GALWAY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE Kinvara Springs

Other names used for site

IGH THEME IGH1 Karst
TOWNLAND(S) Dungory West

NEAREST TOWN/VILLAGE Kinvara SIX INCH MAP NUMBER 113

ITM CO-ORDINATES 537740E 710460N

1:50,000 O.S. SHEET No. 52 GSI BEDROCK 1:100,000 SHEET NO. 14

Outline Site Description

Very large karstic springs in the intertidal zone between Kinvara harbour and Dunguaire Castle.

Geological System/Age and Primary Rock Type

The intertidal springs emerge in Carboniferous Limestone but are a post glacial phenomenon, potentially with inherited earlier development in inter-glacial or pre-glacial times.

Main Geological or Geomorphological Interest

A series of springs draining the Gort lowlands are located within the inter-tidal zone at the head of Kinvara Bay, to the west of Dunguaire Castle, almost as far as Kinvara harbour.

They are probably amongst the largest karstic springs in Ireland and have a highly variable daily flow regime and saline content due to tidal effects. Salinity persists in the outflow for some four hours after high tide. On the western side of the small island in the centre of the springs are a series of shallow (2-4m deep) collapses into solutionally enlarged bedding planes which are probably typical flow conduits for the groundwater in the vicinity of the springs. They contain water only under high flow conditions.

Site Importance – County Geological Site; recommended for Geological NHA

This is one of numerous sites within the Gort-Kinvara lowlands which make up a complex of international importance. The site is recommended to NPWS for designation as a geological NHA, comprising one of 15 critical sites within the Gort-Kinvara lowland karst which is one of the best studied lowland karst areas of the World.

Management/promotion issues

Some of the springs are readily accessible along the shoreline beside Dunguaire Castle, which is a significant visitor attraction in Kinvara, with a car park that is ideally located for examining the springs. At low tide the springs are easily seen but where they rise below the sea water they are visible like 'boiling' water with turbulence, if the sea is calm. These springs are fortuitously included in the SAC 000268 – Galway Bay Complex.



The freshwater springs rise mostly in the intertidal zone.



The volume from the springs is quite significant.



The freshwater springs are visible in the salt water when the sea is calm.





