# LEITRIM - COUNTY GEOLOGICAL SITE REPORT

| | |
|---|---|
| **NAME OF SITE** | **Truskmore** |
| Other names used for site | *Trosc Mór* |
| **IGH THEME** | **IGH7 Quaternary** |
| **TOWNLAND(S)** | **Corglass, Cloontypruglish, Cleighragh (Leitrim), Moodoge (Sligo)** |
| **NEAREST TOWN/VILLAGE** | **Cliffony (Sligo)** |
| **SIX INCH MAP NUMBER** | **3** |
| **ITM CO-ORDINATES** | **576270E 847117N (summit)** |
| **1:50,000 O.S. SHEET NUMBER 16** | **GSI BEDROCK 1:100,000 SHEET NO. 7** |
| **GISCODE LM031** | |

**Outline Site Description**
Truskmore is a mountain which forms the highest point in County Leitrim, and has excellent exposures of rock weathering features visible adjacent to the summit.

**Geological System/Age and Primary Rock Type**
The features of interest on the summit of Truskmore are periglacial features which formed during the later stages of the last glaciation in Ireland, approximately 10,000 years ago.

**Main Geological or Geomorphological Interest**
Periglacial features are those which originate from geomorphological processes that result from seasonal thawing of snow in areas of permafrost, the runoff from which refreezes in ice wedges and other structures. The term 'periglacial' therefore suggests an environment located on the margin of past glaciers, similar to the tundra areas in places like Siberia today. As the last ice sheet retreated across the Irish landscape at the end of the last Ice Age, periglacial processes took hold in the areas not still actually covered by ice. Remnant periglacial features flank the sandstone plateau on Truskmore, and include sorted nets of stones, stone-banked terraces, stone stripes, and a bedrock terrace with an associated debris fan. Sorted nets displaying a fish-net-tights-pattern are exposed close to the summit, and are seen as vegetated centres with stone borders and exhibit varying diameter sizes from approximately 1m to 5m. They probably formed due to frost sorting and heave. The stone borders, consisting of stones of the Glenade Sandstone Formation ranging in size from pebble to boulder, are quite angular, indicating that they have not travelled far from their source. Mass movement of weathered Glenade Sandstone Formation rocks has also produced stone stripes (up to 4 m wide and 100 m long) and stone banked terraces on the southeastern side of the summit. These features formed as seasonally thawed material moved slowly downslope under the influence of gravity.

The northeastern side of the plateau hosts a 120m-long bedrock terrace that has been cut into the rocks of the Glenade Sandstone Formation as a result of frost shattering. A large debris fan associated with the terrace covers the slope below. The summit of Truskmore would have been ice-free early during the end of the last glaciation, allowing for the many freeze-thaw cycles required to shatter and move the rock.

**Site Importance – County Geological Site; recommended for Geological NHA**
This is perhaps the best site in the country to readily observe a wide variety of periglacial features. As well as this, the site is even more exceptional as these occur in a relatively restricted area. The site is unique in Ireland.

**Management/promotion issues**
Any disturbance will damage the scientific value of the periglacial features and associated patterned ground, including roads or trackways, windfarm development, or even use of off-road vehicles over these features. Given the relatively unspoilt nature of the eastern plateau area, where the features are most abundant and best preserved, it is imperative that these are protected.

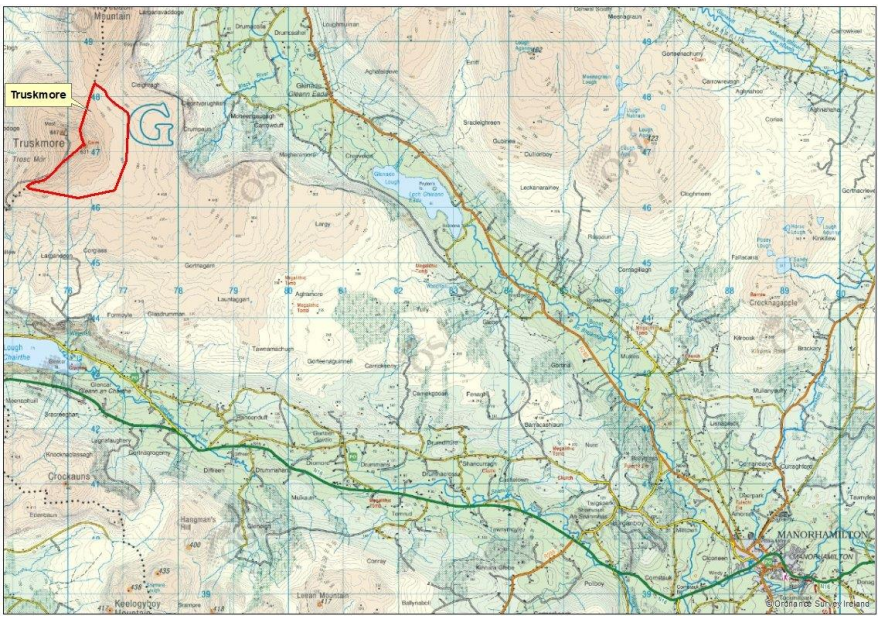
*Parkes et al.*, 2020. Geological Survey Ireland.

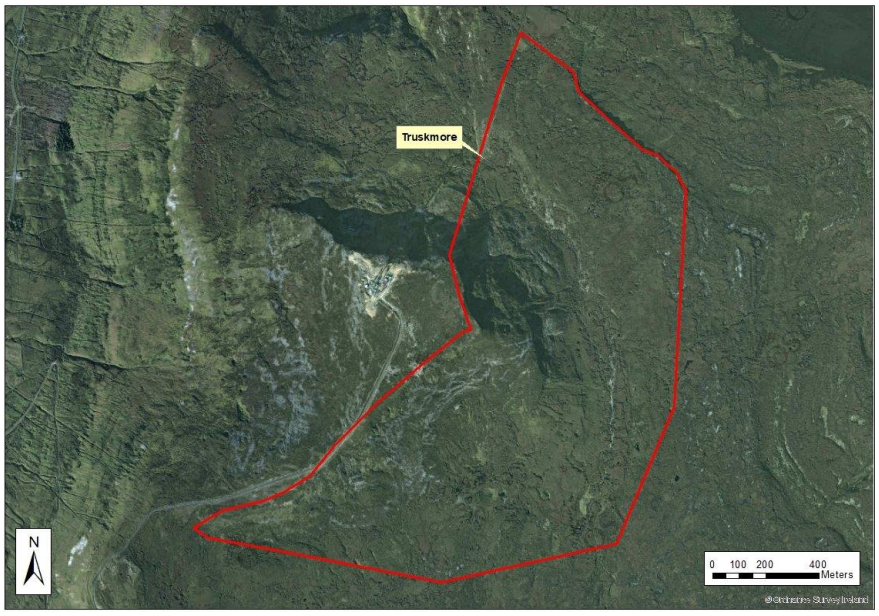
The stone banked terraces on the southeastern flank of Truskmore.

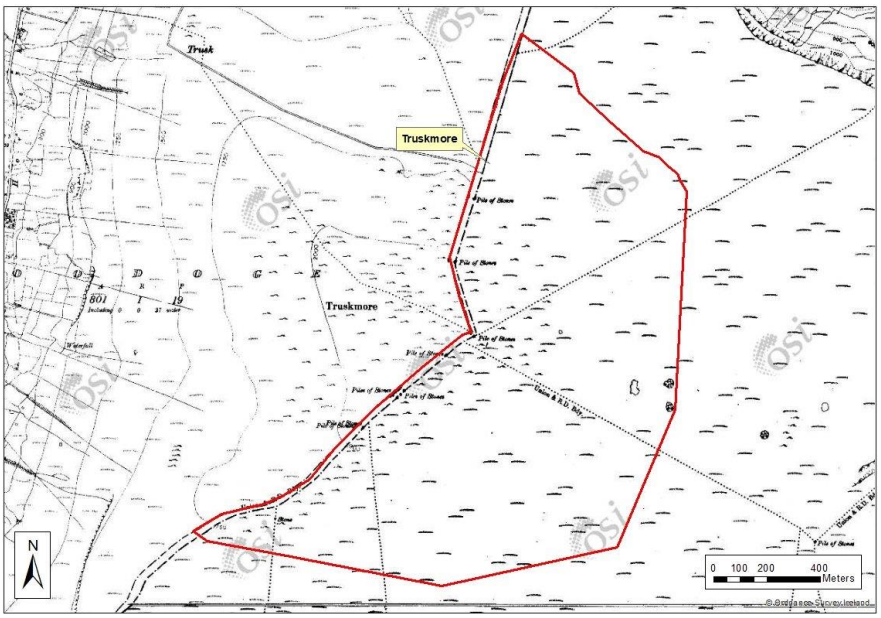
The debris fan, northeast of the telecommunications mast.

The stone stripes, at the south of the summit.

The spread of sorted nets, to the east of the telecommunications mast.




*Parkes et al.*, 2020. Geological Survey Ireland.