

BOX 5

2 Boxes in Legend

**Toe Head Formation (Late Devonian)
Grey – Green Sandstones and Mudstones**

**Castlehaven Formation (Late Devonian ORS Old Red Sandstone)
Purple Sandstones and Mudstones**

Age: Holocene to Present (10,000 years to Present)

Title: The Model depicts the Topography of the Mizen Head Area as we see it today.

Text: The bedrock here contains two sedimentary rock formations, the Castlehaven and Toe Head Formations. These consist of bedded or layered ancient sediments, which are shown in the model. The sediment has been converted into sedimentary rock.

The bedrock is draped by a very thin soil layer (<2m), which has developed partially due to the tundra like freeze-thaw conditions, which accompanied the last glacial event and may have extended into the Holocene.

The Castlehaven Formation consists of purple sandstones and mudstones. These are the deposits of a non-marine alluvial plain, in which extensive shallow ephemeral lakes developed, frequently following major flooding events during the Late Devonian. The lake waters dried up rapidly giving way to strongly oxidising conditions. This resulted in the development of haematite (a hydrated form of iron oxide), which has imparted the purple colour to the rock.

The Toe Head Formation consists of grey or green sandstones, the deposits of a major river system, which drained an upland area well to the west and northwest of Mizen Head. The river system drained eastwards towards Cork Harbour where it entered the Late Devonian sea through a deltaic shoreline.

The rock layers, which form these two formations, were folded into synclines and anticlines as a result of the Hercynian phase of deformation. A major syncline, the North Skibbereen Syncline, runs through Mizen Head and Crookhaven. Superimposed on this structure is a spectacular series of minor parasitic folds, which can be seen on either side of the arched bridge and on the coastal cliffs immediately to the north of the Signal Station.

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