



your guide to...

THE ORIGINS OF THE ISLAND THE BULL ISLAND, WHICH IS JUST OVER 200 YEARS OLD, BEGAN AS A SANDBANK COVERED BY THE TIDES. WHEN THE HARBOUR WALLS WERE BUILT FOR DUBLIN PORT THE SANDBANK DEVELOPED INTO AN ISLAND. BEACH GRASSES STABILISED THE LOOSE SAND AND SALT MARSH PLANTS INVADED THE MUD FLATS. THE ISLAND GREW STEADILY IN ITS FIRST 100 YEARS AND BY 1900 HAD REACHED A LENGTH OF 4.5KM. SINCE THEN, IT HAS GONE ON INCREASING IN WIDTH, PARTICULARLY AT THE SOUTHERN END, AND GROWN A LITTLE IN LENGTH TO THE NORTH, TOWARDS HOWTH. THE ISLAND IS NOW A LITTLE OVER 5KM IN LENGTH AND CONTINUES TO INCREASE IN SIZE. IN ADDITION TO ITS ECOLOGICAL UNIQUENESS THE ISLAND, AND DOLLYMOUNT BEACH IN PARTICULAR, IS A POPULAR RECREATIONAL RESOURCE AND AN AMENITY VALUED BY GENERATIONS OF DUBLINERS.

Flora of the Island

The wide flat beach is the source of the sand that builds the whole island. At low tide the wind blows grains of sand gradually up the shore where they accumulate in little piles around pieces of seaweed or other debris on the beach. This provides potential growing sites for plants that can withstand the salt in seawater like **sand couch** and **sea sandwort**. The stems and leaves of these plants slow the wind and trap sand to form low hummocks, which grow into dunes.

Marram Grass, the familiar spiky grass found on dune system soon appears. It has roots up to 5m long underground stems, which bind sand dunes together. Marram leaves are usually rolled up to conserve water and can continue to grow even during long periods of drought. Marram grass can be buried by new sand each year and continue to thrive. Marram is most vigorous on the dunes closest to the beach where there is little competition from other plants. Development of dune ridges on the island can be dated by looking at old maps and photographs. The ridge behind the visitor and interpretive centre, for example, formed in 1906.

As a dune ridge becomes isolated from the beach by the growth of a new dune it is cut off from its supply of new sand, the marram grass gives way to other plants such as **red fescue**, **yellow ragwort** and **catsear**. A mossy dune grassland develops in which members of the pea family are conspicuous including **clovers**, **vetches**, **trefoils** and **rest harrow**.

These plants known as **legumes** flourish here because they trap a supply of nitrogen from the air, a nutrient, which is in short supply in a dry sandy soil. Dune pansy with its yellow or blue flowers, **yellow rattle**, **eyebright** and **quaking grass** are among the plants to be seen. At this point the flora of Bull Island represent about half the total number of species recorded in County Dublin.

Fauna of the Island

The plants of the island provide food for a multitude of insects and small animals. **Snails**, **caterpillars** and **beetles** graze on leaves: **butterflies**, **moths** and **hover flies** take nectar from flowers while **greenfly** feed on sap.

These smaller creatures are in turn food for other animals. **Ladybirds** and **wasps** feed on **greenfly**, **spiders** catch flying insects while **skylarks**, **shrews** and **harvestmen** choose a wide variety of prey. **Woodlice**, **earthworms** and **ground beetles** feed on dead plant and animal remains. There is a complex food web on the island based on plants. Each animal, whether it is a **burnet moth** or a **linnet** is bound into a close-knit community with countless others, both predator and prey.

The largest animals on the Island are **rabbits**, **mountain or blue hares** and **foxes**. The hare is the most visible because it feeds by day and does not live in a burrow. **Grey** and **common seals** can be seen in the waters around the island.

Birds of the island

The Bull Island is well known for its birdlife. Many birds come to the island to feed in winter or pass through in spring and autumn on their way to and from their northern breeding grounds. In winter up to 5,000 ducks, 3,000 geese and 30,000 waders roost on Bull Island. These numbers make Dublin Bay the fourth most important wetland in the whole country and looked at in terms of its total feeding area it holds more birds per hectare than anywhere else. The Island was the first official Bird Sanctuary in the country (1931) and has since become a UNESCO Man and the Biosphere Reserve. It is an area of vital importance to the birdlife of North West Europe, becoming even more valuable as other such wetlands become reclaimed or polluted, and as such was designated a Special Area of Conservation (SAC) and is a proposed NHA (Natural Heritage Area).

Shorebirds including long legged waders such as **redshank**, **curlew** and **oystercatcher**, wildfowl such as **brent geese**, **shelduck** and **teal**, and **gulls** feed on the mudflats in the channel and elsewhere in Dublin Bay. When the tide

North Bull Island: Nature Reserve
An Bulla Thuaidh: Anaclann Dúlra
A NATURE RESERVE OF LOCAL, NATIONAL AND INTERNATIONAL IMPORTANCE



MARRAM GRASS



KESTRAL



PEACOCK



REST HARROW



DUNE PANSY



BURNET MOTH



IRISH HARE



RINGED PLOVER CHICK

RINGED PLOVER

comes in the birds fly to the saltmarsh to rest and preen until their feeding grounds are again exposed. The movements of the tide are much more important to birds than daylight and darkness so if the tide is out at night, most birds will feed as usual.

The shape and length of the beak tells you a lot about what a bird eats. Wildfowl take food from the surface: **geese** and **wigeon** feed on plant material, the **shoveler** and **pintail** on animals. The **shelduck** exists largely on **Hydrobia**, the little snail that is widespread on the mudflats. Waders have very different beaks for probing and digging in the ground. **Plovers** pick up food from shallow depths, **knot** and **dunlin** somewhat deeper. The **redshank**, **godwit** and **curlew** have varying leg and beak lengths, which allow each species to reach a different layer of mud and thus feed on different prey. The prey animals include the burrowing shrimp **Corophium** as well as the **ragworms** and **lugworms**.

The Brent Goose

The **brent goose**, a winter visitor to the island, nests in Arctic Canada on islands such as Bathurst and Ellesmere. When the snows come the geese move south and east making the trip to Ireland in early October via Greenland and sometimes Iceland. The geese arrive in Sligo Bay or Strangford Lough and spread around the coast so that 3000 may be found in Dublin Bay by January.

The brent goose is the smallest Irish goose. Its diet consists of the **eel grass** and **Zostera** found growing on the mudflats.

PHOTOGRAPHS BY DOROTHY FORDE, PAT CORRIGAN, ANNEMARIE CORRIGAN, STUART WISTOW, EDDIE DUNNE, SINEAD BEGLEY.

BLUEBELL



PYRAMIDAL ORCHID



FRESHWATER MARSHES:

These are areas where rainwater accumulates giving wet freshwater conditions. The Alder marsh, which is mostly underwater in the winter but covered in flowers in the summer, is a freshwater marsh. *Horsetail, bluebell, silverweed, marsh helleborine and orchids* grow here.



GRASSLAND DUNES:

These older stabilised dune areas are most abundant in flowers. *Yellow rattle, common and lesser centaury, common vetch, common milkwort, important orchids such as pyramidal orchid and bee orchid.*

BEE ORCHID



DUNE PANSY



SAND DUNES:

Plants known as legumes thrive here because they can fix nitrogen, an important nutrient, from the air. *Gorse, wild pansy, sea spurge and bird's-foot trefoil* can be found here.



CAUSEWAY:

The causeway was built in 1964 and the plants here are typical of roadsides or waste ground. *Coltsfoot, marsh woundwort, tufted vetch, common mallow, field bindweed and hedge bindweed* grow here.

SALT MARSH:

Plants found here tend to have 'succulent' fleshy leaves to allow them to store fresh water, because the water around them is salty. *Scurvy-grass, thrift, sea-spurrey and glasswort* grow here.



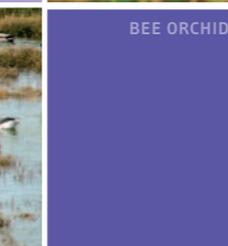
GLASSWORT



HYDROBIA



BRENT GEESE



North Bull Island: Nature Reserve
An Bulla Thuaidh: Anaclann Dúlra