DONEGAL - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	**Cuaschlaonas na Leargadh**
Other names used for site	Móire Largymore Syncline
IGH THEME	**IGH3 (Palaeontology), IGH8 (Lower Carboniferous)**
TOWNLAND(S)	**Bavan, Croaghbeg, Kill, Largy, Largymore, Largysillagh, Shalwy, Tullig**
NEAREST TOWN/VILLAGE	**Killybegs**
SIX INCH MAP NUMBERS	**97**
ITM CO-ORDINATES	**565863E, 875770N**
1:50,000 O.S. SHEET NUMBER: 10	**GSI BEDROCK 1:100,000 SHEET NOs. 3, 4**
GIS Code DL022	

Outline Site Description

This site comprises a continuous outcrop of Carboniferous strata in a syncline exposed along steep coastal cliffs and rocky shore from west of Shalwy Point to Fintragh Bay. Inland the bedrock is mostly covered with glacial drift and exposures are confined to four stream beds and along the western hillside.

Geological System/Age and Primary Rock Type

The rocks are all Lower Carboniferous in age. The Rinn Point Limestone Formation (Ballyshannon Limestone Formation equivalent) comprises basal conglomerates overlain by sandstones, siltstones, limestones and calcareous shales. They are overlain by calcareous sandstones of the Muckros Sandstone Formation.

Main Geological or Geomorphological Interest

The Largymore syncline is the largest and most complete of the Lower Carboniferous outliers in Donegal, which also include Muckros Head and the Slieve League outliers. A continuous stratigraphical sequence is exposed along the coast, from the basal conglomerates, clastics and limestones of the Rinn Point Limestone Formation to the sandstones of the Muckros Head Sandstone Formation. The sandstones, shales and siltstones of the Rinn Point Limestone Formation show evidence of intense burrowing, mostly by *Diplocraterion* and *Chondrites*. They are overlain by crinoidal limestones that also contain echinoids, gastropods, matted *Fenestella* fronds and sponge spicules**.** On the east side of the syncline the limestone contains very rich coral layers with large caninioids (for example *Caninia*), *Michelinia* and the brachiopod *Daviesiella*. The Rinn Point Limestone Formation is overlain in the core of the syncline by a thin bed of Muckros Sandstone, which is devoid of macrofossils but heavily burrowed.

Site Importance: County Geological Site, may be recommended for Geological NHA

The ichnofauna, macro- and microfauna of this, the most northwesterly coherent exposure of Lower Carboniferous strata in Ireland, make this coastal section of national importance.

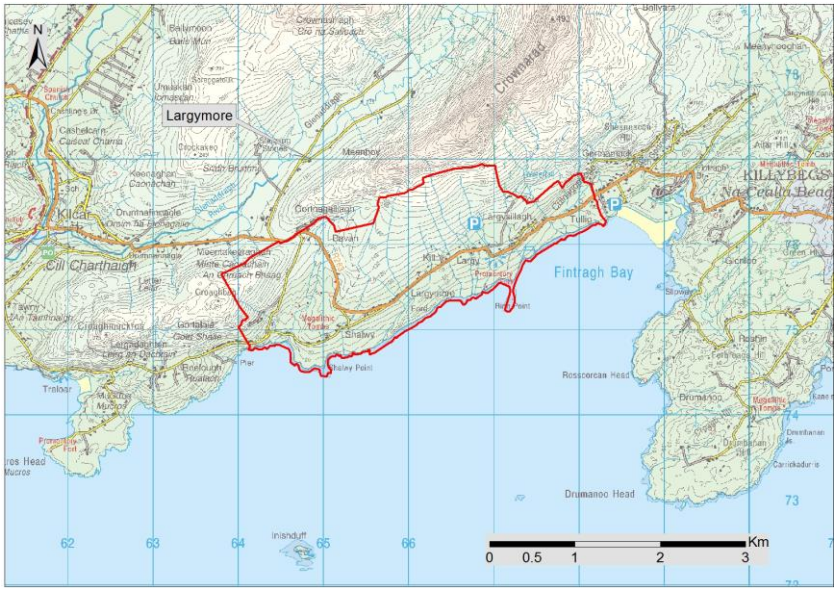
Management/promotion issues

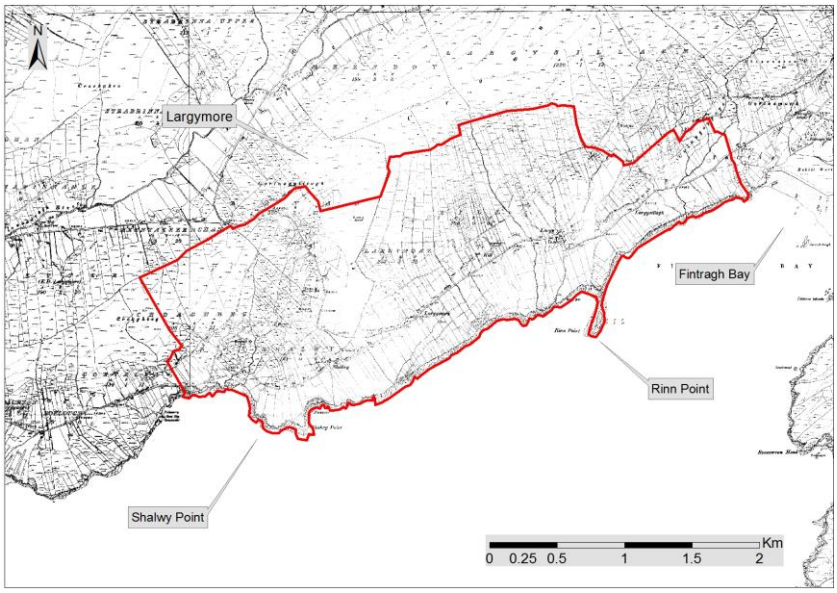
Access to the shore is difficult and would be dangerous at high tide. The pathway below the Blue Haven car park is completely overgrown, so any development of the site as a heritage attraction would require steps to shore level below the Rinn Point viewpoint car park. A signboard giving relevant geological and tide information would be useful here. The scenic road to Kilcar via Muckros has limited capacity for existing traffic, as also has the Shalwy high level access road.

Rinn Point Limestone Formation, looking east.

Basal clastics of the Rinn Point Limestone Formation.

Rinn Point and bedrock shore, looking south.





McClure *et al.* 2019. Geological Survey Ireland.