

## MAYO - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	Cappagh
Other names used for site	Cappa
<b>IGH THEME</b>	IGH7 Quaternary, IGH5 Precambrian
<b>TOWNLAND(S)</b>	Cappagh
<b>NEAREST TOWN/VILLAGE</b>	Castlebar
<b>SIX INCH MAP NUMBER</b>	69
<b>ITM CO-ORDINATES</b>	516010E 793060N
<b>1:50,000 O.S. SHEET NO. 31</b>	<b>GS1 BEDROCK 1:100,000 SHEET NO. 11</b>
<b>GIS Code MO023</b>	

### Outline Site Description

Outcrops of brown/purple coloured Dalradian metamorphic rocks (pelites and psammites) are visible as low-lying, rock exposures. These exposures were carved and shaped by ice during the Ice Age. Folding is clearly visible on the outcrops. The outcrops, called *roches moutonnées* (gently sloping on the side from which the ice flowed, and steep and rough on the downstream/down-ice side) indicate the direction of ice movement, in this case from the southwest to northeast.

### Geological System/Age and Primary Rock Type

Bedrock exposures comprise semi-pelitic and psammitic schists of the Lower Lismoran Formation (Middle Dalradian – Argyll Group). Within northwest Ireland and Scotland, the Dalradian Supergroup represents a variably deformed and metamorphosed late Precambrian (>542 million years ago) succession of marine shelf sediments, volcanics and turbidites. The formation is in faulted contact with the Meelick Member schist and pebble beds (Dalradian - Argyll Group) to the northwest. To the southeast, the Carboniferous Moy Sandstone Formation sandstones are in unconformable contact.

### Main Geological or Geomorphological Interest

The schist and pelitic outcrops rise proud of the surrounding low-productivity terrain, many in the form of *roches moutonnées*. The orientation of these glacially shaped (eroded) outcrops indicates ice movement in a SW to NE direction. The low angle, relatively smooth up-ice surfaces on the SW face of the *roches moutonnées* contrast markedly with the craggy and rough down-ice faces on the NE face of the features. The direction of ice-movement is roughly parallel to the strike of the Dalradian rocks.

### Site Importance – County Geological Site

This site is important as a County Geological Site.

### Management/promotion issues

This site is adjacent to a local road (L17204). Parking is available on a gravel roadside lay-by opposite the margin of forestry adjoining the site. This site is not suitable for public promotion due to it being on private property, and also *as roche moutonnée* features and the folding are common across much of Mayo.



Roches moutonnées at Cappagh, on west side of L17204 roadway, direction of ice flow from southwest to northeast (left to right). Viewed looking north.



Folds in Precambrian rocks exposed on surface of roches moutonnées. Hammer handle indicates axis of fold. Looking west.

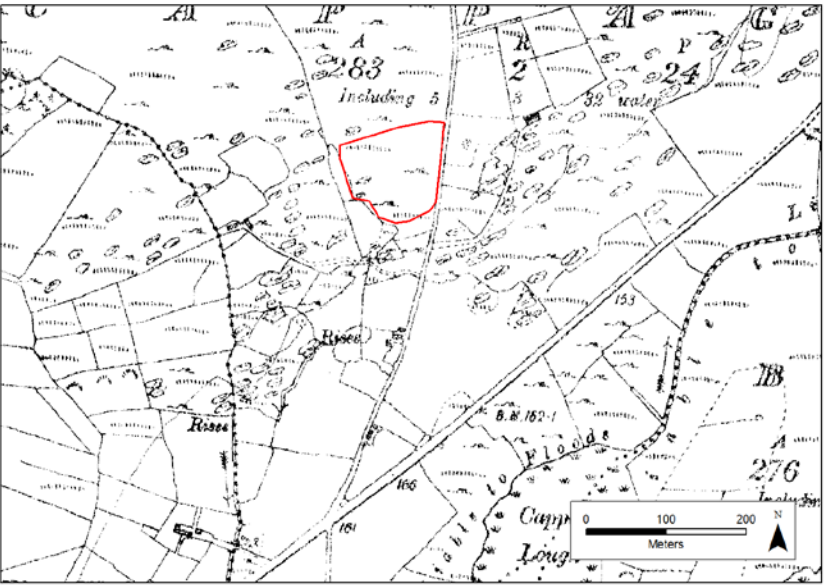
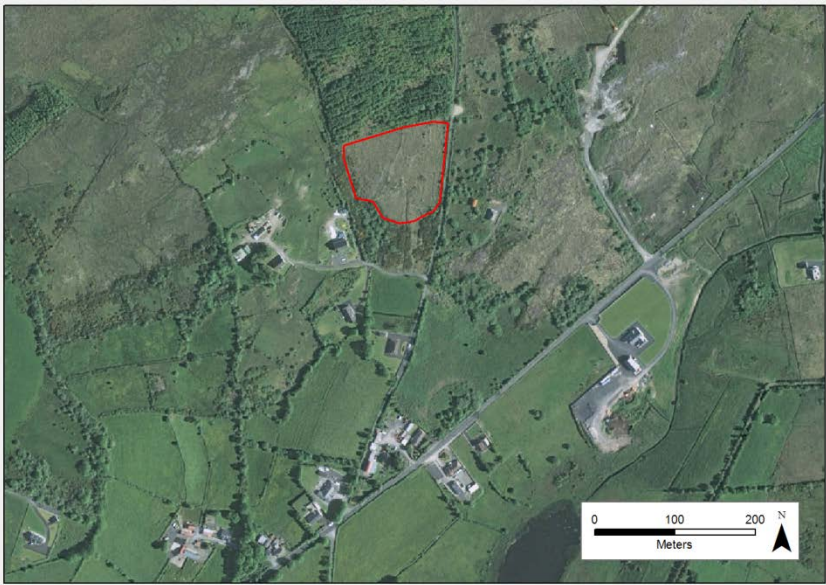


Glacially smoothed surface on roches moutonnées, looking east towards road. Quartz veins visible in bedrock.



Glacially smoothed southwest facing side of roches moutonnées.





Hennessy et al. 2014 (revised 2019). Geological Survey Ireland.