Outline Site Description
Karst caves inundated by post-glacial sea level rise.

Geological System/Age and Primary Rock Type
Karst caves in Carboniferous Limestone.

Main Geological or Geomorphological Interest
The Doolin Green Holes, the best-documented karst caves in Ireland, consist of a series of cave passages that formed at a lower sea level than today when the water was trapped in huge ice sheets. Since their formation the caves have been inundated by post-glacial sea-level rises and have preserved much evidence of this. Other submarine karst springs have been identified along the northwest Clare coastline between Doolin and Black Head, and near Ballyvaughan but no open cave passage has been explored at these sites. Also of interest here are the photokarren and phytokarst, which were examined by Simms (1990). These erosional features, which are absent in the darkest parts of the cave, are the first of their kind to be recorded outside of the tropics. They are produced by the boring and solutional activity of algae, which has proved to be the main factor in coastal limestone erosion rather than chemical solution dominant in freshwater or subaerial settings. A geophysical study conducted by Convery (1991) has demonstrated how VLF (Very Low Frequency) measurements can be used to locate salt-water passages within the cave. This study also highlighted the possibility of further passages north of Mermaid’s Hole that may warrant additional investigation.

Site Importance
This site is of National importance and may be proposed for NHA designation under the IGH 1 Karst theme of the GSI’s IGH Programme.

Management/promotion issues
The site is a popular place for visitors generally to stroll to the Point and would benefit from explanatory material at Doolin Pier, campsite or in guidebooks locally.
The Green Holes of Doolin
After CDG Newsletter 101 with additions by Brian Judd, 1993.
See also UBSS Cave Notes, Co. Clare 1991 Vol 19(1)