WEXFORD - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	**Loftusacre**
Other names used for site	
IGH THEME	**IGH2 Precambrian to Devonian Palaeontology, IGH4 Cambrian-Silurian, IGH7 Quaternary**
TOWNLAND(S)	**Loftusacre**
NEAREST TOWN/VILLAGE	**Wellingtonbridge**
SIX INCH MAP NUMBER	**45, 46**
ITM CO-ORDINATES	**685440E 607640N**
1:50,000 O.S. SHEET NUMBER	**77 GSI BEDROCK 1:100,000 SHEET NO. 23**

Outline Site Description
Discontinuous rock cliffs at the back of the beach.

Geological System/Age and Primary Rock Type
The rocks here are very mixed sediments of Ordovician (Caradoc) age.

Main Geological or Geomorphological Interest
A mid Caradoc fossil locality in the townland of Loftusacre has yielded a relatively large number (26) of specimens of the fossil echinoderm species *Petraster kinahani* (Baily, 1878), a starfish which is unknown from any other locality. Starfish are also generally very rare within the fossil record, and the only other Irish Ordovician record is of two starfish specimens from Slieveroe in County Wicklow. The material, including the holotype, is in the Geological Survey of Ireland. A limited number of other fossils such as brachiopods and graptolites were found with the starfish and have indicated a Caradoc age, as the starfish record is not biostratigraphically diagnostic.

The site is a small inlier of Caradoc rocks west of Ballymadder Point, near Bannow, County Wexford, and faulted on each side against older Cambrian rocks. Inland exposure is very poor, so little is known of the section except for the coastal exposures. However, it is recorded in 1916 by a Geological Survey of Ireland geologist, W.B. Wright, that the whole townland had been removed by the sea, and the rocks in which the fossils were found are no longer exposed. Examination of the six inch to the mile fieldsheets and even more recent Ordnance Survey editions indicate rock exposures no longer present along the coastal section.

Some sections of the cliff top have unusual structures in the glacial deposits above the bedrock. These are infilled till cracks, caused by a freezing episode. These are rare nationally, only really known from County Wexford. Infilled till cracks are features seen in section which show vertical or near-vertical fractures within till subsoil, which has been filled in by material different to that surrounding it. They are usually several centimetres wide and are commonly over 1m deep from ground surface. The fracture opens owing to contraction of the surrounding ground and does not involve ice heaving within.

Site Importance – County Geological Site
Due to this wholesale removal of the rocks by the sea, and consequent lack of certainty over the exact source of the starfish specimens, this site is not recommended as an NHA, but merits County Geological Site status for its historical value and remaining potential.

Management/promotion issues
Continuing natural erosion will undoubtedly further modify the site. Any serious attempts to prevent coastal erosion will obscure what exposures there are. Continued monitoring and regular searching for fossiliferous horizons for new finds would be desirable.

The site viewed from the cliff top at the eastern end.


Some of the beach exposures below the cliff.


Infilled till cracks in the cliff top at Loftusacre.


Wellingtonbridge
Droichead Eoin
Bannow Bay
Cuan Bhanú
Carrick
An Charraig
Loftusacre
Ballymadder Point
Blackhall
Bannow
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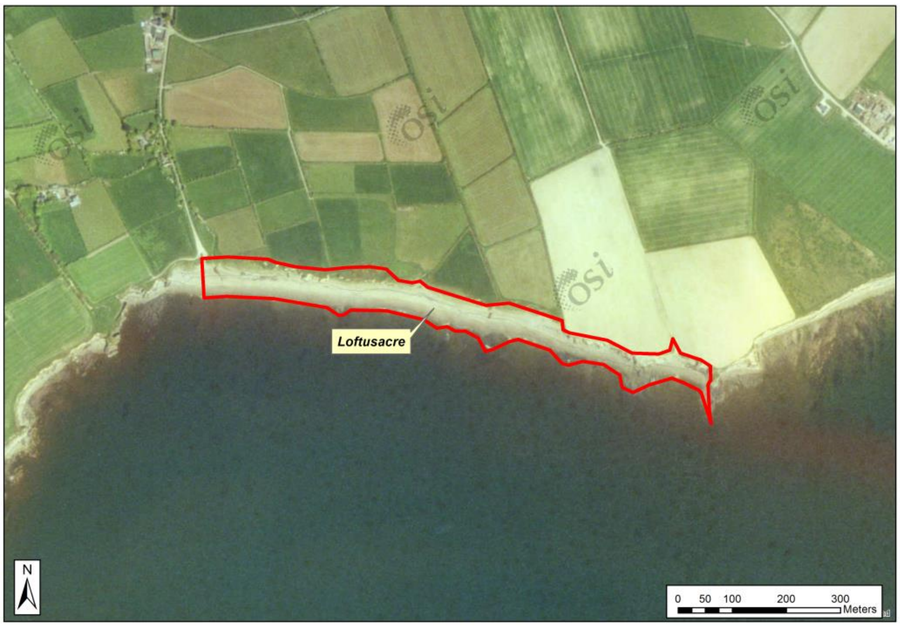
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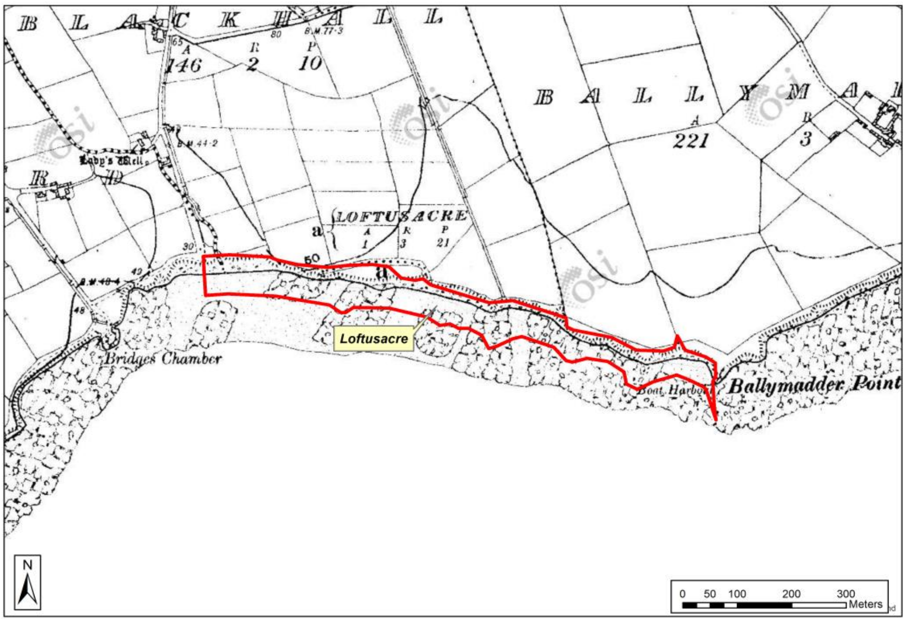
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