

= Dubh Artach =

Dubh Artach (/ duˈʔʔʔʔrtʔʔx / ; Scottish Gaelic : [tʔ uh arʔʔtʔʔx]) is a remote skerry of basalt rock off the west coast of Scotland lying 18 miles (29 km) west of Colonsay and 15 miles (24 km) south @-@ west of the Ross of Mull .

A lighthouse designed by Thomas Stevenson with a tower height of 145 feet (44 m) was erected between 1867 and 1872 with a shore station constructed on the isle of Erraid . The rock is subject to extraordinary sea conditions with waves of 92 feet (28 m) or more being encountered by the keepers . Despite these adverse conditions several men served the light for lengthy periods until it was automated in 1971 .

Dubh Artach is the official name of the lighthouse , although the skerry itself is also known as Dhu Heartach . Various interpretations have been provided for the original meaning of the Gaelic name , of which " The Black Rock " is the most likely .

= = Geology = =

In pre @-@ historic times Dhu Heartach was covered by the ice sheets that spread from Scotland out into the Atlantic Ocean beyond the Outer Hebrides . After the last retreat of the ice around 20 @,@ 000 years ago , sea levels were up to 425 feet (130 m) lower than at present . Although the isostatic rise of land makes estimating post @-@ glacial coastlines a complex task , circa 14 @,@ 000 BP it is likely that Dubh Heartach was at the western edge of a large land bridge linking what is now the island of Ireland to Scotland . This land mass included the islands of Jura and Islay and was probably connected to the mainland of Scotland by an isthmus near Loch Craignish , south of Oban .

Steadily rising sea levels would then have slowly isolated and finally all but submerged Dhu Heartach , which today is a rounded , dark green mass of basaltic rock called augite , which is 240 feet (73 m) long and 130 feet (40 m) wide , and which rises to 35 feet (11 m) above sea level . Submarine surveys indicate that the rock is at the eastern end of a valley stretching 80 miles (130 km) into the Atlantic , which may " account for the seemingly abnormal seas to which the tower is subjected " . It is an isolated outpost of the Inner Hebrides archipelago . The author Robert Louis Stevenson wrote :

An ugly reef is this of the Dhu Heartach ; no pleasant assemblage of shelves , and pools , and creeks , about which a child might play for a whole summer without weariness , like the Bell Rock or the Skerryvore , but one oval nodule of black @-@ trap , sparsely bedabbed with an inconspicuous fucus , and alive in every crevice with a dingy insect between a slater and a bug . No other life was there but of sea @-@ birds , and of the sea itself , that here ran like a mill @-@ race , and growled about the outer reef for ever , and ever and again , in the calmest weather , roared and spouted on the rock itself .

= = Meaning of the name = =

The translation of Dubh Artach is " The Black Rock " , artach being a now obsolete Gaelic word for a rock or rocky ground both in Scottish Gaelic and in Irish . The variation between the anglicised forms Dubh Artach and Dhu Heartach is a simple case of false splitting where the final [h] of [tʔ uh arʔʔtʔʔx] in pronunciation seemingly is part of the following word , suggesting * hartach or heartach to the untrained ear .

Stevenson believed that ' black and dismal ' was a translation of the name , noting that " as usual , in Gaelic , it is not the only one . " Adamnan in his 7th @-@ century Life of St Columba poetically calls the rock An Dubh Iar @-@ stac , " The Black Stack of the West " . Watson (1926) suggests the root is Old Irish hirt meaning " death " , (which he also believes occurs in Hirta , the main island of the St Kilda archipelago) , and offers am Duibh @-@ hirteach , meaning " the black deadly one " . The skerry was also known as St. John 's Rock prior to the construction of the lighthouse .

= = Planning and construction of the lighthouse = =

Between 1800 and 1854 thirty ships were wrecked on the reef ; however , the requirement for a lighthouse was not only to warn seafarers away from Dhu Heartach itself , but also to guide them past the fearsome Torran Rocks , which lie between the Ross of Mull and Colonsay . Originally it was considered to be an impossible site for a light , but the loss of the steamer Bussorah with all thirty @-@ three hands on her maiden voyage in 1863 and of an astonishing 24 vessels in the area in a storm on 30 ? 31 December 1865 encouraged positive action under pressure from insurers Lloyd 's of London and a Captain Bedford of the Admiralty . The engineering work was supervised by the famous Stevenson family of engineers , the brothers Thomas (father of Robert Louis) and David commencing work in 1866 . Thomas noted that " it would be a work of no ordinary magnitude " .

The land base for the construction of the light was Erraid near Iona . Fourteen miles distant from Dhu Heartach across open sea , the little island provided a granite quarry and a shore station once the work on the lighthouse was completed . Initial construction on the rock , which began on 25 June 1867 under the supervision of Alan Brebner , required a barrack for the workmen made of iron . Summer gales brought high seas , which resulted in breaking water falling on the roof 77 feet (23 m) above sea level . It held firm , although fourteen men including Brebner were trapped there for five days , and at one point seawater poured in through the trapdoor , swirled around them and exited with their remaining food supplies . Describing a similar occasion , R. L. Stevenson wrote :

The men sat high up prisoned in their iron drum , that then resounded with the lashings of the sprays ... It was then that the foreman builder , Mr. Goodwillie , whom I see before me in his rock @-@ habit of indecipherable rags , would get his fiddle down and strike up human minstrelsy amid the music of the storms .

Despite these hardships a 36 @-@ foot (11 m) diameter foundation pit was excavated and by 1869 a solid portion of tower rising 32 feet (9 @. @ 8 m) above foundation level had been completed . This was no mean feat . On one occasion eleven two @-@ ton stones were dislodged from the third course of stonework and carried off the rock , never to be seen again . Robert Stevenson noted that this destruction occurred at the same height " above the sea as the glass panes in the lantern of Smeaton 's lighthouse " at Eddystone .

The solid base weighing 1 @, @ 840 tons rises more than 64 feet (20 m) above the pounding seas , more than twice as high as its nearest British rival of Skerryvore . The blocks , having been shaped and fitted on Erraid , were towed out to the rock in barges by the steamer ? Dhuheartach ? each barge carrying 16 tons . Masonry work was completed in 1871 and the lantern , optical apparatus and fog bell installed the following year , Dubh Artach becoming the first isolated rock light in Britain to use paraffin . The finished tower rises 101 feet (31 m) above the foundation in seventy @-@ seven courses of stonework all told .

The total cost of the works undertaken by the Northern Lighthouse Board was £ 65 @, @ 784 , excluding the £ 10 @, @ 300 cost of establishing the shore station on Erraid . However , the extraordinary nature of the work should not be reduced to mere numbers . Stevenson was moved to note that :

It would be ungenerous if a great and dangerous work like this were brought unsuccessfully to an end and no praise should be given to such men as Mr Brebner the resident Superintendent , Mr MacGregor the captain of the steamer , Mr Goodwillie the master @-@ builder on the rock and Mr Irvine the landing master . If full justice were to be done , the list should be much longer , but I can only add that out of all the workmen who took their lives in their hand to finish the Dhu Heartach Lighthouse , there were very few who turned poltroon . And this is the common history of all such undertakings .

= = Early operations = =

Completion of the construction work did not result in an end to the hazards . At low tide the landing stage is forty feet above a boat , yet not completely out of the reach of the swell . Landings other

than via the precarious use of dangling ropes from a derrick were most unusual even on calm days . The storm seas could rise to extraordinary heights . In the first year of operation , the copper lightning conductor was wrenched out of its sockets by a storm at a height of 92 feet (28 m) above high water .

The first principal keeper was James Ewing who looked after the light for the next eleven years . Despite the exceptionally adverse conditions faced by the keepers , which resulted in them receiving additional payments in kind , Ewing was not the only one who served the light for a decade or more . However , some found the lonely rock and its cramped quarters less to their taste . One had to be prevented from diving into the sea and attempting to swim ashore .

= = Later events = =

In 1874 the principal keeper reported an incident which suggested that the rock had experienced an earth tremor but the tower stood fast .

Robert Louis Stevenson 's connection with the construction of Dubh Artach and its shore station played a significant part in his 1886 novel Kidnapped during which the main character , David Balfour , experiences the dangers of the Torran Rocks and is marooned on Erraid .

In 1890 a distinctive red band was painted round the middle section of the tower to distinguish it from Skerryvore , 20 miles (32 km) to the northwest , which was served from the same shore station .

A dispute concerning the financing of lighthouses led to an 1898 visit to Dubh Artach of some prominent persons , including the President of the Board of Trade and the Chancellor of the Exchequer , Sir Michael Hicks Beach .

The name of the lighthouse was changed in 1964 from Dhuheartach to the present form Dubh Artach . The reasons for this are not clear , although the latter is arguably easier to spell for anglophones .

The lighthouse was fully automated in 1971 and the following year a helipad was constructed to enable maintenance work to be undertaken without the need for perilous sea landings .