

## MAYO - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Emlagh Point</b>
Other names used for site	Gob Imligh; Portnalaigna Rocks; Turloughbeg Strand
<b>IGH THEME</b>	<b>IGH4 Cambrian to Silurian</b>
<b>TOWNLAND(S)</b>	<b>Emlagh</b>
<b>NEAREST TOWN/VILLAGE</b>	<b>Louisburgh</b>
<b>SIX INCH MAP NUMBER</b>	<b>95b</b>
<b>ITM CO-ORDINATES</b>	<b>474130E 779875N</b>
<b>1:50,000 O.S. SHEET Nos. 30, 37</b>	<b>GS1 BEDROCK 1:100,000 SHEET NO. 10</b>
<b>GIS Code MO053</b>	

### Outline Site Description

Emlagh Point is located at the northern end of Carrownisky Beach (White Strand). A major fault at Emlagh point can be identified in the small cove on the north side of the headland. One kilometer south of Roonagh Pier, Emlagh Point separates the large sandy embayment at Carrownisky (south) from the rocky coastline stretching north to Roonagh.

### Geological System/Age and Primary Rock Type

The Louisburgh-Clare Island Succession is interpreted to be of Late Silurian (Ludlow-Pridoli) age. The Strake Banded Formation rocks (Louisburgh-Clare Island Succession) occur to the north of the fault at Emlagh. In the cove immediately north of the fault, the Strake Banded Formation comprises wave-smoothened orange-purple-grey siltstone laminate horizons that dip southwards, and exhibit downward facing folds. To the south of the fault, and extending westward to form up the headland, the Bouris Formation rocks (greenschist facies Croagh Patrick Succession) comprise grey-green coloured folded phyllites and pelites, with extensive quartz veining.

### Main Geological or Geomorphological Interest

The major fault at Emlagh is a north-dipping structural contact between two Silurian successions. The fault and the lithologies at Emlagh contribute to an interpretation of the Louisburgh-Clare Island Succession as having being deposited in a pull-apart basin during an episode of regional transpression, and its association with deformation of the Silurian basin during Caledonian reactivation of the Clew Bay Fault Zone (part of the Highland Boundary Fault). The E-W folding of the Louisburgh-Clare Island Succession (Strand Banded Formation), and faulting are consistent with N-S shortening of the basin during the Caledonian Orogeny.

### Site Importance – County Geological Site

This County Geological Site is of significance owing to the excellent exposures of the two Silurian successions at Emlagh, and to the significant structural fault feature at the site.

### Management/promotion issues

Access to the site can be made via the roadway leading to the very northern end of Carrowniskey Beach (White Strand or Cloonveltrauva), followed by a 700m trek along the shoreline to Emlagh Point. Obvious caution is advised, as this coastline faces westward into the Atlantic and can be subject to high-energy waves. No immediate threat to the site is identified, save natural coastal erosion, which is integral to the development of this coastline's geological exposure. Whilst the fault is obvious from the two clearly contrasting lithologies bounding the fault, the site is not recommended for promotion to visitors, although inclusion in a geological heritage/interest publication could be of value.



Location of structural contact between Bouris Formation (south) and Strake Banded Formation (north) at Emlagh Point – viewed looking west.



Smoothened orange-purple siltstone horizons of Strake Banded Formation at Emlagh Point.



South dipping strata of the Strake Banded Formation.

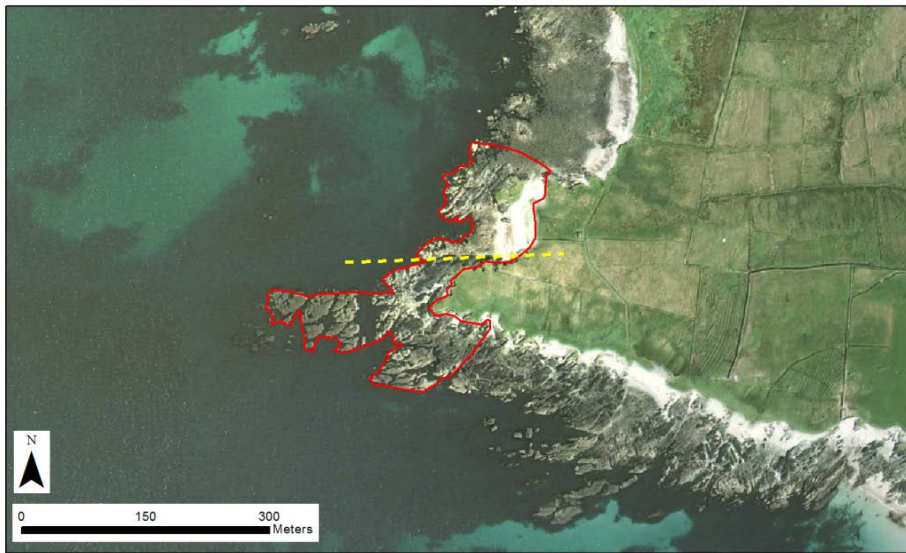


Grey-green coloured folded phyllites of Bouris Formation with extensive quartz veining at Emlagh Point.



Strake Banded Formation rocks (foreground); Bouris Formation (low cliffs in right-centre); Mweelrea mountains in distant background.





Emlagh Point, yellow line indicates contact.

