up to one kilometre wide. Fine rippled sands occur in the outer exposed part of the site. Saltmarsh habitat is well developed in several areas of the site. A substantial area of the land adjacent to the estuary has resulted from reclamation over the past 150 years (McCorry & Ryle, 2009). These grassland fields, the various marine and coastal habitats and the shallow nature of the bay provide important resources for wintering waterbirds,

Ballymacoda is of great importance for waterbirds on the south coast and is designated as a Special Protection Area under the EU Birds Directive due to the presence of nationally and internationally important populations of species listed on Annex I of the EU Birds Directive and/or regularly occurring migratory species. Under this designation the wetland habitat is also protected as a resource for the regularly-occurring migratory waterbirds that utilise it. According to the I-WeBS data (2010-2015) internationally important populations of Black-tailed Godwit regularly occur at the site along with nationally important populations of other species, including a number that are listed on Annex I of the Birds Directive

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Responsible compiler

Institution/agency	National Parks and Wildlife Service, Department of Housing, Local Government and Heritage
Postal address	National Parks and Wildlife Service, 90 North King Street, Smithfield, Dublin, Ireland D07 N7CV

National Ramsar Administrative Authority

Institution/agency	National Parks and Wildlife Service, Department of Housing, Local Government and Heritage
Postal address	National Parks and Wildlife Service, 90 North King Street, Smithfield, Dublin, Ireland D07 N7CV

2.1.2 - Period of collection of data and information used to compile the RIS

From year

To year

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)

Unofficial name (optional)

2.1.4 - Changes to the boundaries and area of the Site since its designation or earlier update

(Update) A. Changes to Site boundary Yes No

(Update) B. Changes to Site area No change to area

(Update) For secretariat only: This update is an extension

2.1.5 - Changes to the ecological character of the Site

(Update) 6b i. Has the ecological character of the Ramsar Site (including applicable Criteria) changed since the previous RIS?

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image
<2 file(s) uploaded>

Former maps

Boundaries description

The boundary of Ballymacoda Ramsar site was delineated as the same boundary as the original Special Protection Area in 1994 (but the latter was subsequently enlarged). While smaller in extent than the current SPA and the SAC, the Ramsar site is an integral part of the larger wetland complex which comprises the SAC and SPA. Details of the SAC and SPA can be found on the NPWS website at <https://www.npws.ie/protected-sites>. Within this area a number of GIS data layers were used to define the Ramsar habitats within the site. These included:

- CORINE (Co-Ordinated Information on the Environment) land cover data sets (2012).
- Bing Maps Aerial - © Harris Corp, Earthstar Geographics LLC © 2017 Intermap Earthstar Geographics SIO © 2017 Microsoft Corporation.
- Environmental Protection Agency of Ireland Rivers and Lakes layers data layers.
- NPWS data layers: Saltmarsh habitats and Marine communities.

The mapped layers were inspected by a site visit to confirm the presence of the habitats. Habitat areas were subsequently estimated by reference to the available imagery and layers and should be considered representative but approximate.

The mapped area, as calculated from the GIS boundary, differs slightly from the official boundary of the Ramsar site. This is due to historic mapping issues generally as a result of differing mapping projections.

2.2.2 - General location

a) In which large administrative region does the site lie?

b) What is the nearest town or population centre?

2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other countries? Yes No

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes No

2.2.4 - Area of the Site

Official area, in hectares (ha):

Area, in hectares (ha) as calculated from GIS boundaries

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Marine Ecoregions of the World (MEOW)	Atlantic
EU biogeographic regionalization	Atlantic

Other biogeographic regionalisation scheme

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

- Criterion 1: Representative, rare or unique natural or near-natural wetland types

Hydrological services provided

The estuary provides natural filtration services which are important for coastal water quality, however where input levels (e.g. chemicals, organic waste) are excessive the natural character of the estuary can be greatly affected. The habitats of Ballymacoda Bay are also important within the context of coastal erosion and storm protection.

Other ecosystem services provided

This site is important for its diversity of coastal and estuarine habitats and the plant and animal communities which they support. Biological monitoring at this site informs local and national habitat and species conservation assessment. The site provides a location for scientific and educational study and research and is also important for tourism and recreation. The site provides provisioning resources with the presence of an aquaculture industry. The estuarine and intertidal habitats and the communities (plant and invertebrate) which they support are important for nutrient cycling, carbon sequestration and sediment trapping. With the cycling of carbon and nutrients estuarine systems have a role in climate regulation.

Other reasons

Ballymacoda contains representative and natural examples of marine habitats and natural wetland types within the Atlantic biogeographic region, i.e. estuaries, tidal mudflats and sandflats and Atlantic saltmarshes. In particular, it supports good examples of an estuarine complex with intertidal mudflats well represented. It also contains excellent examples of Atlantic salt meadows and Mediterranean salt meadows. A rarer sub-type of Mediterranean salt meadow with Borrer's Saltmarsh-grass (*Puccinellia fasciculata*) as an indicator species is present at this site.

- Criterion 2 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity

Justification

This site contains a range of coastal habitats which are representative of the biogeographical region. In particular, it supports good examples of an estuarine complex with intertidal mudflats well represented. It also contains excellent examples of Atlantic salt meadows and Mediterranean salt meadows, including a rarer sub-type of Mediterranean salt meadow. The assemblage of wintering birds including those of high (Red Listed in Ireland, Vulnerable in Europe and/or Globally) and medium (Amber Listed species in Ireland) conservation status contribute to biodiversity within the biogeographical region.

- Criterion 4 : Support during critical life cycle stage or in adverse conditions

- Criterion 5 : >20,000 waterbirds

Overall waterbird numbers 20412

Start year 2011

Source of data: The Irish Wetland Bird Survey (I-WeBS)

- Criterion 6 : >1% waterbird population

3.2 - Plant species whose presence relates to the international importance of the site

Phylum	Scientific name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
Plantae								
TRACHEOPHYTA/ LILIOPSIDA	<i>Puccinellia fasciculata</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	The Flora (Protection) Order; Rare in the Plant Red Data Book, Near Threatened in the 2016 Vascular Plant Red List.	Nationally rare and protected plant species in Ireland

Borrer's Saltmarsh-grass (*Puccinellia fasciculata*) is listed as Rare in the Plant Red Data Book (Curtis & McGough, 1988; Stewart & Church, 1992) and Near Threatened in the 2016 Vascular Plant Red List for Ireland (Wyse Jackson et al, 2016). The species is protected under National Legislation - The Flora (Protection) Order, 1999 [SI94/1999].

According to McCorry & Ryle (2009) this is the first recording of this Borrer's Saltmarsh-grass at the site, previously only found from seven 10 km² squares along the Barrow Estuary, Wexford and Dublin shorelines since 1960 with the most westerly record in the past 20 years being the Barrow Estuary (Wexford). The species is normally found in more brackish conditions than found in typically in Atlantic Salt Marsh. Borrer's Saltmarsh-grass is generally found in upper saltmarsh and muddy transitional areas particularly along embankments adjacent to coastal areas. It is also an indicator of a rarer sub-type of Mediterranean salt meadow.

3.3 - Animal species whose presence relates to the international importance of the site

Phylum	Scientific name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
		2	4	6	9	3	5	7	8								
Birds																	
CHORDATA/ AVES	<i>Alcedo atthis</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Listed on Annex I (Birds Directive), Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Annex I listing.
CHORDATA/ AVES	<i>Anas clypeata</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	2011-2015			<input type="checkbox"/>	<input type="checkbox"/>	Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	National (BoCCI) classification, part of wintering assemblage
CHORDATA/ AVES	<i>Anas crecca</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	413	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Part of wintering assemblage, maintenance of biodiversity
CHORDATA/ AVES	<i>Anas penelope</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	395	2011-2015			<input type="checkbox"/>	<input type="checkbox"/>	Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	National (BoCCI) classification, part of wintering assemblage,
CHORDATA/ AVES	<i>Branta bernicla hrota</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	320	2011-2015			<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Part of wintering assemblage, maintenance of biodiversity
CHORDATA/ AVES	<i>Calidris alpina</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	657	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	National (BoCCI) classification, part of wintering assemblage,
CHORDATA/ AVES	<i>Calidris canutus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	131	2011-2015		NT	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Part of wintering assemblage, maintenance of biodiversity
CHORDATA/ AVES	<i>Cygnus olor</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Part of wintering assemblage, maintenance of biodiversity
CHORDATA/ AVES	<i>Egretta garzetta</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	33	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Listed on Annex I (Birds Directive)	Annex I listing
CHORDATA/ AVES	<i>Gallinago gallinago</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	37	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Part of wintering assemblage, maintenance of biodiversity

Phylum	Scientific name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence ¹⁾	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
		2	4	6	9	3	5	7	8								
CHORDATA/AVES	<i>Haematopus ostralegus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	453	2011-2015		NT	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013), and Vulnerable classification IUCN Europe region)	IUCN classifications, part of wintering assemblage.
CHORDATA/AVES	<i>Ichthyaetus melanocephalus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2011-2015			<input type="checkbox"/>	<input type="checkbox"/>	Listed on Annex I (Birds Directive), Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Annex I listing.
CHORDATA/AVES	<i>Limosa lapponica</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	456	2011-2015		NT	<input type="checkbox"/>	<input type="checkbox"/>	Listed on Annex I (Birds Directive), Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Annex I listing, part of wintering assemblage.
CHORDATA/AVES	<i>Limosa limosa</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	809	2011-2015	1.3	NT	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013), and Vulnerable classification IUCN Europe region)	National (BoCCI) and IUCN classifications, internationally important numbers of the <i>Limosa limosa islandica</i> population, part of wintering assemblage
CHORDATA/AVES	<i>Numenius arquata</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	454	2011-2015		NT	<input type="checkbox"/>	<input type="checkbox"/>	Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013), and Vulnerable classification IUCN Europe region)	National (BoCCI) and IUCN classifications, part of wintering assemblage
CHORDATA/AVES	<i>Phalacrocorax carbo</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	24	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Part of wintering assemblage, maintenance of biodiversity
CHORDATA/AVES	<i>Philomachus pugnax</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2011-2015			<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Part of wintering assemblage, maintenance of biodiversity
CHORDATA/AVES	<i>Pluvialis apricaria</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5041	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Listed on Annex I (Birds Directive), Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Annex I listing, and National (BoCCI) classification, part of wintering assemblage
CHORDATA/AVES	<i>Podiceps cristatus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Part of wintering assemblage, maintenance of biodiversity
CHORDATA/AVES	<i>Tachybaptus ruficollis</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Part of wintering assemblage, maintenance of biodiversity
CHORDATA/AVES	<i>Tadorna tadorna</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	43	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Part of wintering assemblage, maintenance of biodiversity
CHORDATA/AVES	<i>Thalasseus sandvicensis</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	153	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Listed on Annex I (Birds Directive), Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Annex I listing
CHORDATA/AVES	<i>Tringa totanus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	267	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	National (BoCCI) classification, part of wintering assemblage.
CHORDATA/AVES	<i>Vanellus vanellus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	876	2011-2015		NT	<input type="checkbox"/>	<input type="checkbox"/>	Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013), and Vulnerable classification IUCN Europe region)	National (BoCCI) and IUCN classifications, part of wintering assemblage.

1) Percentage of the total biogeographic population at the site

Wintering bird species listed under 3.3 have been selected based on an assessment of Irish Wetland Bird Survey data from the period 2006/07 to 2015/16. Ballymacoda Bay is a Special Protection Area (SPA) for birds, however not all species listed for the SPA may be listed under 3.3 (or vice versa) as the SPA designation is based on other data and criteria.

Ballymacoda is the second most important site for wintering waterbirds on the south coast after Cork Harbour. I-WeBS data for this site (from the period 2006/07 to 2015/16) lists internationally important populations of the Black-tailed Godwit (*Limosa limosa*). The IUCN deem this species as Vulnerable in Europe and Near threatened globally; with rapid declines in Europe and globally due to changes in agricultural practices. I-WeBS data (for the same period) lists nationally important populations of Teal (*Anas crecca*), Little egret (*Egretta garzetta*), Ringed plover (*Charadrius hiaticula*), Golden plover (*Pluvialis apricaria*), Grey plover (*Pluvialis squatarola*), Lapwing (*Vanellus vanellus*), Sanderling (*Calidris alba*), Dunlin (*Calidris alpina*), Bar-tailed Godwit (*Limosa lapponica*), Curlew (*Numenius arquata*), and Turnstone (*Arenaria interpres*). All but three (Little egret, Sanderling, Turnstone) of these birds are listed as Birds of Conservation Concern in Ireland. The Little egret, Dunlin, Golden Plover and Bar-tailed Godwit are listed on Annex I of the EU Birds Directive. The EU population status for Dunlin is Depleted (EUNIS). According to the IUCN the Bar-tailed Godwit population is stable in Europe but declining globally (Near threatened); the Lapwing is Near threatened within Europe and Vulnerable globally and is suspected to be decreasing at a moderately rapid rate. The Curlew is under-going rapid decline both throughout Europe (Vulnerable) and globally (Near Threatened).

Ballymacoda is a designated Special Protection Area due to the presence of the following wintering waterbird species which are regularly occurring and/or listed on Annex I EU Birds Directive: Wigeon (*Anas penelope*), Teal, Ringed Plover (*Charadrius hiaticula*), Golden Plover Grey Plover, Lapwing, Sanderling, Dunlin, Black-tailed Godwit, Curlew, Redshank (*Tringa totanus*), Turnstone, Black-headed Gull (*Chroicocephalus ridibundus*), Common Gull (*Larus canus*) and the Lesser Black-backed Gull (*Larus fuscus*). Under this SPA designation the wetland habitat is also protected as a resource for the regularly-occurring migratory water birds that utilise it.

Other Annex I species recorded at the site include Sandwich tern (*Sterna sandvicensis*), Common tern (*Sterna hirundo*) and Kingfisher (*Alcedo atthis*). According to IUCN the Kingfisher is deemed Vulnerable within Europe and the EU population status is deemed threatened (EUNIS). The EU population of the Black Headed Gull, a consistent visitor at the site, is listed as Depleted (EUNIS).

3.4 - Ecological communities whose presence relates to the international importance of the site

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
Saltmarsh community	<input checked="" type="checkbox"/>	A wide range of communities are supported by the Saltmarsh habitat at the site including a Mediterranean salt marsh community which supports the rare species <i>Puccinellia fasciculata</i>	The saltmarsh communities support the structure and function of the site. The communities associated with the saltmarsh areas have a restricted distribution within the biogeographical range
Mudflats and sandflats not covered by seawater at low tide [1140]	<input checked="" type="checkbox"/>		Annex I (Habitats Directive)
Salicornia and other annuals colonising mud and sand [1310]	<input checked="" type="checkbox"/>		Annex I (Habitats Directive)
Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>) [1330]	<input checked="" type="checkbox"/>		Annex I (Habitats Directive)
Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]	<input checked="" type="checkbox"/>		Annex I (Habitats Directive)
Estuaries [1130]	<input checked="" type="checkbox"/>		Annex I (Habitats Directive)

Optional text box to provide further information

Some saltmarsh, sand dune and wet grassland habitats which are part of Ballymacoda SPA and/or SAC are integral to this site, but are not within the Ramsar site boundaries. These habitats are of importance in themselves (qualifying SAC habitats) and are also used by roosting and feeding wintering waterbirds.

4 - What is the Site like? (Ecological character description)

4.1 - Ecological character

Ballymacoda is a coastal site characterised by a range of habitats including estuaries, mudflats, saltmarsh and shallow subtidal waters. The Womanagh River drains into the south west of the site. A significant sand spit shelters the inner bay from the outer, exposed, easterly facing section of the site. The Womanagh River is a substantial river which drains a large agricultural catchment. The main channel of the river is flanked by saltmarshes and wet fields, much of the latter being improved for agriculture. The intertidal mudflats and sandflats, which form part of the overall estuarine habitat, are well represented. The sediment types vary from muds to muddy sands in the inner part, to fine rippled sands in the outer exposed part. The macro-invertebrate fauna of the intertidal flats is well-developed and provides an important feeding resource for waterbirds. Ballymacoda is one of the most important bird sites in the country and supports a higher number of waders than any other Co. Cork estuary of its size. Aquaculture (Oyster farming) is present on intertidal habitat within the Ballymacoda Bay.

4.2 - What wetland type(s) are in the site?

Marine or coastal wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
E: Sand, shingle or pebble shores	Sand, shingle or pebble shores	4	4	Representative
F: Estuarine waters	Estuarine waters	3	25	Representative
G: Intertidal mud, sand or salt flats	Intertidal mudflats and sandflats	1	323	Representative
H: Intertidal marshes	Intertidal marshes	2	28	Representative

4.3 - Biological components

4.3.1 - Plant species

Invasive alien plant species

Phylum	Scientific name	Impacts	Changes at RIS update
TRACHEOPHYTA/LILIOPSIDA	<i>Spartina anglica</i>	Actual (major impacts)	No change

4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Pop. size	Period of pop. est.	% occurrence	Position in range /endemism/other
CHORDATA/AVES	<i>Arenaria interpres</i>	127	2011-2015		Occurs in nationally important numbers
CHORDATA/AVES	<i>Calidris alba</i>	156	2011-2015		Occurs in nationally important numbers
CHORDATA/AVES	<i>Charadrius hiaticula</i>	202	2011-2015		Occurs in nationally important numbers
CHORDATA/AVES	<i>Chroicocephalus ridibundus</i>				Recorded from this site
CHORDATA/AVES	<i>Larus canus</i>				Recorded from this site
CHORDATA/AVES	<i>Pluvialis squatarola</i>	187	2011-2015		Occurs in nationally important numbers
CHORDATA/AVES	<i>Sterna hirundo</i>				Annex I species, recorded from this site.

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
C: Moist Mid-Latitude climate with mild winters	Cfb: Marine west coast (Mild with no dry season, warm summer)

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

- Entire river basin
- Upper part of river basin
- Middle part of river basin
- Lower part of river basin
- More than one river basin
- Not in river basin
- Coastal

Please name the river basin or basins. If the site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean.

Irish Sea

4.4.3 - Soil

Mineral

(Update) Changes at RIS update No change Increase Decrease Unknown

Organic

(Update) Changes at RIS update No change Increase Decrease Unknown

No available information

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)? Yes No

4.4.4 - Water regime

Water permanence

Presence?	Changes at RIS update
Usually permanent water present	

Source of water that maintains character of the site

Presence?	Predominant water source	Changes at RIS update
Marine water	<input checked="" type="checkbox"/>	No change
Water inputs from surface water	<input type="checkbox"/>	unknown

Water destination

Presence?	Changes at RIS update
Marine	No change

Stability of water regime

Presence?	Changes at RIS update
Water levels fluctuating (including tidal)	No change

Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology:

The site comprises of the estuary of the Womanagh River, a substantial river which drains a large agricultural catchment.

4.4.5 - Sediment regime

Significant erosion of sediments occurs on the site

(Update) Changes at RIS update No change Increase Decrease Unknown

Significant accretion or deposition of sediments occurs on the site

(Update) Changes at RIS update No change Increase Decrease Unknown

Sediment regime unknown

Please provide further information on sediment (optional):

Saltmarshes occur within the site, Accretion and erosion are natural elements of Saltmarsh systems (NPWS, 2013). According to McCorry & Ryle (2009) losses due to erosion are quite minor compared to the growth of saltmarsh within the past 90 years and therefore the impact of erosion is assessed as neutral.

4.4.6 - Water pH

Alkaline (pH>7.4)

(Update) Changes at RIS update No change Increase Decrease Unknown

Unknown

4.4.7 - Water salinity

Fresh (<0.5 g/l)

(Update) Changes at RIS update No change Increase Decrease Unknown

Euhaline/Eusaline (30-40 g/l)

(Update) Changes at RIS update No change Increase Decrease Unknown

Unknown

4.4.8 - Dissolved or suspended nutrients in water

Unknown

4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the site itself: i) broadly similar ii) significantly different

Surrounding area has greater urbanisation or development

Surrounding area has higher human population density

Surrounding area has more intensive agricultural use

Surrounding area has significantly different land cover or habitat types

Please describe other ways in which the surrounding area is different:

The land bordering the site is low lying improved agricultural land. The area has many one-off domestic dwellings and small villages.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Erosion protection	Soil, sediment and nutrient retention	Low
Pollution control and detoxification	Water purification/waste treatment or dilution	Low
Climate regulation	Local climate regulation/buffering of change	Medium
Climate regulation	Regulation of greenhouse gases, temperature, precipitation and other climactic processes	Medium
Hazard reduction	Coastal shoreline and river bank stabilization and storm protection	Low
Hazard reduction	Flood control, flood storage	Low

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Scientific and educational	Long-term monitoring site	Medium
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	Medium

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganisms, the genes they contain, and the ecosystems of which they form a part	Medium
Soil formation	Accumulation of organic matter	Low
Soil formation	Sediment retention	Low
Nutrient cycling	Storage, recycling, processing and acquisition of nutrients	Low
Nutrient cycling	Carbon storage/sequestration	Low

Within the site: 1000s

Outside the site: 10 000s

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes No Unknown

4.5.2 - Social and cultural values

i) the site provides a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland

ii) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland

iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples

iv) relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland

<no data available>

4.6 - Ecological processes

<no data available>

5 - How is the Site managed? (Conservation and management)

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public ownership

Category	Within the Ramsar Site	In the surrounding area
Provincial/region/state government	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Provide further information on the land tenure / ownership regime (optional):

All of the foreshore of Ireland is deemed owned by the State, unless a valid alternative title is provided. The foreshore of Ireland is classed as the land and seabed between the high water of ordinary or medium tides (shown HWM on Ordnance Survey maps) and the twelve-mile limit (12 nautical miles equals approximately 22.24 kilometers). Foreshore also covers tidal areas of rivers particularly estuaries (Housing.gov.ie).

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site:

National Parks & Wildlife Service (NPWS),
Department of Culture, Heritage and the Gaeltacht.
Cork County Council.
Environmental Protection Agency (EPA).
Department of Housing, Local Government and Heritage
Marine Institute.

Provide the name and/or title of the person or people with responsibility for the wetland:

Maurice Eakin

Postal address:

National Parks and Wildlife Service,
90 North King Street,
Smithfield, Dublin,
Ireland
D07 N7CV

E-mail address:

maurice.eakin@chg.gov.ie

5.2 - Ecological character threats and responses (Management)

5.2.1 - Factors (actual or likely) adversely affecting the Site's ecological character

Human settlements (non agricultural)

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Housing and urban areas	Medium impact		<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change
Tourism and recreation areas	Medium impact		<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Livestock farming and ranching	Medium impact		<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Marine and freshwater aquaculture	unknown impact		<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Hunting and collecting terrestrial animals	Medium impact		<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Recreational and tourism activities	Medium impact		<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Invasive non-native/ alien species	Medium impact		<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Agricultural and forestry effluents	Low impact	Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Please describe any other threats (optional):

Common Cordgrass *Spartina anglica* is present at this site and is an invasive species of saltmarsh and mudflats. According to McCorry & Ryle (2009) the Atlantic saltmarsh at this site can be considered to be negatively impacted by this invasive species; It is also present within the *Salicornia* flats where seedlings are present. The spread of *Spartina* sward will be at the expense of intertidal mudflats.

5.2.2 - Legal conservation status

Regional (international) legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
EU Natura 2000	Ballymacoda (Clonpriest & Pillmore) Scientific Area of conservation. Site Code:000077	https://www.npws.ie/protected-sites/sac/000077	whole
EU Natura 2000	Ballymacoda Special Protection Area. Site Code:004023	https://www.npws.ie/protected-sites/spa/004023	whole

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Ballymacoda	http://datazone.birdlife.org/site/factsheet/ballymacoda-iba-ireland	whole

5.2.3 - IUCN protected areas categories (2008)

- Ia Strict Nature Reserve
- Ib Wilderness Area: protected area managed mainly for wilderness protection
- II National Park: protected area managed mainly for ecosystem protection and recreation
- III Natural Monument: protected area managed mainly for conservation of specific natural features
- IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention
- V Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation
- VI Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems

5.2.4 - Key conservation measures

Legal protection

Measures	Status
Legal protection	Implemented

Habitat

Measures	Status
Catchment management initiatives/controls	Implemented
Improvement of water quality	Implemented
Land conversion controls	Implemented

Species

Measures	Status
Threatened/rare species management programmes	Implemented

Human Activities

Measures	Status
Regulation/management of wastes	Implemented
Fisheries management/regulation	Implemented
Harvest controls/poaching enforcement	Implemented
Regulation/management of recreational activities	Implemented
Research	Implemented

Other:

The Ballymacoda Ramsar site lies within the Ballymacoda (Clonpriest & Pillmore) SAC (000077) and the Ballymacoda SPA (004023). Under European and national legislation, Ireland must maintain at favourable conservation status areas designated as Special Protection Areas. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites. Conservation objectives of this site have been set for the SAC and the SPA and are listed below; these can be accessed on NPWS.ie.

- To maintain or restore the favourable conservation condition of the Annex I habitat(s) for which the SAC has been selected: Estuaries (1130), Mudflats and sandflats not covered by seawater at low tide (1140), Salicornia and other annuals colonizing mud and sand (1310), Atlantic salt meadows (Glauco - Puccinellietalia maritima) (1330).
- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA; and Wetlands (A999).

Legislation in the Republic of Ireland affords protection to bird species outside of designated sites e.g. all wild bird species are afforded protection by The Wildlife Act 1976. Waterfowl shooting is under license only, managed by the National Parks & Wildlife Service. Ballymacoda is routinely surveyed as part of I-WeBS which provides comprehensive counts of the bird species using the site.

5.2.5 - Management planning

Is there a site-specific management plan for the site? No

Has a management effectiveness assessment been undertaken for the site? Yes No

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning processes with another Contracting Party? Yes No

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No need identified

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Water regime monitoring	Implemented
Water quality	Implemented
Animal community	Implemented
Birds	Implemented

A requirement of the Water Framework Directive is that benthic macro-invertebrates must be sampled from coastal and transitional waters at least twice within a river basin cycle (6 years) in order to classify these water bodies. The site is monitored under this programme. As an EU Natura 2000 site, it is required under Article 12 and 17 of the EU Birds and Habitats Directives respectively, that the status and trends of the conservation objectives within the site are monitored and reported on every 6 years. The site is monitored under this programme. The site is monitored under the I-WeBS scheme. The site is regularly inspected by the National Parks and Wildlife Service Conservation Rangers for the area

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Colhoun, K. and Cummins, S. 2013. Birds of conservation concern in Ireland 2014-2019. Irish Birds 9: 523-544.

McCorry, M. & Ryle, T. (2009). Saltmarsh Monitoring Project 2007-2008. Unpublished report to the National Parks and Wildlife Service, Dublin.

Stewart, N. F. and Church, J. M. (1992) Red Data Books of Britain and Ireland. Joint Nature Conservation Committee and Office of Public Works.

The Irish Red Data Book (1988) T.G.F.Curtis & H.N.McGough

Lewis, L. J., Burke, B., Fitzgerald, N., Tierney, T. D. & Kelly, S. (2019) Irish Wetland Bird Survey: Waterbird Status and Distribution 2009/10-2015/16. Irish Wildlife Manuals, No. 106. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland.

NPWS (2015) Conservation Objectives: Ballymacoda (Clonpriest and Pillmore) SAC 000077. Version 2. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2015) Site Synopsis: Ballymacoda (Clonpriest and Pillmore) SAC 000077. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2015) Natura Form: Ballymacoda (Clonpriest and Pillmore) SAC 000077. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2015) Conservation objectives supporting document - Marine Habitats: Ballymacoda (Clonpriest and Pillmore) SAC 000077. Version 2. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2014) Conservation objectives supporting document - Coastal Habitats: Ballymacoda (Clonpriest and Pillmore) SAC 000077. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2015) Conservation Objectives: Ballymacoda Bay SPA 004023. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2015) Ballymacoda SPA 004023 Natura 2000 Form. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2014) Site Synopsis for Ballymacoda SPA 004023. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2011) Conservation objectives supporting document for Ballymacoda SPA 004023. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

Wyse Jackson, M., FitzPatrick, Ú., Cole, E., Jebb, M., McFerran, D., Sheehy Skeffington, M. & Wright, M. (2016) Ireland Red List No. 10: Vascular Plants. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, Dublin, Ireland.

IUCN 2014. IUCN Red List of Threatened Species. Version 2014.2. . Downloaded on August 2017.

BirdwatchIreland.ie

<http://eunis.eea.europa.eu>

The Irish Wetland Bird Survey (IWeBS).

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)

<no file available>

ii. a detailed Ecological Character Description (ECD) (in a national format)

<no file available>

iii. a description of the site in a national or regional wetland inventory

<no file available>

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

<no file available>

vi. other published literature

<no file available>

<no data available>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Ballymacoda (National Parks and Wildlife Service, 12/8/17)



Ballymacoda (National Parks and Wildlife Service, 12/8/17)



Ballymacoda (National Parks and Wildlife Service, 12/8/17)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 1996-06-07