



Site Name: Ballyteige Burrow SAC

Site Code: 000696

This coastal site extends eastwards and northwards from the village of Kilmore Quay in Co. Wexford. A long, narrow spit of coarse sand and gravel with an impressive sand dune system (Ballyteige Burrow) forms most of the seaward boundary of this site. Behind the spit lies a shallow, tidal sea inlet and estuary of the Duncormick River (The Cull). The eastern portion of this intertidal system was reclaimed in the 19th century by construction of the Cull Bank and is now polderland, most of which is intensively farmed grassland and arable land. The western portion of The Cull retains semi-natural habitat, including mudflats which are exposed at low tide and saltmarsh. Most of the site is designated a Nature Reserve.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

- [1130] Estuaries
- [1140] Tidal Mudflats and Sandflats
- [1150] Coastal Lagoons*
- [1210] Annual Vegetation of Drift Lines
- [1220] Perennial Vegetation of Stony Banks
- [1310] *Salicornia* Mud
- [1330] Atlantic Salt Meadows
- [1410] Mediterranean Salt Meadows
- [1420] Halophilous Scrub
- [2110] Embryonic Shifting Dunes
- [2120] Marram Dunes (White Dunes)
- [2130] Fixed Dunes (Grey Dunes)*
- [2150] Decalcified Dune Heath*
- [2190] Humid Dune Slacks

A significant proportion of this site comprises intertidal mud- and sandflats which form part of the estuary of the Duncormick River, and the site includes most of the tidal section of this river. The estuary also receives the flow from a network of canals which drain the polders to the east of the site, plus from some minor streams. The estuary is interesting because it is almost entirely enclosed by the extensive sand-shingle spit which makes up Ballyteige Burrow, with only a narrow inlet/outlet at the western end. The estuary empties almost entirely on most tides, apart from the main central channel.

A dominating feature of this site is its large dune system, many of the dunes reaching over 20 m in height. Embryonic shifting dunes and Marram (*Ammophila arenaria*) dunes occur along the seaward side, with more stable fixed dunes and dune heath inland, though blow-outs occur throughout. Typically, plants such as Marram, Portland Spurge (*Euphorbia portlandica*), Sea-holly (*Eryngium maritimum*), Sea Stork's-bill (*Erodium cicutarium*) and Carline Thistle (*Carlina vulgaris*) are common on the seaward dunes.

The fixed dunes occupy the central ridge of the Burrow. These are well developed and species-rich. The vegetation is predominantly low-growing and contains species such as Common Restharrow (*Ononis repens*), Wild Pansy (*Viola tricolor* subsp. *curtisii*), Sea Stork's-bill, Common Centaury (*Centaureum erythraea*), Wild Thyme (*Thymus praecox*) and Red Fescue (*Festuca rubra*). Cattle have not grazed the eastern end of the site since 1987 and, as a result, there is an increase in dune scrub encroachment and a decrease in species diversity. The dominant species here are Red Fescue and Burnet Rose (*Rosa pimpinellifolia*), while Bracken (*Pteridium aquilinum*) is common.

One of the most notable features at Ballyteige is the presence of developing acid heath within the (calcareous) fixed grey dune area. This is very unusual in Irish dune systems. The vegetation here is dominated by Bracken, with some Gorse (*Ulex europaeus*) and low-growing herbs. In addition, dune slacks occur as part of the dune complex. These are eroded down in places to the shingle base on which the dunes rest. The free draining nature of these slacks has resulted in an unusual vegetation community distinguished from the adjacent fixed dunes in the abundance of the lichen and bryophyte flora and the shorter stature of the vegetation.

Saltmarsh vegetation fringes The Cull, featuring Sea Aster (*Aster tripolium*), Sea Arrowgrass (*Triglochin maritima*), Lax-flowered Sea-lavender (*Limonium humile*) and Hard-grass (*Parapholis strigosa*), with well developed mats of glasswort (*Salicornia* sp.) and patches of cord-grass (*Spartina* sp.). Salt meadows with Sea Rush (*Juncus maritimus*) have formed behind the dyke at the eastern end of the site. Part of the saltmarsh complex contains halophilous scrub vegetation. This is a very rare habitat in Ireland, with only two known extant locations - Ballyteige and Bannow Bay. This habitat is characterised by the rare Perennial Glasswort (*Arthrocnemum perenne*).

A series of drainage channels and a small pond, which are largely artificial in origin, now have a flora and fauna characteristic of lagoons. The channels have a maximum depth of 3 m. Seawater enters mainly by percolation through the dunes along the southern shore and apparently by leakage of the sluice on The Cull at high tide. While the aquatic vegetation in much of the site is poor, two lagoonal specialists, Tassel-weed (*Ruppia maritima*) and the green alga *Chaetomorpha linum* occur. An additional lagoonal specialist, the Red Data Book stonewort *Chara canescens*, was recorded here in 1991. The fauna of the lagoonal habitat is rich, diverse and typically lagoonal. A total of 60 taxa were recorded in a survey in 1998, in addition to several further taxa recorded previously. Eleven of these are considered as lagoonal

specialists in Britain or Ireland (*Lekanesphaera hookeri* (Order Isopoda), *Palaemonetes varians* (Order Decapoda), *Sigara stagnalis* (Order Hemiptera), *S. concinna* (Order Hemiptera), *Agabus conspersus* (Order Coleoptera), *Enochrus bicolor* (Order Coleoptera), *Hydrobia ventrosa* (Class Gastropoda, Order Neotaenioglossa), *Conopeum seurati* (a bryozoan), *Neomysis integer* (Order Mysida), *Notonecta viridis* (Order Hemiptera) and *Plea leachi* (Order Heteroptera)). While the habitat is particularly degraded, restoration is considered feasible and long-term prospects are good.

Ballyteige is recognised as one of the most impressive shingle-based dune systems in the country. There are 'cobble valley's' in between the some of the dunes, an unusual feature. Species associated with shingle recorded from the site include Sea Sandwort (*Honkenya peploides*), Sea-holly (*Eryngium maritimum*), Sea Bindweed (*Calystegia soldanella*) and Yellow Horned-poppy (*Glaucium flavum*). Species typical of the habitat 'annual vegetation of drift lines' which occur at the site include Spear-leaved Orache (*Atriplex prostrata*), Sea-holly, Sea Rocket (*Cakile maritima*) and Yellow Horned-poppy.

This site is host to a range of rare plant species. Wild Asparagus (*Asparagus officinalis* subsp. *prostratus*) is frequent among dune vegetation, while Lesser Centaury (*Centaureum pulchellum*) is associated with damp dune slacks. Borrer's Saltmarsh-grass (*Puccinellia fasciculata*) and Perennial Glasswort occur on the saltmarsh. There is also a recent record for Sea Pea (*Lathyrus japonicus* subsp. *maritimus*), a species typically associated with shingle. All five species are protected under the Flora (Protection) Order, 2015. Henbane (*Hyoscyamus niger*), a species which is considered as threatened in Ireland, also occurs at Ballyteige. The dunes also have an interesting lichen flora: the scarce species *Usnea articulata* occurs here, and this is the only known site in Ireland for the species *Fulgensia fulgens*.

The Cull and adjacent reclaimed land provide important habitat for wintering waterfowl, and Brent Goose occur here in internationally important numbers (average maximum count of 219 individuals over the winters 1994/95 - 1997-98). Nationally important numbers of Lapwing (2,737) and Black-tailed Godwit (161) occur. Two species listed on Annex I of the E.U. Birds Directive occur regularly in winter, Golden Plover (2,441) and Bar-tailed Godwit (79), while another species, Little Tern, breeds at Callenstown strand.

The invertebrate fauna of the site includes a number of scarce species, examples being the bumble bees *Bombus distinguendus* and *B. sylvarum*, the jewel wasp *Hedychridium ardens* and the ant *Tetramorium caespitum*, as well as those listed above.

The dune system is used for cattle grazing. An appropriate grazing level is a critical factor in maintaining the diversity of dune systems. Coastal systems in general are threatened by disturbance of the substrate, such as removal of sand/shingle.

This coastal site is of major ecological value for its range of good quality coastal habitats, including three habitats given priority status on Annex I of the E.U. Habitats Directive - fixed dune, dune heath and lagoon. The dune system is of excellent quality, physically well developed and with a rich flora which includes five

protected species. The importance of the site for wintering waterfowl further enhances its value.