MAYO - 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. 30 GIS Code MO094 Shivlagh Rocks

Shivellagh Rocks, Lugadamba Strand, Cregganbaun Strand, Turlin Strand, Carricklahan IGH4 Cambrian to Silurian Legan; Derrylahan, Bunowen Louisburgh 86 481540E 782550N (centre of features) GSI BEDROCK 1:100,000 SHEET NOs. 10, 11

Outline Site Description

A coastal section on the southern shore of Clew Bay, where bedrock is exposed along the shoreline and glacial drift cliffs face northward onto the bay.

Geological System/Age and Primary Rock Type

Late Silurian age rocks (mainly siltstones and sandstones) of the Louisburgh-Clare Island Succession are exposed long the shoreline. Glacial deposits (Quaternary age) are exposed in cliffs along the coastal section.

Main Geological or Geomorphological Interest

Late Silurian rocks of the Louisburgh–Clare Island Succession are exposed in erosional surfaces between high and low tide marks, and in places at the foot of the low cliffs. Three of the Louisburgh-Clare Island Succession formations exposed along this section (Strake Banded, Knockmore Sandstone, Bunnamohaun Siltstone) are interpreted as having formed in a fluvial environment, and there is evidence that a contemporaneous volcanic centre was active to the west of the site. Some grey laminated mudrocks (with fragments of fossilised fauna) have been interpreted as lacustrine in origin. At Shivlagh Rocks, red and grey siltstones and light coloured tuffs of the Strake Banded Formation are seen. At Turlin Strand, green and yellow sandstones and breccias (Knockmore Formation) crop out opposite the concrete 'pier'. Red and green coloured siltstones of the Bunnamahon Formation outcrop at the western end of Turlin Strand. To the very east of Shivlagh Rocks, the strata are crossed by a silicified serpentinite dyke (7m wide) trending NNW-SSE. E-W folding is evident throughout the strata along the coastal section, as is evidence of intense faulting. There are numerous dykes (1m thick) on Lugadamba Strand and Cregganbaun Strand. Thick glacial deposits (Quaternary age) are exposed in the cliffs (<30m high) along the 1km coastal section between Shivlagh Rocks and Turlin Strand. There are excellent sections through a large drumlin at Derrylahan. A variety of clasts washed out of the thick glacial drift deposits are strewn along the shore, including fossiliferous (coral) and 'piddock holed' limestones, granite boulders and red coloured jasper-bearing conglomerates.

Site Importance – County Geological Site; recommended for Geological NHA

All the key stratigraphical relationships within the Silurian Louisburgh–Clare Island Succession are seen along this coastal section. For this reason, the site is very important in understanding the geology of this region of western Ireland. It is recommended for designation as a geological NHA.

Management/promotion issues

Access to Shivlagh Rocks is via a grassy path through private land. Much of the coastal section comprises glacial deposit cliffs, and the risk of collapsing cliff sections is always a threat. For this reason, and owing to the immediate proximity to Clew Bay's waves, caution must be exercised. Owing to the lack of parking, or suitable locations for interpretation panels, the site is not deemed suitable for public promotion. Access to Turlin Strand is reasonably easy via a small roadway.



Red and grey siltstones (Bunnamohaun Siltstone Formation) at Shivlagh Rocks, looking east towards Legan.





Grey coloured glacial deposits overlying red coloured Bunnamohaun Formation siltstones, exposed in the drumlin cliff face at Shivlagh Rocks.



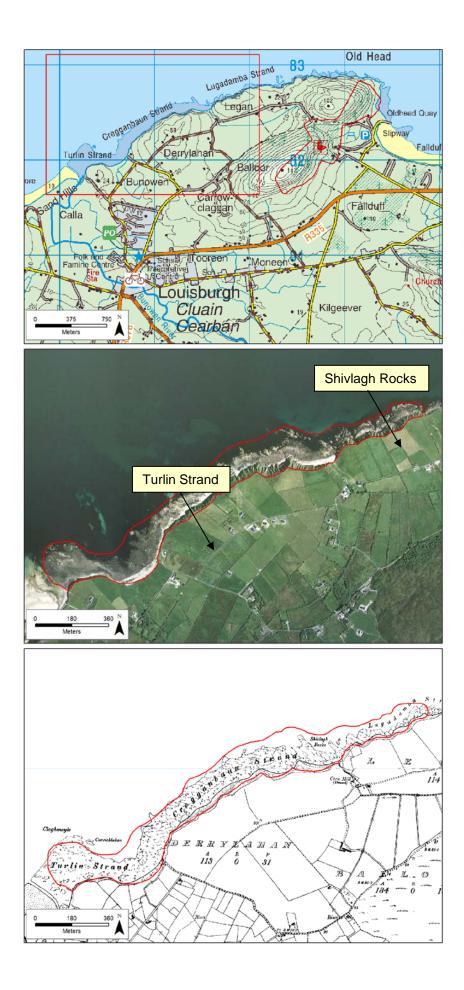
Loose boulders and cobbles of various rock types (limestone, sandstone, conglomerate) washed out of the glacial cliff sections at Turlin Strand.



Folding in south dipping rocks at west end of Turlin Strand, looking east toward Derrylahan and Old Head.



Looking west over Turlin Strand, with Carrowmore in distance. Knockmore Formation rocks visible on right.



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