

Bartholomew Ledges, St Mary's Sound, Isles of Scilly Conservation Statement & Management Plan **Cornwall Archaeological Unit**

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Bartholomew Ledges St Mary's Sound, Isles of Scilly

Conservation Statement & Management Plan

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Cover photo: Bartholomew Ledges (photo: Eric Berry)

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Executive Summary

In the late 1970s local divers, led by Mike Pirie, recovered lead ingots and broken fragments of bronze bell from the vicinity of Bartholomew Ledges in St Mary's Sound, Isles of Scilly. Over 100 ingots and 600 bell fragments were recovered, although accounts vary as to the exact quantity. These artefacts were thought to date to the 16th century. Six silver coins with a date range of 1474 to 1555 were subsequently recovered from the site; the four earlier coins were Spanish and the two later ones were coinage of the Holy Roman Empire.

What survives on the seabed now are at least five iron anchors, about 12 wrought iron swivel guns and two cast iron guns as well as a number of unidentified iron objects. Most of these items are consistent with a date sometime in the second half of the 16th century. To date, no evidence of ship's structure has been located. Current thinking suggests that the remains were part of the consignment of an unidentified armed cargo vessel, possibly of Iberian origin.

The wreck was first designated under the Protection of Wrecks Act (1973) on the 3rd October 1980 – position 49° 54.26'N, 006° 19.83'W (OSGB 36) with a radius of 250m around this point. In 1983 the radius of the designated area was reduced to 100m. The designation was changed on the 17th May 2006 to a new position 49° 54.363'N, 006° 19.889'W (WGS 84) with a radius of 150m around this point. This new position is the same location as that of the Trinity House beacon installed on the Ledges in 2002.

The site lies within the Isles of Scilly Area of Outstanding Natural Beauty and Special Area of Conservation. The site lies outside the Isles of Scilly Marine Conservation Zone.

This Conservation Statement and Management Plan has been produced to enable local and regional stakeholder involvement in our aspirations for the conservation management of the Bartholomew Ledges Protected Wreck site, so as to balance protection with economic and social needs. The principle aim of the Plan is to identify a shared vision of how the values and features of how Bartholomew Ledges can be conserved, maintained and enhanced.

The following management policies have therefore been formulated in accordance with achieving our principle aim:

Management Policy 1

We will seek to develop appropriate visitor access to the monument as a mechanism to enhance the value of the site. Visitor access to the site needs to be considered in the light of the dense kelp cover over the site which makes locating the exposed artefacts difficult. A site plan and brief explanation of the site could be produced on an underwater slate to help guide visitors to the site.

Management Policy 2

We will seek to promote the recording and expert appraisal of the artefact assemblage recovered from the site. Analysis of the surviving bell fragments and lead ingots will be undertaken as part of this process.

Management Policy 3

We will seek to facilitate interpretive material for the site. This should be locally displayed, ideally to accompany some of the artefacts from the site. One possible location for this display would be the Isles of Scilly Museum.

Management Policy 4

Through web-based initiatives, we will continue to develop the accessibility of related material and support appropriate links. A virtual dive trail may be developed for this site. This is particularly important as physical access to the site is difficult.

Management Policy 5

Mechanisms will be identified and implemented so as to develop shared ownership and partnership working.

Management Policy 6

Where projects are commissioned on the site we will encourage the use of the site as a training resource where this is appropriate.

Management Policy 7

We will seek to commission a staged programme of assessment and research to contribute towards a fuller understanding of the site in its entirety. Perhaps the best way of achieving these aims would be the production of a desk based assessment for the site.

Management Policy 8

We will encourage the investigation and survey of the area around the known remains to establish the full extent of the site

Management Policy 9

We will seek to undertake a programme of monitoring and targeted recording.

Management Policy 10

Unnecessary disturbance of the seabed within the restricted area should be avoided wherever possible in order to minimise the risk of damage to buried archaeological material.

Management Policy 11

The sale of artefacts recovered from the site should be monitored as far as possible. The UK has adopted 'The Rules', an annex to the 2001 UNESCO convention which includes the principle that underwater cultural heritage should not be commercially exploited.

Management Policy 12

This management plan will be reviewed and updated on a regular basis so that it continues to reflect the conditions and state of knowledge pertaining to the site.

Bartholomew Ledges

Conservation Statement & Management Plan

1 Introduction

1.1 Background and Purpose

- 1.1.1 Wreck sites may contain the remains of vessels, their fittings, armaments, cargo and other associated objects or deposits and they may merit legal protection if they contribute significantly to our understanding of our maritime past. The Protection of Wrecks Act 1973 (PWA) allows the UK Government to designate, in territorial waters, an important wreck site to prevent uncontrolled disturbance. Although the National Heritage Act 2002 enabled English Heritage (now Historic England) to assist in costs relating to works under the PWA, the responsibilities of Historic England for the physical management of designated wreck sites must align with our strategic and research priorities.
- 1.1.2 This document seeks to set out a Conservation Statement and Management Plan for Bartholomew Ledges, an archaeological site designated under the PWA, lying in St Mary's Sound, Isles of Scilly (Fig 1). The wreck was designated under the PWA on the 3rd October 1980 position 49° 54.26'N, 006° 19.83'W (OSGB 36) and a radius of 250m around this point. In 1983 the radius of the designated area was reduced to 100m. The designation was changed on the 17th May 2006 to a new position 49° 54.363'N, 006° 19.889'W (WGS 84) with a radius of 150m around this point. This new position is, incidentally, the exact location of the Trinity House beacon installed on the Ledges in 2002.
- 1.1.3 Bartholomew Ledges is attributed the National Heritage List for England (NHLE); the List Entry Number is 1000066.
- 1.1.4 Historic England has published a set of *Conservation Principles, Policies and Guidance* for the sustainable management of the historic environment, designed to strengthen our credibility and the consistency of decisions taken and advice given (English Heritage 2008). These *Conservation Principles* are intended to support the quality of our decision-making, with the ultimate objective of creating a management regime for all aspects of the historic environment that is clear and transparent in its purpose and sustainable in its application. As such, *Conservation* is taken to be the process of managing change in ways that will best sustain the values of a place in its contexts, and which recognises opportunities to reveal and reinforce those values (English Heritage 2008).
- 1.1.5 This Conservation Statement and Management Plan has therefore been produced to enable local and regional stakeholder involvement in our aspirations for the conservation management of the Bartholomew Ledges Protected Wreck site.



Fig 1 Location of the Bartholomew Ledges Protected Wreck site in St Mary's Sound, Isles of Scilly. Depths are in metres below chart datum, the red dashed circle shows the original 1980 designated area, the blue dashed circle is the 2006 designated area and the black triangle is the Trinity House beacon installed on the Ledges in 2002.

1.2 Aims and Objectives

- 1.2.1 The principle aim of this Conservation Statement and Management Plan is to identify a shared vision of how the values and features of the Bartholomew Ledges Protected Wreck site can be conserved, maintained and enhanced.
- 1.2.2 This has been achieved through the following objectives:
 - Understanding Bartholomew Ledges.
 - Assessing the significance of Bartholomew Ledges.
 - Identifying where the significance of Bartholomew Ledges is vulnerable.
 - Identifying policies for conserving the significance of Bartholomew Ledges.
 - Realising the public value of conservation.

1.3 Scope

- 1.3.1 In 1995, the Archaeological Diving Unit (ADU) sought to determine factors affecting the stability of Protected Wreck sites (report ref. 95/30). This assessment considered the exposure of archaeological material, the probability of active degradation, site dynamics (energy) and sediment covering. It concluded that many of the sites designated under the PWA are actively deteriorating.
- 1.3.2 This assessment was subsequently reconsidered by Historic England, which sought to place an understanding of the physical stability of (and therefore risk to) each designated wreck site against ongoing investigations (through incumbent licensees), ease of access for visitors and potential for wider awareness (publication, signage, etc.). Practical measures that can conserve, maintain and enhance the values and features of the Bartholomew Ledges Protected Wreck site identified as being at risk will be delivered through this Conservation Statement and Management Plan.
- 1.3.3 Access to England's 52 Protected Wreck sites is managed through a licensing scheme and authorisation by the Secretary of State for Culture, Media and Sport. Of the 52 protected sites in England, five are in the Isles of Scilly.

1.4 Authorship

- 1.4.1 Contributions to this Conservation Statement and Management Plan were sought through stakeholder involvement. Sixteen individuals and organisations were consulted (listed in section 9.2).
- 1.4.2 This document is based on the Historic England Standard for Conservation Statements for English Heritage Sites and draws on generic plans for shipwreck sites (e.g., Cederlund 2004).
- 1.4.3 This Conservation Statement and Management Plan was prepared between June and November 2016 for Historic England by Kevin Camidge and Charles Johns.

1.5 Status

1.5.1 The final version of this report was adopted on 25th November 2016. Notes on its status (in terms of revision) will be maintained.

2 Understanding Bartholomew Ledges

2.1 Historical Development of the Designated Site

- 2.1.1 In the late 1970s, lead ingots and broken fragments of bronze bell were recovered from the vicinity of Bartholomew Ledges by local divers led by Mike Pirie. Over 100 ingots and 600 bell fragments were recovered, although accounts vary as to the exact quantity. These finds were thought to indicate a 16th century date. Sadly, only a handful of the ingots and bell fragments survive, the majority having been sold for scrap. Ten bronze bell fragments were also photographed at the Blue Boar public house in Poole, Dorset (Wessex Archaeology 2005). Two ingots survive at the Isles of Scilly Museum, and another was sold to the British Museum in 1985 (BM number 1985.0704.7). A fourth ingot was seen at the Blue Boar public house in 2005 (Wessex Archaeology 2005). Other artefacts reported included pottery, lead shot and a yellow brick.
- 2.1.2 What survives on the seabed now are at least five iron anchors, about 12 wrought iron swivel guns and two cast iron guns as well as a number of unidentified iron objects. Most of these items are consistent with a date sometime in the second half of the 16th century (Wessex Archaeology 2005). To date, no evidence of ship's structure has been located. Current thinking suggests that the remains were part of the cargo of an unidentified armed cargo vessel, possibly of Iberian origin
- 2.1.3 It has been suggested that the wreck may be that of the Armada ship San Bartolome which was lost in 1597. This association probably derives from the name of the reef Bartholomew Ledges. However, the size of the guns on the site would suggest an armed merchantman rather than a large ship such as the San Bartolome a 900 ton galleon built in Densto between 1589 and 1591 (Casaban 2016). Furthermore, recently discovered documentary material has established that the San Bartolome was wrecked on the 13th November 1597 at Mundaka in northern Spain (Casaban 2016).
- 2.1.4 It has recently been suggested that there may be a link with an English fleet which 'went to the aid of the Huguenots in Rochelle in 1569' (Cumming and Stevens 2016), the association is based on the assertion that the fleet 'returned fully laden with salt..., wine... and popish bells from every church the Huguenots had sacked'.
- 2.1.5 The historical development of the site is outlined in *Historic Shipwrecks Discovered, Protected and Investigated* (Fenwick and Gale 1998, 54–5). There are also accounts in *The Wrecks of Scilly* (Larn 2010) and the *Designated Site Assessment* (Wessex Archaeology 2005). The site is also mentioned in the *Shipwreck Index of the British Isles* (Larn and Larn 1995) and *Shipwrecks and maritime history in and around the Isles of Scilly* (Cumming and Stevens 2016, 21–2). There are four ADU reports for this site, produced in 1986, 1993, 1996 and 1998. Further details have been extracted from the surviving licensee's reports held at the Historic England Archives (Swindon), although not all of the reports were available. The licensees' reports for 1983, 1984, 1985, 1988-1997,

1999-2001 and 2007 have not been located. The excavation of the site undertaken in the late 1980s has never been formally published. The licensee at that time, Roy Graham, died in 2007 so it is likely that his annual licensee reports of the work will be the only record.

2.1.6 As the wreck on Bartholomew Ledges has not been identified it is not possible to present a documentary history of the vessel. The known history of the site is presented in Appendix 1 below.

2.2 Description of Surviving Features

- 2.2.1 The Bartholomew Ledges is a granite reef in St Mary's Sound, situated about 600m to the south-west of the island of St Mary's in the Isles of Scilly. The Ledges consist of a rock pinnacle surrounded by gullies and large boulders. Beyond the pinnacle, the seabed falls to 10–15m depth below chart datum. There are patches of sandy sediment in the gulley bottoms. The site is covered with a dense growth of tall kelp which hinders location and survey.
- 2.2.2 The top of the reef is less than 1m below chart datum, so its location within a busy shipping channel makes it a hazard to shipping. At least seven ships are known to have struck the reef (Larn 2010, 74), most recently in 1997 when the 25,000 tonne cruise liner *Albatros* ran into the adjacent North Bartholomew Rock, removing about 0.5m from the top of the rock. Partly as a result of this incident the Bartholomew Ledges buoy was replaced in 2002 by a steel beacon fixed to the top of the reef.
- 2.2.3 In 1979 a large quantity of bronze bell fragments and lead ingots were recovered from the site. This took place before the site was designated on the 3rd October 1980. The number of bell fragments recovered was at least 644, weighing in total 2699 pounds, which is over 1.2 tonnes (Graham 1980). A report on the bell fragments was produced in July 1981 by Humphrey Wakefield but this contained no detailed measurements or drawings of the bell pieces. The report says 'All the fragments are of much the same size. The largest is 35lb in weight, the rest are of a size that could be described as handy'. Some adhering clay and a hard black material were interpreted as remains of the casting mould and it was concluded that '...this metal was not the remains of a complete bell... [but] part of a shipment of bell-metal broken deliberately for transport' (Wakefield 1981). Fenwick and Gale (1998, 55) suggest that Lombardic lettering on some fragments indicate that some of the bells were cast before c 1420 (Fenwick and Gale 1998, 55). Most of the bell fragments were apparently sold for scrap at some time after 1981. Ten bronze bell fragments survive in a display at the Isles of Scilly Museum. A further two bell fragments were also photographed at the Blue Boar public house in Poole, Dorset (Wessex Archaeology 2005). There are rumoured to be 'a few' fragments in private hands on the Isles of Scilly.
- 2.2.4 The number of lead ingots recovered is less certain. The application for designation states that '80+ boat-shaped ingots' had been raised from the site (Graham, 1980). However, the number is reported as 105 by Fenwick and Gale (1998) and as 'approximately 130' by Wessex Archaeology (2005). Only 42 survived to be examined and recorded by Dr Lynn Willies on Bryher in 1982

(Wessex Archaeology 2005). Many of these ingots are rumoured to have been used as ballast in local boats. Two ingots survive at the Isles of Scilly Museum, and another was sold to the British Museum in 1985 (BM number 1985.0704.7). A fourth ingot was seen at the Blue Boar public house in 2005 (Wessex Archaeology 2005).

- 2.2.5 What remains on the seabed today are a number of small iron guns and anchors along with some patches of unidentified iron concretion. A total of fourteen guns remain on the site. All are heavily concreted and attached to the bedrock and/or boulders. There is no evidence of surviving wooden stock beds or carriages. The majority appear to be small wrought iron breech loading swivel guns, although one wrought iron tube gun was noted (Wessex Archaeology 2005). A larger cast iron cannon has been reported, which is thought to be a later intrusion. However, suggestions that this gun came from the wreck of the *Firebrand* (1707) are in error (it is too large for the armament of a small fireship and all eight of the *Firebrand's* guns remain on the seabed in Smith Sound (Camidge 2011). One gun was removed from the site around 1986 by the licensee Roy Graham. This was described to the Receiver of Wreck as 'Iron banded deck gun (badly corroded), length 920mm, 22kg'. The current location of this gun is not known.
- 2.2.6 In the '*Designated Site Assessment*', it is stated that 'The number and calibre of breech loading guns located on the site are comparable with other 16th to early 17th century wreck sites' (Wessex Archaeology 2005). The examples given include Studland Bay and the Cattewater Wreck; it is, however, interesting that these 'comparable' sites are also unidentified vessels.
- 2.2.7 The remains of five large wrought iron anchors have been noted on the site. There is also a broken anchor which may be a part of one of these five. These anchors are seen as typical of Iberian style anchors 'They all have long slender shanks (none complete) and relatively short arms — classic attributes of Iberian-influenced anchor construction' (Wessex Archaeology 2005).
- 2.2.8 The most secure dating for the site is currently the coin evidence. A silver 'Karolusgulden' of Charles V (Holy Roman Emperor, ruler of the Netherlands and the Spanish Empire) dated 1555 was recovered by Richard Larn from the site in 1989. This coin is still in his possession. Less certain are the six coins recorded in '*Historic Shipwrecks Discovered, Protected and Investigated*': 'Six coins, originally passed to Charlestown Shipwreck and Heritage Centre provide some dating, 4 two-reals of Ferdinand and Isabella (1474–1504); a half real of Emperor Charles (1521–55) and a Thaler of 1555' (Fenwick and Gale 1998, 55). These coins were not in evidence when the material from protected wrecks was recorded at Charlestown Shipwreck Museum in 2006 (Camidge 2006). A single coin was noted by the ADU in 1986 'One coin is known from the site. It was minted in the reign of Ferdinand and Isabella (1479–1497)' (ADU report 006). The current location of this coin is not known.
- 2.2.9 Other objects recovered from the site include pottery, lead and iron shot, pewter cutlery, a barrel tap, a yellow brick, bone, glass and a number of unidentified metal objects. These objects recovered (excluding the bell fragments and lead ingots) are about 100 in number (Wessex Archaeology 2005, 10–13). Apart

from the bone there does not appear to have been any organic material recovered. There have been no reports of ship structure surviving on site.

2.4 Ownership, Management and Current Use

- 2.4.1 As the wreck on Bartholomew Ledges has not been identified, the owner cannot currently be determined. The seabed is owned by the Crown Estate.
- 2.4.2 The Archaeological Diving Unit visited the site on three separate occasions (ADU 1986, 1993 and 1998). Their first visit in 1986 was extensive and they undertook 31 dives on the site. This visit coincided with survey on the site by a large group of RAF divers over a 14 week period. The survey by the RAF divers was deemed a failure by the ADU. During their final visit to the site in 1998 the ADU undertook bathymetric and magnetometer surveys of the site.
- 2.4.3 The site was assessed by the Archaeological Contractor for Services in Relation to the PWA in 2004 (Wessex Archaeology 2005). The guns and anchors were positioned using an SBL acoustic position fixing system and a site plan was produced. An inventory of the objects recovered from the site was also produced and a number of suggestions for further work on the site were outlined.
- 2.4.4 As physical access to the protected section of the site is restricted to licensed divers, the recovery of artefactual material can in theory be managed and controlled. Historically-recovered material is largely in private ownership and the current whereabouts of much of it is unknown. A small collection of objects recovered from the site are on display in the Isles of Scilly Museum (Fig 2).
- 2.4.5 Public access to the site is achieved by licence under the PWA. This licensing is currently administered by Historic England. The three dive charter boats operating in Scilly have annual licences to visit for the protected wreck sites of HMS *Colossus*, HMS *Association*, Tearing Ledge and Bartholomew Ledges. The scheme has been very popular with visiting divers; over 2300 visits have been made to HMS *Colossus* in the last ten years. However, the Bartholomew Ledges site has proved less popular with only 27 visits in the last ten years, and none since 2010. This is attributed to the difficulty of finding the guns and anchors in the dense kelp. The local charter skippers consider this site to be 'for real historic gun enthusiasts only'.
- 2.4.6 A summary of the archaeological work undertaken on the site to date appears in Appendix I.



Fig 2 The Bartholomew Ledges display cabinet in the Isles of Scilly Museum.

2.4 Gaps in Existing Knowledge

- 2.5.1 The most obvious gap in our knowledge of this site is to understand how and when the large quantity of bell fragments and lead ingots came to be deposited on the site. The assumption is that these came from the same source as the guns and anchors on the site which would suggest the wreck of a small armed cargo vessel. However, the possibility that a vessel was stranded on the Ledges and jettisoned this material in order to lighten ship cannot be discounted. Further study of the material on the seabed and the remaining recovered artefacts is clearly needed.
- 2.5.2 We need to understand more about the recovered artefacts from the site. In particular the bell fragments and lead ingots. Although most of these are no longer extant sufficient remain for a detailed study to yield useful data. Both would probably benefit from a metallurgical analysis as well as a study of their form to possibly indicate a likely date and origin. In particular, the stamps and markings on the surviving lead ingots may be traceable to a particular place and time.
- 2.5.3 The 'Designated Site Assessment' (Wessex Archaeology 2005) highlights a number of areas where further work is required to improve our understanding of this site. The main suggestions were that:
 - 1) The recovered finds should be assessed by an appropriate specialist;
 - 2) An archive should be compiled covering all the existing site records and artefacts; and
 - 3) The area to the north of the Ledges and around the beacon should be searched this area has not been looked at in recent times.

- 2.5.4 We need to establish the full extent of the site. The dense kelp cover makes searching difficult so it is possible that further remains exist outside the area already mapped for example, an additional cast iron gun has been reported to the north of the Ledges.
- 2.5.5 We need to understand the topography of the site. A complete bathymetric survey of the area would be useful to map the terrain of the seabed. There may be bathymetry in the public domain (although this is rarely of high resolution). It would certainly be useful to have high quality multibeam data of the Ledges and the area around it.
- 2.5.6 A formal programme of staged assessment and research is required to contribute towards a fuller understanding of the site in its entirety.

3 Assessment of Significance

3.1 Basis for Assessment of Significance

- 3.1.1 Significance means the sum of the cultural and natural heritage values of a place (English Heritage 2008). Cultural heritage value has many aspects, including the potential of a place to yield primary information about past human activity (evidential value, which includes archaeological value), the ways in which it can provide direct links to past people, events and aspects of life (historical value), the ways in which people respond to a place through sensory and intellectual experience of it (aesthetic value, which includes architectural value) and the meanings of a place for the people who identify with it, and communities for whom it is part of their collective memory (communal value).
- 3.1.2 In addition, the historic environment is a cultural and natural heritage resource shared by communities characterised not just by geographical location but also by common interests and values. As such, emphasis may be placed upon important consequential benefits or potential, for example as an educational, recreational, or economic resource, which the historic environment provides. The seamless cultural and natural strands of the historic environment are a vital part of everyone's heritage, held in stewardship for the benefit of future generations.
- 3.1.3 The basis for assessing significance therefore enables consideration of the varying degrees of significance of different elements of the site. By identifying those elements which are vital to its significance and so must not be lost or compromised, we are able to identify elements which are of lesser value, and elements which have little value or detract from the significance of the site.

3.2 Statement of Significance

- 3.2.1 The six silver coins recovered from the wreck site have a date range of 1474 to 1555. These were coins for currency and may be close in time to the date of the shipwreck (Fenwick and Gale 1998, 55), making Bartholomew Ledges the oldest known wreck site in the Isles of Scilly, except for the late 13th /early 14th century Tresco Channel site (ProMare and CISMAS 2011).
- 3.2.2 The evidential significance of the Bartholomew Ledges site also lies in the large number of artefacts has been recovered from the site and the potential for further discoveries on the seabed. The finds include over 100 lead ingots and 644 bell fragments as well as the six silver coins.
- 3.2.3 To date none of the ship's structure has been identified. What remains on the seabed today are six iron anchors, 13 wrought iron swivel guns and two cast iron guns as well as a number of unidentified iron objects. Most of these items are consistent with a date sometime in the second half of the 16th century.
- 3.2.4 Current thinking suggests that the remains were part of the cargo of an unidentified armed cargo vessel, possibly of Iberian origin, and therefore

providing evidence of long distance trade at this time. There is an alternative suggestion that the wreck may be associated with the English fleet which 'went to the aid of the Huguenots in La Rochelle in 1569 under the command of Sir John Hawkins, this interpretation is based on the assertion that the fleet 'returned fully laden with salt..., wine... and popish bells from every church the Huguenots had sacked').

- 3.2.5 The historical value of Bartholomew Ledges is that it contributes to our understanding of mid-sixteenth century long-distance trade or is possibly associated with a recorded maritime event led by a famous Elizabethan seaman and associated with the French Wars of Religion, a conflict of international importance.
- 3.2.6 We can understand the aesthetic value of the ship that was wrecked through study of the historic images of other mid-16th century vessels. Many of the artefacts recovered from the wreck site are in themselves of aesthetic as well as evidential, historical and communal value. In addition we have the aesthetic qualities of the wreck site itself, both on the sea surface and the seabed, and located in an Area of Outstanding Natural Beauty.
- 3.2.7 The Bartholomew Ledges site was discovered by local divers and the local community retains a keen interest in the site and may be viewed as 'unofficial 'custodians'. Some members of the community have published their own interpretations of the site (see Cumming and Stevens 2016, 21–2). In this capacity, the community investigates and to some extent monitors the site and self-regulates visiting divers. In addition Bartholomew Ledges may be seen to provide recreational (and therefore economic) resource by virtue of diving tourism although this has declined in the last ten years. Local educational value may be viewed in relation to the display in the Isles of Scilly Museum.
- 3.2.8 Whereas historical and communal values contribute to the assessment of significance of the Bartholomew Ledges Protected Wreck Site, these values cannot stand alone. Without the continued enhancement of certain values, interest in the Bartholomew Ledges Protected Wreck Site would be diminished. As such, extant material remains on the seabed are vital to the significance of the site and must therefore not be lost or compromised.
- 3.2.9 The following table seeks to summarise these values of the Bartholomew Ledges Protected Wreck site as a whole, by noting how those values relate to the surviving fabric and its constituent parts:

Evidential	Relating to the potential of Bartholomew Ledges to yield primary information about past human activity.
	The finds include over 100 lead ingots and 644 bell fragments as well as six silver coins with date range of 1474 to 1555. If these coins are indicative of the date of the shipwreck it makes Bartholomew Ledges the second earliest known wreck site in Scilly.
	To date none of the ship's structure has been identified. What remains on the seabed today are six iron anchors, 13 wrought iron

	swivel guns, two cast iron guns and a number of unidentified iron objects. Most of these items are consistent with a date sometime in the second half of the 16 th century.	
Historical	Relating to the ways in which Bartholomew Ledges can provide direct links to past people, events and aspects of life.	
	Current thinking suggests that the remains were part of the cargo of an unidentified armed cargo vessel, possibly of Iberian origin, and therefore providing evidence of long distance trade at this time. There is an alternative suggestion that the wreck may be associated with a recorded maritime event in 1569 when the English fleet went to the aid of the Huguenots in La Rochelle under the command of Sir John Hawkins.	
Aesthetic	Relating to the ways in which people respond to Bartholomew Ledges through sensory and intellectual experience of it.	
	We can understand the aesthetic value of the ship through study of the historic images of other mid-16 th century vessels. Many of the artefacts recovered from the wreck site are in themselves of aesthetic as well as evidential and historical value. In addition we have the aesthetic qualities of the wreck site itself, both on the sea surface and the seabed, located in an Area of Outstanding Natural Beauty.	
Communal	Relating to the meanings of Bartholomew Ledges the people who identify with it, and whose collective memory it holds.	
	The site was discovered by local divers and the local community retains a keen interest in the site. In addition, the site may be seen to provide recreational (and therefore economic) resource by virtue of diving tourism although this has declined in the last ten years. Local educational value may be viewed in relation to the display in the Isles of Scilly Museum.	
	Designation of Bartholomew Ledges under the Protection of Wrecks Act 1973) is, in itself, an expression of communal value.	

3.3 Gaps in Understanding Significance

- 3.3.1 Despite the acknowledged need for a formal programme of staged assessment and research, the assessment of significance has not been acutely hindered by any gaps in knowledge identified in Section 2.5 above. However, certain key gaps in our understanding of the significance of the component parts of the site may need to be filled so that these significances can contribute to informing its future conservation management.
- 3.3.2 Most notable among these would be a positive identification of the name of the ship, its country of origin and date (contributing to its historical value);

establishment of the full extent of the site and the identification of any structural remains on the seabed (contributing to its evidential value); and improved interpretative material (relating to its communal value).

3.4 Statutory and Other Designations

- 3.4.1 The site was first designated on the 3rd October 1980 position 49° 54.26'N, 006° 19.83'W (OSGB 36) and a radius of 250m around this point. In 1983 the radius of the designated area was reduced to 100m. The designation was changed on the 17th May 2006 to a new position 49° 54.363'N, 006° 19.889'W (WGS 84) with a radius of 150m around this point. This new position is, incidentally, the same location as that of the Trinity House beacon installed on the Ledges in 2002.
- 3.4.2 The Isles of Scilly were designated as an Area of Outstanding Natural Beauty (AONB) in 1975 while the Isles and marine areas around Scilly were designated on the 1st April 2005 under SI No. 2716 as a Special Area of Conservation (SAC), Conservation (Natural Habitats) Regulations (1994), pursuant to the EC Habitats Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (1992). The Isles of Scilly inshore Marine Conservation Zone (MCZ) was designated in November 2013; Bartholomew Ledges does not lie within any of the MCZ areas.
- 3.4.3 In addition, Section 40 of the Natural Environment and Rural Communities Act (2006) places a duty on all public bodies to have regard to biodiversity. Guidance for this duty is contained in 'Biodiversity duty: public authority duty to have regard to conserving biodiversity' by Natural England and DEFRA published in October 2014.

4 Issues and Vulnerability

4.1 Introduction

- 4.1.1 This section summarises the main conservation and management issues that specifically affect, or may affect, the significance of the monument and its component parts and elements. The ways in which the significance of the site may be vulnerable will also be identified.
- 4.1.2 Vulnerability (and therefore risk) may be assessed against environmental factors (such as natural processes) and human impact on the site, including the setting. Commissioned research is being undertaken to assess site specific marine environments to provide a better understanding of the level of risk to assets or whether a site is in a stable condition. Current assessment may indicate that such sites are at medium or high risk, unless they are completely buried below bed level during successive tidal cycles.
- 4.1.3 It is accepted that all wreck sites are vulnerable simply because of the nature of their environment, though sites will be considered to be at risk when there is a threat of damage, decay or loss of the monument. However, damage, deterioration or loss of the monument through natural or other impacts will not necessarily be considered to put the monument at risk if there is a programme of positive management. Practical measures that affect site stability, preservation *in situ* and increased visitor access will be addressed here, while the necessity to address the sites' post-excavation back-log is recognised.
- 4.1.4 Issues relate specifically to the values identified in Section 3.2 above and are presented here thematically rather than in order of severity or priority for remedial action. Relevant issues cover a wide range, including but not restricted to:
 - The physical condition of the site and its setting;
 - Conservation and presentation philosophy;
 - Visitor and other legal/ownership requirements;
 - The existence (or lack) of appropriate uses;
 - Resources, including financial constraints and availability of skills;
 - Lack of information or understanding about aspects of the site; and
 - Conflicts between different types of significance.

4.2 The Physical Condition of the Site and its Setting

4.2.1 The Bartholomew Ledges is a granite reef in St Mary's Sound, situated about 600m to the south-west of the island of St Mary's in the Isles of Scilly (Fig 3). The top of the reef is less than 1m below chart datum, so its location within a busy shipping channel makes it a hazard to shipping. The Ledges consists of a rock pinnacle surrounded by gullies and large boulders. Beyond the pinnacle, the seabed falls to 10–15m depth below chart datum. There are patches of sandy sediment in the gulley bottoms. The site is covered with a dense growth of tall kelp and other seabed flora which hinders location and survey.

4.2.2 The only visible remains on the site are iron objects comprising a number of small iron guns and anchors along with some patches of unidentified iron concretion. Fourteen guns remain on the site. All are heavily concreted and attached to the bedrock and/or boulders. They appear to be small wrought iron breech loading swivel guns, although one wrought iron tube gun was noted (Wessex Archaeology 2005). A larger cast iron cannon has been reported. This is thought to be a later intrusion. There are also the remains of at least five wrought iron anchors on the site.



Fig 3 Plan of the Bartholomew Ledges Protected Wreck site by Richard Larn and Dave McBride.

- 4.2.3 The most important items found on this site are the bell fragments and lead ingots. These were probably part of the cargo of an armed merchant vessel. The most likely date of this material is around the middle of the 16th century. Bell fragments have been reported on the site in 1989 and 2003, so there are probably still some remaining on the site.
- 4.2.4 The site is fairly easy to access but is subject to swell and tidal currents. The greatest impediment is the thick kelp cover which makes finding the exposed material very difficult. In the past the kelp has been cut down prior to survey or excavation taking place. Infralittoral rock (which covers this kelp habitat) is a designated feature of the SAC and therefore protected. In advance of any future proposed cutting of areas of kelp, the licensing authority would need to undertake a Habitats Regulations Assessment to ensure that it would not have an adverse effect on site integrity.

4.3 Conservation and Presentation Philosophy

- 4.3.1 The site was first designated under the Protection of Wrecks Act on the 3rd October 1980. The position designated was 49^o 54.26'N, 06^o 19.82'W, with a radius of 250m. On the 8th March 1983 the radius of the designation was reduced to 100m. The current designation came into force on the 17th May 2006. The position was changed to 49^o 34.364'N, 06^o 19.899'W (the same as the new Trinity House beacon on the site), and the radius of the area was extended to 150m.
- 4.3.2 There is some limited interpretive information available for the site online. Material is currently available on the Historic England and Wikipedia web sites (Appendix 2). There is also a small display of objects in the Isles of Scilly Museum (Fig 2).
- 4.3.3 The artefacts recovered from the site are mainly in private ownership. Many of the objects recovered are no longer available for study; the majority of the bell fragments and lead ingots have been sold for scrap. The largest group of surviving artefacts is in the possession of one of the licensees, Richard Larn. The location of many of the artefacts recovered in the 1980s is currently not known.

4.4 Visitor and other Occupancy Requirements

- 4.4.1 There is currently no dive trail on the site, and it is doubtful whether a physical dive trail is appropriate. Furthermore, the dense kelp cover on the site is not conducive to a good visitor experience. Finally, given that there are only a few small iron guns and anchors, the visible remains are unlikely to repay the effort of a visit. The fact that there have been no visits to the site since 2010 is significant. There were in fact 36 visits to the site in 2004–5, but this was when the kelp had been cut down over the site for the Diving Contractor's visit in 2004. There is currently no interpretive material to assist divers visiting the site the production of such material may increase visitor numbers to the site.
- 4.4.2 A virtual dive trail similar to that recently commissioned by Historic England for the nearby HMS *Colossus* site could be produced for this site. This would allow virtual site visits and would obviate the problem of the dense kelp cover over the site.
- 4.4.3 There have been no applications to visit the site under the PWA since 2010. We should, however, encourage and support responsible visitor access through the licensing system. It should be recognised that visits may entail some level of damage to the site but given the nature of the exposed material on the site this is likely to be minimal.
- 4.4.4 Given the difficulty of visiting the site, it is desirable that the virtual (online) information pertaining to this site should be enhanced.

4.5 The Existence (or lack) of Appropriate Uses

- 4.5.1 Although unlicensed activity on the site has been reported in the past, recent local self-regulation has served to ensure that illegal diving on the site has been significantly reduced (if not completely removed).
- 4.5.2 Regular and consistent information relating to the condition of the Bartholomew Ledges Protected Wreck site will be necessary to monitor the existence (or lack) of appropriate uses of the site.

4.6 Resources, including Financial Constraints and Availability of Skills

- 4.6.1 There is no doubt that the recovery of archaeological material to date indicates the evidential value of the Bartholomew Ledges protected Wreck site and that interaction with archaeological material relates to both aesthetic and historical value. However, given the limited local capacity for professional conservation of material recovered from the date and Historic England's research priorities there shall be presumption against further excavation and recovery.
- 4.6.2 In line with developing Government policy for designated marine historic assets, we will seek to develop provision for flexible voluntary management agreements. The latter should enable greater partnership, better planning, a reduction in individual licence applications and a more holistic approach to the needs of the Bartholomew Ledges Protected Wreck site.
- 4.6.3 Opportunities for seeking funding for interpretative and display works relating to the Bartholomew Ledges Protected Wreck site should be discussed with the Isles of Scilly Museum and the Council of the Isles of Scilly.

4.7 Lack of Information or Understanding about Aspects of the Site

- 4.7.1 *Taking to the Water* (English Heritage's Initial Policy for the Management of Maritime Archaeology in England) addressed the protected wreck site postexcavation backlog. Here, it is recognised that over the last twenty-five years many licenses have been issued for survey and excavation work within areas designated under the PWA. Few of the licences issued required the academic reporting of fieldwork results and, as the vast majority of this work took place on a voluntary basis, lacking adequate financial support for subsequent analysis and dissemination of the results, very little of this work has been formally published (Roberts and Trow 2002, 25). This problem is, however, not unique to maritime archaeology.
- 4.7.2 Inevitably, the standard of much of the previous work on the Bartholomew Ledges Protected Wreck site is variable and in different formats. Some of the projects have been carried out to an extremely high standard and have resulted in accessible archives, while others have resulted in less coherent record. The data from this work represents the only record of investigations and, therefore, is itself an irreplaceable resource.
- 4.7.3 A number of excavations have been undertaken on the site. These took place

in 1979 (prior to designation), 1980 (Graham 1987), 1986 (ADU report 006), and 1987 (Graham 1987); Fenwick and Gale 1998; Wessex Archaeology 2005; and Larn 2010). There has been no formal publication of this work. There are brief accounts of this work in the licensee's annual reports but no single narrative. We need to understand the extant and location of the areas which have been excavated.

- 4.7.4 We need to better understand the date and origin of the material on and from the site. In particular, the likely origin and date of the lead ingots and bell fragments needs to be established. A metallurgical analysis of the bell fragments and ingots should be undertaken. The best way to achieve these aims is to undertake a specialist appraisal of all the extant artefacts from the site.
- 4.7.5 We do not understand the full extent of the site. It has been suggested that the area to the north of the present known material may contain further remains (Wessex Archaeology 2005).

5 Conservation Management Policies

5.1 Introduction

- 5.1.1 This section of the Conservation Statement and Management Plan builds on the Assessment of Significance and the issues identified in Issues and Vulnerability to develop conservation policies which will retain or reveal the site's significance, and which provide a framework for decision-making in the future management and development of the site or reveal the site's significance and also:
 - Meet statutory requirements.
 - Comply with Historic England's standards and guidance.
- 5.1.2 It is intended that the policies will create a framework for managing change on the Bartholomew Ledges Protected Wreck site that is clear in purpose, and transparent and sustainable in its application. Our aim is to achieve implementation through the principles of shared ownership and partnership working so as to balance protection with economic and social needs.
- 5.1.3 Policies are also compatible with, and reflect, Historic England's *Conservation Principles for the Sustainable Management of the Historic Environment* (2008) and its published policies and guidelines, as well as the wider statutory framework.

5.2 Bartholomew Ledges is a Shared Resource

- 5.2.1 The Bartholomew Ledges Protected Wreck site forms a unique record of past human activity which reflects the aspirations, ingenuity and investment of resources of previous generations. In addition, it is an economic asset, and provides a resource for education and enjoyment.
- 5.2.2 In addition, the conflict between the desire for access to the site and the restrictions imposed by conservation needs and legislative limitations will be reconciled through continued flexible and appropriate visitor management.
- 5.2.3 Therefore, we should sustain and use the Bartholomew Ledges Protected Wreck site in ways that allow people to enjoy and benefit from it, but which do not compromise the ability of future generations to do the same.

Management Policy 1

We will seek to develop appropriate visitor access to the monument as a mechanism to enhance the value of the site. Visitor access to the site needs to be considered in the light of the dense kelp cover over the site which makes locating the exposed artefacts difficult. A site plan and brief explanation of the site could be produced on an underwater slate to help guide visitors to the site.

Management Policy 2

We will seek to promote the recording and expert appraisal of the artefact assemblage recovered from the site. Analysis of the surviving bell fragments and lead ingots will be undertaken as part of this process. Management Policy 3

We will seek to facilitate interpretive material for the site. This should be locally displayed, ideally to accompany some of the artefacts from the site. One possible location for this display would be the Isles of Scilly Museum.

5.3 Everyone can Participate in Sustaining Bartholomew Ledges

- 5.3.1 Stakeholders have the opportunity to contribute to understanding and sustaining the Bartholomew Ledges protected Wreck site. Judgements about its values and decisions about its future will be made in ways that are accessible, inclusive and transparent.
- 5.3.2 Practitioners should use their knowledge, skills and experience to encourage others to understand, value and care for their heritage. They play a crucial role in communicating and sustaining the established values of the wreck, and in helping people to articulate the values they attach to it.
- 5.3.3 Education at all stages should help to raise awareness and understanding of such values, including the varied ways in which these values are perceived by different generations and communities. It should also help people to develop, maintain and pass on their knowledge and skills. Where appropriate we will encourage the use of the site as a training resource.
- 5.3.4 In acknowledging the communal value of the Bartholomew Ledges Protected Wreck site recent local self- regulation (involving licensees, the harbour authority and constabulary) has served to ensure that unauthorised activity on the site has been significantly reduced (if not completely removed).
- 5.3.5 Building on this success, we will develop provision for a flexible voluntary management agreement for the Bartholomew Ledges Protected Wreck site. This will enable greater partnership, better planning, a reduction in individual license applications and a more holistic approach to the needs of Bartholomew Ledges.

Management Policy 4

Through web-based initiatives, we will continue to develop the accessibility of related material and support appropriate links. A virtual dive trail may be developed for this site. This is particularly important as physical access to the site is difficult.

Management Policy 5

Mechanisms will be identified and implemented so as to develop shared ownership and partnership working.

Management Policy 6

Where projects are commissioned on the site we will encourage the use of the site as a training resource where this is appropriate.

5.4 Understanding the Value of Bartholomew Ledges is Vital

- 5.4.1 The significance of the Bartholomew Ledges Protected Wreck site embraces all the interdependent cultural and natural heritage values that are associated with it. To identify and appreciate those values, it is essential first to understand the structure and ecology of the place, how and why that has changed over time, and its present character.
- 5.4.2 Judgements about values are necessarily specific to the time they are made. As understanding develops, and as people's perceptions evolve and places change, so assessments of significance will alter, and tend to grow more complex.
- 5.4.3 We acknowledge that records of previous activities on the Bartholomew Ledges Protected Wreck site form an irreplaceable resource to identify previous values and assist with maintaining a cumulative account of what has happened to the site, and with understanding how its significance may have been altered.
- 5.4.4 Further, a formal programme of staged assessment and research is required, to contribute towards a fuller understanding of the site in its entirety. Such work will conform to the *Management of Research Projects in the Historic Environment* (Historic England 2015) and is likely to comprise the following stages:
 - Collation of the site archive
 - Assessment to determine academic potential of the archive
 - Determination of further work to fulfil this academic potential
 - Preparation of a research archive
 - Report text for publication, and finally
 - Publication

Management Policy 7

We will seek to commission a staged programme of assessment and research to contribute towards a fuller understanding of the site in its entirety. Perhaps the best way of achieving these aims would be the production of a desk based assessment for the site.

Management Policy 8

We will encourage the investigation and survey of the area around the known remains to establish the full extent of the site

5.5 Bartholomew Ledges will be Managed to Sustain its Values

- 5.5.1 Conservation is the process of managing change in ways that will best sustain the values of a place in its contexts, and which recognises opportunities to reveal or reinforce those values.
- 5.5.2 Changes in the Bartholomew Ledges Protected Wreck site underwater are

inevitable and it is acknowledged that all wreck sites are vulnerable simply because of the nature of their environment. We will build on the previous work to sustain heritage values, where these values represent a public interest in the Bartholomew Ledges Protected Wreck site regardless of ownership. It is therefore justifiable to use law and public policy to regulate the management of the Bartholomew Ledges Protected Wreck site as a place of established heritage value.

- 5.5.3 However, measures taken to counter the effects of natural change will be proportionate to the identified risks, and sustainable in the long term.
- 5.5.4 Other changes will be devised so as to avoid material harm. Irreversible intervention on the Bartholomew Ledges Protected Wreck site may nonetheless be justified if it provides new information about the past, reveals or reinforces the values of a place or helps sustain those values for future generations so long as the impact is demonstrably proportionate to the predicted benefits.
- 5.5.5 The effects of changes to the condition of the Bartholomew Ledges Protected Wreck site will be monitored and evaluated, and the results used to inform subsequent action.
- 5.5.6 If retaining any significant part of the Bartholomew Ledges Protected Wreck site is not reasonably practicable, its potential to inform us about the past will be exploited. This involves the recovery of information through prior investigation, followed by analysis, archiving and dissemination of the results at a standard appropriate to its significance.
- 5.5.7 Where such loss is deliberate, the costs of this work should normally be borne by those who initiate the change.

Management Policy 9

We will seek to undertake a programme of monitoring and targeted recording.

Management Policy 10

Unnecessary disturbance of the seabed within the restricted area should be avoided wherever possible in order to minimise the risk of damage to buried archaeological material.

Management Policy 11

The sale of artefacts recovered from the site should be monitored as far as possible. The UK has adopted 'The Rules', an annex to the 2001 UNESCO convention which includes the principle that underwater cultural heritage should not be commercially exploited.

Management Policy 12

This management plan will be reviewed and updated on a regular basis so that it continues to reflect the conditions and state of knowledge pertaining to the site.

6 Forward Plan

6.1 Introduction

6.1.2 In order to commence the implementation of the proposed Management Policies outlined in Section 5, Historic England is seeking to commence a range of projects that will increase our understanding of the value and setting of the Bartholomew Ledges Protected Wreck site. These projects are outlined below.

6.2 **Proposed Projects in Relation to Bartholomew Ledges**

- 6.2.1 A review and appraisal of all the surviving artefacts recovered from the site should be undertaken by a finds specialist. This should include an analysis of the composition of the bell fragments and lead ingots to perhaps determine their geographical origin and date.
- 6.2.2 There is a need to collate all the surviving records, list all the known finds and their current location and to reconcile the various site plans which exist. The simplest way to achieve these aims would be to produce a desk based assessment for the site, as recommended in Management Policy 7.
- 6.2.3 As the site is difficult to access physically we propose to enhance our virtual (web based) site presentation. The finds assemblage assessment proposed above could also contribute to the enhancement of the virtual resource.
- 6.2.4 When resources are available we will seek to initiate a survey of the area around the known remains to establish the full extent of the site.
- 6.2.5 A virtual dive trail could be produced for this site. This could consist of a topographic model of the seabed produced from bathymetric data with the seabed features (past and present) superimposed in 3D. The recently produced *HMS Colossus* virtual dive trail has had about 500 unique visits in its first month demonstrating the popularity of virtual access to a site.
- 6.2.6 When resources are available we will seek to initiate a programme of site monitoring to be carried out on a biennial basis.

7 Implementation

7.1 Consultation

- 7.1.1 An agreed draft of the *Conservation Statement and Management Plan* for the Bartholomew Ledges Protected Wreck site was internally reviewed by Historic England.
- 7.1.2 The *Conservation Statement and Management Plan* for the Bartholomew Ledges Protected Wreck site will be circulated for a four-week stakeholder consultation to refine how the values and features of the Bartholomew Ledges Protected Wreck site can be conserved, maintained and enhanced. Responses to the consultation will be considered and the *Plan* revised as appropriate.

7.2 Adoption of Policies

- 7.2.1 The *Management Plan* was adopted on 25th November 2016.
- 7.2.2 A programme that identifies a realistic timescale for implementing the updated plan taking into account those areas which need immediate action, those which can be implemented in the medium or long term, and those which are ongoing will be devised.
- 7.2.3 Responsibilities for implementation of the *Management Plan* lie with Historic England, though consultation with stakeholders will be maintained throughout. In addition, provision will be made for periodic review and updating of the *Plan*.

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Appendix I: Archaeological History

Date	Activity	Source
Late summer	The site was discovered by Mike Pirie. Lead ingots and bronze bell	Lic Rep 1980
1979	fragments were salvaged – the majority of these were sold for scrap	Larn 2010
	(exactly when they were sold is not clear). Other artefacts recovered	Fenwick & Gale 1998
	included pottery, lead shot and a yellow brick. This date of discovery is	
	given in the 1980 licensee's report - other dates have been put forward	
	(1974 or 1978 – Richard Larn, 1976 – Isles of Scilly Museum display).	
Sept 1980	Application for designation by Roy Graham 23.9.1980. The main features	Application form – HE
	are listed as 4 or 5 guns, 2 anchors, 1 large fragmented bronze bell and	archive Swindon.
	80+ boat shaped lead ingots. At this point 572 fragments of bell had been	
	recovered and an unknown number remained piled on the seabed ready	
	for recovery. 44 lead ingots had been recovered.	
	572 fragments bell, weight 2500lb, largest frag 35lb declared to receiver	Wessex 2005
	of wreck by Roy Graham.	-
Oct 1980	The site was designated under the PWA (1973) 3 October 1980 – Position	Statutory Instrument
	49° 54.26'N, 06° 19.82'W, with a radius of 250m.	
	Roy Graham was the licensee, his report (27.10.80) states 644 bell frags	Lic Rep 1980
	recovered (2699 lb) and an unspecified number of boat shaped lead	
	ingots.	Manager 2005
	Roy Graham declares further objects to RoW: 13 frags pottery, 1 frag	Wessex 2005
1001	glass, 2 musket shot, 1 yellow brick and 72 bronze bell frags.	Lie Den 1001
1981	Survey licence issued to Roy Graham.	Lic Rep 1981
	Weed cut down and a visual search of the 'main site' located only one	
	lead ingot. A proton magnetometer survey of the designated area and the area between this and the Spanish Ledges was undertaken.	
	A report on the bell fragments was produced in July (by H.Wakefield). This	Bell Metal Report
	did not have any measurements or detailed description of the fragments	1981
	but claimed there were 572 fragments and a further 100 were awaiting	1981
	recovery. The fragments were 'all much the same size. The largest is 35lb	
	in weight'. Photographs of some of the inscribed fragments were sent to	
	the V&A for an opinion.	
1982	The area around the guns and anchors was searched – only traces of iron	Lic Rep 1982
1502	concretion were found. A magnetometer survey of the area between	Lie nep 1502
	Bartholomew Ledges and Spanish Ledges was undertaken – an iron	
	cannon was found 'downtide of the designated area' lying on sand and	
	'badly corroded' – it is possible that this was moved onto the site and is	
	the 'later' cast iron gun reported.	Wessex 2005
	Survey 'failed to produce any further evidence'	
	42 lead ingots from the site were examined on Brhyer by Dr Lynn Willies	
March 1983	The designation was amended 8 th March 1983 – the position remained	Statutory Instrument
	unaltered but the radius of the designation was reduced to 100m	
1986	In June an excavation license was issued	HE archive
	June Roy Graham declared a 'banded iron gun, weight 22kg' to RoW	Wessex 2005
	An extended site visit was made by the ADU (ADU 006) they were on site	
	from 14 August to 2 September. They undertook 31 dives and spent a	ADU Report 006
	total of 28 hrs 23 minutes underwater. They reported 'evidence of up to 4	
	iron breach-loading guns, 3 lead ingots and a variety of anchors. They	Lic Rep 1986
	reported that most of the anchors were 'not contemporary with the	·
	cannons and ingots'. A large number of RAF divers conducted a survey	
	over a 14 week period (7 separate teams for two weeks per team) – this	
	was described by the ADU as 'a total failure. The RAFSAA expedition	
	disintegrated into a shambles'	
1987	A small excavation was undertaken by the licensee's team 'First season of	Lic Rep 1987
	excavation'. The licensee, Roy Graham did not dive – some artefacts were	
	recovered.	Wessex 2005
	Roy Graham declared to RoW - 1 cast lead window sash weight, 1 pistol	
	shot, 1 copper alloy tunic broach, 1 iron shot (50mm) and 'several glazed	
	pottery sherds'	1

Date	Activity	Source
1988	Survey license held by Roy Graham	HE Archive
1989	Objects recovered from the site by Richard Larn and declared in 1990 by him to RoW (73 objects declared). Included 5 bell fragments and 1 silver coin (dated 1555). A total of 6 silver coins are mentioned in Historic Shipwrecks and The Wrecks of Scilly; one of these (Ferdinand & Isabella 1474-1504) has been traced to a visiting Plymouth diver. The whereabouts of the other four coins reported is not known.	Wessex 2005 Fenwick & Gale 1998 Larn 2010
1993	The site inspected by the ADU in August. Three dives were undertaken, total underwater time was 154 minutes. No archaeological remains were seen – this was attributed to the thick kelp covering the site. The ADU report refers to 'former licensees' – so there was probably no licensee in 1993.	ADU 93-17
1997	Cruise liner <i>Albatros</i> hits the North Bartholomew Rock (just to the north of the site).	West Briton
1998	The ADU visited the site – no archaeological remains were observed but a magnetometer and bathymetric survey were undertaken by them. There was no licensee in 1998	ADU 98-06 HE Archive
2002	Steel navigation beacon fixed to the top of the Bartholomew Ledges, replacing the tethered buoy previously to the east of the Ledges. Survey license (Richard Larn) Visit Licence (Todd Stevens)	Wessex 2005 Lic Rep 2002 HE Archives
2003	Survey license (Richard Larn) Survey License (Jason Rosevear) – his report mentions finding a '9 inch cannon ball' and a small area of bell fragments in 8m of water. The position given for this is located about 48m to the south of the current designation.	Lic Rep 2003 Lic Rep 2003
2004	Site inspection by the diving contractor (Wessex Archaeology). Some SBL acoustic positioning undertaken. See site plans (Wessex Archaeology, 2005, pp. 25-27). 4 artefacts recovered by the licensee Richard Larn.	Wessex 2005 Lic Rep 2004
2005	Plan of the site made by Richard Larn and Dave McBride (Fig 3)	In the Isles of Scilly Museum
17 May 2006	The designation of the site was amended. The position was changed to 49° 34.364'N, 06° 19.899'W (the same as the new Trinity House beacon on the site), the radius of the area was extended to 150m.	Statutory Instrument
2010	In July illegal diving on the site was reported to the police. A group of mainland divers were interviewed by the police but denied diving within the designated area (2010 licensee's report). The last recorded dive on the site took place; four visiting divers were taken to the site by one of the Isles of Scilly dive charter boats. Since then there have been no recorded visits to the site.	Lic Rep 2010
2015	Lead ingots said to be identical to the Bartholomew Ledges ingots were reported recovered from the Spanish Ledges site which lies some 1.5 kilometres to the south east of the Bartholomew Ledges.	(Cumming & Stevens, 2016)

Appendix 2: Links to web-based resources

Historic England Bartholomew Ledges page:

https://historicengland.org.uk/listing/the-list/list-entry/1000066

CISMAS Home page:

http://www.cismas.org.uk/index.php

Links last verified 29/07/2016