

**MARINE ARCHAEOLOGICAL FIELDWORK 1993 :
A PRE-DISTURBANCE SURVEY OF THE GULL ROCK SITE**

By

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AIM OF PROJECT

The aim was to re-locate a previously recorded site and to carry out a pre-disturbance survey of it. This project was initially encouraged by Neville Oldham of the National Archaeological Society (N.A.S.), South West to start to gather some information on this wreck, which has been registered as a historic wreck site for several years. The wreck was originally found by John Shaw, while working on Lundy. The work was undertaken by the Appledore Sub-Aqua Club.

The time period for the licence was from July through to the end of October 1993; the main part of the survey work was anticipated to be undertaken between 10th-17th July, with the period up until October as a backup in the case of bad weather.

LOCATING THE SITE

Re locating the site from the Latitude and Longitude supplied by the Department of National Heritage proved unsuccessful on the 10th and the morning of the 11th; it was finally located on the afternoon of the 11th, using previous knowledge of the site from several years ago.

Initially two cannon balls were found and marked with a shot line. Later in the afternoon of the 11th, most of the main area of the site had been established, which included a broken cannon and the breach.

This was plotted on to Admiralty Charts using Decca, and the new marks recorded were found to be two tenths of a mile from the original position given. Later in the year the N.A.S. diving team checked their original figures using G.P.S. (satellite fixing) and found them to be correct. The inconsistency of our figures is thought to be due to the work being carried out at the time on the Decca aerials.

THE SITE

The site itself is scattered at the bottom of a granite shelf; it covers a fairly small area, and is at a depth range of 25/30 metres. At approx 30m the sea bed flattens out and gently slopes away, consisting of mud and gravel.

The majority of the finds are around the 30m level, which considerably reduces diving time spent at the site during the day; this was to keep decompression time to a minimum. Usually the first dive was at slack water; once clear on decompression tables the second dive was around half tide.

Shortly after finding the site it was obvious, because of the silty conditions, that it could only be worked by a couple of divers at any one time. Holes were drilled in the rock and expanding bolts screwed in. Attached to these were plastic ear tags used for marking cattle, marked S70 north and S71 south. A further datum point S72 (13.01m) was added south of S71 on the discovery of the second cannon.

The area around the site is contaminated with a few items (coal and metal objects) from possibly two other wrecks. Contamination of the site with coal could possibly come from a large area of coal to the north of the site, as there is no sign of any superstructure here, and it may have come from one of several strandings along the east coast, and could possibly have been a jettisoned cargo to enable a ship to be floated off. Several small items found amongst this area were large copper nails and Victorian ink wells.

Inshore there is a definite wreck site, of a wooden vessel which was found earlier this year, which could be from the late 19th or early 20th century. This is against the island

just south of Gull Rock. To date she has not been identified.

While searching for the site on the first day, a small length of timber with copper sheathing was found, in approx 25m of water to the south of the cannon site, possibly from a wreck earlier than the one located inshore.

Contact with the Admiralty Hydrographic Officer to try and identify any wrecks in the Gull Rock area proved fruitless, though the possibility of new wrecks for their database interested them. They have sent information on known wrecks along the east coast of Lundy, which included the Gull Rock site, and it was noted that the Archaeological Diving Unit (A.D.U.), had registered a significant magnetometer reading 60m east of the cannon site. This was briefly investigated on a single dive in August but nothing was found. Again because of depth (35m+), and without the use of a magnetometer, a visual search would be time consuming. A visual sweep search was made 20m out on the mud from the breech but nothing was found.

Use of initial dives to get familiar with the site found more cannon balls and another cannon half submerged in the mud at the bottom of the drop off; this is when the third datum point S72 was included.

Items found and plotted in during the week 10th-17th July included two cannons, one breech gun, seven cannon balls, three metal objects, and one large blue slate stone. Another cannon ball was found on the 15th August while photographing the site. There is no evidence of any wood or wooden structure above the sea bed, (Fig. 1).

As finds were found they were marked with numbered pegs. With the slope of the site, the use of datum lines, and triangulation with measuring tapes from each of the datum points, plus diving computers for depth at each measured point, seemed the most appropriate method for surveying this site. With more time a fourth datum could be added and measurements taken and computed to form an accurate picture of the site.

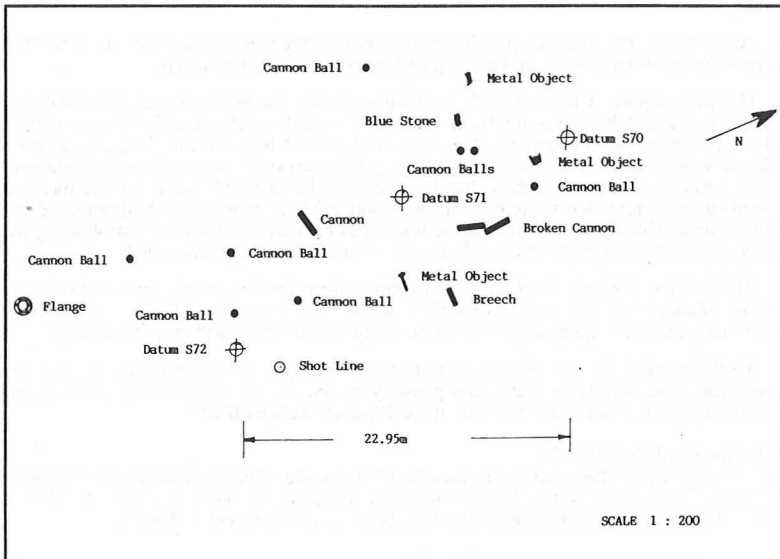


Fig 1: Finds distribution at the Gull Rock Site.

The first cannon found was broken into two pieces and laying over rocks in a north south direction (Fig. 2). From photographs the banding of the cannon can be seen to have separated. The second cannon (Fig. 3), which is sticking out of the mud at roughly a thirty degree angle, is in a better condition, and clearly a different design with more definition to be seen on the barrel, and also the dolphins (handles to manoeuvre the gun) clearly visible.

The breech is the furthest find away from the drop off; to the east half is buried in the mud.

Of the eight cannon balls found, six have from a distance what looks like a grey mould growing on them, which was identified from photographs by Plymouth Marine Laboratory as *Phoronida*, a very small stone (usually calcareous) boring worm. These are accompanied with larger stone boring Piddock Worms, which have left quite large holes in some of the cannon balls. The cannon balls could themselves become a small project with their marine growth and geology. They appear to be made from a very fine limestone; an offer from a geologist at Edinburgh University to do some research work on any samples brought up could possibly localise the geographic area of their origin. One unusual aspect of the cannon balls is their position relative to the sea bed. Their range throughout the site is from a few metres up on the drop off down to the mud bottom; despite their time of several hundred years on the seabed, they have little in the way of sediment build up around them and most sit proud of the surface of the seabed. Two of them have suffered from rock falls at some time and have lumps of granite on top of them.

The three metal objects found on the site would seem to be from a more modern source and are embedded in the surface of the sea bed. One is circular like a flange or bearing and is approx 300mm diameter by 100mm thick, with six holes drilled into it. The other two pieces have corroded away and are unrecognisable as any distinct shape.

The single lump of blue slate on the site is interesting. This type of stone is normally found on the mainland beaches; it has been in the sea or a river at some time, with the obvious effects of erosion on it. With the absence of any other similar rocks on the site it is doubtful whether it was ballast and has probably been dropped on the site at a later date.

At the end of the week the position of the buoy on the shot line was measured at 175m from the top of Gull Rock, and a compass bearing of 82 degrees taken.

On the last dive of the week, all marking pegs and datum points were removed from the site, leaving the expanding bolts in the rock, which are flush with the rock surface, for any future use. On subsequent dives these have not been hard to find; the easiest to locate is S72 which is in a large boulder of granite just out from the drop off to the east. The removal of any marks from the site seems to be justified. Since the site has been marked on current charts, there has been a noticeable increase in boats dropping divers in the area. The age of the site and the way finds have blended into the surrounding area have probably made it difficult to find, and so far has remained untouched.

The site has been revisited on two occasions since the July week, once to take some more photographs and the second time to try and find the A.D.U's magnetometer anomaly; the site is quite easy to return to using transits taken and an echo sounder.

Work intended for the 1994 season is to add another datum point to the east and measure in all objects, to search and possibly extend the site to the north and south, and hopefully photograph and video this site and that of the Iona II site.

ACKNOWLEDGEMENTS

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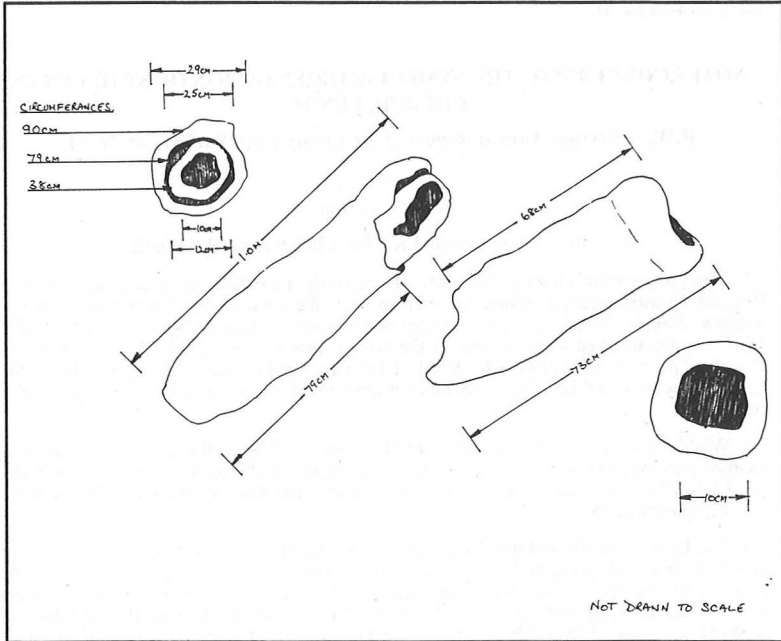


Fig 2: The broken cannon.

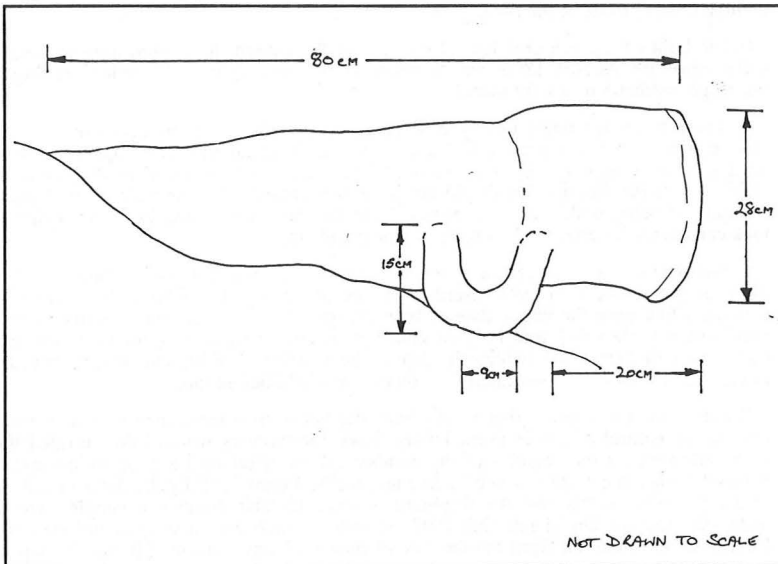


Fig 3: The whole cannon.