

## Fingal County Council Biodiversity

### The Fingal Coastline

The scenic coastline of Fingal is a wonderful natural amenity resource for the people in the county. The 55 kilometres long coastline is also home to thousands of plants and animals that live in the great diversity of habitats that make up our coastline such as the estuaries, dunes and beaches. The coastline is our most important wildlife resource with most of the protected sites and protected wildlife species in the county found along our shores.

### Estuaries

The coastline of Fingal is characterised by the three large estuaries of Rogerstown, Malahide and Baldoyle. These estuaries with their extensive mudflats and saltmarshes are amongst the most important nature conservation areas in Fingal. Every year, up to 40,000 migratory birds spend the winter feeding and resting at Fingal's estuaries. Wading birds such as Black-tailed Godwit, Curlew and Snipe probe in the mud in search for the millions of tiny creatures that live there. Other birds such as the Brent Goose will feed on the Eelgrass and algae growing on the mudflats, while Cormorants and Red-breasted Mergansers can be seen diving for fish. The sheltered waters of the estuaries also provide nursery areas for many fish species that live out in the sea such as Herring, Seabass, Cod and Pollack.

### Sandy and Shingle Beaches

In autumn and wintertime, the long sandy beaches are important roosting sites for the large flocks of estuarine birds that appreciate the open character of the beaches. Breeding birds on our beaches have largely disappeared as a result of disturbance caused by dogs and people. However, Ringed Plover still breeds along the coast and there is hope for a return of the Little Tern at Portrane. Throughout the year, birds such as Pied Wagtail and Ringed Plover can be observed running along the shore looking for insects among the rotting plant material that has washed up on the shore. Typical strandline vegetation includes colonizer species such as Sea Rocket (*Cakile maritima*), Frosted Orache (*Atriplex laciniata*) and Saltwort (*Salsola kali*). These plants are often joined by dune forming grasses such as Sea Couch (*Elytrigia juncea*) and Lyme-grass (*Leymus arenarius*).

The very mobile shingle and gravel beaches are subject to continuous disturbance and are therefore generally sparsely vegetated. However, this habitat type does include some national or Dublin rarities such as Yellow Horned-poppy (*Glaucium flavum*), Sea Holly (*Eryngium maritimum*) and Sea Kale (*Crambe maritima*).

### Sand Dunes

The extensive sand dune systems at Rush, Portrane, Donabate, Malahide, and Portmanock are some of our richest biodiversity hotspots in the County. They are also amongst the most fragile habitats around the Fingal coast and unfortunately much of the dune habitat is covered by golf courses, holiday homes or caravan parks. The dune grassland vegetation is very similar to the species composition of Dry Calcareous and Neutral grasslands and includes Common Bird's-foot-trefoil (*Lotus corniculatus*), Kidney Vetch (*Anthyllis vulneria*), Common Restharrow (*Ononis repens*), and Wild Thyme (*Thymus praecox*). Substantial colonies of the legally protected Hairy Violet (*Viola hirta*) grow abundantly in the stable

dune grassland of Portmarnock and Donabate and the Red Data Book species Spring Vetch (*Vicia lathyroides*) occurs in a few sites here too. At Corballis the dune slacks have Marsh Helleborine (*Epipactis palustris*), Field Gentian (*Gentianella amarella*) and Black Bog-rush (*Schoenus nigricans*) all of which are now very rare plants in Dublin. The many plants attract many insects such as butterflies, moths, burrowing bees and wasps, including some nationally uncommon species such as the Small Blue butterfly and the solitary bee *Osmia aurulenta*.

### **Cliffs and Rocky Shores**

Rocky and soft sedimentary cliffs line much of the Fingal coast. The steep rocky cliffs of Howth Head are home to numerous breeding seabirds such as Kittiwake, Fulmar, Herring Gull and Guillemot. Shag and Black Guillemot breed along the inaccessible rocky shoreline at the base of the cliffs. The exposed intertidal rocky shores at Howth show a typical zonation of kelp, mussels or barnacles and lichens in progression up the cliffs. The more moderately exposed and sheltered intertidal rocky shores further north support a much wider variety of marine plants and animals with Bladder wrack (*Fucus vesiculosus*), Serrated wrack (*Fucus serratus*), Barnacles, Limpets, Mussels, Starfish and Periwinkles. Rock pools are often the best place to see some marine wildlife including Hermit Crabs, Beadlet Anemone, Shore Crab, and Shrimp.

The steep and soft sedimentary cliffs between Rush and Balbriggan hold several colonies of Fulmar and are home to Sand Martins that tunnel into these soft soils.

### **Inshore Waters**

The inshore area of the Irish Sea along the Fingal coast are classified as an important spawning and nursery area for several commercially important fish species such as Cod, Whiting, Plaice, Herring and Mackerel. These fish species spend their juvenile period in the calm waters in the estuaries and along the shore, before moving out to the choppy waters of the Irish Sea. So far 47 different species of fish have been recorded along the Fingal coast. These small fish provide the main food source for the thousands of breeding seabirds of the islands along Fingal's coast.

All Irish coastal waters within the 200-mile limit were declared a sanctuary for whales and dolphins in 1991. Whales and dolphins are regularly seen off the Fingal coast, and sometimes are found stranded on the shoreline. Six species have been observed along our coast particularly at Howth and Skerries; Harbour Porpoise, Common Dolphin, Striped Dolphin, Bottlenose Dolphin, Minke Whale and Fin Whale.

### **The Islands**

There are six islands located just off the Fingal coast. These are Ireland's Eye near Howth, Lambay near Rush, and Colt, St. Patrick's, Shenick and Rockabill near Skerries. These islands are home to about 100,000 breeding seabirds during the summer months. Rockabill is home to Europe's largest colony of Roseate Terns, one of Europe's rarest breeding seabirds. Lambay Island holds Ireland's largest "mixed" seabird colony and is of international importance. Ireland's Eye and Lambay Island hold two out of the six colonies of Gannets in Ireland. The three large Cormorant colonies on St. Patrick's Island, Lambay and Ireland's Eye collectively form a "supercolony" that comprises the largest aggregation of the species anywhere in Britain or Ireland. The most abundant sea birds are Guillemot and Kittiwake.

## **Key Issues for Nature in Fingal**

We are lucky to have a great diversity of habitats and species in County Fingal. However, the biodiversity resource we see today is only a small fraction of the resource we had here in the past. The fortunes of many habitats and species have changed over the last decades as the environment came under increasing pressure from development, changing farming practices and climate change. The most important threats to nature along our coast are described in more detail below:

1. Habitat Loss & Fragmentation
2. Disturbance
3. Climate Change

### **Habitat Loss and Fragmentation**

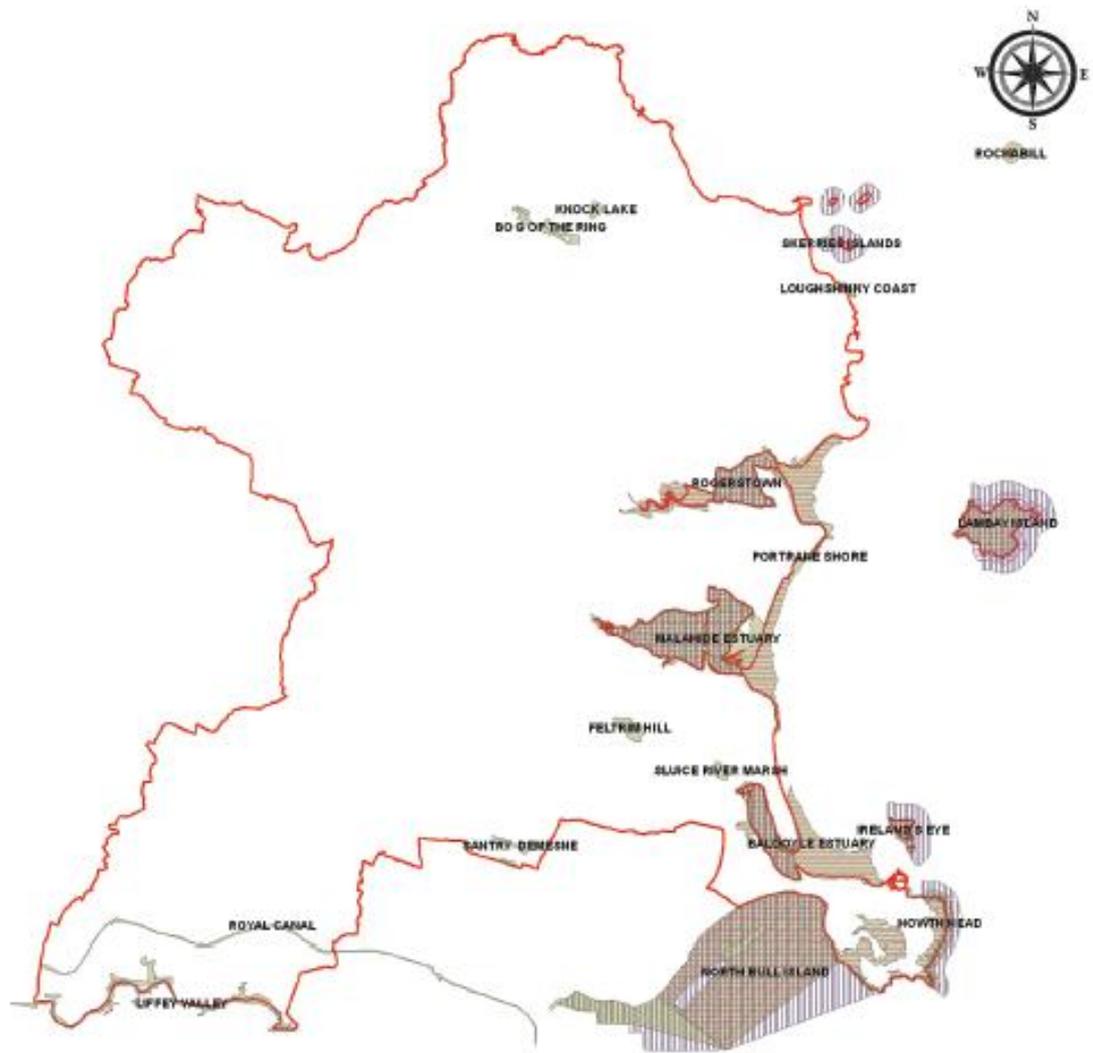
The National Biodiversity Plan identifies habitat loss and degradation as the main factor eroding biodiversity in Ireland today. Although Ireland's landscape and habitats have been modified by human activity since the island was settled, the pace and scale of change rapidly accelerated from the latter half of the 20<sup>th</sup> century. The rapid development of houses, roads golf courses and other infrastructure along our coastline have led to a major loss of coastal habitats (dunes and saltmarsh in particular).

### **Disturbance**

Some of the most important nature conservation sites in Fingal are the estuaries and the islands, because of the thousands of birds that winter and breed there. At the same time, our scenic coast is a popular amenity resource with thousands of visitors frequenting our coast and beaches every year. The wintering birds are in Ireland to recover from their long flight, spend the soft winter here while fattening up for their return journey to the Arctic. If these birds are continuously disturbed by visitors and dogs they use up a lot of energy, which hampers their recovery and can affect the breeding success and mortality rates in the Arctic. Similarly, disturbance to the bird colonies on the islands by leisure craft can affect the success of the breeding season of the seabirds. Controlling and guiding the flow of people along our coast to avoid disturbance to the main nesting, feeding and roosting sites will be one of the major challenges for Fingal as the County continues to grow.

### **Climate Change**

Climate change affects our coastal habitats and species in a myriad of ways. Sea level rise and increasingly stormy conditions are putting significant pressure on our coastal habitats in particular. Dunes and saltmarshes are eroding away, leading to a loss of these habitats but also threatening houses and roads located behind these natural coastal defences. The coastal erosion problem is particularly bad in Portrane and Rush and to a lesser degree at Sutton. We are likely going to experience more coastal erosion and coastal flooding in the future and it will be important to start planning for these climatic changes and take serious steps to tackle climate change at a local level.



**Legend**

Core Areas

- SAC
- SPA
- pSPA

County Boundary

**FINGAL ECOLOGICAL NETWORK - MAP 3**

