WEXFORD - 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 NUMBER Camaross Pingos Camaross Crossroads, Camaross fossil pingos IGH7 Quaternary Camaross Adamstown 36 689000E 624900N (centre of features) 77 GSI BEDROCK 1:100,000 SHEET NO. 23

Outline Site Description

This site comprises approximately forty pingo remnants, across an area of 26 hectares, located just north of the N25 road at Camaross. This site is a subset of a wider area covering over 6 square kilometres, where over two hundred pingo remnants have been recorded.

Geological System/Age and Primary Rock Type

The pingo locality is underlain principally by bedrock comprising rhyolitic volcanics and grey and brown slates of the Campile Formation, which are volcanic rocks of Ordovician age. . The pingos themselves were formed in the Quaternary Period, at the end of the Ice Age, when ice had vacated the locality but temperatures were still exceptionally cold.

Main Geological or Geomorphological Interest

A pingo, also called a hydrolaccolith, is a mound of earth-covered ice found in the Arctic and subarctic that can reach up to 70m (230 ft) in height and up to 600m (2,000 ft) in diameter. The term originated as the *Inuvialuktun* word for a small hill. The plural form is 'pingos'.

A pingo is a periglacial landform, which is defined as a nonglacial landform or process linked to colder climates. 'Periglacial' suggests an environment located on the margin of past glaciers. However, freeze and thaw cycles influence landscapes outside areas of past glaciation. Therefore, periglacial environments are anywhere that freezing and thawing modify the landscape in a significant manner. They are essentially formed by ground ice which develops during the winter months as temperatures fall.

A series of fossil pingos and related topographic forms, which have a unique hydrology and which seem to be partially fed by springs, are located in Camaross. Some of the pingos are floored by lacustrine clays. Where the water table breaks the surface in the pingos, springs occur. Many of the pingos were once ponds, but were drained in the late nineteenth century.

Site Importance - County Geological Site; recommended for Geological NHA

The site is unique in the number and variety of pingo forms which lie side by side in a relatively small area. The site is of international importance.

Management/promotion issues

Historically, drainage has altered the hydrological regimes of the pingos. Some of this has happened in the late nineteenth century, some in the late twentieth century, and some between 2011 and 2015. Recent drainage has affected the hydrology of some of the pingos, in particular those in the northernmost portion of the locality. It is notable, though, that this drainage has not affected the geomorphology of the features.

Owing to the uniqueness of the site, the importance of the features should be highlighted with promotional literature. It must be noted, however, that the features are on private land.



Rush-dominated, wet grassland in the base of one of the pingos at the south end of the site.



One of the deeper, larger, and more impressive pingos, with wetland within its base, at the northern end of the site.



The most extensive and deepest pingo, at the northern edge of the site.



Pingo with wetland in its base.

