

## CORK - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Shot Head</b>		
Other names used for site	Coosard, Trafrask Bay, Mehal Head		
<b>IGH THEME</b>	<b>IGH10 Devonian, IGH8 Lower Carboniferous</b>		
<b>TOWNLAND(S)</b>	<b>Roosk, Trafrask East</b>		
<b>NEAREST TOWN/VILLAGE</b>	<b>Adrigole</b>		
<b>SIX INCH MAP NUMBER</b>	<b>116, 117</b>		
<b>ITM CO-ORDINATES</b>	<b>484650E 548275N</b>		
<b>1:50,000 O.S. SHEET NUMBER</b>	<b>84, 85</b>	<b>GSI BEDROCK 1:100,000 SHEET NO.</b>	<b>24</b>
<b>GIS CODE</b>	<b>CK080</b>		

### Outline Site Description

Rocky headland with coastal outcrops.

### Geological System/Age and Primary Rock Type

Bedrock comprises a conformable stratigraphical sequence from Upper Devonian Gun Point Formation, Castlehaven Formation, Toe Head Formation and Old Head Sandstone Formation to the Lower Carboniferous (Mississippian) Kinsale Formation Ardaturrish Member, Castle Slate Member and Reenagough Member.

### Main Geological or Geomorphological Interest

Coastal exposures from inner Trafrask Bay southwards to Shot Head, and at Mehal Head to the east, represent a conformable stratigraphical sequence of lithologies dating from the Upper Devonian, through the Devonian-Carboniferous transition and into the Lower Carboniferous. Gun Point Formation, Castlehaven Formation, Toe Head Formation, Old Head Sandstone Formation, Castle Slate Member and Ardaturrish Member rocks are exposed along the shore from inner Trafrask Bay to Shot Head. Reenagough Member rocks crop out at Mehal Head. Two NE-SW trending faults traverse the site: Trafrask Fault and Roosk Fault. The lithologies record changing depositional environments, from alluvial fan-associated braided river systems (Gun Point Formation; Castlehaven Formation), to near-coastal fluvial plain settings (Toe Head Formation), to shallow tidally influenced marine conditions (Old Head Sandstone Formation), to shallow offshore low-energy marine conditions (Castle Slate Member), to intertidal settings (Ardaturrish Member), to a shallow marine environment (Reenagough Member). Overall, the rocks provide a record of an encroaching sea flooding onto a terrestrial environment during Upper Devonian-Lower Carboniferous times.

### Site Importance – County Geological Site

This is an important site owing to the full stratigraphical sequence that records the transition from terrestrial Old Red Sandstone red-beds to tidal and marine sediments. The sequence plays a key role in understanding of depositional environments in the South Munster Basin during the Upper Devonian and Lower Carboniferous.

### Management/promotion issues

The site is an exposed, sea-facing coastal section on the north shore of Bantry Bay. The coastal exposures can be accessed in calm weather conditions. Parking is available at the end of two narrow lanes leading to Shot Head and east Trafrask Bay. The site is of value for geological research but is not deemed suitable for public promotion.



Shot Head viewed looking south from Toe Head Formation on east Trasfrask Bay. Sheep's Head Peninsula visible to south across Bantry Bay.



Ripples in Toe Head Formation sandstone, north of Shot Head.



Castlehaven Formation purple siltstone. Hungry Hill in cloud to west across Trafrask Bay.



Ardaturrish Member by road. Reenagough Member on rounded headland (left of pole). Photo taken looking southwest along Roosk Fault towards Sheep's Head Peninsula visible across Bantry Bay.



