SITE SYNOPSIS

SITE NAME: DALKEY COASTAL ZONE AND KILLINEY HILL

SITE CODE: 001206

This site includes the coastal stretch from Scotman's Bay to south of White Rock, the Dalkey Island group and Dalkey Sound, and Killiney Hill. Killiney Hill is at the edge of the Wicklow mountain intrusion and so it is formed of a mixture of granite and mica schist. It provides one of the best exposed junctions of these rock types, on the beach at White Rock, at which minerialisation has taken place due to contact metamorphism. The minerals include biotite, andelusite and garnet, with aplite and pegmatite veins also exposed. The seaward parts of Killiney Hill have in addition a covering of calcareous glacial drift. The rocky shore is mainly of granite.

Dalkey Sound and its environs have been highly regarded as a valuable marine collecting area for many years. The Sound is especially noteworthy for the occurrence of west and south coast invertebrates. Species taken include squat lobsters (*Galathea* spp.), swimming crabs (*Portunus* spp.) and the crawfish *Palinurus vulgaris*. The area is also noted for the occurrence of gymnoblastic hydroids, with the rare *Antedon bifida* being taken regularly. Some rare European species which occur are members of the Order Nudibranchia and the Spiny Starfish (*Marthasterias glacialis*).

Dalkey Island lies c. 400m off Sorrento Point. The island is low-lying, the highest point at c.15m is dominated by a Martello Tower. Soil cover consists mainly of a thin peaty layer, though in a few places there are boulder clay deposits. Vegetation cover is low, consisting mainly of grasses. No woody plants have become established, probably due to constant grazing by goats. Dense patches of bracken (*Pteridium aquilinum*) and Hogweed (*Heracleum sphondylium*) occur in places.

Lamb Island lies to the north of Dalkey Island, attached at low-tide by a line of rocks. It has a thin soil cover and some vegetation, mainly grasses, Common Nettle (*Urtica dioica*) and Hogweed. Further north lies Maiden Rock, a bare angular granite rock up to 5m high. There is no vegetation cover. Muglins, a small granite rock, lies about 1km north-east of Dalkey Island. A small lighthouse is on the rock.

Herring Gulls nest on Dalkey Island (17 pairs in 1986), Lamb Island (29 pairs in 1986) and Muglins (207 nests in 1982). Great Black-backed Gull nests on Dalkey Island (maximum 62 nests in 1982-88), and two pairs of Lesser Black-backed Gull nested there in 1981.

Common Terns breed annually on Maiden Rock, with a maximum of 54 nests between 1980 and 1986. One pair of Arctic Tern bred on Maiden Rock in several years and in 1986 two pairs of Roseate Terns nested but were unsuccessful. Manx Shearwater is suspected of breeding on Dalkey Island.

Shelduck, Mallard and Oystercatcher nest on Dalkey and Lamb Island. Meadow and Rock Pipits breed on Dalkey Island. Maiden Rock is an important autumn roosting site for up to 2,000 terns, including Roseates from the Rockabill colony. In autumn and winter Dalkey Island is an evening roosting site for Cormorants, Shags, Curlew and large gulls. Up to 50 Turnstones and 15 Purple Sandpipers occur in winter.

Killiney Hill is a complex of coastal heath and mixed woodland. The woods are mostly planted and include Sycamore (*Acer pseudoplatanus*), Horse Chestnut (*Aesculus hipposcastanum*), some oak (*Quercus* spp.), Ash (*Fraxinus excelsior*) and Holly (*Ilex aquifolium*). The ground flora is mainly Ivy (*Hedera helix*) and bramble (*Rubus* spp.) but there are some areas with more typical woodland species such as Wood-sorrel (*Oxalis acetosella*) and Herb-Robert (*Geranium robertianum*).

Many of the rock surfaces on the open and bushy areas on the east side of the summit of the hill are roches mountonnes while near the summit spodumene is found in a small scarp exposure. This results in an interesting flora, with Wood Vetch (*Vicia sylvatica*), Climbing Corydalis (*Corydalis claviculata*) and Wild Madder (*Rubia peregrina*) growing amongst the Gorse (*Ulex europaeus*). The shallow soils overlying the rock support a community of winter annuals and early flowering perennials such as Spring Squill (*Scilla verna*) and Wild Onion (*Allium vineale*).

The drift banks above and below the railway have warm shallow soils. Here grow scarce plants such as Bloody Crane's-bill (*Geranium sanguineum*), Bee Orchid (*Ophrys apifera*), Sea Stork's-bill (*Erodium maritimum*) and clovers (*Trifolium ornithopodioides*, *T. striatum* and *T. scabrum*). The naturalised Silver Ragwort (*Senecio cineraria*) is widespread.

Up to five pairs of Fulmar breed on the cliffs below the railway line. Kestrel breeds in the area, as well as Stonechat.

This site represents a fine example of a coastal system with habitats ranging from the sub-littoral to coastal heath. The flora is well developed and includes some scarce species. The islands are important bird sites. The site also has geological importance.

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