

## CORK - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Derrycarhoon</b>		
<b>Other names used for site</b>	Derrycarhoon copper mine		
<b>IGH THEME</b>	<b>IGH15 Economic Geology</b>		
<b>TOWNLAND(S)</b>	<b>Derrycarhoon</b>		
<b>NEAREST TOWN/VILLAGE</b>	<b>Ballydehob</b>		
<b>SIX INCH MAP NUMBER</b>	<b>139</b>		
<b>ITM CO-ORDINATES</b>	<b>499040E 540450N</b>		
<b>1:50,000 O.S. SHEET NUMBER</b>	<b>88</b>	<b>GSI BEDROCK 1:100,000 SHEET NO.</b>	<b>24</b>
<b>GIS CODE</b>	<b>CK041</b>		

### **Outline Site Description**

A forested upland area and site of Late Bronze Age and nineteenth century copper mining activity.

### **Geological System/Age and Primary Rock Type**

Bedrock comprises Upper Devonian Castlehaven Formation sandstone and siltstone, wherein beds of green sandstone host low-grade disseminations of oxidised copper (Cu) minerals.

### **Main Geological or Geomorphological Interest**

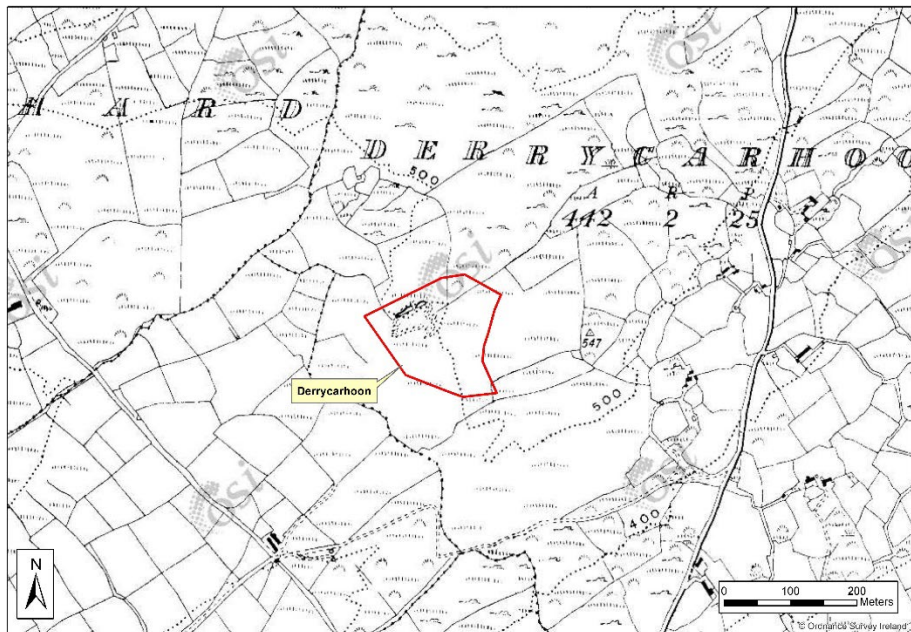
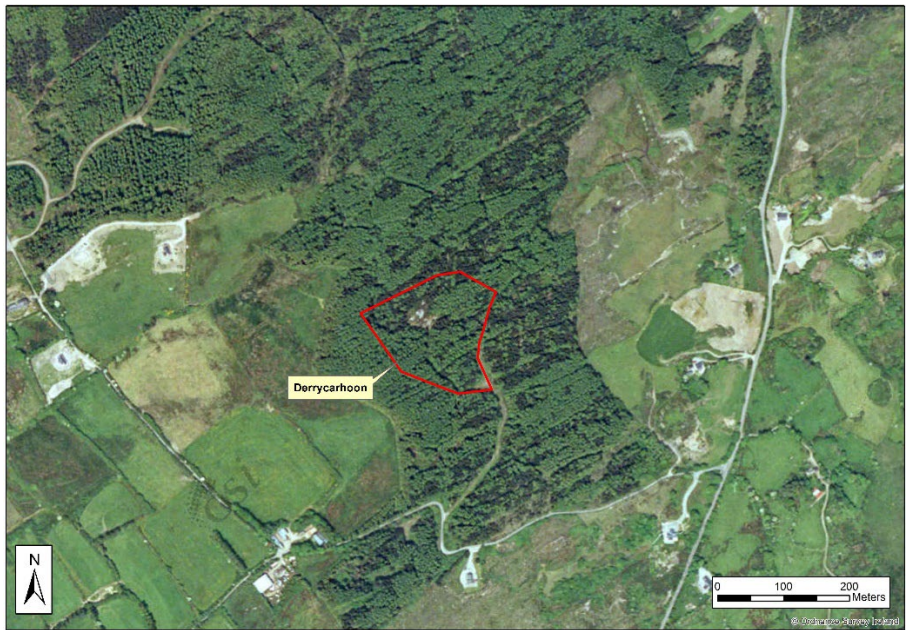
The south-west region of Cork and Kerry was the most important source of copper in Ireland during the Chalcolithic and Bronze Age. Whilst Ross Island (c. 2400-1800 BC) and Mount Gabriel (c. 1800-1400 BC) are among the better-known early Bronze Age copper mines in Ireland, Derrycarhoon is the first copper mine in Ireland to be dated to the Middle to Late Bronze Age (c.1400 – 1000 BC). Unlike Bronze Age mines such as those at Mount Gabriel, where fire-setting was used in the extraction of 'copper-bed' mineralisation, there is no evidence for the use of fire-setting at Derrycarhoon. Instead, miners extracted ore by working into the natural, easy-to-spilt fabric of the bedrock using stone, wood, and antler tools. A short period of renewed mining activity in 1846 led to the discovery of narrow trench workings covered by peat c. 5 m thick. This mining activity was attributed to the 'Danes'. Stone hammers and wooden implements were discovered, including a 75 cm-long curved tube of yew, that is understood to be a medieval musical instrument. Archaeological surveys carried out post-2007 revealed two vertical mine shafts that were sunk in the nineteenth century, though these are now infilled. GSI Mineral Localities (MinLocs No. 2841) data records copper, chalcocite, silver, gold and malachite at Derrycarhoon. Trials were carried out on the site in the early 1960s by Northfield Mines Inc.

### **Site Importance – County Geological Site; recommended for Geological NHA**




This is an important County Geological Site owing to it being part of the Bronze Age mining and nineteenth century industrial heritage of this part of southwest Ireland. The site is of immense significance owing to it being one of the earliest sites of copper mining activity in northwest Europe.

### **Management/promotion issues**

The site of the Derrycarhoon copper mine is located within an area of Coillte conifer forestry that was clear-felled in 2014, but later replanted. As a result of forest growth, the site is difficult to access, and as a result there are no photographs illustrating any clear features on or of the site in this report.





 TRENCH - HIGH EXPOSURES  
 OUTCROP RIDGE  
 UNDERGROUND WORKINGS  
 50 FEET LEVEL

**DERRYCARHOON MINING AREA**

X55 CONCESSION CO. CORK.

**SKETCH OF GEOLOGY AND LODES**

SCALE 1 INCH = 100 FEET

20 December 1963

NORTHFIELD MINES INC.

20 Jan 1964 Revised

I. S. THOMPSON