

KERRY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Crag Cave
Other names used for site	
IGH THEME	IGH1 Karst, IGH8 Lower Carboniferous, IGH7 Quaternary
TOWNLAND(S)	Crag
NEAREST TOWN/VILLAGE	Castleisland
SIX INCH MAP NUMBER	40
ITM CO-ORDINATES	501330E 611720N (entrance to car park)
1:50,000 O.S. SHEET NUMBER	72
GSI BEDROCK 1:100,000 SHEET NO.	21
GIS CODE	KY039

Outline Site Description

Show cave with access *via* a visitor centre.

Geological System/Age and Primary Rock Type

The bedrock in the area of the cave is Lower Carboniferous in age (Mississippian, 359–323 million years old) and comprises unbedded mudbank limestone of the Cloonagh Limestone Formation (Cracoean Reef Member), in which the cave has developed, overlain by well-bedded bioclastic and cherty limestone of the DIRToge Limestone Formation. The cave system is Quaternary in age and is still undergoing active development. Dating of a speleothem found there has indicated a minimum age of c. 130,000 years, which corresponds to the last interglacial period, just before the last Ice Age.

Main Geological or Geomorphological Interest

Exploration of several caves at Crag House in the 1980s led to discovery of an extensive cave system almost 4 km in surveyed length. Crag Cave was then opened as a show cave in 1991. The section that is open to the public is relatively short but contains an abundance of typical limestone cave features including stalactites and stalagmites, pillars, curtains and flowstones. The relatively small scale of the cave allows close observation the various features. Every stage of the development of stalactites and stalagmites can be observed, from the delicate calcite straws that form as water drips from the roof to the pillars resulting from merging of the two. Among many striking features is the “Candlestick” stalagmite, the shape of which is interpreted to reflect changing amounts of water flowing through the roof of the cave over time, with the thicker base reflecting high flow rates from melting ice at the end of the last glaciation, 10,000 years ago, while the thinner middle section reflects the most recent dry period, 5,000 years ago.

Speleothems, a general term for features such as stalactites and stalagmites that are formed underground by deposition of minerals from water, have been the focus of much modern scientific research because they can provide insights into climatic variation over time. Crag Cave has been the most significant *locus* of such research in Ireland, both because it is readily accessible and because, as a recently-discovered cave, is largely unspoiled.

Site Importance – County Geological Site

This is an excellent example of a karst cave with abundant readily observed speleothems. It has been the focus of very significant international research relating to climate variation.

Management/promotion issues

The site incorporates a cave system of c. 3.8 km in surveyed length. A short section, c. 150 – 200 m in length, is open to the public as a manged show cave. An audioguide downloaded to one’s phone is the basis for a self-guided visit. The guide is detailed and informative about features within the cave and the geological background to them. Display panels in the visitor centre provide useful supplementary information. The cave is well signposted from the approaches to Castleisland and does not require further promotion.

Gallagher et al., 2026. Geological Survey Ireland.



Entrance to Crag Cave visitor centre and show cave.



“Diver’s Delight” – the point where a cave diver emerged from lower part of the cave system to discover the remainder of system including the show cave. Scalloping of limestone above the pool attests to previous flow of water along the cave walls.



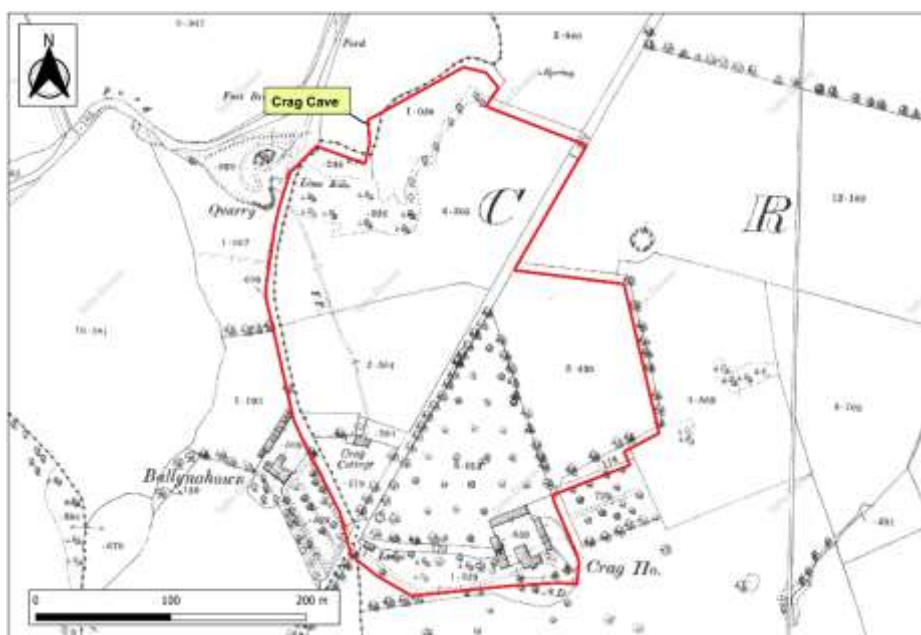
View of curtain formation, showing how it has developed at the extremity of flowstone that formed from water flowing across a ledge.



A large pillar that has formed where a stalactite and stalagmite have met.



The “Candlestick” stalagmite in the “Cathedral” section of cave.



Gallagher et al., 2026. Geological Survey Ireland.