

# Gun Rocks – Cannon Site, Financial Report 2018

*2018 Funding report*

The Gun Rocks Project received funding to undertake a range of objectives during 2017-2018 financial year. This report summarises the objectives and tasks which were met, and which are still outstanding. The report also provides a statement of the spending undertaken to date, a requirement for both the Jubilee Trust and Heritage Lottery Fund.

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**Divers preparing to dive Gun Rocks**

**Acknowledgement:** A big thank you to the funders who supported this project – **British Sub-aqua Jubilee Trust, Crowdfunder (public donations) and Heritage Lottery Fund.** We would also like to thank all of the Tyneside 114 club members (past and present) as well as all of the other club and agency divers who helped to make this project successful.

## **1 INTRODUCTION**

### **1.1 A brief project history**

#### **1.1.1 Background**

Tyneside 114's association with the cannon on Gun Rocks began back in 1970 thanks to a curious Diving Officer of the time, Mr. W.R. Smith (known as Bill). During the initial Gun Rocks Project in the 1970s, a cannon was raised, a TV programme made, and a huge amount of diver participation was involved in the surveying of the cannon site. All of the findings were recorded in the Gun Rocks Project, Interim Report 1970, written by Bill Smith.

In 2010 Andy Hunt, the Diving Officer of Tyneside 114 at the time, started a Gun Rocks Project II, to celebrate the 40th anniversary of the initial project. The main aim of this project was to re-survey the Gun Rocks cannon site and compare the results with the original survey. During the resurvey of the cannon, there was a lot of diver participation, and many people learned a lot about RIB diving, surveying and reporting.

In 2013 Wessex Archaeology (WA) was commissioned by Historic England (previously English Heritage) to undertake an "Undesignated Site Assessment" of the wreck on the Gun Rocks site. The work was undertaken as part of the "Heritage at Risk - Designated Wrecks at Risk". The fieldwork was part of a staged investigation of a number of wreck sites in the Farne Islands, beginning in March 2013. A report was subsequently published by WA, which has an interesting conclusion as to the reason for the wreck and its potential origins.

#### **1.1.2 The Wreck Award**

In 2015, 45 years since Tyneside 114's initial investigations into the cannon and other wreckage at Gun Rocks began, Nicola Faulks decided to tell the story of Gun Rocks. The report, Gun Rocks Cannon Site, was written with the aim of providing not just an entry for the Wreck Award, but a full report of activity and findings for posterity.

The report was written and submitted for the BSAC Wreck Award with the following aims:

1. Provide a summary of the 1970s Gun Rocks project;
2. Provide information on the intervening 40 years;
3. Collation and presentation of the data for the 2010 Gun Rocks Project II;
4. Provide information on, and a summary of, the WA site investigations in 2013;
5. Discuss the future of Tyneside 114's involvement with Gun Rocks.

In February 2015 Tyneside 114 were informed that Gun Rocks Cannon Site report had won the BSAC Wreck Award, fighting off some stiff competition. The trophy was presented by Jane Maddocks (BSAC Wrecks and Cultural Heritage Advisor), on a foggy day at the Farne Islands; sadly a day when it was too foggy to actually dive the Gun Rocks site.



**The Wreck Award Trophy**

### **1.1.3 From Wreck Award to dive trail**

The final section of the Gun Rocks Cannon Site report contained a section called “The future of Tyneside 114 and Gun Rocks.”, a sub-section of which was “A dive trail”. Here the following information was presented, and from it, the Gun Rocks Dive Trail was developed:

*“Following on from all of the publicity received about Gun Rocks, and conversations with other divers and boat skippers up at Seahouses, the general opinion has been that a dive trail of some sort would be a great idea for Gun Rocks. Gun Rocks is a site that is often dived by beginners, or as a second dive, so having a dive trail to enable divers to find the cannon and learn about the history of the site would be very beneficial.*

*“Tyneside 114 members have therefore been researching dive trails and how to implement them. Peta Knott from WA has been particularly helpful with our considerations, providing examples of trails that she has helped to implement. The figure right, shows an example of the site layout for the Iona II dive site.*

*“Funding would also be required in order to implement a dive trail. Leaflets would be needed to describe the trail and the artefacts to be found. Annual site maintenance would need to be undertaken to ensure that the diver drop off point is clearly buoyed and that the start and end of the trail is visible. At the time of writing, this is being researched through organisations such as the Sharing Heritage Grant from the Heritage Lottery Fund and also the Landmark Trust. This report will likely also form part of any funding application.”*

In addition to a dive trail, the Gun Rocks Cannon Site report goes on to state that further exploration should be undertaken. The report set out the following aims:

- *Full measured survey and photographic recording of all known cannons, including the cannon reported to be to the east of Gun Rocks, followed by further specialist analysis to identify them;*
- *Further searches on the east side of Gun Rocks to investigate historic reports of wreck material associated with Site 1;*
- *Searches around Sites 1 and 2 to define their full extent;*
- *Further ground truthing of cannon-like geophysical anomalies;*

- *Further investigation of wooden ship timber 6020 and its vicinity.*

## 1.2 Funding and Donations

Since the Gun Rocks Cannon Site report was written, Tyneside 114's committee and members have discussed at length how to set up a dive trail project; with funding requirements in mind. It was decided that a funding package should be put together, but with a range of aims, benefitting both divers and non-divers as well as promoting diving on the Gun Rocks site itself.

The initial round of funding was undertaken through the online portal Crowdfunder. It was more of an experiment to see if people would be interested in funding such a project. An account was set up, information provided and then pushed out live, with a little help from the local press. During the eight-week funding period, 27 supporters pledged money, and a total of £600 was raised. Interestingly the majority of the donations came from friends and family, rather than local divers. It was therefore decided that other avenues of funding should be investigated.

After talking to Jane Maddocks at BSAC, we were advised to apply to the Jubilee Trust for Funding for the Gun Rocks Dive Trail, so an application was put together. The process of putting the application together was very informative, as it really helped to draw out and categorise the aims and goals of the Dive Trail project. The application was submitted in December 2016, for a sum of £1000. We were informed in March 2017 that this application had been successful.

During the application process it became obvious that, for what we wanted to achieve, further funding would be required. Following a conversation with Alison James from Historic England, it was decided that a funding application should be made to the National Lottery Heritage Funding. Although the application form was quite long, it was straight forward to fill in and again enabled us as a dive club to really determine and set out what we as a club wished to gain from the Project, if funding was made available. In April 2017 we were informed that our application had been successful, and we were awarded £8,000.

## 1.3 Report objectives

This report has been written so that it can be submitted to each of the funding sources, in order to provide them with information on how the funding was spent, and what the tangible outcomes of the project have been. As three funders have been involved, this report has been written with two common sections (to all funders):

1. Introduction
2. Project Activities

Following this, a funder specific section has been created, aimed at demonstrating how the funding spends have been justified.

3. Funding specific financial report

The penultimate section contains information on the future of the project, and how the activities undertaken during 2017-2018 will be continued in to the future. In other words, the project legacy. The final section summarises the inclusivity and involvement of people in the project.

4. Project Legacy
5. Inclusivity



**Ladies day on Gun Rocks**



**Stephen's first RIB dive, and it is on Gun Rocks!**



## 2 PROJECT ACTIVITIES 2017-2018

### 2.1 General overview

Prior to submitting funding for the Gun Rocks Dive Trail project, all aspects of the project had to be priced up, so that a ball park cost could be arrived at. As part of this process, the Marine Management Organisation was engaged, and advised us that to leave a mooring buoy on Gun Rocks and to put in a dive trail a marine licence would be required. The licence could be eligible for the fast track process and should cost £175. The licence was therefore duly applied for once funding had been secured, in mid-May, in the understanding that it would be processed and in place for mid-July, so that the dive trail could be installed for the summer divers to try it out and enjoy our efforts. Unfortunately, the MMO did not process the licence until September 2017, and the cost increased to £470. The late provision of the licence meant that the decision was taken not to install the dive trail so close to the end of the 2017 dive season, but to delay installation to the start of the 2018 dive season: mid-April.

The site was however “shot” with a marker buoy tied to one of the pile of three cannon in the centre of the site. Over the course of the summer, a number of dive operators used the shot for their divers, so that they could easily locate at least three of the cannon. Via social media, we did identify a range of divers who had visited the site with cannon as they had heard about it on FaceBook and the diver’s grapevine. Dive groups were from Bradford, Tynemouth, Dundee, and elsewhere. When we spoke to some of the divers, the feedback was generally positive, but some divers did find it hard to locate all of the cannon. It was because of this comment that we decided that the trail between the cannon, although not far, should be roped.



**Glad Tidings VII, dropping divers on the Gun Rocks marker buoy**

### 2.2 Sea based

#### 2.2.1 Kelp clearing

In order to prepare for the installation of the dive trail (at the time we didn’t know this would be delayed) kelp clearing took place. This was also required so that we could undertake the photogrammetry. Kelp clearing was undertaken over two days of diving and was quite successful. During the kelp clearance an additional cannon was found, just to the north of the site, which started to raise questions about the orientation of the WA produced canon maps.



**Cleaned cannon, ready for photogrammetry**

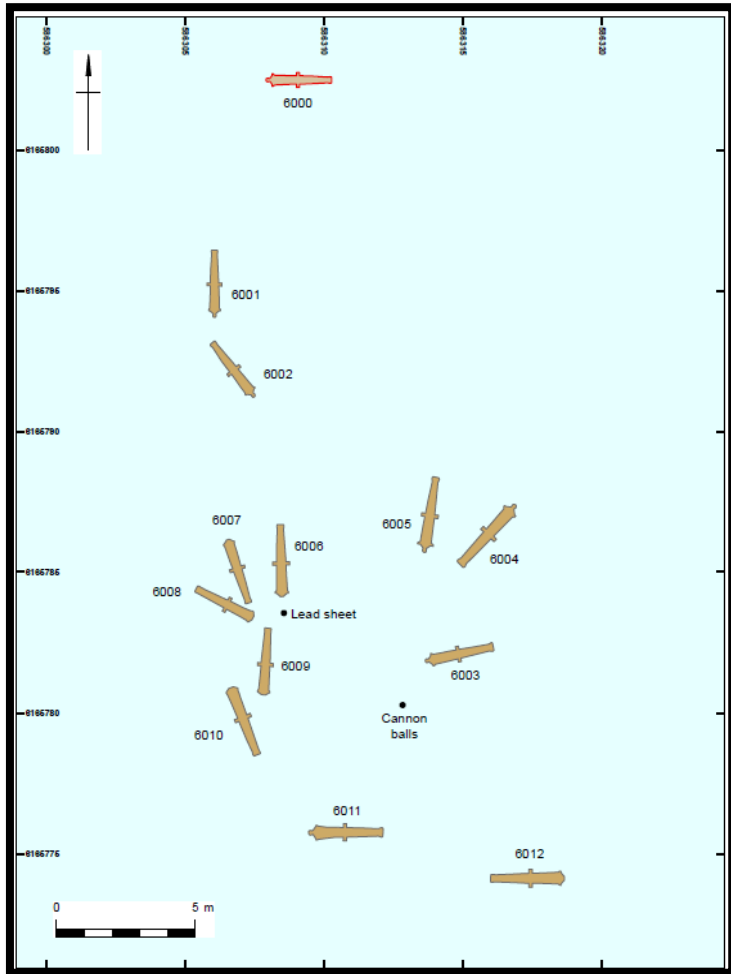
### **2.2.2 Re-mapping the site**

As the cannon were cleaned, it became apparent that the WA cannon maps were not in the correct orientation and therefore not accurate enough to use to guide divers around a dive trail. In order to remedy this, four days of diving were undertaken based around remapping the cannon, including orientation, length of canon and the distance between the cannon. The resulting map can be compared with the original and is shown below.



**Remapping the cannon; orientation, size and distance**

Cannon Layout as provided in WA report



Above is the revised map of the cannon drawn since the 2017 surveys – notice that the orientation has been change about 90 degrees. Also cannon 6000 was found and photographed. It lies just to the south of canon 6002. An additional cannon was also found which lies further west of 6001, just on the edge of the drop in to Staple Sound.

### 2.2.3 Anomaly diving

When WA undertook surveys of the site in 2013, they produced a table of data from their seabed scans. This table include over 150 points of interest, lying on the seabed in and around the Farne Islands (not just Gun Rocks). As part of the funding bid, we aimed to dive 20 of these anomalies in order to confirm what they were. Due to the additional time which was spent re-mapping the cannon site, only 16 anomalies were dived and checked out. The anomalies which were dived are all in the vicinity of Gun Rocks and were as follows:



Aerial photograph showing the locations of anomalies: pink locations were investigated

The table below gives a description of the findings at each location.

WA ID	Easting	Northing	Length (m)	Width (m)	Height (m)	Description taken from WA Report	2017 Survey Findings
7012	586296	6165917	6.1	0.4	0.4	Elongated anomaly with a distinct curved rectangular shadow visible showing height variation. Located on the edge of a rocky outcrop.	No debris found, kelp very dense.
7013	586294	6165924	1.9	0.6	0.7	Curved anomaly with a distinct tapered shadow visible. Located on edge of rocky outcrop.	Small piece of wreckage found but did not match description. Difficult to identify location due to kelp growth.
7023	586249	6165797	1.8	0.3	0.6	Elongated anomaly with an irregular shadow visible showing some height variation. Located on a gravelly seabed.	Cannon found on edge of slope laid on gravelly ground. Photographed and found to be quite eroded.
7024	586195	6165795	4.1	0.4	0.4	Elongated anomaly with a distinct shadow visible.	Known to be seven cannon in this area. One found to be in the general area, but also basalt rocks, which are rectangular in shape.
7062	586202	6165740	2.6	1.2	0.5	'Elongate anomaly with a distinct rectangular shadow visible. Located on gravelly seabed.	Gravel mounds present here due to strong tidal movements. Possibly this could affect the imagery.
7063	586183	6165745	1.4	0.3	0.3	Anomaly with a distinct rectangular shadow visible.	Likely to be a rock.
7072	586192	6165756	2.1	0.2	0.3	Anomaly located on stretched data with a distinct	Search of area conducted, no cannon found.

						rectangular shadow visible.	Difficult conditions with the tide.
<b>7073</b>	586189	6165750	1.1	0.6	0.8	Anomaly with a distinct slightly tapered shadow visible. Located on gravel seabed.	Considered likely to be a rock.
<b>7125</b>	586239	6165784	6.1	0.7	0.6	Two to three elongated anomalies located amongst a group of debris. The two main elongated anomalies cut each other at 45 degrees with the larger positions on top of the smaller. Both have distinct oblong shadows visible. Third anomaly located adjacent to these overlapping anomalies. Dimensions range in length from 1.3m to 6.7m. Width ranges from 0.2m to 0.7m. Height ranges from 0.1m to 0.6m.	This is the pile of three cannon, confirmed and remapped correcting the orientation.
<b>7126</b>	586247	6165791	10.2	3.2	0.9	Group of three distinct adjacent elongated anomalies located near a group of debris. Two elongated anomalies with oblong shadows visible and an angular anomaly with a distinct irregular tapered shadow visible. The angular anomaly and the central elongated anomaly possibly overlap, with the second elongated anomaly offset by 45 degrees in orientation. Located close to	As above, cannon re-mapped and new orientation recorded.

						rocky outcrop and gravelly region. Offset elongated anomaly measures 2.9m by 0.4m by 0.4m. Central elongated anomaly measures 4.1m by 0.3m by 0.3m. Angular anomaly measures 5.6m by 3.2m by 0.9m.	
<b>7127</b>	586262	6165791	2.4	0.4	0.5	Elongated anomaly in a group of	As above.
<b>7128</b>	586230	6165787	4.5	4.3	1	Two anomalies adjacent to one another with distinct sub-oval tapered shadows visible. Located by area of debris. Southern anomaly measures 1.7m by 0.4m by 1m. Northern anomaly measures 0.9m by 0.8m by 0.6m.	Two cannon located considered likely to be cannon 6001 and 6002. Orientation noted and re mapped.
<b>7133</b>	586226	6165912	1.5	1.5	0.3	Angular anomaly with a distinct shadow visible. Located on the edge of rocky outcrop.	Considered likely to be a rock.
<b>7134</b>	586223	6165894	2	0.5	0.5	Elongated anomaly with a distinct triangular shadow visible. Located at base of rock outcrop.	Considered likely to be a rock, nothing else found.
<b>7135</b>	586226	6165892	3.3	1.4	0.6	Rounded anomaly with a distinct rectangular shadow visible. Located on edge of rocky outcrop.	No debris found, considered likely to be a rock.
<b>7145</b>	586308	6165909	-	-	-	Unidentified wreck lying in 7.6m of water on east side of Gun Rocks. Site of 16 <sup>th</sup> century	Hard to access site, tidal and with kelp. Some debris noted, no cannon. Unfortunately not

					wreck according to local knowledge. 3 cannon and large number of cannon balls were located in the vicinity. Strong tidal stream flows across the site.	photographed, due to losing camera in kelp.
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**New Cannon - anomaly 7023 - very eroded.**

#### **2.2.4 Photogrammetry**

During the 2017 dive season, five dive days were dedicated to photogrammetry. It was found that photogrammetry, in order to be productive had to be undertaken on days with little or no swell, good visibility and on days with a constant light (not patchy clouds). No flash could be used with the cameras for photogrammetry, as it creates shadows which do not work well with the soft-ware which creates the three-dimensional images. Calm clear days, as rare as they are, were definitely best suited to undertaking photography for photogrammetry.

We also tried using small sports cameras (MUVI pro) in burst mode to take lots of images of each cannon. This approach did work, but the quality of the final image was affected. It was therefore decided that we would continue to use the Olympus OMD EM1 with a 12 – 40mm pro lens. During the photogrammetry surveys over 4000 photographs were produced, with between 200 – 800 per cannon!

The photogrammetry process, which uses software to stitch the photographs together in 3D, was outsourced so that professional software could be used to create the best images possible. The photogrammetry is an ongoing process so will be updated as each completed model is returned to us. Prior to the outsourcing of the photogrammetry, we were able to use free software to create a range of images using the 2017 data. The images have been uploaded on to the Gun Rocks website, a sample of which are shown below:





**Some of the cannon which have been subject to photogrammetry.**

## **2.3 Land based activities**

### **2.3.1 The website**

In April 2017 following the “go ahead” from the Heritage Lottery Fund for the Gun Rocks project, the website was begun. The website was created to complement the Gun Rocks information presented on the Tyneside 114 website; but to be solely dedicated to the history and finds on Gun Rocks. The Gun Rocks website was created in Wordpress for easy ongoing management, and is hosted by One.com, a company which represented good value with regards to website hosting.

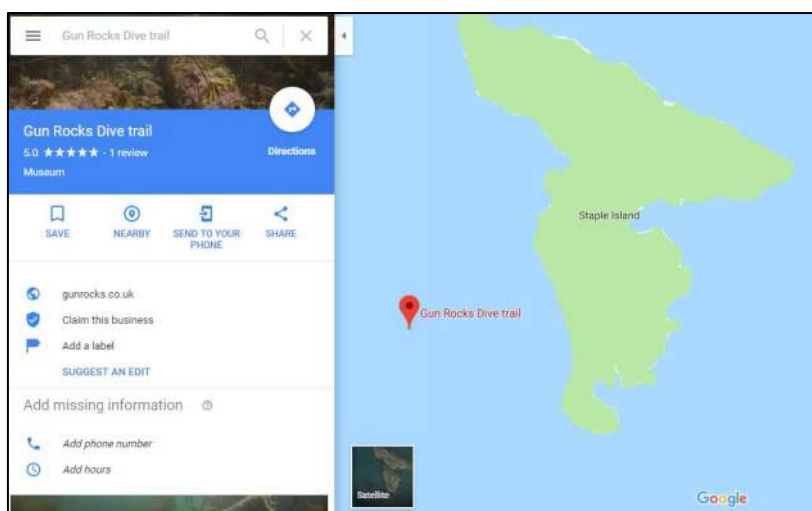
<http://www.gunrocks.co.uk/>

For the structure of the website, the following tabs have been added to group the information together:

- Home – general introduction to the project and links to other pages.
- History – timeline of the project since its inception on 1970s and the current time.
- Media – compendium of articles and films which concern Gun Rocks past and present.
- Dive Trail – logistics, marine life information and down loads, everything you need to dive the site and enjoy the environment.
- Reports – downloadable PDF versions of the 1970, 2010, 2013 and 2015 Gun Rocks reports. Recently added is also a report containing the results of ongoing research by Joe Mallon, and his ideas on the identity of the wreck/cannon.
- Imagery – photogrammetry imagery.
- Blog – keep up to date with the goings on both in the water and in the background.
- Gallery – photographs of people and objects, recent and historic.

The website will be hosted for a minimum of five years and will continue to evolve and be updated as new finds are made, or new theories on the origin of the cannon develop. The blog especially will be kept up to date as this is seen as being a good way to advertise our activities and to encourage discussion

In addition to the website, a link has been placed on Google Maps showing where Gun Rocks is and listing it as a museum. If you then click on the link it gives, it takes you to the Gun Rocks website. The aim is that this will encourage traffic to the website, and divers to visit the dive trail. The screen shot below has been taken from Google Maps.



### **2.3.2 Archive film**

During the summer of 2017 Joe Mallon contacted the North East Film Archive. It was decided by Nicola and Joe, that the archive likely had enough film of the 1970s Gun Rocks project to enable a short film clip to be compiled for the website. The film was all in 16 mm format so needed to be digitised. A price was agreed, and the film digitised. On reviewing the film, it was apparent that the archive footage consisted mainly of out-takes from the TV footage, and the Tyneside 114 committee decided that there was not enough of interest in the footage to warrant paying the additional fee for the film to be edited and a licence fee to place the film on line for one year. The majority of the film was found to be divers being interviewed on the boat (but with no sound); lots of scenic shots of the Farne Islands; only 4 minutes of the film contained underwater footage, most of which was of poor quality.

The search for the original ITV film footage continues, with emails being sent to the BSAC media centre, Tyne and Wear Museums and other possible keepers of such footage.

### **2.3.3 Collating additional information**

The search for the identity of the wreck which deposited the cannon on Gun Rocks has continued during the last year. Joe Mallon has been very involved with sourcing historical maps and talking to other historians about their theories. The results of Joe's investigations have been uploaded on to the Gun Rocks website on the reports page. His theory is that the cannon may have been deposited by ships from a Dutch convoy which was bound, with Merchant Ships, for Scotland. In the early months of 1689 there was a great deal of military shipping movement up and down the North East coast, mostly in convoys controlled by Dutch and English Warships. A renowned cartographer of the time Mr Moll, has drawn a map of the Farne Islands, marking a rock called the Grimstone (in the same location as Gun Rock) and has stated that a Dutch man of war was lost here in 1689.

### **2.3.4 Dive trail maps**

Once the kelp had been cleared from the site, and the map of the cannon had been redrawn/orientated, it was discovered that the seaweeds were growing back during the

summer in about 6-8 weeks. The speed with which the kelp regrew over the cannon, surprised all of us! So, it was decided that the dive trail should be installed using ropes leading from a central point out to the various cannon to make them easier to find. Due to the delay in getting the licence from the MMO, the trail will be installed April 2018. As a project, we made the decision that the dive trail maps should be printed after the installation of the trail, so that we can ensure that the correct configuration of the trail rope is shown on the map prior to printing.

As the whole site has been remapped and the orientation of the cannon corrected, it is envisaged that the creation of the dive trail maps will be relatively quick. It should be possible to draft up and print the maps by the end of April 2018, ready for the Spring Bank Holiday.

### **2.3.5 Archaeological leaflets**

The archaeological leaflets have been published and are available to download from the website. 500 leaflets have also been printed out and distributed to various dive shops, tourist information outlets and other marine related venues. The leaflet has information about the history and layout of the site, but most importantly links back to the website, so that the reader can find out more information if required, and also download the dive trail map (when available).

A copy of the archaeological information leaflet has been placed in Appendix A.

### **2.3.6 Marine identification leaflets**

The marine identification leaflet has also been published and is available to download from the website. A run of 250 leaflets has been made, and distributed to outlets (dive shops, tourist information etc) up at Seahouses, the stepping stone to the Farne Islands. The leaflet has been designed in order provide some basic information about marine life which may be found on Gun Rocks. The leaflet also directs the reader to the Gun Rocks website to find out more information. It also provides information about Seasearch, a citizen science programme which has been running for 30 years, training people to collect marine identification data. Nicola Fauks is a Seasearch tutor; and has been submitting data on the Gun Rocks site over the last 7 years.

A copy of the marine identification leaflet has been placed in Appendix B.



**Angler fish on Gun Rocks**

## 2.4 Training

### 2.4.1 Boat Handling

During the project phase, Gun Rocks is best accessed via a RIB as this provides more flexibility, both in dropping individual buddy pairs to investigate anomalies and in working on the Gun Rocks site to install the dive trail. So far, we have qualified 2 new BSAC boat handlers; and in order to maximise future boat handling capability we have also managed to qualify a new BSAC boat handling instructor to conduct future training and assist with gaining post qualification experience.

In addition to the boat handling qualification, during all rhib trips, participants were encouraged to practice their boat handling skills under the watchful eye of the two cox'ns on board. This handling time has enabled various club members to improve their skills.

### 2.4.2 Diver Cox'n

Whilst the boat handling qualification provides basic training in driving a RIB for diving, it is only the starting point and does not indicate full competence to navigate and, crucially, drop off and pick up divers. This requires further practice and experience to be gained under the supervision of an experienced diver cox'n; following which the boat handler can undergo a formal diver cox'n assessment to test their skills and knowledge before qualifying them to operate without supervision. 2 trainees sat the diver cox'n assessment, only one of whom has passed so far; and we have potentially 2 further trainees planning to take the assessment later in the year after a period of gaining experience over the summer. We have also been able to qualify a new BSAC Diver Cox'n Assessor to continue the assessment process into the future.



**Tiago practicing for his diver cox'n assessment**

### 2.4.3 VHF Short Range Certificate

This qualification, gained through the RYA, is a mandatory requirement to use a marine VHF radio in anything other than emergency situations. It is a normal safety precaution to contact the Coast Guard whenever leaving harbour for any voyage or to dive, and it was therefore appropriate to increase our qualified radio operators in line with the increase in competent RIB crew to facilitate safe boat diving on Gun Rocks during and beyond the project. We have a course booked through a local RYA provider for April 2018, which will qualify 3 new radio operators.

#### **2.4.4 Wreck appreciation award**

We had initially planned to undertake Nautical Archaeological Society training, however, on further investigation this proved to be a sub-optimal option for us. Instead we chose to conduct a BSAC Wreck Appreciation course, which provides more flexibility for investigation of further anomalies on and around the Gun Rocks site. We qualified 6 divers to conduct wreck site surveys, including measuring and recording the site; this has been valuable in preparing the maps and dive trail. A new wreck appreciation instructor was also gained through running the course.



**Wreck appreciation award in progress**

### 3 SPECIFIC FUNDING REPORT – BRITISH SUB-AQUA JUBILEE TRUST

#### 3.1 The Dive Trail

The table below sets out the Actions for installing the dive trail, which are described in the funding bid. At the current time, only the dive trail itself has not been installed. As long as the weather permits, the dive trail will be installed over the weekend of the 14-15<sup>th</sup> April 2018.

Number	Dive Trail Action	Description	Cost
1	MMO licence	Total cost was £450, so was partially subsidised by the Heritage Lottery Grant. Licence received September 2017.	£70
2	Kelp clearing	Two days of kelp clearing was undertaken in May 2017, it also resulted in the finding of a new cannon.	£300
3	Trail start markers	A buoy and line was purchased and installed in May 2017. It was buoyed directly down to the pile of three cannon.	£100
4	Map design	The map has been designed; but is awaiting trail laying to be finalised and published.	£0
5	Draft map printing	The printing is set to be done at the end of April 2018 once the trail has been installed.	£50
6	Map refining	This will be done once the trail has been installed and diver feed-back received.	£100
7	Information leaflet for divers and non-divers	The archaeological leaflet, providing historical information has been designed and printed (February 2018).	£92
8	Wildlife leaflet, the marine life of Gun Rocks	The marine life leaflet has been designed and printed. (March 2018)	£92
9	Club website	The website has been kept up to date and links added through to the Gun Rocks website. (Ongoing)	£0
	<b>TOTAL</b>	<b>Jubilee trust fund to covered these costs:</b>	<b>£804</b>

### 3.2 Actions for further exploration

Actions for further exploration were also listed in the funding bid. These actions were funded by the Crowdfunder, Jubilee Trust and Heritage Lottery Fund. All of the further exploration was undertaken and has been described below.

Objective	Action and date	Description	Cost
1	<b>Photogrammetry on Gun Rocks</b> May - July 2017	Photogrammetry was undertaken over a period of 4 separate days. It was very weather dependent. We tried different equipment too.	£340
2	<b>Photogrammetry of cannon on Gun Rocks 2 site.</b> June - September 2017	Photogrammetry could not be done on all of the cannon, however during the four days diving we undertook here, two more cannon were found and marked, one on the edge of Gun Rocks 1 site and another on the Gun Rocks 2 site.	£640
3	<b>NAS course training.</b> August 2017	Originally a NAS course, but instead the BSAC wreck appreciation course was run as it was considered to be more relevant. The course was attended by six students, one instructor and one trainee instructor, who is now qualified to run the course in future.	£1400
	<b>Archaeological anomaly diving.</b> May - September 2017	Aim was to look at 12 anomalies. We managed to dive 16 anomalies during the 2017 dive season.	£940
	<b>Total and funding source:</b>	Jubilee trust funding <b>£196</b> Crowd funding <b>£600</b> Heritage Lottery grant <b>£2,524</b>	<b>£3,320</b>

## **4 PROJECT LEGACY**

### **4.1 Diving**

#### **4.1.1 Dive Trail**

Once the dive trail has been installed (April 2018) Tyneside 114 will aim to maintain the dive trail over a minimum of five years. It is hoped that the legacy of the dive trail will continue in to the future, with the kelp clearing and trail checking forming part of the club's early season dive calendar. Over the last year, we have been speaking with William Shiel who is very supportive of the trail, therefore in the future he may be persuaded as a business to part fund maintenance of the trail; especially since his clients often ask to dive the mysterious cannon of Gun Rocks!

Throughout 2018 the intention is to complete the photogrammetry of the cannon on Gun Rocks site 1 and 2. The two new cannon, (found in 2017) will also be subject to photogrammetry.

#### **4.1.2 Anomaly diving**

As a club Tyneside 114 will continue to dive the anomalies listed in the WA report. It is only through this type of exploratory diving that we will find new cannon, and possibly something that will unlock the mystery of Gun Rocks. As a club, our RIB is kept in Northumberland, close to the Farne Islands. So, to have a continued aim of diving anomalies as and when we can, is something that club members will enjoy doing. Who doesn't enjoy a new adventure?

### **4.2 Internet Site**

#### **4.2.1 Website and Blog**

All of the people who donated to the Gun Rocks Project through Crowdfunder have been added to the website so that they can be emailed when updates are made, or the blog written. The intention is to continue to do this so that individuals know how their money is being spent, and how the project is progressing. For interested parties, especially divers, the website will continue to be updated. This will include the dive trail maps (PDF download) in case the roped trail is ever changed due to conditions or damage.

The hosting of the site is paid annually, so a decision has been made that the website hosting fee will be guaranteed for a minimum of five years. After this date, additional funding may be required, but will be investigated and sourced if possible, during the year preceding (2021).

#### **4.2.2 On-going research**

Research will continue on the Gun Rocks site. A number of people are very interested in the project so have said that they will continue to investigate the origins of the cannon. Peta Knott, who used to work for WA will continue her research as she now works for the NAS. Joe Mallon has also said that he will continue to collect historical maps, to confirm his theory on the origin of the cannon.

#### **4.2.3 Historical Recording**

The project has continued to pull together a variety of historical and contemporary records which relate to Gun Rocks. These records are now preserved on the website for the future, and will continue to be added to as the investigations continue. Those involved in the original 1970 Gun Rocks project are, sadly, rapidly dwindling in number; and it has been hugely important for the whole project to capture and record their knowledge and recollections before they are lost forever.



### **4.3 Training**

#### **4.3.1 RIB driving**

We now have an increased in-club ability to conduct future training courses and qualify more divers to drive and cox the RIB in the future. Those newly qualified will increase their experience and become the future leaders of RIB diving within the club. This will benefit further investigation of new wreck sites and contribute to the continuing investigation of Gun Rocks.

#### **4.3.2 Radio operation**

Whilst we have been unable to generate an in-club capacity to provide radio training, the ability to properly use a VHF radio is a vital skill for safety at sea: this increased capability will make continuing investigation of Gun Rocks, and other anomalies, safer.

#### **4.3.3 Wreck Appreciation**

We have increased ability to teach this skill, and a new-found enthusiasm for diving and investigating wreck sites. This is beneficial not just within the scope of the Gun Rocks project, but also to further the investigation of other sites, including the many sites about which there is currently very little known beyond a common name such as ‘the wheel wreck’ or ‘the cider wreck’.

## **5 INCLUSIVITY**

### **5.1 Divers**

As described previously, Gun Rocks is a shallow site: only around 8 metres deep. The Gun Rocks 2 site is only 15-18 metres deep. The sites are therefore accessible to all experience levels. This is what makes the Gun Rocks site such a good site for a dive trail; but also a great site for divers of all levels to get involved in exploration and survey.

During 2017, as a club, twelve club members participated in the research at Gun Rocks, and divers from a further 5 BSAC clubs were also involved in the project. During 2018 with funding and training in place, the aim will be to involve at least 20 club members (50% of our active membership), in the exploration and photogrammetry of Gun Rocks. Members will benefit from gaining a new range of survey skills, diving new sites, boat handling skills and will also enjoy being involved in such an interesting project. I have not listed the names of all to be involved here, but it will be open to all club members, and contacts in local clubs who have expressed a desire to be involved.

Outwith the club environment, local clubs will be involved in trying out and giving feedback on the Gun Rocks dive trail maps. Once the maps are finalised, then divers will benefit from an *in-situ* dive trail with interest and freely available information.

### **5.2 Seahouses local community**

The publicity surrounding this project is also likely to benefit the local dive boat operators. Groups often dive a deeper first dive, then the skippers try to find a second dive of interest which is sheltered and shallow. Gun Rocks is this dive, so visitors can, with the aid of leaflets and maps, learn about the site prior to diving it. At least one of the local charter boat skippers is already using the site and shot line on a regular basis, so will benefit once the trail is installed.

### **5.3 Non-divers**

The leaflets which have been produced (Appendix A and B) were designed to be of interest to divers and non-divers. Non-divers always stop us on the pier at Seahouses and ask what do we see when we are “down there”? The aim is that the leaflets will satisfy the curiosity of the non-divers too.

The research in to the origins of the cannon will be ongoing. One of the reasons for undertaking the photogrammetry is so that non-diving archaeologists and interested people can see in detail what is lying on the sea bed. In addition to this, continued research such as checking archives, trying to locate the lost 1970s cannon, and other activities can all be undertaken by non-divers.

## **6 APPENDICES**

A – Archaeological Leaflet

B – Marine Life Leaflet

## A – Archaeological Leaflet

## Gun Rocks History

This small outcrop of rock, which lies to the west of Staple Island, and within Staple Sound, is covered at high tide. It has been marked on maps since 1778 as Gun Rocks, likely earning its name following a ship wreck event. Archive data provides evidence of a 40 cannon Dutch merchant ship having foundered here, in the late 17th early 18th century. But none of the evidence is conclusive.

For a time, people assumed that the cannon came from one of the Spanish Armada wrecks. Later analysis of the cannon (F mark on the trunnion, and their overall design) dates them to the late 17th early 18th century, produced by the Finsprong foundry in Sweden for the Dutch market.

But the cannon are all single examples, in a variety of sizes and designs, and ships did not carry such a range of mismatched cannon for use in war. More recent research suggests that some of the cannon may in fact be British. So, why would a ship be carrying Swedish and British cannon? It is also possible that Gun Rocks has been the site of more than one wreck.

This project, co-ordinated by Tyneside 114 a local branch of the British Sub Aqua Club, aims to try and answer these questions, through further research and the use of social media, just in case someone has information that may help us.

## Gun Rocks

### Further Information

If you are interested in finding out more about the Gun Rocks Project, or perhaps even helping with some of the investigation of the site, then please visit the website:

[www.gunrocks.co.uk](http://www.gunrocks.co.uk)

On the website you can find:

- ◆ Blog with project updates
- ◆ Details of the Gun Rocks dive trail
- ◆ Downloadable dive maps
- ◆ Marine identification guides
- ◆ History of Gun Rocks
- ◆ Theories on where the ship(s) came from and how the cannon arrived on Gun Rocks!
- ◆ Downloadable past survey reports
- ◆ A gallery of images old and new

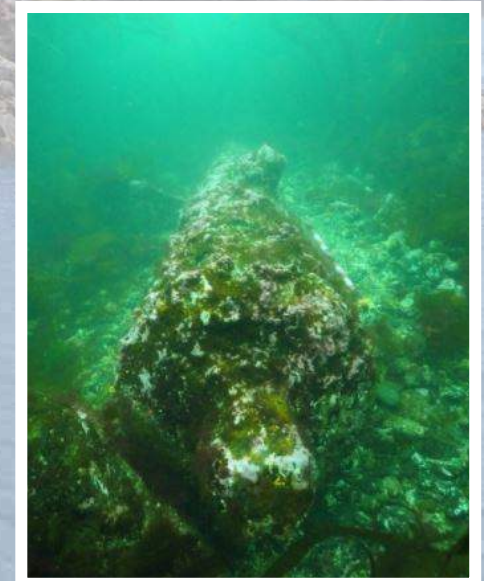
You can also contact us through the website if you have a question or some information relating to Gun Rocks.



[www.gunrocks.co.uk](http://www.gunrocks.co.uk)



# Gun Rocks Dive Trail Farne Islands





Right: Gun Rocks is uncovered at low tide and is covered at high tide; presenting a hazard to shipping as it sits just below the surface in a channel known as Staple Sound. The tide flows through Staple Sound at up to 4 knots: a vessel in difficulty could easily end up on the rocks. Over the years many ships have been wrecked in this area.

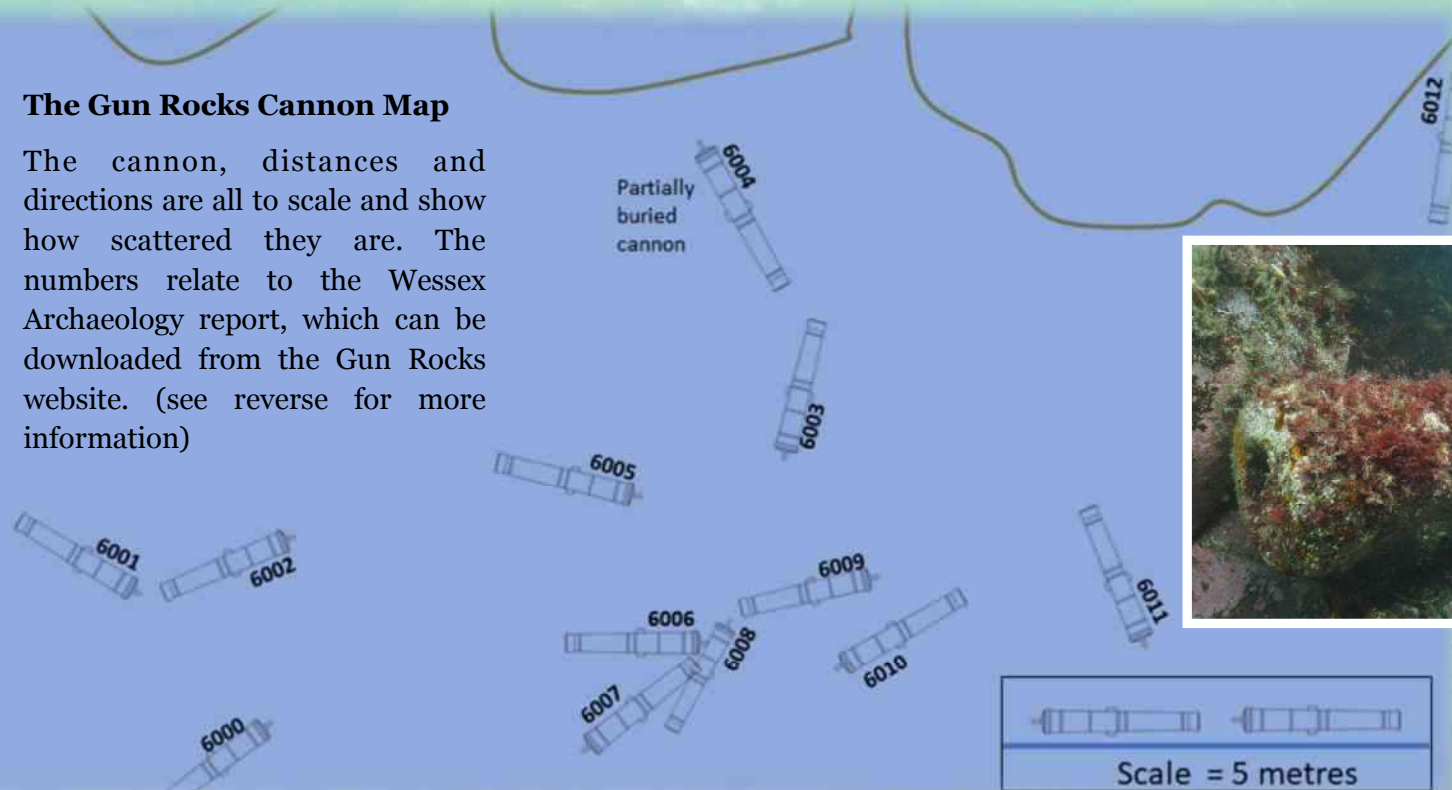


Below: photograph and location of cannon 6012. This cannon lies in a shallow gully, with ropes still attached. Police ordered that it be returned, after an illegal salvage attempt. It is a cast-iron six pounder, so would have been quite heavy to lift in the first place.

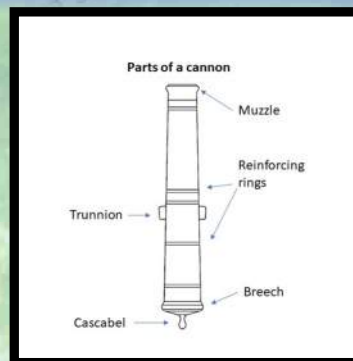
Above: Sword hilt found during the 1970s. Dated to between 1500 and 1720, its origins remain unknown. Many other items were also found including cannonballs. Many are still present on the site, but have become naturally concreted in to the seabed. If you dive the site you can still see them.

### The Gun Rocks Cannon Map

The cannon, distances and directions are all to scale and show how scattered they are. The numbers relate to the Wessex Archaeology report, which can be downloaded from the Gun Rocks website. (see reverse for more information)



Above: Grey seals often visit the cannon, alongside divers. When the weather is calm, they haul out and sunbathe on top of Gun Rocks at low tide. On the cannon site there is lots of marine life, including octopus and anemones.



Left: The start of the dive trail is marked by a pile of three cannon with one sticking up. The cannon all show signs of damage: some is due to time and the action of the sea, but several also show signs of battle damage such as blown out muzzles .

Were they scrap cannon being taken back to the foundry?

## B – Marine Life Leaflet

# Gun Rocks

## Natural History

This small outcrop of rock, which lies to the west of Staple Island, and within Staple Sound, is covered at high tide. It has been marked on maps since 1778 as Gun Rocks, likely earning its name following a ship wreck event. Archive data provides evidence of a 40 cannon Dutch merchant ship having foundered here, in the late 17th early 18th century. But none of the evidence is conclusive.

What we do know is that the cannon have lain here for a very long time, in an area which is swept by strong currents, particularly on northerly winds. As a result the marine life here is abundant. This leaflet only gives a small snapshot of the critters which can be found here. As part of the Gun Rocks Project, we are not only recording and trying to decipher the history of the cannon, but also to record the marine life which occurs here. The results of the marine recording have been collated through Seasearch; a long running citizen science project.

Front cover images are top: a sun star and bottom sea urchins and dead man's fingers growing on a cannon.



# Gun Rocks

## Further Information

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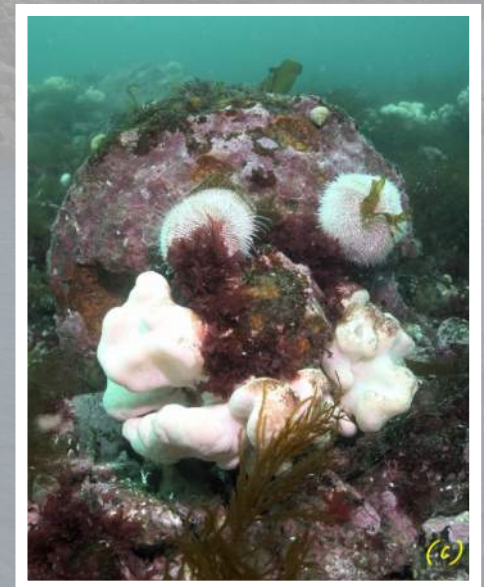
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- ◆ A gallery of images old and new

You can also contact us through the website if you have a question or some information relating to Gun Rocks.



# Gun Rocks Marine Life Farne Islands



[www.gunrocks.co.uk](http://www.gunrocks.co.uk)







Right: Gun Rocks is uncovered at low tide and covered at high tide, presenting a hazard to shipping as it sits in a channel known as Staple Sound. The tide flows through the Sound at up to 4 knots: it is this current which encourages so much life to grow on the rocks, including soft corals called dead men's fingers!



Below: Two Polycera nudibranchs. Nudibranchs are a type of sea slug, and come in a range of colours including pink, yellow, orange and purple. In the photograph they are eating a bryzoan, or sea moss, which is growing on kelp. Bryzoans are also animals not plants.

Above: There are plenty of lobsters on the cannon site, as well as lots of relatives of the lobster including porcelain crabs, shrimps and edible crabs!



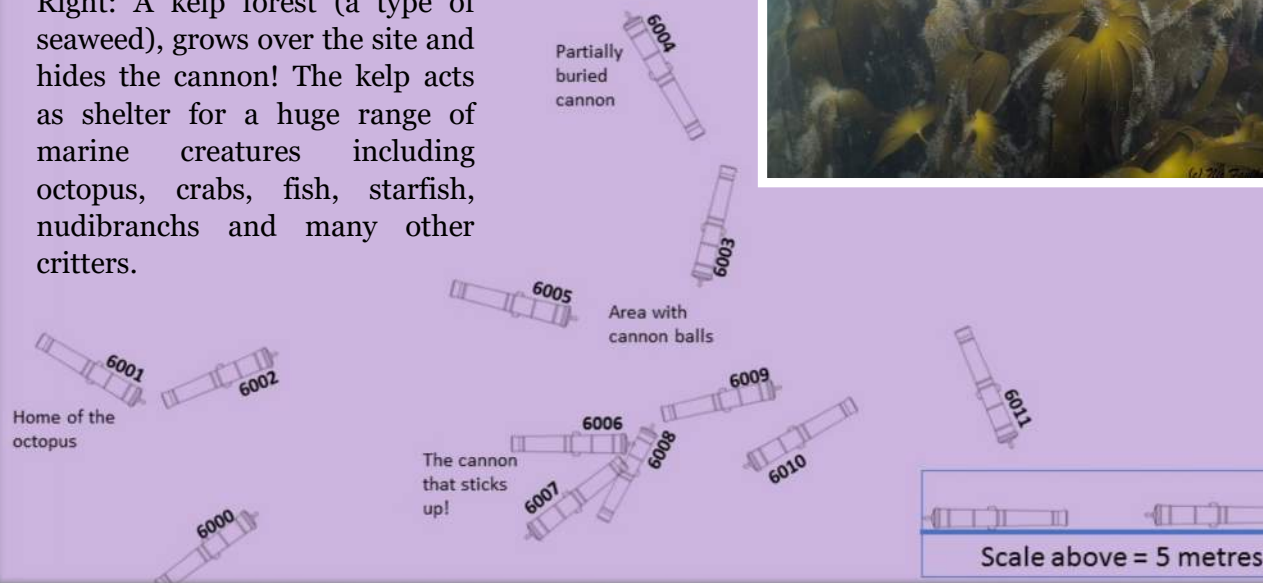
Above: Grey seals often visit the cannon alongside divers. When the weather is calm, they haul out and sunbathe on top of Gun Rocks at low tide.

### The Gun Rocks Cannon Map

The cannon lie scattered on a shallow part of the seabed.

Right: A kelp forest (a type of seaweed), grows over the site and hides the cannon! The kelp acts as shelter for a huge range of marine creatures including octopus, crabs, fish, starfish, nudibranchs and many other critters.

### Map of Gun Rocks



Left: Two elegant anemones; although they look like flowers, they are in fact animals. They often come in a range of colours.

Right: The really pretty ones are called dahlia anemones.



Above: A ballan wrasse; always inquisitive, friendly to divers, and so colourful.

Left: An octopus; one of the cannon often has an octopus underneath.

