

KERRY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Sceilg Mhichíl
Other names used for site	Skellig Michael, Skellig Rock Great, The Skelligs
IGH THEME	IGH10 Devonian, IGH13 Coastal Geomorphology, IGH16 Hydrogeology
TOWNLAND(S)	Sceilg Mhichíl (<i>Island</i>)
NEAREST TOWN/VILLAGE	Portmagee
SIX INCH MAP NUMBER	KY104a
1:50,000 O.S. SHEET NUMBER	83
ITM CO-ORDINATES	424700E 560680N
GS1 BEDROCK 1:100,000 SHEET NO.	20
GIS CODE	KY076

Outline Site Description

An elevated, steep, rocky island distant off the coast of the Iveragh Peninsula.

Geological System/Age and Primary Rock Type

Bedrock comprises Upper Devonian Old Red Sandstone, comprising St. Finan's Sandstone Formation (Iveragh Group) siltstone, sandstone and rhyolite. The St. Finan's Sandstone Formation has been dated as 375 million years old.

Main Geological or Geomorphological Interest

Sceilg Mhichíl exhibits a variety of exceptional geological characteristics. The island is bisected (NNW-SSE) by the Blue Cove Fault. This major fault splits the island in two parts: a western, down-thrown side of Upper Skellig Sandstone Member overlain by South Peak Siltstone Member beds; and an eastern, side of Lower Skellig Sandstone Member, Skellig Volcanic Member, and Upper Skellig Sandstone Member beds. Radiometric (U-Pb zircon) and palynological (microspore) dating of St. Finan's Sandstone Formation rocks have yielded an age of c. 375 million years old (specifically the mid-Frasnian stage of the Upper Devonian). The island is traversed by a SW-NE oriented syncline (U-shaped fold). The fold and fault structures are associated with the Variscan Orogeny (mountain building event) that formed the characteristic 'peninsula-ridge and bay' topography in southwest Ireland.

Building stone for the monastery was quarried from the summit sloping rock area (Upper Skellig Sandstone Member) above, and to a lesser extent below, the monastery. Stone is predominantly grey sandstone, with some large vein-quartz, possibly sourced south-west of the North Peak, between the monastery and Christ's Saddle, where vein quartz occurs *in situ*. Channels cut by the monks into the sloping bedrock above and in the vicinity of the monastery was enabled water to be directed into two cisterns in the core area of the monastery. The cisterns are set within the stone-built plinths beneath the cells. The two cisterns have a storage capacity of c. 450 litres of water.

Site Importance – County Geological Site; recommended for Geological NHA.

This County Geological Site is of international importance, and Sceilg Mhichíl is an UNESCO World Heritage Site. The extreme rocky landscape of the island and the manipulation of the natural resources are a direct reflection of its geology. Sceilg Mhichíl is considered a site of outstanding universal value, uniquely representing an early religious settlement deliberately sited on a pyramidal rock in the Atlantic Ocean, preserved because of a remarkable environment, and illustrating the extremes of Christian monasticism during the period in which it was occupied.

Management/promotion issues

Sceilg Mhichíl is protected by international and national cultural and natural heritage designations. These include status as an UNESCO World Heritage site, National Park (Páirc Náisiúnta na Mara, Ciarraí), Skelligs SPA (site code 004007), Great Skellig pNHA (site code 001954), and a National Monument. The island is the property of the Irish Government and management of the island is under the remit of state bodies. The site is the subject to a recent publication; Meere, P., Higgs, K. T., & Hennessy, R. (2025). *Geology of Sceilg Mhichíl: A Field Guide*. Geological Survey Ireland.



View of northeastern side of Sceilg Mhichíl on approach to boat landing (left). Lower Skellig Sandstone Member (St. Finan's Sandstone Formation) beds in nearest cliffs.



Water cistern near Cell B and Cell C. Cistern entrance is 80 cm high.



Upper Skellig Sandstone Member and South Peak Siltstone Member beds on cliffs south of Upper Lighthouse ruins.



Blue Cove Fault (yellow) at OPW huts on south side of island.



South Peak Siltstone Member beds on the South Peak viewed from Christ's Saddle.

