# NORTH DONEGAL - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE Other names used for site IGH THEME TOWNLAND(S) NEAREST TOWN/VILLAGE SIX INCH MAP NUMBER ITM CO-ORDINATES 1:50,000 O.S. SHEET NUMBER 2 GIS Code ND026 Cuan na gCaorach Sheep Haven, *Cuan na gCurrach* IGH13 Coastal Geomorphology *Numerous townlands border the bay* Dunfanaghy, Creeslough, Carrigart 7, 15, 16, 17, 26 609000E 937000N (centre of bay) GSI BEDROCK 1:100,000 SHEET NO. 1

# **Outline Site Description**

Sheep Haven is a large bay complex, with many bounding areas of beaches, dunes and tidal flats exposed at low tide, and bounding headlands.

# Geological System/Age and Primary Rock Type

The branched bay feature has been formed in the Holocene Period, since the last glaciation. It is likely that the macro-structure of the bay dates back through the Quaternary (Ice Age) to the Tertiary Period. The majority of bedrock exposures along portions of the bay perimeter are of Precambrian age (2,500-541 Ma) with quartzite rocky shores and sandy beaches, and one small peninsula of metamorphosed limestone.

# Main Geological or Geomorphological Interest

Sheep Haven is a wide coastal embayment, and is approximately 10 kilometres long in a north-south direction. The entrance to the bay is a wide strait between Horn Head and the Rosguill Peninsula, and is almost 5 kilometres in width.

The bay narrows southwards, into the Faymore, Duntally, Carrownamaddy and Lackan River Estuaries. A fine, wide beach (an Trá Mór) extends along the eastern edge of the bay, between Downings and Creeslough. Extensive areas of intertidal sands and muds occur at the Back Strand, Ards Strand, Doo Castle Strand and at Carrigart. On its western side sand has drifted inland from beaches and dunes during the past two centuries to invade farmland and overwhelm a settlement at Dunfanaghy. Marble Hill Strand is the north-east facing beach on the west side of the bay. The sediment here is fine, well-sorted sand, and the plant communities present are representative of shores moderately exposed to wave action to shores sheltered from wave action.

Large areas of sand dune occur at Rosepenna and at Marble Hill, with individual dunes at Rosepenna up to 40m high. An extensive area of saltmarsh also occurs at Back Strand, with further areas at Ards Strand and to the west of Carrigart village.

### Site Importance - County Geological Site; recommended for Geological NHA

Sheep Haven is an impressive locality and the associated estuarine flats, beach, dune and slack features, as well as the surrounding headlands, make the bay a textbook locality for the recognition of coastal erosion and deposition features.

### Management/promotion issues

The location of the bay means it is easily accessible, and Downings and Dunfanaghy are popular tourist attractions. An information board at the viewing points in each village, might prove a worthy addition to the site, explaining the formation of the feature and its associated habitats, flora and fauna. The site is already an SAC (001190, Sheep Haven) and much of it is also a proposed NHA for biodiversity reasons. The geodiversity of the locality should be highlighted in any promotion of this.



View west across the mouth of Sheep Haven, from Rosguill to Horn Head.



View across the extensive intertidal sand flats at Dunfanaghy.



Small beach coves near Downings.



High sand dunes at Portnablahy.

Hennessy et al. 2019. Geological Survey Ireland.



