

WEXFORD - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Kilpatrick Sandhills
Other names used for site	
IGH THEME	IGH13 Coastal Geomorphology
TOWNLAND(S)	Kilpatrick, Kilmichael
NEAREST TOWN/VILLAGE	Coolgreany
SIX INCH MAP NUMBER	3, 7
ITM CO-ORDINATES	724750E 665700N (centre of sandhills)
1:50,000 O.S. SHEET NUMBER	62 GSI BEDROCK 1:100,000 SHEET NO. 19

Outline Site Description

The Kilpatrick Sandhills comprise a mature sand dune system which extends along 2 kilometres of coastline, approximately 8 kilometres south of Arklow Town.

Geological System/Age and Primary Rock Type

The features have been forming in the Holocene Period following the last glaciation, and the sandhills themselves comprise sand sediment continually blown and recycled onto them during that time.

Main Geological or Geomorphological Interest

The site includes sand dunes in various stages of dune formation, from small fore dunes which are stabilized by marram grass, to mature fixed dunes. Embryonic shifting fore dunes occur mainly along the middle and southern sections of the site.

On the landward side of the dunes, in the middle of the site, there is a low-lying marsh, bounded again at the west by scrubby woodland. Parts of the site are used for grazing cattle, and the grazing is a critical factor in such coastal systems, as the correct grazing pressure maintains species-rich open swards and curtails scrub encroachment. Over-exposure to grazing and amenity usage can cause damage to dune vegetation, however, and exacerbate dune erosion.

At the northern end of the site Kilmichael Point forms a rocky headland, affording fine views along the coastline. Bedrock outcrops occur here where the overlying glacial till has been eroded, exposing cliffs which rise in steps to about 10m above sea level.

Site Importance - County Geological Site

The site is important as a good example of a mature and fairly intact sand dune system which shows the developmental stages of dunes from fore dunes to mature fixed dunes. The site is already a proposed NHA (pNHA 001742, Kilpatrick Sandhills) and SAC for biodiversity reasons and the geodiversity of this active sedimentation system should be highlighted in promotion of this.

Management/promotion issues

The location of the sandhills means they are easily accessible, and Kilpatrick beach and the adjacent dunes are popular recreational features, particularly at the southern end of the site. However, erosion is an issue along this stretch, and the coastline is receding rapidly here.

Information boards which explain the feature's geological formation, and the geomorphological processes taking place within the site, would be worthy additions and this information could also be highlighted in any future literature produced on the sandhills.



View north along the beach, from the central portion of the sandhills.



View south across the sandhills, across some of the mature, fixed dunes.



The low-lying marsh to the west of the dunes.



Erosion at the southern end of the site.

