

LOUTH - COUNTY GEOLOGICAL SITE REPORT

| | | | |
|-----------------------------------|-------------------------------------|--|-----|
| NAME OF SITE | Cooley Point | | |
| Other names used for site | | | |
| IGH THEME | IGH7 Quaternary | | |
| TOWNLAND(S) | Templetown | | |
| NEAREST TOWN/VILLAGE | Greenore | | |
| SIX INCH MAP NUMBER | 9 | | |
| ITM CO-ORDINATES | 721733E 805180N (centre of section) | | |
| 1:50,000 O.S. SHEET NUMBER | 36 | GSI BEDROCK 1:100,000 SHEET NO. | 8/9 |

Outline Site Description

This site includes a low coastal cliff section that extends for several hundred metres and is c. 6m-8m high over most of its extent.

Geological System/Age and Primary Rock Type

The cliff section at Cooley Point is comprised of Quaternary Age glacial sediments, deposited during deglaciation at the end of the last Ice Age.

Main Geological or Geomorphological Interest

The cliff exposes sediments that are important to an understanding of relative sea levels in this part of Ireland during the end of the last Ice Age.

The exposure contains four main facies, or units, of sediment:

- (1) Massive and laminated muds are exposed at beach level over a length of about 200m. These yield samples of *Elphidium clavatum*, a genus of foraminiferan protozoa, which yielded an AMS ¹⁴C age of 15,000 and 15,400 years BP.
- (2) The mud is overlain by a boulder pavement which is pressed into the marine muds. The pavement contains boulders which have bevelled upper surfaces, and most of the boulders are flat-lying.
- (3) The boulder pavement is in turn overlain by approximately 2m of laminated silty clay.
- (4) These then pass into a 2m thickness of laminated sand. These form part of a raised beach sequence.

The pavement is interpreted to have been deposited during a fall in high relative sea level in the area, and seems to have been deposited in the intertidal zone.

Site Importance – County Geological Site

The section at Cooley Point is important as its stratigraphy provides information on regional deglaciation and the section shows an excellent example of a boulder pavement.

Management/promotion issues

The site is accessible via the public beach and is therefore easily visited. The cliffs are prone to slumping, however, and care must be taken when close to the faces. The importance of the section could be highlighted in promotional material for the Carlingford Lough proposed NHA.



Boulder pavement overlying deformed muds, Cooley Point.



View northwards along the Cooley Point section, towards Cooley Point itself.



