

GALWAY CITY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Rusheen Bay Drumlins
Other names used for site	Galway Bay Drumlins, Barna Drumlins, Silver Strand, Derryloney, Blake's Hill, Gentian Hill, Illaunafamona
IGH THEME	IGH7 Quaternary
TOWNLAND(S)	Derryloney, Knocknacarragh
NEAREST TOWN/VILLAGE	Bearna
SIX INCH MAP NUMBER	93, 94
ITM CO-ORDINATES	525140E 722900N
1:50,000 O.S. SHEET NUMBER	45
GISCODE	GSI BEDROCK 1:100,000 SHEET NO. 14 GC007

Outline Site Description

A group of coastal drumlins, some with eroded cliff-faces, and intertidal boulder fields indicating the footprint of the drumlins prior to coastal erosion.

Geological System/Age and Primary Rock Type

The drumlins are Quaternary in age and were deposited at the base of the ice sheet moving northeast to southwest during the maximum period of the last Ice Age, around 18,000 years ago. Drumlin sediment is predominantly sourced from Lower Carboniferous limestone. All three drumlins overlie Galway Granite bedrock (Devonian age).

Main Geological or Geomorphological Interest

The three drumlins are high, distinct hills formed from subglacial 'till' sediment. The tills are especially well exposed where coastal erosion has developed cliffs of glacial sediment. The internal sedimentary structures of stratified sediment, laminated and massive layers of mud, muddy diamicts, cross-bedded gravels, and laminated sands have been studied by numerous Quaternary geologists over the years. Large limestone boulders also protrude from the cliff faces and lie strewn along the shoreline. All three drumlins also have local names: Knocknagoneen (Derryloney), Blake's Hill (or Knocknacarragh) and Illaunafamona. The cliff of limestone sediment at the westernmost drumlin Knocknagoneen, at Silver Strand, is also known as Aillebaun, referencing the striking bright coloured cliff. The eroded sediment from this feature forms the Silver Strand beach, so the drumlins are important in framing the place names and local cultural heritage of the area. Aerial photographs and low-tide shorelines reveal areas of boulder deposits that indicate the extent of drumlin coverage prior to erosion and near-oblivation.

Site Importance – County Geological Site

This is the southern edge of a larger field of drumlins. Owing to the excellent preservation of the features and the exposure of their sediments in cliffs, they represent an important County Geological Site. There are up to twenty features within the drumlin field that stretches north and east 'under' Galway City.

Management/promotion issues

This is an excellent site displaying macro-scale Quaternary subglacial geomorphology. The features are accessible from public beaches, coastal walkways and visible from vantage points along the Galway Bay coast. The cliffs are prone to slumping and collapse so care must be exercised close to the cliff faces. Consideration of tides is also important when visiting any features. The importance of the site should be highlighted in promotional material for the Galway Bay Complex SAC and proposed NHA (000268), as well as in the Inner Galway Bay SPA (004031). A signboard at Silver Strand, where the features are visible, would help promote these glacial bedforms.



Illaunafamona viewed looking west from Blackrock.



Limestone and granite boulders exposed in the till cliffs at Illaunafamona.



The cliff exposure at Knocknagoneen.



Knocknagoneen (Silver Strand) drumlin and Blake's Hill (white cliff on left) viewed from Bearna.

