GALWAY - 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 No. 45 Corranellistrum

IGH1 Karst Corranellistrum, Kylemore, Carrowmore, Srue Oughterard 55 519415E 740800N (centre of outcrops) GSI BEDROCK 1:100,000 SHEET NO. 11

Outline Site Description

This site comprises an area of limestone bedrock outcrop close to the southern shore of Lough Corrib, within a wider region of bedrock at surface.

Geological System/Age and Primary Rock Type

The site is an area of outcrop of pure bedded limestones, which are Lower Carboniferous (359-323 Ma) in age. The karst pavement features themselves have been formed in the present climate, since the last Ice Age, in the last 14,000 years or so.

Main Geological or Geomorphological Interest

A limestone pavement is a natural karst landform consisting of a flat, incised surface of exposed limestone that resembles an artificial pavement. Many of these landforms have developed distinctive surface patterning resembling paving blocks. Similar landforms in other parts of the world are known as alvars.

For limestone pavement to occur, the bedrock has to have been stripped of all its overlying sediment by a passing glacier during the last Ice Age, which scrapes away any overburden and exposes horizontally bedded limestone. The resultant flat, bare limestone surface is slightly soluble in water and particularly in acid rain, so corrosive drainage along joints and cracks in the limestone can produce slabs called clints isolated by deep fissures called grykes. Where the grykes are fairly straight and the clints are uniform in size, the resemblance to man-made paving stones is striking.

The Corranellistrum site consists of an exposed limestone plateau flanked with scrub. Parts of the pavement exhibit a well-developed system of clints and grykes, while other parts are shattered, with much loose rock.

Site Importance – County Geological Site

The site is an excellent example of limestone pavement, and the extent of bare pavement is particularly noteworthy.

Management/promotion issues

The site is already part of the Gortnandarragh Limestone Pavement SAC / pNHA (site code 0001271), and is openly accessible at the verge of a public road, with the features easily visible. Some of the boulders and rock slabs have been removed for decorative purposes in gardens and at other amenities previously, and this should be discouraged. The threats to the site include overgrazing, land reclamation, quarrying and scrub encroachment, the latter three already occurring to a small extent within the site. A signboard at the roadside highlighting the origin and significance of the pavement features might prove worthwhile.



View southwards across the limestone pavement at Corranellistrum.



Detail of some of the clints and grykes on the limestone pavement at Corranellistrum.



A small roadside quarry cut into the pavement area.



Isolated, partially dissolved limestone boulders on the payment at Corranellistrum.



Meehan et al. 2019. Geological Survey Ireland.