



# AMPHIRE

Scottish Atlantic Maritime Past: Heritage, Investigation, Research & Education

Annual Report 2013



# **SAMPHIRE**

## **Scottish Atlantic Maritime Past: Heritage, Investigation, Research & Education**

### **Non-Technical Report (2013)**

#### **CONTENTS**

<b>1</b>	<b>INTRODUCTION.....</b>	<b>1</b>
1.1	What is Project SAMPHIRE? .....	1
1.2	Project background .....	2
1.3	Positive Stewardship and Scotland’s Maritime Cultural Heritage .....	4
1.4	A Regional ‘Study Area’ .....	5
<b>2</b>	<b>METHODOLOGY.....</b>	<b>7</b>
2.1	Phase 1 – Preparation and Promotion .....	7
2.2	Phase 2 – Community Engagement Fieldwork .....	15
2.3	Phase 3 – Survey Fieldwork .....	20
<b>3</b>	<b>RESULTS AND FUTURE DIRECTION .....</b>	<b>26</b>
<b>4</b>	<b>REFERENCES.....</b>	<b>29</b>

## Figures

- Figure 1: The key concepts of Project SAMPHIRE
- Figure 2: Project SAMPHIRE phases
- Figure 3: The Viking-period Gosktad ship
- Figure 4: SAMPHIRE promotional material
- Figure 5: SAMPHIRE talk poster
- Figure 6: Promotional material produced in Gaelic
- Figure 7: SAMPHIRE *Scottish Diver* Magazine Article
- Figure 8: Phase 2: Principal community engagements locations
- Figure. 9: Community-reported marine heritage sites targeted as part of the 2013 SAMPHIRE fieldwork
- Figure. 10: Community-reported marine heritage sites targeted as part of the 2013 SAMPHIRE fieldwork
- Figure. 11: Community-reported marine heritage sites visited/surveyed as part of the 2013 SAMPHIRE Phase 3 fieldwork
- Figure 12: A typical blog entry on the SAMPHIRE website, one of 38 published during 2013

## Plates

- Plate 1: Experienced recreational divers Bridie and Russell Pursey invite the SAMPHIRE team into their home in Elphin (May 9th 2013)
- Plate 2: The SAMPHIRE team conducts community engagement in Gairloch (11th May 2013)
- Plate 3: The SAMPHIRE team gives a public talk in Drumbeg, Sutherland
- Plate 4: SAMPHIRE team member Dr Simon Davidson in discussion with Drumbeg residents
- Plate 5: The SAMPHIRE team arrives at the Kessock Lifeboat Station
- Plate 6: Dr Simon Davidson explains the purpose of Project SAMPHIRE to members of the Inverness Sub-Aqua Club
- Plate 7: Promoting the wider resource of maritime cultural heritage
- Plate 8: The SAMPHIRE survey team at Hunterston, north Ayrshire

# SAMPHIRE

## Scottish Atlantic Maritime Past: Heritage, Investigation, Research & Education

### Non-Technical Report (2013)

#### Acknowledgements

SAMPHIRE is a community-focused project and would not be possible without the collaboration of all the individuals, groups and communities who worked on the project.

The following is a list of some of the key participants and friends of Project SAMPHIRE in 2013 (in no particular order). It is not intended to be comprehensive but to give some recognition to those local community members who have made important contributions to the project. The team would particularly like to thank Robert Gordon, Bruce Greig, Derek and Kay Dillon and Ewen and Mairi Mackay who have helped to make the SAMPHIRE 2013 project a success. Credit is also due to Charles Trollope for his expert advice given on cannon dating and identification and to Jack Morrison of *Scottish Diver* magazine for helping to spread the word to the diving community. The SAMPHIRE team would like to thank The Crown Estate for supporting the 2013 season of the project through the Marine Stewardship Fund. Our apologies to anyone mistakenly left off this list.

John and Jo Beaton	Iain MacLennan
Dave Angus	Derek and Kay Dillon
Steven Birch	Kenny and Gemma Livingstone
Andy Venters	Andrew Patrick
Bridie and Russell Pursey	Jimmy MacIntosh
Stevan Lockhart	Steven Corbett
Janet MacLean	Michael Montgomerie
Liam Griffin	Neil Gudgeon
Ewan MacNeillage	Robert Gordon
James Forsyth	Ewen and Mairi Mackay
Iain Macaulay	George Brown
Nick Goldthorpe	Phil Mitchell
Jimmy Crooks	Bruce Greig
Willie Murdo	Neil MacInnes
James Corrigan	Michael Scott
Ron Henderson	Hywell Davies
Davie Urquhart	Glenn McIntosh
Matt Baron	Betty Finn
John Corfield	Isabel Garret
Alice McLennan	Carol Martin
Sarah Wedgewood	Rachael Quick
Julia Smith	Robin Fraser
Sean Wilken	Rod McDonald
Alejandro Gallego	Guy Grieve
Andy Holbrow	Ian French
Anne McLeod	Derek Roxburgh
Professor Karen Hardy	Colin Tucker
Hugh Mackay	Terry Oliver
Professor Colin Martin	
Mike Morgan	
Ewen Gillies	

# **SAMPHIRE**

## **Scottish Atlantic Maritime Past: Heritage, Investigation, Research & Education**

### **Non-Technical Report (2013)**

#### **1 INTRODUCTION**

This is a non-technical report intended to present a summary of the work and results from the first year of Project SAMPHIRE. It is intended for a wide audience and to assist with the process of passing information and enhanced knowledge of archaeological sites directly back to the individuals and communities who first reported them. It is envisioned that a full technical publication will be produced at the completion of the project and this will contain a comprehensive review of the theory, methods and outcomes of Project SAMPHIRE.

##### **1.1 What is Project SAMPHIRE?**

Project SAMPHIRE was designed as a way to bring professional marine archaeological expertise into local maritime communities. The central focus of the project is to record the unique knowledge of maritime cultural heritage sites on the seabed (and intertidal zone) that is held within local communities. This is done through a programme of face-to-face community engagement, allowing knowledge exchange in both directions. The reported sites are then investigated by the SAMPHIRE Project team with the maximum involvement of local community members at every level, including fieldwork and desk-based research. In this way we hope to foster a wider understanding of and interest in local maritime heritage and to promote the stewardship of this valuable local resource.

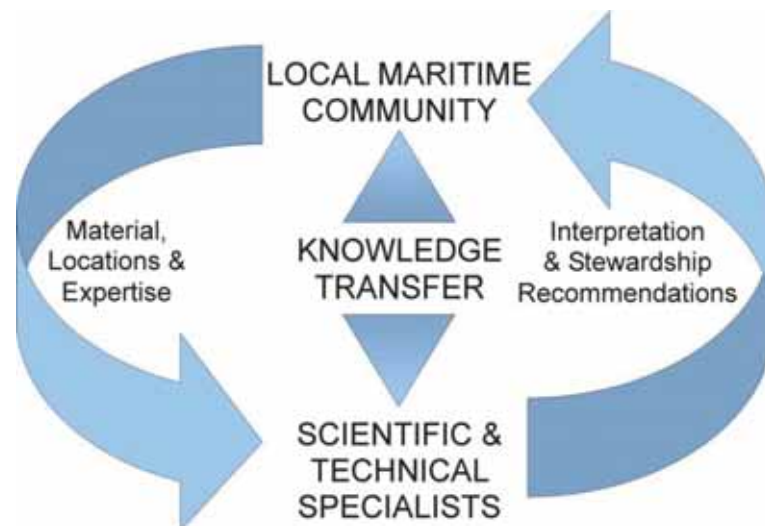


Figure 1: The key concepts of Project SAMPHIRE

Project SAMPHIRE aims to demonstrate the benefits of active participation between coastal communities and professional marine archaeologists. Through the trust and knowledge built up through SAMPHIRE we aim to build an enduring legacy of cooperation between coastal and maritime communities and professional archaeologists.

## 1.2 Project background

It is common for professional archaeologists, while working in the field (often for pre-development survey or evaluation) to encounter, engage and spend time with local community members. Archaeologists are often told anecdotal accounts of maritime finds and sites, often in other nearby locations to where they are deployed. Such account of sites may have never been recorded by archaeologists; this is particularly common in the case of underwater material. All too often the demands of a commercial archaeological (ie. pre-development) survey means that there is no time to fully investigate and record such additional reports, tip-off's or clues. In many cases the value of this information is very high; for example where a local diver or recreational dive club has information on the identity and exact locations of several wrecks. Any information of the location and nature of marine archaeological sites is important as these sites are far harder to discover due to difficulty and cost of conducting large-scale, focused archaeological surveys of the seabed. In such a case, of living knowledge held by local community members, there is a real risk that this unique and valuable local knowledge will be lost without a positive effort to record it.

The questions faced by heritage professionals revolve around how to effectively and respectfully access this local knowledge, and how to enhance, preserve and disseminate it for the benefit of the local community, heritage managers and the wider field of

researchers, students and practitioners of maritime archaeology. Project SAMPHIRE has been designed around these questions. SAMPHIRE is an acronym for “**Scottish Atlantic Maritime Past: Heritage, Investigation, Research & Education**”<sup>1</sup>. The project is a collaboration between WA Coastal & Marine and the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS). Funding has been provided by The Crown Estate through the Marine Stewardship Fund. This support has enabled Project SAMPHIRE to undertake the recording and investigation of community-reported marine heritage sites.

Project SAMPHIRE has been designed to complement existing marine and coastal heritage initiatives in Scotland. The most notable examples in the United Kingdom include programmes run by the Nautical Archaeology Society (NAS)<sup>2</sup> and by the Scottish Coastal Archaeology and the Problem of Erosion (SCAPE) Trust<sup>3</sup>. The NAS has made huge progress in the UK in training avocational archaeological activity and encouraging recreational divers to undertake one (or more) of their courses on archaeological survey and interpretation. The NAS has implemented the Adopt-a-Wreck Scheme to encourage divers to survey and monitor particular sites and have also recently announced an e-learning programme to make it easier for divers to learn about heritage. SCAPE has run several community projects, including Shorewatch<sup>4</sup>, encouraging reporting and monitoring of coastal sites by community members. Wessex Archaeology has also undertaken the *Fishing Industry Protocol for Archaeological Discoveries (FIPAD)*<sup>5</sup>, the *Shipwreck Heritage of Shetland and Fair Isle* (Scott 2011) which incorporated significant input from community members and the OHCCMAPP (Outer Hebrides Coastal Community Marine Archaeology Pilot Project). OHCCMAPP was a particularly important influence on the methodology applied in SAMPHIRE, being located in the same general area and also involving community input<sup>6</sup> (Benjamin *et al*, in press). Project SAMPHIRE aims to contribute to the field of coastal and marine archaeology in Scotland by targeting the seabed and intertidal zone. Reports of coastal sites above the intertidal zone are not ignored, but rather are either investigated directly or a recommendation is made to contact SCAPE, or the appropriate local or national heritage curator.

---

<sup>1</sup> Samphire is also an edible plant, found in rocky coastal environments.

<sup>2</sup> [www.nauticalarchaeologysociety.org/](http://www.nauticalarchaeologysociety.org/)

<sup>3</sup> The SCAPE Trust is a charity that seeks to research, conserve and promote the archaeology of Scotland's intertidal heritage, particularly where it is threatened by coastal erosion.

<sup>4</sup> <http://www.shorewatch.co.uk>

<sup>5</sup> <http://fipad.org/>

<sup>6</sup> <http://blogs.wessexarch.co.uk/ohccmapp/>

Targeting the seabed is particularly crucial within a national context of evaluating and understanding the marine heritage resource; our knowledge is far less complete than that relating to terrestrial resources. This point has been raised in recent years by Historic Scotland and the Built Environmental Forum of Scotland as well as the Scottish Archaeological Research Framework<sup>7</sup>. In part this is because much of the sea around the UK has yet to be surveyed with high-resolution marine geophysics. The Civil Hydrography Programme (CHP) run by the Maritime & Coastguard Agency (MCA) has been underway since 2004 and has now covered around 12% of UK waters, mostly well away from the shore. The records from the CHP and a wide array of other sonar surveys are adding many new sites but are more suited to discovery of large metal shipwrecks than to older and smaller craft, particularly those made mainly of wood. The vast majority of recorded marine heritage sites in the UK have been found through sonar survey and as a result the local and national heritage databases are heavily skewed towards large modern ships in both England (English Heritage 2012) and Scotland (McCarthy 2011). One way to address this imbalance is to explore other methods of discovering wrecks and other heritage sites. The BEFS taskforce (2009, 11) stated in 2009 that ‘there is a need to further refine understanding of the most significant gaps in knowledge including geographic areas, types and periods of assets which are under-represented at present, in order to identify appropriate methodologies, prioritise and implement avenues of research for addressing the most significant gaps. An audit of marine heritage data was subsequently commissioned by Historic Scotland and highlighted the potential value of community sources, including the diving community (McCarthy 2011, 35-37).

### **1.3 Positive Stewardship and Scotland’s Maritime Cultural Heritage**

The overall aim of Project SAMPHIRE has been to go beyond mere data collection for the archives. The BEFS (2009, 14) strategy document also stated that “as a result of the low level of awareness and knowledge of the resource, the inaccessibility of it, the wide range of environmental and man-made drivers of change, and the logistical difficulties of operating offshore, stewardship of the marine historic environment is less well developed than on land”. One of the key aims of Project SAMPHIRE is to help to develop this sense of stewardship, by encouraging communities involved in the project to participate in the process of documenting and investigating reported sites.

In many cases, the individuals who have discovered archaeological sites feel a strong connection with them and can feel justifiably aggrieved if professional archaeologists

---

<sup>7</sup> <http://www.historic-scotland.gov.uk/marine-strategy.pdf> & <http://www.scottishheritagehub.com/content/scarf-marine-maritime-panel-report>



seem to be 'taking over'. To avoid this, the SAMPHIRE team has sought to follow an inclusive model where professional archaeologists offer their expertise as a service to local communities and aim to ensure that any new knowledge arising from research and survey is passed back directly to those communities as both stakeholders and project participants<sup>8</sup>.

During the 2013 SAMPHIRE programme of fieldwork the SAMPHIRE team was fortunate to have participation of local community members in almost every aspect of the on-site investigation. Community members joined on intertidal walkover surveys and aboard dive boats to see how archaeological survey was carried out and to direct the team to local sites. Volunteer participation in the majority of our dive surveys was also possible by embedding a suitably qualified diver within the HSE-compliant archaeological dive team.

From the beginning of the project, the SAMPHIRE team worked carefully to ensure that the data gathered can be added directly to the RCAHMS National Database. The information has been gathered and entered into a proforma Access database provided by RCAHMS. In this way the project data is available to the public with the minimum of delay. A constant dialogue with community participants has been maintained, passing back professional interpretations of the sites and artefacts reported as soon as they became available, directly through phone calls, emails and face-to-face meetings as well as indirectly, through online blogs, social media and ultimately through the final reports. In some cases it has been possible to return to communities and give talks on the sites we found. Data from the project has also been provided to local archives as well as national heritage databases and will be offered to local archives such as the Skye and Lochalsh Archive Centre<sup>9</sup> and Lochinver Mission Community Archive<sup>10</sup> to ensure that the results are as widely disseminated as possible.

#### 1.4 A Regional 'Study Area'

Broadly, the focus of Project SAMPHIRE is Scotland's Atlantic coast, including the islands. This area contains a vast stretch of coastline, much of which is rugged and exposed. Many parts of this coast are difficult to access by road and sparsely populated. For example, Sutherland, the focus of much of the fieldwork in 2013, is the most sparsely populated of the Highland Areas, with a population density of only 2 people per km<sup>2</sup>,

---

<sup>8</sup> In some fields of study, the term 'informant' is used, however we have chosen to view local stakeholders, with a shared interest in cultural heritage as a project *participant* to stress the ethos of inclusivity held by the Project SAMPHIRE team.

<sup>9</sup> <http://www.highlandarchives.org.uk/skye-and-lochalsh.asp>

<sup>10</sup> <http://www.lochinvermission.org.uk/community-archive/>

compared with 8 per km<sup>2</sup> for the Highlands as a whole and 66 per km<sup>2</sup> for Scotland<sup>11</sup> (and over 400 people per km<sup>2</sup> for England)<sup>12</sup>.

This comparatively low level of population density has presented challenges and opportunities for the project in 2013. This is an enormous area to target for a heritage project but as the settlements within it tend to be small it has been easier to locate and contact key individuals and groups within the maritime community. In addition there are strong existing links between the tight-knit maritime communities in the western Highlands and Islands and in many cases our contacts in one area were able to point the team to other key members of west-coast maritime communities hundreds of miles away.

---

<sup>11</sup> <http://www.sutherlandpartnership.org.uk/UserFiles/File/Sutherland%20Snapshots%20Statistics.pdf>

<sup>12</sup> Office for National Statistics - Population and Household Estimates for the United Kingdom, March 2011

## 2 METHODOLOGY

Project SAMPHIRE was divided into four phases.

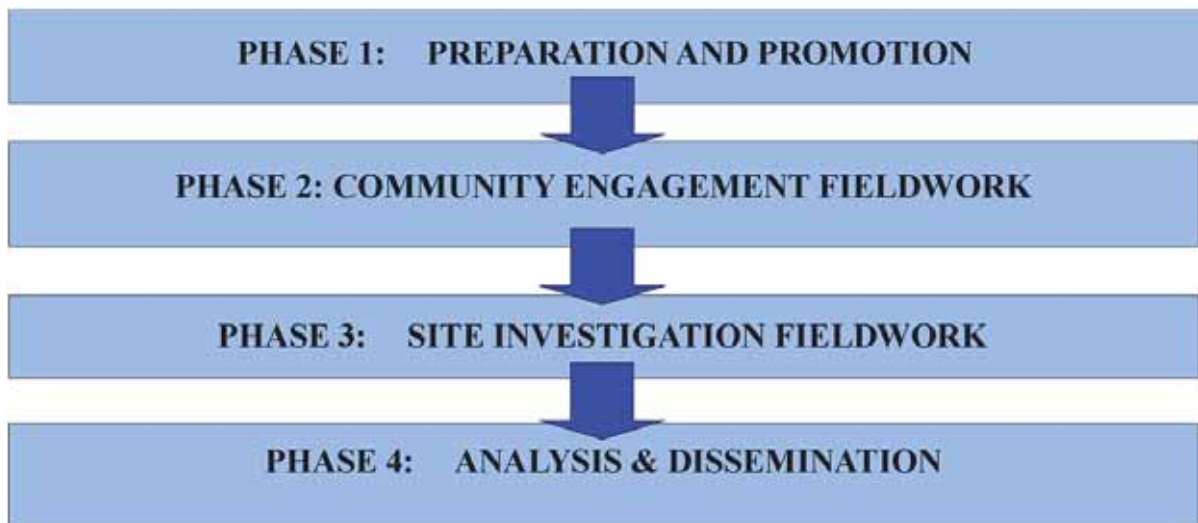


Figure 2: Project SAMPHIRE phases

### 2.1 Phase 1 – Preparation and Promotion

Phase 1 took place between January and April of 2013. It centred on review of similar/related projects to highlight the best ways to engage with marine stewards, on developing project tools and material, on raising awareness of the project and on preparation for fieldwork in Phase 2 and Phase 3.

The review of related community heritage projects included consideration of various projects by the NAS (including Adopt-A-Wreck),<sup>13</sup> by the SCAPE Trust (including Shorewatch),<sup>14</sup> by Wessex Archaeology (including *Scottish Marine Historic Environment Data Audit* (McCarthy 2011), OHCCMAPP (Benjamin *et al* 2014), FIPAD and the *Shipwreck Heritage of Shetland and Fair Isle* (Scott 2011)) and by the JNAPC (such as *Underwater Finds: Guidance for Divers* (JNAPC 2008)). The outcomes and recommendations of these projects were incorporated into the design of SAMPHIRE from the outset to try to ensure that the project made a meaningful and productive connection with local communities.

Preparation for fieldwork in Phases 2 and 3 was a major component of Phase 1. Phase 1 included organisation of bookings and payments for vehicles, accommodation and boat hire. Creation of a fieldwork schedule was a major logistical challenge. A shortlist of

<sup>13</sup> [www.nauticalarchaeologysociety.org/](http://www.nauticalarchaeologysociety.org/)

<sup>14</sup> The SCAPE Trust is a charity that seeks to research, conserve and promote the archaeology of Scotland's intertidal heritage, particularly where it is threatened by coastal erosion.

potential community engagement locations along the west coast was drawn up, based on population size, accessibility and the locations of existing contacts. The project's schedule had to take account of driving distances, staffing (including availability and suitability for specific tasks), tides, weather, and accommodation availability in remote locations and also the availability of community contacts. Proposed meetings with groups such as the Inverness Sub-Aqua Club meant that the SAMPHIRE team had to coordinate with the club's set timetable. By the end of Phase 1, thirteen community engagement fieldwork locations had been selected for Phase 2, to be visited over eight days, beginning in Kinlochbervie and ending in Skye. The strategy for community engagement was to combine pre-arranged meetings with individuals, pre-arranged talks with larger groups and an 'organic' approach where the team would simply arrive at a promising location such as a coastal town without any pre-arranged contacts. In this case the team would speak to locals and try to identify and make contact with key members of the maritime community within the space of a few hours. This dual approach also allowed us to compare the success of each technique.

For Phase 3 (survey fieldwork) organisation of diving and other fieldwork equipment was a major task and a comprehensive list of equipment had to be made as it would be difficult or impossible to replace any missing or broken equipment in the field due to the remoteness of many of the proposed survey locations. The project also needed detailed risk assessments and health and safety documentation for diving. Safety for divers in remote locations was an important consideration. For example it was important to calculate the travel time between each of the proposed dive sites and the nearest decompression chamber and to consider whether enough was known about each dive site to make an adequate assessment of the potential risks involved.

Tools created for the project included project logos, websites, flyers, blogs and databases for the recording of community contacts and for data on archaeological sites.

The logo (**Figure 2**) for the project is based on the ornate prow of the Gokstad ship, a Viking ship found in Norway in 1880 and now preserved in the Viking Ship Museum in Oslo. This was chosen due to the strong link between the maritime traditions of the Vikings and the medieval boats of the west coast of Scotland. Clinker-built vessels such as the West Highland galleys were direct descendants of the Viking longships (Rixson 1998). Once the logo was finalised, further promotional tools were produced, including flyers (**Figure 3**) and a website. The website included a blog (**Figure 4**) linked to an interactive project map, allowing interested members of the public to follow the progress of

the project. One of the prearranged events planned for Phase 2 was a talk on marine archaeology and Project SAMPHIRE in the Drumbeg Village Hall. Funding to cover the costs of hall hire and refreshments was made available by the project, however most of the arrangements were made by local resident Mairi Mackay, who promoted the talk and even designed and printed posters (**Figure 5**). As the project targeted areas traditionally associated with a high proportion of Gaelic speakers it was decided to produce some of the promotional material in Gaelic (**Figure 6**)<sup>15</sup>.

It was important to create of a list of key contacts within the communities along the western coast. This drew partly on a database created during the *Scottish Marine Historic Environment Data Audit* (McCarthy 2011) but consisted mainly of contact details gathered through web searches, phone calls and other means. Details of community members with potentially interesting sites were also passed on by Historic Scotland and other organisations. An email list was created to announce the project and to solicit information on unrecorded sites or other expressions of interest. This database was also used to keep a note of interactions with community members to ensure that important contacts were not lost.

A separate database was also created to store archaeological data. Early discussions highlighted the potential value of using a database format compatible with the RCAHMS National Database. Not only would this ensure that the data was recorded to a high standard and using controlled terminology but also that accession of the data into the RCAHMS National Database and into the public domain through the Canmore portal would be rapid<sup>16</sup>. This was felt to be important in terms of demonstrating that information given to SAMPHIRE was put to good use and made publically available. RCAHMS provided a proforma Access database which was adapted with additional fields so that the sites could be automatically mapped out (in ArcGIS) and used for project planning.

Promotion of the project began via the internet, including announcements on the websites of the project partners. An article was also prepared for the *Scottish Diver* magazine (**Figure 7**).

---

<sup>15</sup> A professional translation was commissioned through Cànan, a communications and translation service based in Skye: <http://canan.co.uk>

<sup>16</sup> <http://canmore.rcahms.gov.uk>



Figure 3: The Viking-period Gosktad ship was the inspiration for the SAMPHIRE logo. Photo: A. Bicket. Design: K. Nichols.



Figure 4: SAMPHIRE promotional material - Flyers were produced during Phase 1 of the project. These were distributed throughout the duration of the project. Design: K. Nichols.



*Marine Archaeologists – John McCarthy, Jonathan Benjamin & Simon Davidson of  
WA Coastal & Marine*

*Will hold a talk about Marine Archaeology in general and their discoveries as part  
of the Drumbeg survey including an EXCLUSIVE premiere of their 3D modelling of  
the Drumbeg Site – not previously published!*

Venue: Drumbeg Village Hall

Date: Wednesday 8 May 2013

Time: 7:30pm

Admission: Free (including light refreshments)



Project SAMPHIRE Aims – to build up links between archaeologist and local  
communities with knowledge of unreported possible marine archaeological  
sites.



Figure 5: SAMPHIRE talk poster. Phase 1 of Project SAMPHIRE included arranging for the marine archaeologists to give talks during the Phase 2 community engagement fieldwork. This poster for the talk was designed, printed and distributed by Drumbeg resident Mairi Mackay who helped to organize the public event.



## Arc-eòlas Mara na h-Alba Gad Iarraidh!

'S e pròiseact arc-eòlas mara a th' ann an SAMPHIRE agus tha e a' buntainn ri cladaichean agus eileanan taobh an iar na h-Alba. Bidh SAMPHIRE a' toirt cothrom do choimhearsnachdan ionadail a dhol an sàs le arc-eòlaichean proifeiseanta fo-uisge, a tha stèidhichte ann an Alba. Tha e ag amas air taic a chumail ri bhith ag aithneachadh agus a' rannsachadh dualchas mara na h-Alba, agus a bhith a' faotainn tlachd às. Le bhith ag obair cuide ri coimhearsnachdan ionadail, tha sinn an dòchas gun daingnich sinn am beachd gu bheil e an urra rinn uile na làraichean arc-eòlais fo-uisge a ghlèidheadh.

Chaidh SAMPHIRE a dhealbhadh gus am bi a' choimhearsnachd air cridhe pròiseas an arc-eòlais.

Ma chunnaic thu, no ma bha thu a' dèiligeadh, no ma tha fiosrachadh sam bith agad mu làraichean arc-eòlais fo-uisge air taobh an iar na h-Alba nach eil air an clàradh, **tha sinn airson fios fhaighinn bhual!**



### Ceistean Cumanta (FAQ)

#### Dè th' ann an SAMPHIRE?

Tha *Scottish Atlantic Maritime Past: Heritage, Investigation, Research and Education* na phròiseact a chaidh a dhealbhadh ann an com-pàirtieschas eadar WA Coastal & Marine agus an Royal Commission on Ancient and Historic Monuments of Scotland (RCAHMS). Tha am pròiseact stèidhichte air an dualchas chultarail fo-uisge ann an Alba, air taobh an iar na dùthcha agus anns na h-eileanan air cladaich a' Chuain Siar.

#### Carson SAMPHIRE?

Tha SAMPHIRE a' toirt cothrom do choimhearsnachdan ionadail a dhol an sàs le arc-eòlaichean proifeiseanta ann an arc-eòlas fo-uisge a tha stèidhichte ann an Alba. Bheir SAMPHIRE cothrom do dh'arc-eòlaichean a tha proifeiseanta ann an arc-eòlas fo-uisge, a dhol an sàs le choimhearsnachdan-mara ionadail air taobh an iar na h-Alba, agus tha iad ag amas air taic a chumail ri bhith ag aithneachadh agus a' rannsachadh dualchas mara na h-Alba a tha glèidhte fo agus air grunnnd na mara agus airson faighear tlachd às.

Tha sinn an dòchas, le bhith a' co-obrachadh, gun daingnich sinn tuigse gu bheil e an urra rinn uile na làraichean arc-eòlais fo-uisge a dhìon.

fios a chur ri buidhnean a' feilidh [SCAPE Trust](#) (airson làraichean ri taobh na mara air a' chladaich) no gu na com-pàirtichean againn aig an Royal Commission on the Ancient and Historical Monuments of Scotland ([RCAHMS](#)) a tha a' cumail stòr-dàta nàiseanta den dualchas chultarail fo-uisge ann an Alba.

#### Ciamar as urrainn dhomh a bhith an sàs ann an *déidh* fiosrachadh a thoirt do SAMPHIRE?

Chaidh SAMPHIRE a dhealbhadh gus am biodh a' choimhearsnachd air cridhe a' phròiseis arc-eòlais. Nì sinn rannsachadh anns na h-athisgean agus cuiridh sinn am fiosrachadh mun làraich thugad. Ma nì sinn barrachd rannsachaidh air an làraich, bheir sinn cuireadh dhut a thighinn an sàs ann, agus nì sinn ar dìcheall gus obrachadh cuide riut a rèir cuin as urrainn dhut obrachadh cuide ris an sgioba.

#### Cò tha a' maoineachadh Pròiseact SAMPHIRE?

Archaeology Policy Committee ([JNAPC](#)) leabhran beag feumail "Underwater Finds – Guidance For Divers" anns a bheil a' mhòr-chuid dhe na prìomh cheistean. Tha eòlas aig sgioba SAMPHIRE air an raon seo, agus feuchaidh iad ri gach ceist a fhreagairt. Cuimhnich, a rèir *Merchant Shipping Act 1995* gum feumar innse dha Receiver of Wreck mu long-bhriseadh sam bith a thèid a lorg. 'S urrainn dhuinn fhèin sin a dhèanamh dhut, agus sinn a' coileanadh nan deastanas laghail agad. 'S ma dh'fhaoidte gum faigheadh an neach a lorgadh an long duais-dhiolachd – 's e sin an suidheachadh lagha airson longan-briseadh an latha an-diugh agus longan eachdraidheil.

a bheir e taic do  
am ri teachd.

na stèidhichte ann an  
d fiosrachaidh mun  
ag aig

ith mu arc-eòlas fo-  
dh cuide ri  
air an taobh siar.  
rc-eòlas fo-uisge, agus  
e sna sgìrean sin a thoirt

#### ich eil clàraichte?

ig

oba SAMPHIRE a tha  
no sgrìobh gu **Project  
Street, Edinburgh,**

agus bheir sinn sùil air  
chte mar-thà. Ma chaidh  
achd fiosrachaidh a chur  
daidh againn, faodar

[Maritime Stewardship](#)

an lagh?

ean laghail co-  
t Nautical

Figure 6: Promotional material was produced in both English and Gaelic as part of Phase 1



Figure 7: Scottish Diver Magazine. A two-page article outlining the aims of the project was prepared for the Scottish Sub-Aqua Club's member's magazine. The ScotSAC organisation was enthusiastic about the project and gave SAMPHIRE space on the cover.

## 2.2 Phase 2 – Community Engagement Fieldwork

The importance of face-to-face interaction was considered to be crucial to the success of the project. Phase 2 of Project SAMPHIRE was a bespoke fieldtrip dedicated to community engagement, undertaken by the project outreach team between the 7<sup>th</sup> and 15<sup>th</sup> of May 2013.

The first step upon meeting local community members, by prior arrangement or fortuitously, was to give a brief description of purpose and methodology of the project. The team found that local people were very welcoming and keen to pass on information about local sites. The 'organic approach' was found to be highly successful. Upon arrival in a coastal community where no prior meetings had been arranged, the team made their way to the harbour. In many cases the first people the team approached did not know of any sites themselves but were able to point to particular individuals considered to be knowledgeable about the marine environment, such as divers, fishermen, harbourmasters or others. In most cases it was possible, through a series of conversations and/or phone calls to track down local experts within an hour or two of arrival. This proved to be one of the most productive tactics adopted for the project. In this way it was possible to visit two locations a day on average during the field trip and the amount of project time spent on transport was minimised (**Figure 8**).

In cases where meetings had been arranged prior to commencement of fieldwork, many local community members invited the SAMPHIRE team into their own homes to go over Admiralty Charts or old dive logs. In some cases divers were able to provide photographs and video of previously unrecorded wreck sites or even sketch maps (see **Appendix I**). Many of the individuals contacted during this phase have stayed in touch with the SAMPHIRE team and continued to supply data on sites in the area, resulting in much more comprehensive records of those sites.

The following details were requested where available:

- Coordinates;
- Estimated accuracy of coordinates;
- Depth;
- Most recent survey/dive/visit;
- Tidal conditions/boat traffic/other hazards in area if known;
- Photographs/video/sketch plan;
- Any other details.

In recording community reported sites consideration was given to the fact that the team might need to conduct SCUBA surveys of the site later in the project. The presence of potential hazards such as strong tidal conditions at a reported site was recorded to assist in planning of dive surveys.

In many cases site locations were described or coordinates were derived from an 'X' marked by hand on an Admiralty chart. In other cases locations were provided from a GPS reading. Accuracy was estimated either by the participant or by the SAMPHIRE team. Depth was considered to be an important detail as it could be used to narrow down the search area for a site with an inexact position. It was also clear that many of the reported sites were beyond the limits of SCUBA diving, particularly the sites reported by fishermen around Skye.



*Plate 1: Experienced recreational divers Bridie and Russell Pursey invited the SAMPHIRE team into their home in Elphin (May 9<sup>th</sup> 2013) to pore over Admiralty charts and old dive logs. The Purseys were able to provide crucial information on unrecorded sites at Badcall and Badnaban. Photo: J. McCarthy.*

The most recent sighting of a potential archaeological site was recorded for several reasons. Submerged or coastal sites are often hidden by changes in sediment levels and are also occasionally subject to destruction or removal by both natural and anthropogenic forces. Sites which had not been seen for a long time, in some cases several decades,

are more likely to be difficult to find and in some cases the exact location might have been forgotten.

Information on possible maritime archaeological sites was noted down, either on paper or directly into the project database. One of our key concerns was to focus on previously unrecorded sites and to avoid recording sites which were already well known. This was accomplished by reference to a set of Admiralty Charts or, where internet access was available through consultation to the RCAHMS online database.

The response from local community members was found to be very welcoming and after an initial explanation of the nature of the project, local residents in all the targeted locations were very generous with their knowledge and time. Although SAMPHIRE team members conducted the majority of the community engagement during traditional working hours it was also found that important information regularly came in during 'off' hours'. In this sense the project's community and research goals greatly benefited from a flexible approach, with dedicated and experienced personnel focused on results and unafraid to undertake a professional attitude, including days that frequently extended from early mornings into the evenings.



*Plate 2: The SAMPHIRE team conducting community engagement in Gairloch (11<sup>th</sup> May 2013). It was found to be highly effective to go in person to coastal communities to identify and engage directly with local people. Photo: J. McCarthy.*

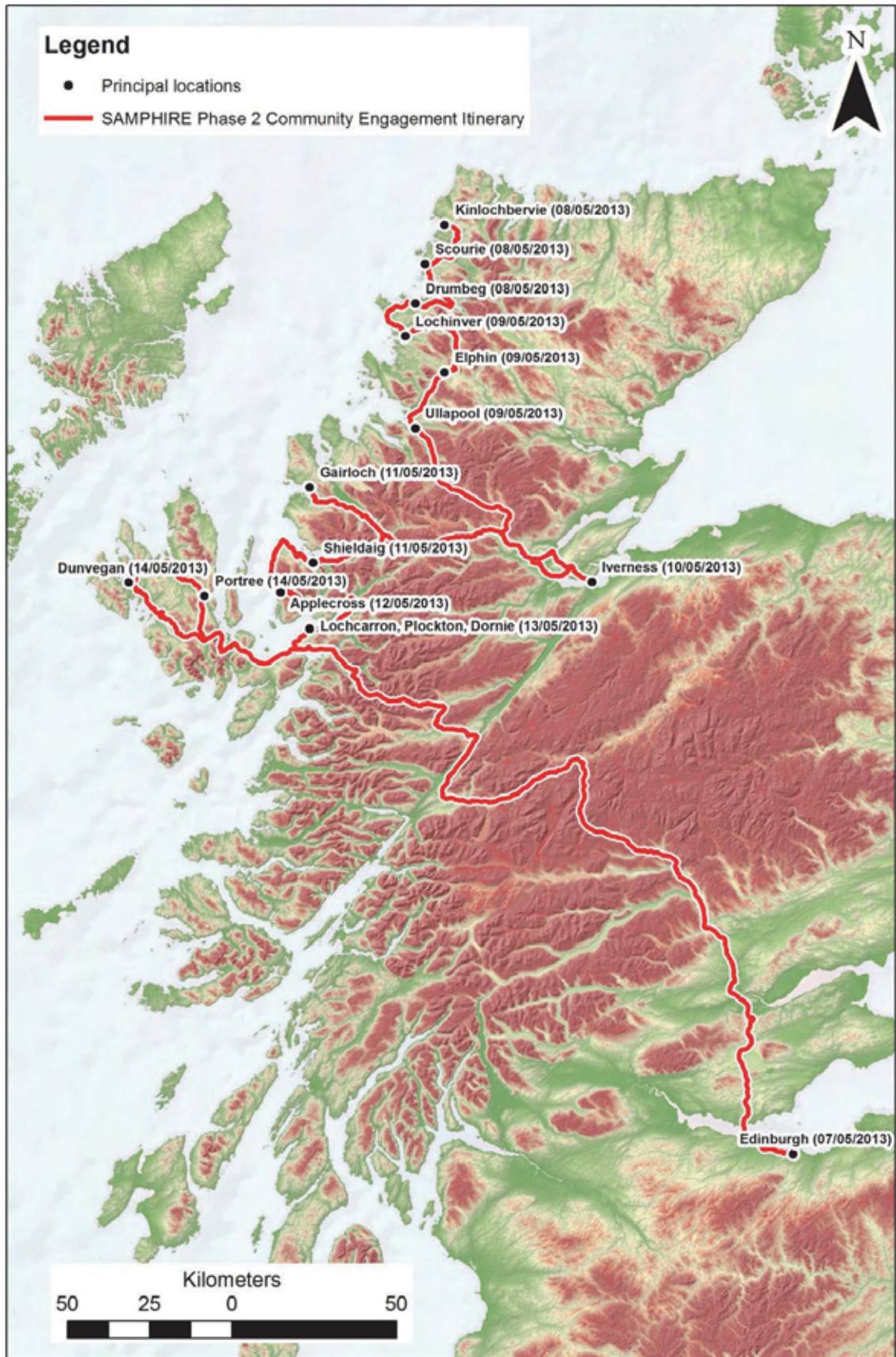


Figure 8: Phase 2: Principal community engagements locations.



*Plate 3: The SAMPHIRE presentation in Drumbeg was very well-attended thanks to promotion by local residents.  
Photo: J. Benjamin*



*Plate 4: SAMPHIRE's Dr Simon Davidson in discussion with local residents after the public lecture in Drumbeg village hall.  
Photo: J. Benjamin*

Phase 2 also included two pre-arranged lectures that were followed by lengthy discussions by engaged members of the public. The first of these was given at the Drumbeg Village Hall. A half hour talk was given on project SAMPHIRE, followed by a second talk on the Drumbeg wreck site which had been surveyed by members of the SAMPHIRE team as part of a separate project in 2012. As a result of local publicity the talk was very well attended with all chairs filled and further attendees in the back willing to stand (**Plate 3 and 4**).

Recreational divers were an important group with whom the project aimed to engage. During the community engagement fieldtrip (Phase 2), numerous meetings were held with representatives of local sub-aqua groups. In order to target larger numbers of divers a talk was arranged for the Inverness Sub-Aqua Club (BSAC: 0346) the largest recreational diving club in the Highlands. This talk was timed to coincide with the club's weekly meeting at the Kessock Lifeboat Station (**Plate 5**). The talk was also well-attended; over 30 recreational divers came out for the event (**Plate 6**). The SAMPHIRE team distributed flyers for Project SAMPHIRE and also for related projects by our colleagues at the Nautical Archaeology Society and the Society of Antiquaries of Scotland (**Plate 7**). Many of the divers presented expressed an interest in getting more involved with Project SAMPHIRE. After the talk the team stayed to chat with the divers and several leads on possible wreck sites were provided.

### **2.3 Phase 3 – Survey Fieldwork**

Phase 3 of Project SAMPHIRE was focussed on testing, or ground-truthing, the sites reported in Phase 2. The main method for testing these reports was through diver survey. The diving fieldwork was undertaken in a single block over the course of eight days. It was not possible to conduct surveys of all the reported sites due to the great distances involved and in many cases depths far beyond the limits of SCUBA diving. A dive team of four professional marine archaeologists was sent into the field to visit eight reported sites. Thanks largely to the opportunity to spend more time embedded within local communities in locations at Shieldaig, Kinlochbervie and Lochinver, this fieldwork led to further reports and ultimately 15 sites were visited or surveyed during this phase (**Figure 11**).





Plate 5: The SAMPHIRE team arrive at the Kessock Lifeboat Station, situated under Kessock Bridge. The talk was scheduled on the 10<sup>th</sup> May 2013, to take place directly after the club's weekly meeting. Photo: J. McCarthy.



Plate 6: Dr Simon Davidson explains the purpose of Project SAMPHIRE to members of the Inverness Sub-Aqua Club. The talk was well attended with over 30 recreational divers present. Photo: J. McCarthy.



Plate 7: Promoting the wider resource. Throughout Project SAMPHIRE we have highlighted the existence of other key heritage organisations such as the Nautical Archaeology Society and Archaeology Scotland. Photo: J. McCarthy.

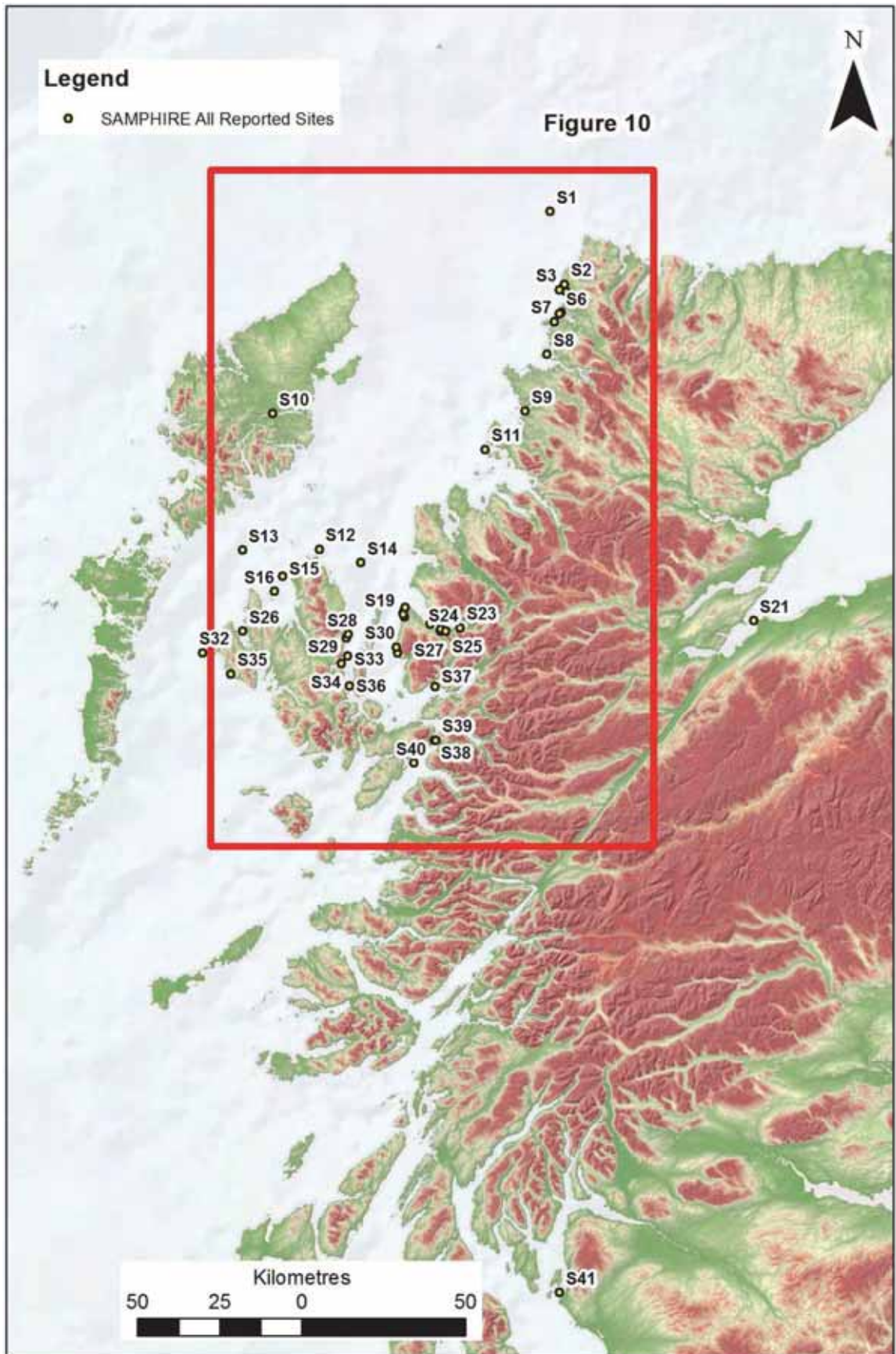


Figure 9: Community-reported marine heritage sites targeted as part of the 2013 SAMPHIRE fieldwork.

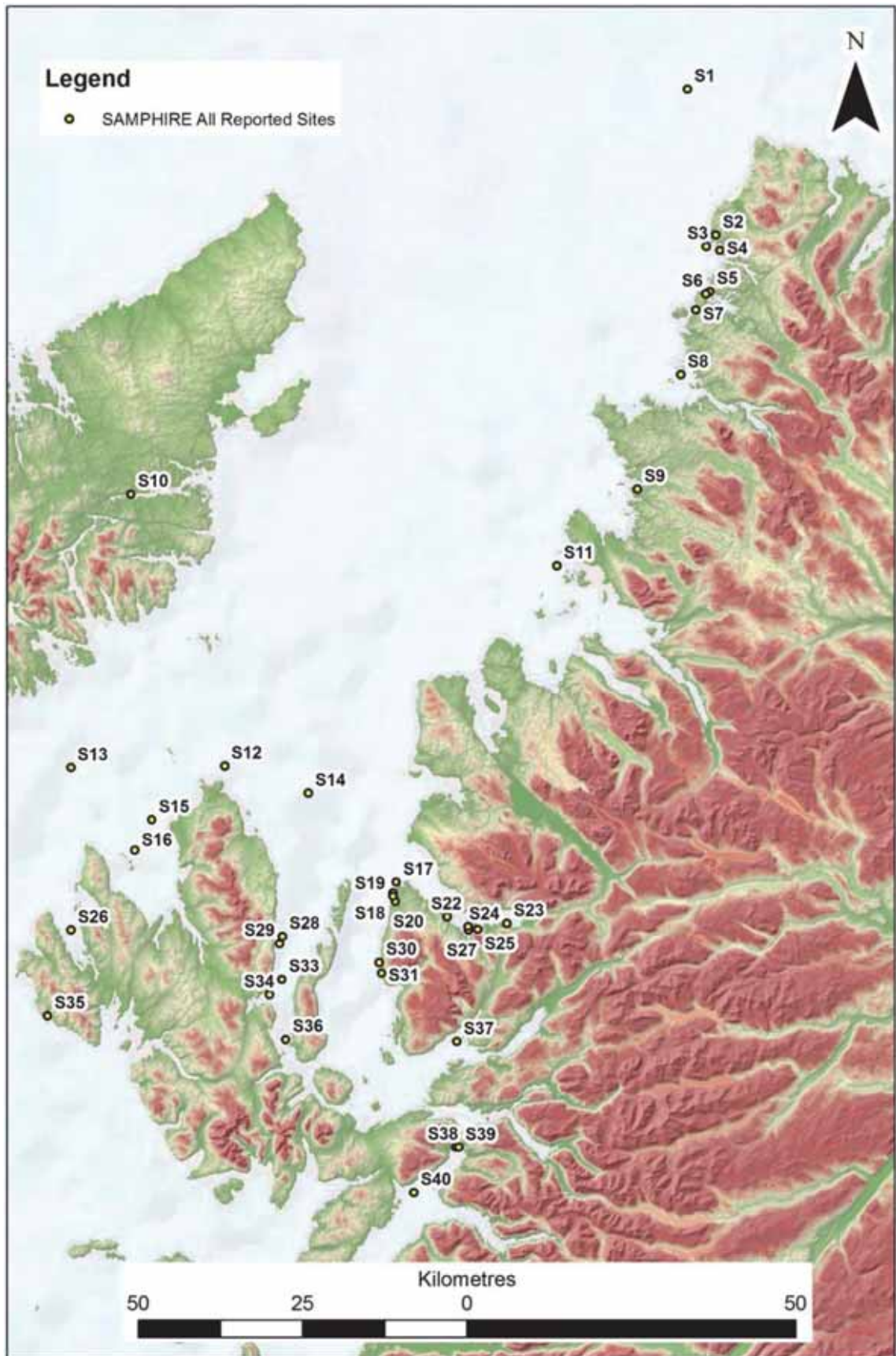


Figure 10: Community-reported marine heritage sites targeted as part of the 2013 SAMPHIRE fieldwork.

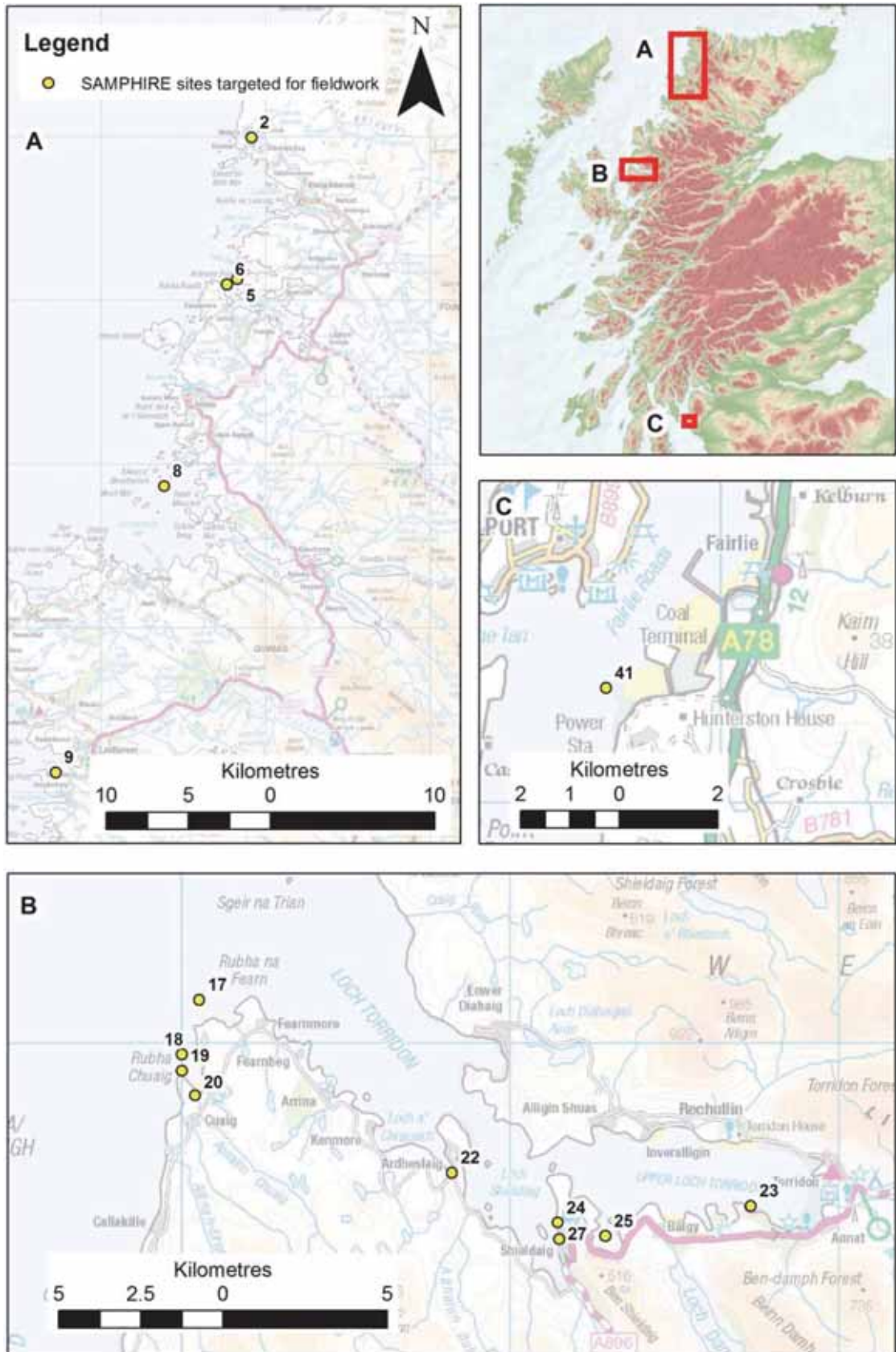


Figure 11: Community-reported marine heritage sites visited/surveyed as part of the 2013 SAMPHIRE Phase 3 fieldwork.

In order to maximise the involvement of local community members, invitations to participate in the Phase 3 fieldwork were extended for every site, particularly to those who had reported the site. The dates of the Phase 3 surveys were discussed with community participation in mind and one of the successes of SAMPHIRE was the involvement of community members in every survey undertaken during Phase 3. In some cases it was even possible to include community volunteers within the dive team. Full details of the results of the Phase 3 fieldwork are included in **Appendix I**.

In addition an aerial survey was undertaken of a complex series of intertidal features at Hunterston Sands. This was undertaken by Dr Jonathan Benjamin. The aerial survey was followed up by a terrestrial intertidal survey undertaken by a SAMPHIRE team including Dr Alex Hale of RCAHMS and Dr Andrew Bicket of WA Coastal & Marine. The remains at the site, which include a possible harbour, lie close to the Mean Low Water Springs mark, meaning that the survey had to be timed carefully in order to see all of the features exposed. Despite a very early start we were fortunate to be joined at this anti-social hour by local historian and guide Isabel Garrett of the Friends of Portencross Castle and local amateur archaeologists Michael and Catherine Scott; fonts of knowledge about this and other local sites (**Plate 8**).



*Plate 8: The SAMPHIRE survey team at Hunterston. The team was joined on the survey by local historian and guide Isabel Garrett of the Friends of Portencross Castle and local amateur archaeologists Michael and Catherine Scott; fonts of knowledge about this and other local sites. Photo: W. Wyeth.*

### 3 RESULTS AND FUTURE DIRECTION

The 2013 programme of work undertaken for Project SAMPHIRE has been a success. A total of 41 archaeological sites have been reported to the SAMPHIRE project team over the summer by local community members. Of these, 15 locations were targeted in the fieldwork phase. All reported and surveyed sites are described in detail in **Appendix I: Gazetteer of Reported Sites** at the end of this document.

Of the 41 reported sites, 30 have never been archaeologically recorded in any way. The remaining 11 all have corresponding entries in the RCAHMS National Database. In most cases these existing entries describe unlocated ship losses, for which Project SAMPHIRE can now provide accurate coordinates and details of actual wreck sites. There are also a number of wrecks and other sites which we have been given details of but which are not included here for various reasons and which we hope to investigate more fully in the future.

In other cases community involvement has allowed us to enhance our knowledge of sites which have been known about for a long time, such as Murchadh Breac and the harbour at Hunterston. In many cases the reported sites were of a type which would have been difficult or impossible to find using a sonar survey. The project also recorded a significant amount of historical detail from local community sources which might otherwise have been lost, in particular the data gathered from the generation born in the first half of the 20<sup>th</sup> Century (some of whom had accounts of sites from parents, or grandparents extending back even further). As an example, one of our most informative participants, Shieldaig-based participant Robert Gordon passed on one such description, recounted by his father, related to the cannon the team recorded on the main street of the village (see **S27** in **Appendix I**). Mr. Gordon pointed out that the traditional oral histories of the Highlands were being lost and that the recording of this story would ensure its preservation.

SAMPHIRE has also led to direct financial benefit for the coastal communities involved in the study. The majority of the project expenditure on services and consumables was spent within the coastal communities we visited. Local boat charter and accommodation in particular accounted for a significant part of the project budget. The discovery and publication of previously unknown wreck sites can attract recreational divers to an area and this has been shown to have financial benefits. For example the data collated in 2007 estimated that 25,000 divers visited the Scottish Borders annually, contributing £3.7 million to the local economy annually (Scottish Enterprise Borders 2007). One of the SAMPHIRE project participants, Matt Baron of Dornie Divers, informed the team that he

had been actively looking for wrecks around Kintail, Lochalsh and surrounding areas to attract more business into the local area and that he hoped the project would assist him in this aim.

Perhaps the most valuable outcome of SAMPHIRE 2013 has been the building of links and trust between professional archaeologists and coastal communities. This is difficult to quantify but the team has received a huge amount of input from community members who have become more engaged with their local heritage and it is clear that SAMPHIRE is building momentum. The project website has been updated on a regular basis throughout each phase of the project with 38 posts (**Figure 12**) and over 3,000 views as of the 10/1/2013. Extensive use was also made of social media, in particular Twitter and Facebook and LinkedIn. Many members of the public and participants have contacted us through email or through the website to express their appreciation for the project. Although anecdotal, a few examples of unsolicited correspondence are listed below which demonstrate actual relationships forged and the project's actual impact on individuals involved.

*“Just an email to say thank you for all the wonderful environmental & community work that you all do. I'd heard of Samphire but only seen your wonderful website today via Crown Estates” (Terry Oliver, website form submission 17/05/2013)*

*“I for instance, due to the interest in the maritime history of wrecks in this area have now compiled a list of one-time fishing boats of the area, some of them I can remember, there may be some photos of a few, I have yet to enquire on that. This again is an important aspect of the historical background of these communities, their origin and existence was dependent on fishing which sadly no longer exists” (Robert Gordon, email 15/09/2013)*

*“Just to say thanks for adding a new dimension to our UK diving – we usually divide our scuba time between exploring new (to us) dive sites and re-visiting favourites, but invariably with an eye to the flora and fauna.... We will be sure to check the SAMPHIRE site and your team's future investigations.” (Derek Dillon, email 30/08/2013)*

The SAMPHIRE team aim to continue the project for a further two years, following a similar phased approach each year and have every hope that each year will produce more and better results thanks to the enthusiastic response of local coastal communities.

## Gairloch – 11th May 2013

Posted on [May 13, 2013](#) by [WA\\_C&M](#)

Today the team have been in Gairloch, meeting the local maritime community. We first stopped on at the local [glass-bottom boat operators](#) who were very helpful and wrote up a list of the local scallop divers and skippers for us to contact. We then dropped in to the [Gairloch Marine Wildlife Centre](#) and spoke to Ian French, a long time resident and expert on marine life. He is a font of knowledge on the local area and passed us lots of useful info and contacts on heritage in the area. Finally we spoke to some of the local fishermen who very kindly invited us on to their boats. A fantastic first stop for the day – next stop [Gairloch Heritage Museum!](#)



- A busy start to the day in Gairloch, the glass-bottom boat, the Gairloch Marine Wildlife Centre and meeting with local fishermen.

Our second stop in Gairloch was the spectacular local [Heritage Museum](#). We met retired local fisherman Derek Roxborough who was in the museum for the day demonstrating how to make and repair fishing gear. He gave us an impromptu tour of the boats in the museum's collections and gave us a first-hand account of their use and subsequent preservation. We picked up some exciting leads on unreported marine archaeology sites which we hope to chase up later in this trip. Watch this space!



- The SAMPHIRE team learning a few things about the local fishing industry at the Gairloch Heritage Museum.

Posted in [News](#) | Tagged [archaeology](#), [community](#), [Gairloch](#), [heritage](#), [local knowledge](#), [maritime Scotland](#), [west coast](#)

Figure 12: A typical blog entry on the SAMPHIRE website, one of 38 published during the 2013 season.



## 4 REFERENCES

Benajmin, J., Bicket, A., Anderson, D. and Hale, A. (2014) 'A Multidisciplinary Approach to Researching the Intertidal and Marine Archaeology in the Outer Hebrides, Scotland', *Journal of Island and Coastal Archaeology* (in press).

English Heritage (2012) *Introductions to Heritage Assets: Ships and Boats: Prehistory to 1840*, English Heritage.

Historic Scotland and BEFS (2009) *Towards a Strategy for Scotland's Marine Historic Environment*, Historic Scotland.

JNAPC (2008) *Underwater Finds: Guidance for Divers*, JNAPC.

Land Use Consultants (2007) *A Review of Marine and Coastal Recreation*. SNH Commissioned Report No.247 (ROAME No. F05AA608).

McCarthy, J. (2011) *Scottish Marine Historic Environment Data Audit: Sources for the enhancement of the Coastal and Marine Historic Environment Record*. Report for Historic Scotland. WA Ref 76680.01

Rixson, D. (1998) *The West Highland Galley*, Edinburgh, Birlinn.

Scott, G. (2011) *Shipwreck Heritage of Shetland and the Fair Isle - Desk-Based Assessment: Archaeological Report*. Report for Historic Scotland. WA Ref 53111.02q-7

Scottish Enterprise Borders (2007) *Diving on the East Coast of the Scottish Borders*, Scottish Enterprise Borders, Tourism Resources Company & EKOS Ltd., May 2007.

## **APPENDIX I**

### **SAMPHIRE (2013) GAZZETEER**

The following pages include a description of the sites reported to the SAMPHIRE team, including those targeted for fieldwork. There are also a number of sites which have not been included here for various reasons such as incomplete data or lack of location. These sites will be investigated further where possible.

**SAMPHIRE ID: 1**

**Classification:** FINDSPOT, ANCHOR

**Site Name:** Unknown: Atlantic

**Canmore ID:** 101894

**Coordinates:** 214812, 982176

**Accuracy:** 500m

**Description:**

This is the approximate findspot of a large British anchor, dating to before 1812 (position based on that of the *Manipur*). The anchor was accidentally recovered in the mid-1990s during dredging by the *Sparkling Star*, a Kinlochbervie-based fishing boat. The anchor was recovered near the wreck of the *Manipur*, a well-known local wreck and fishing spot known by locals as the copper wreck. The *Manipur* (Canmore ID 101894 Site Number NC18SW 8003) is a much more recent wreck (sunk in 1940) and is clearly unrelated to this anchor although the anchor was reportedly dredged from a location immediately adjacent to the *Manipur*. The findspot is very isolated and without navigational hazards so it seems to be entirely coincidental that wreck material of two very different dates should be recovered in such close proximity.



*Plate A1: The anchor was first reported to the SAMPHIRE team by a recreational diver who had seen it outside a cottage in Balchrick (© WA Coastal & Marine 2013).*

The anchor now lies in the garden of a house at Balchrick. It was spotted at this location by a recreational diver, Derek Dillon, who reported it to Wessex Archaeology marine archaeologists who subsequently called to his home to discuss another site in Loch Laxford. This visit was undertaken as part of the outreach phase of Project SAMPHIRE in May 2013. Initial investigations were undertaken by calling some of our contacts in the area, eventually speaking with Michael Montgomerie, who served as mate on the *Sparkling Star* at the time of recovery. During the subsequent fieldwork phase in August of 2013 the SAMPHIRE team called to the house in Balchrick where the anchor is now kept and spoke to the current owner, Hywell Davies. Mr Davies recounted the story of the anchor in a video interview. He is originally from Wales and purchased a holiday home called Sandy Gunn's at Balchrick in the early 1970s. In the 1990s he was given the

anchor by his friend Al, who worked as a fisherman on the *Sparkling Star*. The anchor was initially landed on the pier at Kinlochbervie and was then transported to Balchrack in a coal lorry.



Plate A2: Balchrack resident Hywell Davies describes the discovery of the 18th century anchor to the SAMPHIRE team (© WA Coastal & Marine 2013).

He also passed on copies of correspondence with the National Maritime Museum, dated 16<sup>th</sup> April 1997. The museum described the anchor as an Old Admiralty Longshanks Anchor of a type in use until the early 18<sup>th</sup> century. The letter states that this type of anchor:

'held well but weakness at the junction of the arms and shank resulted in breakage there, the drop hammer used in welding often failed to expel air bubbles. As a result a number of anchors were returned to Admiralty Dockyards for repairs during the period... It is unfortunately not possible to relate an anchor to particular ship or manufacturer - as well as the Admiralty Dockyards a number of small forges produced anchors'.

A full set of measurements were made on the anchor by SAMPHIRE archaeologists and a photogrammetric survey was carried out. The photogrammetric survey revealed a slight curve to the shank of the anchor and also highlighted damage to one of the flukes, one side of which had been bent inwards. It is not known whether this damage occurred before or during recovery by the dredger. No attempt to conserve or paint the anchor had been made at the time of the survey and it appeared to be in a state of slow decay. The following form has been taken from the Big Anchor project.



Plate A3: The SAMPHIRE team undertook a photogrammetric survey of the Balchrack anchor (© WA Coastal & Marine 2013).

Anchor type: Long shank  
Period: 16 - 18th century  
Certainty: Probable  
Length of shank: 3 m  
Maximum width at top of shank: 14 cm  
Maximum width at bottom of shank: 14 cm  
Amplitude of the arms: 1.82 m  
Fluke width: 45 cm  
Fluke length: 61 cm  
Diameter of the ring: 47 cm  
Diameter of the eye of the ring: 44 cm  
Width or thickness of the ring: 1.5 cm

See also the entry below (**S2**) for the current site location at Balchrack.

**SAMPHIRE ID: 2**

**Classification:** ANCHOR

**Site Name:** Anchor: Balchrack

**Canmore ID:** None

**Coordinates:** 219096, 959958

**Accuracy:** 5m

**Description:**

These coordinates are for the current location of the Balchrack 18<sup>th</sup> century anchor. See above for the anchor findspot (**S1**) and full details.

**SAMPHIRE ID: 3**

**Classification:** FINDSPOT: PIN

**Site Name:** Unknown: Eilean an Ròin

**Canmore ID:** 220937

**Coordinates:** 217674, 958242

**Accuracy:** 5m

**Description:**

A possible wreck site at Eilean an Ròin was reported to the SAMPHIRE project by email on the 19/08/2013 by recreational divers Derek and Kay Dillon, who have reported a number of sites previously. They described the discovery of copper bolts in a series of emails to the SAMPHIRE team and also provided a set of photographs of the artefacts in situ on the seabed and of some of the bolts which were recovered.



*Plate A4: A photograph of the site location, taken by Mr. Dillon at the time of discovery*

Mr. Dillon stated that he intended to report his finds to the Receiver of Wreck and that he could also provide more photographs of the site, including one taken before the removal of any material. The SAMPHIRE team requested these and further details including depth and coordinates, all of which were subsequently provided. The coordinates provided were estimated to be accurate to within 5 metres and place the findspot within southern part of the gully between Eilean an Ròin Mor and Eilean an Ròin Beag. Further correspondence from Mr. Dillon (22/08/2013) stated that another diver, George Brown of the Highland Council, had also seen pins in this area but in the northern part of the gully.

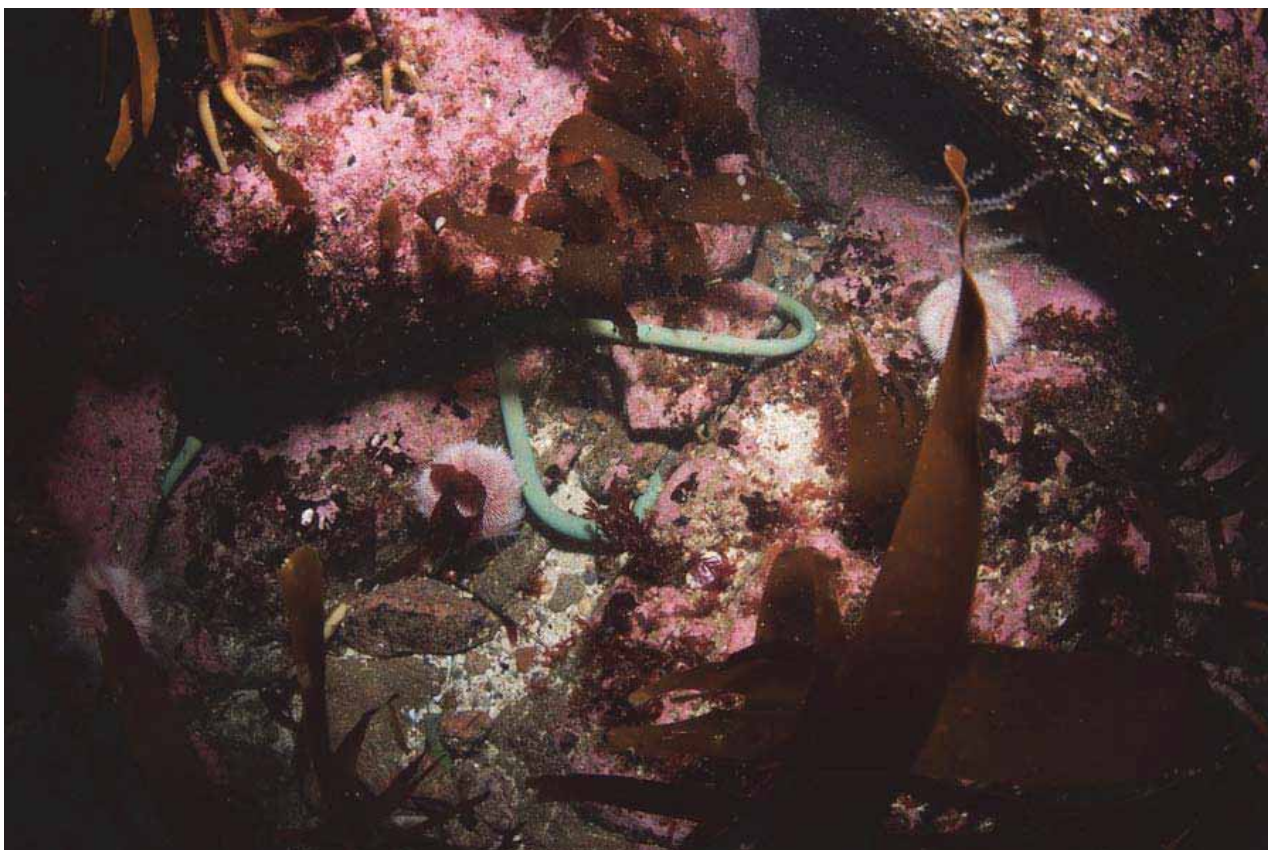


Plate A5: A photograph of the pins as found on the seabed. This image was provided to the SAMPHIRE team by Mr. Dillon.

Extract of email from Derek Dillon dated 20/08/2013

*"We almost never find wreckage on our dives, so you can imagine our surprise at finding a number of copper pins (nails?) of various lengths on a dive to recover our stuck grapnel anchor in a gully at Eilean an Ròin (the big island a couple of miles north of Loch Inchar). The largest is 750mm long by 23mm diameter... we picked up three. There are a two or three left in situ and I took a picture before moving anything. I can provide more detail should this prove to be of interest."*

Extract of email from Derek Dillon 21/08/2013

*"The pins I lifted were the lower bent one, the one at the lower edge of the image and one not in the frame, but less than a metre away. The "gully" is actually the channel between Eilean an Ròin Mor and Eilean an Ròin Beag (big and small respectively) – we were at the south side gully. One of the photos (taken from directly over the area in question) shows the rock walls to the north and west. This gully is not navigable, being very narrow and the rocks only just covered at high tide."*

*The dimensions of the pins are:*

- 1) 260mm long X 26mm diameter.*
- 2) 470mm X 20 – 23mm.*
- 3) 760mm X 22 – 24mm.*

*I could discern no deliberate markings on any of them.*

*We were diving on Tuesday 13th August and the depth was 3 to 5 metres in the area of the pins. There is never any current at this site, at any time. It is exposed to the south only. We have dived here many times, but never so shallow, hence the find. The seabed here is best explained by the photo – boulders and thick kelp, as you would expect from*

*the location. We continued to search the immediate area for 40 minutes, but found no other artefacts, save a rubber glove and a yellow welly boot!"*



*Plate A6: A detail of the head of one of the copper pins.*

The presence of copper pins suggests that there is likely to be a wreck of a wooden vessel somewhere in this vicinity. There are two unlocated recorded losses in the RCAHMS database in this area, the *Mersy*, a wooden schooner of 188 tons built in 1839 and lost in 1878 (Canmore ID 295107) and the *Gem*, also a wooden schooner, of 60 tons built in 1852 and lost in 1874 (Canmore ID 265200). Copper bolts were used below the water line in 19<sup>th</sup> century wooden hulled ships but the diameter of the bolts suggests they may be from a larger vessel than either of these.



**SAMPHIRE ID: 4**  
**Classification:** ANCHOR  
**Site Name:** Anchor: Na Cluasnadh  
**Canmore ID:** None  
**Coordinates:** 219762, 957606  
**Accuracy:** 50m



*Plate A7: The SAMPHIRE team recording the reported location of a possible 18th century anchor in the home of Kinlochbervie skipper Jimmy MacIntosh (© WA Coastal & Marine 2013).*

**Description:**

A possible 18<sup>th</sup> century anchor reported by Jimmy MacIntosh, skipper of the MV *Nimrod*, based at Kinlochbervie. Mr. MacIntosh was interviewed in his home and in the Kinlochbervie Hotel by the SAMPHIRE team on the 8<sup>th</sup> May 2013 during the community outreach phase. He reported to the Project SAMPHIRE team that a large arrow-headed anchor had been seen at this location by divers diving from his boat around 1998. The anchor was located at the foot of a drying rock to the northwest of an island named 'Na Cluasnadh', outside the entrance to Loch Clash.

Unfortunately Mr. MacIntosh did not have contact details for the divers. The position given here is derived from a paper Admiralty Chart marked by Mr. MacIntosh. The depth of the anchor is thought to be around 60 feet/18 metres. The site is sheltered from the northeast and the depth suggests the anchor lies below the line of the kelp on clean sand. Mr. MacIntosh stated that an unsuccessful attempt to find the anchor was later made by the Caithness dive club although he could not give a date for this attempt.

**SAMPHIRE ID: 5**

**Classification: WRECK**

**Site Name:** Unknown: Loch Laxford

**Canmore ID:** None

**Coordinates:** 218250, 951330

**Accuracy:** 30m



*Plate A8: Photographs of various artefacts encountered at the Loch Laxford wreck site, provided by Derek and Kay Dillon who discovered the site while undertaking recreational diving in the area and reported it to the SAMPHIRE team.*

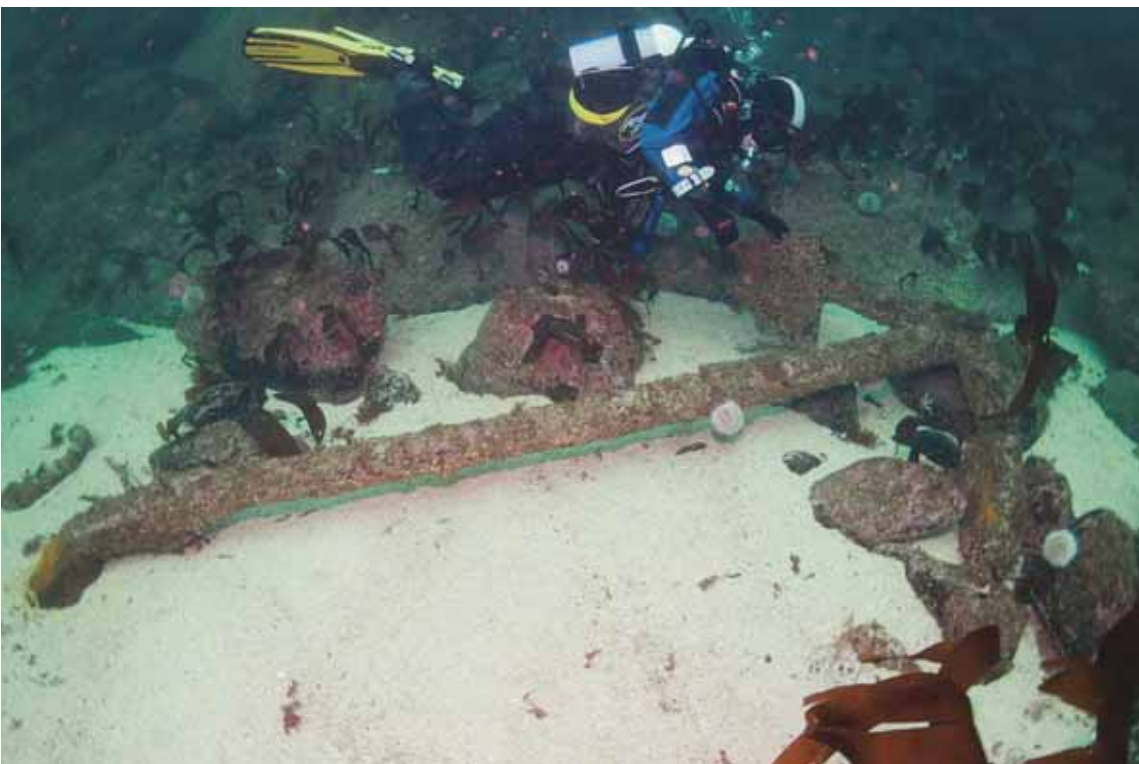
**Description:**

One of a number of wreck sites reported by recreational divers Derek and Kay Dillon. The Dillons were put in touch with the SAMPHIRE project team by Jimmy MacIntosh of Cape Wrath Charters, with whom he had discussed the site. Mr. Dillon described the site as 'a mass of timbers, a large arrowhead shaped anchor with flukes, a massive iron block of some kind and some old bottles with corks intact, lying in and around a sandy gully at a depth of approximately 20 metres'. He was able to provide an exact location for the wreck as well as a sketch plan and high quality stills and video. The SAMPHIRE team conducted several dives on the site during Phase 3 of the 2013 season, between the 30<sup>th</sup> of July and the 1<sup>st</sup> of August. The environment of the wreck described by Mr. Dillon was confirmed to be a rocky slope running southwards from a sea cliff to a clean sandy gully at approximately 20m depth. No artefacts were encountered by the SAMPHIRE dive team. It is thought that this is either due to changes in sediment levels which may have covered the remains or to the artefacts being located deeper than the maximum operating depth of the dive team which was set to 20m for Health and Safety reasons. Subsequent contact with Mr. Dillon established that he had in fact recorded a maximum depth of 24m during at least one dive on the site. In any case it is clear that there is a wreck at this location and that there are a wide variety of artefacts visible under certain conditions.



*Plate A9: Photographs of lead scuppers found at the Loch Laxford wreck site, provided by Derek and Kay Dillon.*

From the images provided by Mr. Dillon it is clear that these artefacts include timbers, a large anchor, glass bottles, lead scuppers and a variety of other copper and iron fragments of uncertain identity.



*Plate A10: Photograph of the anchor found at the Loch Laxford wreck site. Photo provided by Derek and Kay Dillon.*

The most diagnostic feature is the anchor, which appears to be an admiralty long-shank, having an acutely-angled crown and triangular flukes. This anchor appears to be of a type which pre-dates Pering's improvements of 1815 (Upham 2001, 20).

There have been few wrecks recorded as lost in Loch Laxford and these include the *Phoenix* (Canmore ID 275364) sunk in 1842, the *Helena* (Canmore ID 220938) built in 1871 and sunk in 1879 and the *Charlotte Mackenzie* (Canmore ID 296647) built in 1835 and sunk in 1848. The anchor appears to be earlier than any of these losses but may have been in use for a long time or been reused from an earlier vessel. At the time of the survey no accurate position for the *Charlotte MacKenzie* was known.

RCAHMS archaeologist George Geddes provided the SAMPHIRE team with a reference to an online document 'Excerpts from Leaves from the Logbook of a Collier Skipper' written by a Capt. James Knill (b.1823) on the website [http://www.east-durham.co.uk/seaham/colliers\\_logbook.htm](http://www.east-durham.co.uk/seaham/colliers_logbook.htm). It describes the sinking of the *Charlotte Mackenzie* in detail.

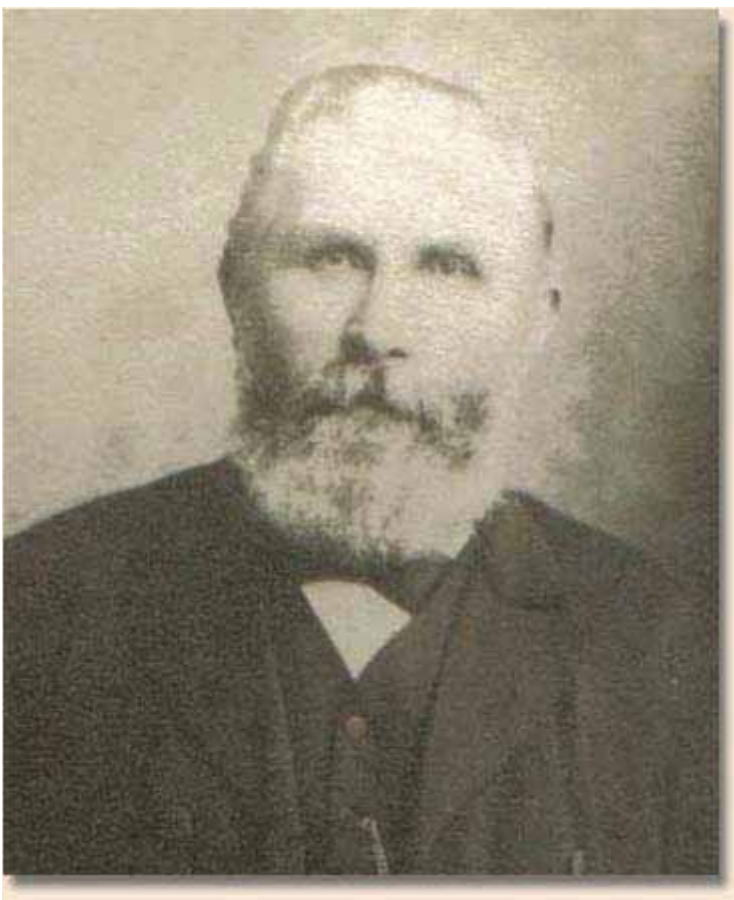


Plate A11: Capt. James Knill (reproduced from [www.East-Durham.co.uk](http://www.East-Durham.co.uk) by kind permission of David Angus)

### *My first Shipwreck*

*As I write from memory of the past fifty-five years, I beg to ask my readers to pardon the omission of days and dates, and read my narrative in its main incidents, as connected with the above headings. I was a young man when I shipped in a Berwick smack, bound from Berwick to Easedale, in the Highlands of Scotland, with a cargo of coals. Her name, "Charlotte Mackenzie." Her crew, four in number, including the captain (named Constable), and a very good double C he was. We had a very rough and stormy passage down the Scotch coast, and up the "Moray Firth," until we entered the Caledonian Canal, through which we were towed by horses on the side of the same, by*

*a rope from the ship attached to them. From thence we passed into Loch Ness, through which we had to make several tacks, sometimes almost blinded by snowstorms, although it was in the month of May - extremely cold. Eventually we arrived at Easedale, our port of discharge, after a tedious time, navigating through sounds and lochs and rocks, among which we had many a close shave. We got discharged of our coals, and loaded a cargo of slates for Berwick-on-Tweed. We sailed from Easedale through the Sound of Mull, and had a fairly good passage until we reached Cape Wrath (ominous name), where we met with very bad weather. Our captain made up his mind to try and gain an anchorage in Loch Laxford, and in doing so struck a sunken rock, and holed her bottom, slipped off the rock, and began to fill with water. We put out the boat ready to leave the ship, but seeing a small cove between two high rocks on the lee, made for it, and just in entering it sank, leaving us standing on the deck, up to our waists in the water, looking at each other in wonder and amazement at our narrow escape, proving the words true that "Safety consists not in escape from dangers of a frightful shape; an earthquake may be bid to spare the man that is strangled by a hair." we landed in our own boat, and were met by the farmers and fishermen, and conducted to a farmhouse, and were treated very kindly. After being refreshed with milk and scones, and had our clothes dried, we returned to the ship, and found her free from water. We boarded her again to get our clothes, which were all wet. My son chest was full of water, my reference Bible and books all spoiled; also, my best shore-going suit; all the provisions, except the beef, which was carried to the farmhouse. We stayed a few days with the farmer's family, consisting of wife, daughters, and sons, and cattle. Our bed for three was separated from the cattle by a wooden partition, and often during the night the cows called the watch by their lowing in the next room. Then we would give each other a dun and say "do you hear the watch called?" Well, the time came when we must leave this happy family, and their kind treatment; and, shank the distance, seventy miles to Invergorden, a rough and rugged road, with a drove of cattle and their drovers as guides, over hills and through glens, winding round the base of mountains, crossing waters, stopping at nights in a wayside shelter, appointed for travellers, shepherds, and sailors; menu, milk and scones, oat cakes (cakes), and whisky, oatmeal porridge, with plenty of good milk, of which I could take my share. In four days we arrived at our port of shipment, and walked on board the big "Caledonia". After the cattle was put on board we steamed away from Leith, calling on the way at Banff and Aberdeen for goods, passengers, and more cattle. Paddling away from the above-named city, we arrived in due time at Leith. From thence we trained it home to Berwick, not bringing poor old "Charlotte" back with us, but leaving her wreck and poor old bones in Loch Laxford, to be washed and bleached and whitened, with the black waters of the North Atlantic Ocean. Now let me ascribe a song of praise to Him "who holds the winds in His fist and the waves in the hollow of His hand":-*

*"Rendered safe by His protection,  
We shall pass the watery waste,  
Trusting to His wise direction,  
We shall gain the port at last,  
And with wonder think on toils and dangers past."*

The owner of the website, Dave Angus, was contacted and stated that, "I have no knowledge of John Willis Knill other than a hand/typewritten pre-publication copy of his book. It looks like it was printed by T. Bolton of 50 Queen Street West, Sunderland." No further reference to the publication has been found and it is unclear whether it ever reached publication.

The description of the wreck location as 'a small cove between two high rocks' does not clearly match either of the two wreck locations reported to the SAMPHIRE project, the northernmost of which (S4) is adjacent to sheer cliffs with no apparent cove, the southernmost (S5) supposedly

lying between two islands although there are some coves in the vicinity. The *Charlotte Mackenzie* is described as having a cargo of slate and the recreational divers have suggested that the southernmost wreck (S5) had some slate on it, suggesting that this northernmost site (S4) is either the *Phoenix* (Canmore ID 275364) or the *Helena* (Canmore ID 220938). The *Helena* was described as having stranded on Crow Island. The RCAHMS entry for the *Helena* states that 'Crow Island is not noted as such on the 1997 edition of the OS 1:50,000 map' and that the 'location assigned to this record is essentially tentative'. However further research for the SAMPHIRE project has found that Crow Island is annotated on the 1856 *Admiralty Chart 2503: Lochs Laxford and Inchard with Scourie Bay* (1:24, 400, surveyed 1846) and corresponds with the island now known as 'Eilean Ard'. This is some distance away from the reported wreck site and would also seem to rule out this identification, leaving only the *Phoenix*. Little is known of this loss, the only available reference being from *The Marine List*, LL, No. 8874, which states 'The *Phoenix*, from Peterhead to Liverpool, in beating up Loch Laxford 4<sup>th</sup> inst., during a gale from the West, missed stays, went on shore, and sunk, and now lies several feet below water; crew, & cargo, saved.'

**SAMPHIRE ID: 6**

**Classification:**

**Site Name:** Unknown: Loch Laxford

**Canmore ID:**

**Coordinates:**

**Accuracy:**

**Description:**

An approximate location for a second wooden wreck in Loch Laxford was supplied to the SAMPHIRE team by recreational diver Derek Dillon in early 2013. Mr. Dillon had not dived the site himself but had been told of its location. Mr. Dillon described a small area close to a drying rock -to the immediate south of Sgeir losal. It was suggested that some slate had been found at this wreck site and that it may have been a slate transport. During the 2013 diving phase of SAMPHIRE, Bruce Greig, the volunteer diver who accompanied the SAMPHIRE team stated that he had actually come across this wreck but that it had been almost 30 years earlier and he was no longer sure of the location. He gave a description of the site as the outline of a boat visible in an area of clean sand, characterised by upstanding wooden ribs or futtocks. He had come across it while scallop diving and felt that it was between two islands, either Sgeir losal and Eilean an t-Sithein or Sgeir losal and Eilean Ard. Although Mr. Greig had seen the site and Mr. Dillon had not, it was felt to be impractical to try to complete a dive survey of the entire area between the three islands in the time available and the search was focused on the much smaller area described by Derek. The seabed was found to be a mix of clear sandy gullies and rocky outcrops. Some areas of sandy seabeds were obscured by layers of mobile dead seaweed but the area to the west, south and east of the rock pointed out by Mr. Dillon was extensively surveyed over the course of several dives with no trace of archaeological features.



*Plate A12: SAMPHIRE diver John McCarthy encounters a jellyfish while surveying at the reported wreck site on 2nd August 2013 (© WA Coastal & Marine 2013).*

Given the reported presence of slate at this wreck site it is considered most likely that the wreck encountered described by Mr. Dillon and seen by Mr. Greig is the wreck of the *Charlotte Mackenzie*. However there is another possibility as it is also close to Eilean Ard, the reported wrecking site of the *Helena*. For a more detailed discussion of the reported wrecks in Loch Laxford see the confirmed wreck site (S5) at the northern entrance to the loch.

The position given for this entry is based upon the dive survey undertaken in July/August 2013 centred on 217600, 951000 with dives covering most of the area within 100 metres of that point.

**SAMPHIRE ID: 7**

**Classification:** WRECK

**Site Name:** Unknown: Sgeir nan Airbhe

**Canmore ID:** None

**Coordinates:** 216100, 948530

**Accuracy:** 75m

**Description:**

A previously unrecorded wreck was reported at this location by Bruce Greig during his participation in the diving phase of SAMPHIRE in July 2013 although no diving was undertaken at the site. Mr. Greig stated that he had not seen the wreck himself but had been told of it by an acquaintance, Willie, who worked on the ferries. The site was described as a pile of stones on the seabed in the shape of a boat, together with an anchor. Mr. Greig's acquaintance discovered this site in 1987 and it is thought to be in a depth of approximately 12 metres. Mr. Greig believed that an anchor had been recovered from the site and taken ashore - it is not clear if there was more than one anchor at the site. Mr. Greig marked a position on a chart with reference to terrestrial features for the SAMPHIRE team and estimated it was accurate to approximately within 75m. The reported location places this wreck in the middle of Port Mor bay to the south of Sgeir nan Airbhe.

**SAMPHIRE ID: 8**

**Classification:** WRECK (POSSIBLE)

**Site Name:** Unknown: Badcall

**Canmore ID:** None

**Coordinates:** redacted

**Accuracy:** 100m

**Description:**

This unconfirmed wreck site was initially reported by two divers James Forsyth and Russel . They stated that they had been told of a number of cannon on the seabed beside a small island, by a commercial scallop diver, James Clarke (Clark, Clerk) many years previously – but had since lost contact with Mr. Clarke. After being told of the site Mr. Pursey and Mr. Forsyth searched for it on a single dive but were unable to find it. The island is marked on Admiralty charts as 'Ox Rock' and is approximately 40m square. James Forsyth described the environment as being a sharply sloping rock wall meeting a sandy bottom at around 15m. When he dived the site he stated that they dropped in at the northwest and moved around to the south, keeping the rock on their shoulder. Two dives were undertaken at this site during the SAMPHIRE diving programme in 2013, in an attempt to verify this potentially important site. One dive was conducted to the west of the rock and one to the south-east. Although the environment matched that described by the divers no archaeological material was discovered. However it was not possible in the time available to conduct a complete survey around the rock and it is possible that there remains an undiscovered wreck site in this area.





Plate A13: The SAMPHIRE team visiting a scallop diver James Forsyth at his home in the village of Scourie to discuss the Badcall site on the 9th May 2013 (© WA Coastal & Marine 2013).

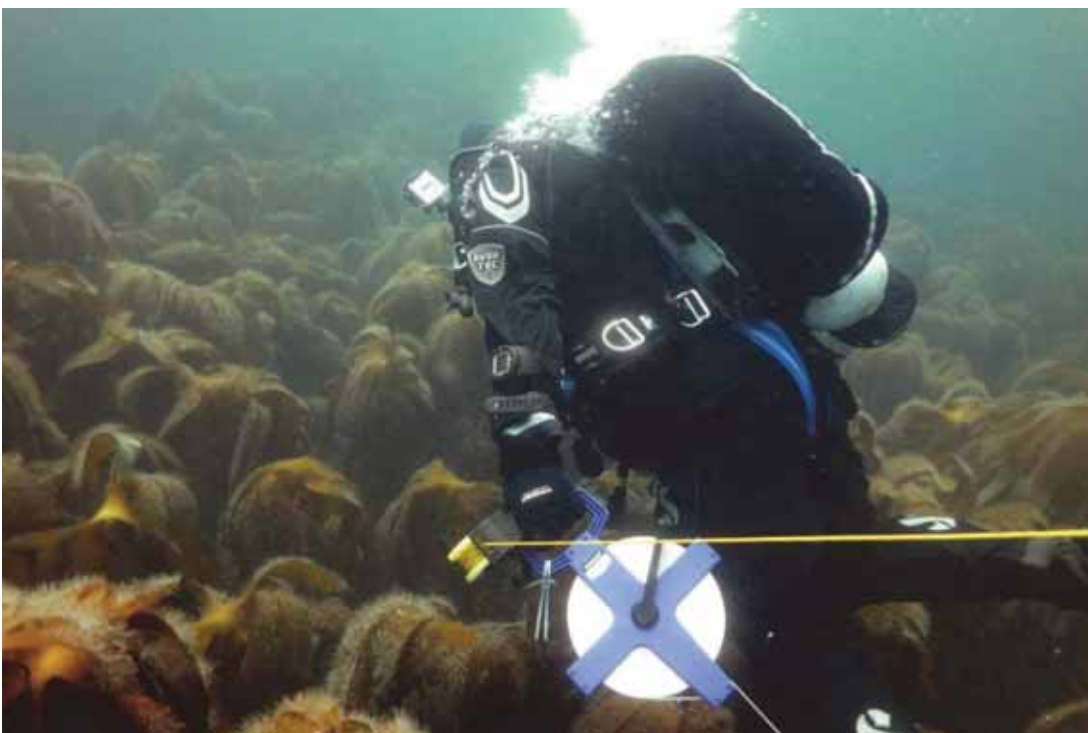


Plate A14: Volunteer diver Bruce Greig, assisting with a SAMPHIRE survey of the reported cannon site at Badcall on the 29th July 2013 (© WA Coastal & Marine 2013).

It is suggested that, rather than conducting further dives at this site the most successful approach to further investigations would be to trace the individual who discovered the site or to conduct a geophysical survey of the area. Mr. Forsyth made further attempts on behalf of the SAMPHIRE

project to trace Mr. Clarke with no success but Bruce Greig, another informant, stated that he might be able to make contact through a mutual friend.

**SAMPHIRE ID: 9**

**Classification:** WRECK (POSSIBLE)

**Site Name:** Unknown: Eilean Bad nam Bán

**Canmore ID:** None

**Coordinates:** 207200, 921220

**Accuracy:** 20m

**Description:**

This possible wreck site was reported to the SAMPHIRE team by a Lochinver-based retired diver and charter boat operator Jimmy Crooks, during community engagement at Lochinver Harbour in May 2013. Mr. Crooks described a stone spread on the seabed in shape of boat at around 10m depth at Badnaban, a small bay to the south of Lochinver. He had discovered the site many years earlier during scallop diving in the bay, which is a well-known sheltered area with a small gravel cove. He described the stones as being arranged in a clear double-ended boat outline with a total length of 10-15 metres. He had brought many recreational divers there during his time operating a dive charter. He described the site as lying off the south-east corner of Eilean Bad Nam Ban. No wreck is marked at this location on Admiralty charts or in the RCAHMS database.



*Plate A15: Local diver Jimmy Crooks describes a wreck site with the SAMPHIRE team during community engagement in Lochinver on the 9th May 2013 (© WA Coastal & Marine 2013).*

The SAMPHIRE team visited the site as part of the project's diving phase on the 28<sup>th</sup> July 2013, accompanied by Mr. Crooks.



Plate A16: The SAMPHIRE team were fortunate to have Mr. Crooks accompany them to Badnaban to point out the wreck site on the 28th July 2013 (© WA Coastal & Marine 2013).

No dive boat was available in this location and it was hoped to carry out diving from the shore. Unfortunately the conditions were assessed by the dive supervisor as being unsuitable for diving as the nearest shore access to the island was over 200 metres distant. As a result it was decided to conduct the survey through snorkelling. The probable location of the anomaly was established from the surface and a video survey was then undertaken using a remotely operated camera. A large spread of stones was found in the position described by Mr. Crooks and with the same approximate shape and dimensions. The entire feature was covered with low kelp making it impossible to establish the exact nature of the site. An accurate position was taken and the site has been recorded as a possible wreck.

The Canmore entry for the village of Badnaban (89525) includes an image of a croft from 1886 with a wooden boat alongside, demonstrating the historic use of the site as a harbour. There are a number of recorded losses around Lochinver but none of these can be strongly connected to this site.



Plate A17: A photographic survey of the reported ballast spread at the base of Eilean Bad nam Bán on the 28th July 2013 (© WA Coastal & Marine 2013).

**SAMPHIRE ID:** 10

**Classification:** TRAWLER (20TH CENTURY)

**Site Name:** Muirneag

**Canmore ID:** None

**Coordinates:** 130169, 920420

**Accuracy:** 25m

**Description:**

The remains of a wreck were reported at this location to the SAMPHIRE team via email on the 22/08/2013. A spread of wreckage was photographed adjacent to a slipway on the north shore of Loch Erisort by Glenn McIntosh, a resident of Australia with ties to the area. Mr. McIntosh visited the site in 2009. He had created a website with extensive details on the history of the vessel<sup>1</sup>. Images provided by Mr. McIntosh show a donkey boiler and various other artefacts.

This vessel is significant as 'the last British herring drifter to fish under sail power alone'. Six figure NGR coordinates were also provided by Mr. McIntosh and a detailed description of the boat's history was given on his website:

*"SY 486 Muirneag*

*Launched May 1903 for Alexander "Sandy" MacLeod, Knock Point, Stornoway.  
Length 82', keel 61', beam 21', depth 12'.*

*The Muirneag was among the last of the Zulus built by McIntosh of Portessie & Ianstown. They had been building fishing boats here since around 1830, the previous twenty years since 1883 being spent in perfecting the Zulu & acquiring an excellent reputation for the quality of their craft. Messrs' McIntosh had already launched the first Buckie built Steam Drifter, BF 398 Frigate Bird in 1900, but in 1903 were still building mainly Zulus, six being launched in 1903, each taking about eight weeks to build, & costing £500 including spars. A further four were launched in 1904 before they presumably adapted their yards to the production of Steam Drifters. When Alexander "Sandy" MacLeod ordered his Muirneag ("Darling Girl" in Gaelic & also the name of a prominent hill near Stornoway) in 1903, it was his second McIntosh built Zulu - the first being the SY 1108 Caberfeidh, being launched from the Portessie yard by John*

<sup>1</sup> <http://glennmci.brinkster.net/mng/mng.html> Accessed 28/08/2012

McIntosh in January 1896. "Sandy" had by 1903, already a reputation as a fine fisherman & mariner, his *Caberfeidh* being the first Stornoway Zulu to go the English herring fishing. This reputation was enhanced as he fished *Muirneag* continuously up to the outbreak of WW2, refusing to convert her to engine power & thus becoming one of the last links to the past, being the last British herring drifter to fish under sail power alone.

#### *MacLeod the Hard Driver*

*MacLeod* drove all his boats hard, especially the *Muirneag*. She could stand being hard pressed. As he once said - "I never worry about the *Muirneag*'s hull, only the spars & gear". *Muirneag* was apparently triumphant in many races home with the Scottish fleet from Yarmouth, as well as races back to Scottish ports from the fishing grounds. In consequence he did damage much gear, & in 1909, when running for Fraserburgh, wind abaft, the mizzen was snapped off above the crutch, driving her so hard that day, he was leaving the Steam Drifters behind. Another time while running to Wick from the Stronsay fishing grounds again with wind abaft, foresail & mizzen set & two men on the wheel, *Muirneag* logged 22 1/4 miles in 2 hours.

#### *The End of the Muirneag*

At the age of eighty in 1945 he took her to sea for a night to say farewell, after 42 years as her sole owner. *Muirneag* was sold at public auction in Stornoway in 1947 for £50 & was dismantled to provide fence posts. A Stornoway dental mechanic, George MacLeod, took her measurements whilst she was being dismantled, & these became the basis for the plans drawn by renowned maritime expert & author Harold Underhill, of Glasgow, & the reference for models such as those by Gordon Williams & David P. H. Watson OBE, Connecticut, USA, on display at the Scottish Fisheries Museum at Anstruther. "

The website also includes a history of the early career of Alexander McLeod and text from his obituary from the Stornoway Gazette of March 1954. There are also numerous photographs of the vessel while it was still in use and historical images of the wreck on the shoreline. Models of the boat are now held in the Scottish Fisheries Museum and the National Maritime Museum.

Mr. McIntosh also stated that 'behind the B&B at 8 Ballalan there is a shed full of 'junk'. In this shed - if it hasn't been cleaned out by the owners of the B&B - is possibly/probably some important 'physical remains' of the *Muirneag*.'

The coordinates given for this entry relate to the physical remains of the vessel on the beach at Loch Erisort, including the donkey boiler. At present there is no record at this location or of any vessel by this name in the RCAHMS database.

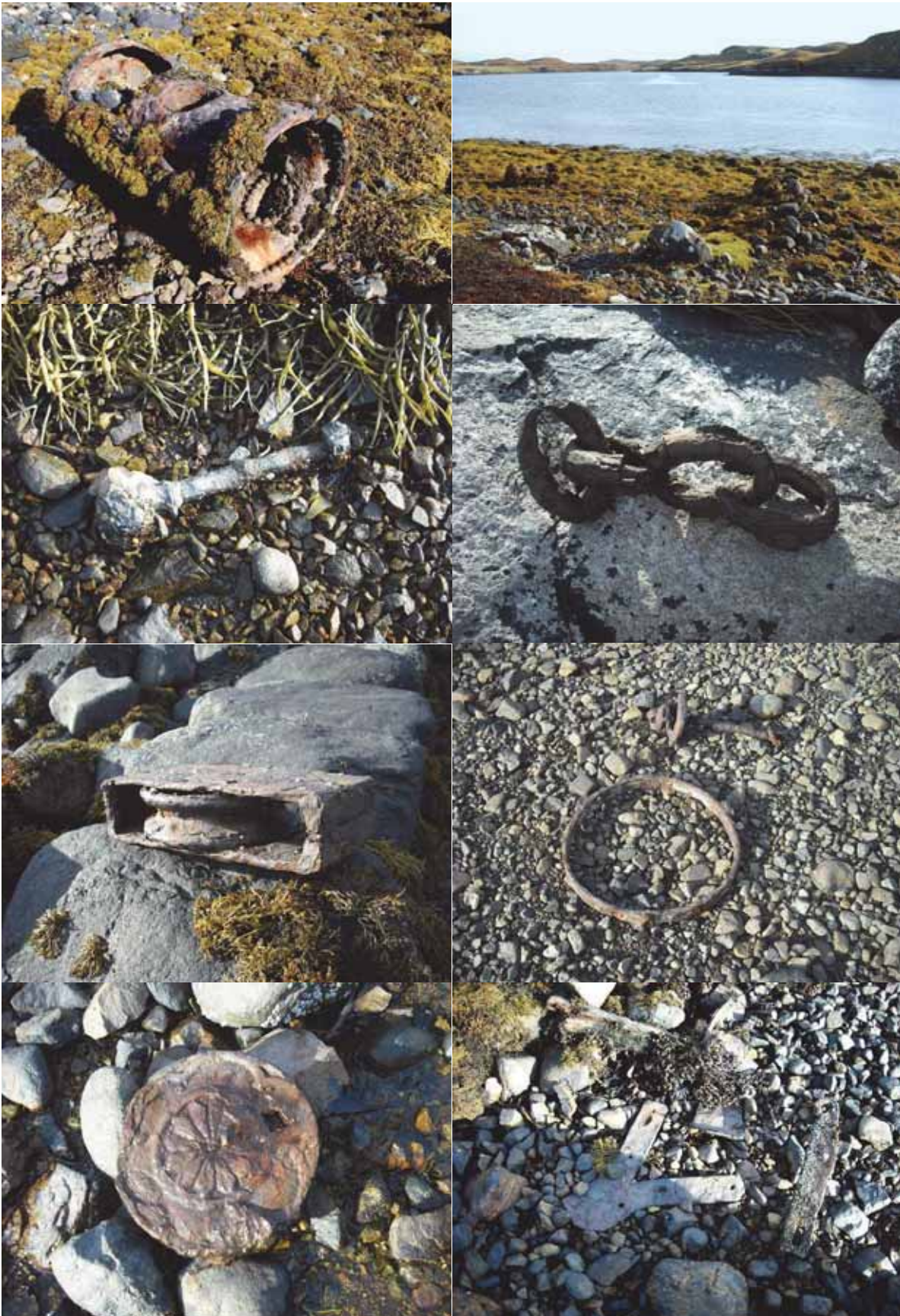


Plate A18: Images of the Muirneag wreck site provided to the SAMPHIRE project by Mr. McIntosh.

**SAMPHIRE ID: 11**

**Classification:** TRAWLER (20TH CENTURY)

**Site Name:** Unknown: Glas-leac Mór

**Canmore ID:** None

**Coordinates:** 194963, 909536

**Accuracy:** 100m

**Description:**

A previously unrecorded wreck was reported at this location by Ullapool resident and dive charter operator Andy Holbrow during a SAMPHIRE community engagement visit to Ullapool on the 9<sup>th</sup> May 2013.



Plate A19: A wreck at Glas-leac Mór was reported to the SAMPHIRE team by scallop diver and charter boat operator Andy Holbrow during a community engagement session undertaken on Mr. Holbrow's boat in Ullapool harbour (© WA Coastal & Marine 2013).

Mr. Holbrow stated that he had discovered a wreck around 1998 while scallop diving at Glas-leac Mór at a depth of approximately 30m. He believed it to be a steam drifter; possibly of a locally remembered wreck that hit the island to north (no date was given). He reported that the remains lie in the middle of a heavy scallop dredging ground and have been somewhat dispersed. He also reported that a variety of artefacts were seen on the site including remains of a brass deck light, a deck plate for mast support and brass pipework. He believed that the wreck had a wooden hull and dated to around 1900 although there are no timbers still visible. The wreck is positioned on flat sandy ground at the base of a boulder slope and is possible to dive at any tide.

No wreck is recorded at this location in Canmore or on Admiralty charts.

**SAMPHIRE ID:** 12

**Classification:** CRAFT

**Site Name:** Unknown: Eilean Trodday

**Canmore ID:** None

**Coordinates:** 144400, 879000

**Accuracy:** 50m

**Description:**

A report of a locally known wreck at this location was provided by James Corrigan, during a community engagement visit to Portree on the 14<sup>th</sup> May 2013. No exact coordinates were given as the area is too shallow for echo sounder but the wreck location was annotated by Mr. Corrigan on a marine chart. No further details were known and there are no records of a wreck at this location in the RCAHMS database.



Plate A20: Portree-based trawler boat operator James Corrigan provided accurate coordinates for several unlocated wreck sites during a community engagement session undertaken on his boat in Portree harbour (© WA Coastal & Marine 2013).

**SAMPHIRE ID: 13**

**Classification:** MOTOR FISHING VESSEL (20TH CENTURY)

**Site Name:** *Enterprise*

**Canmore ID:** 324555

**Coordinates:** 120972, 878766

**Accuracy:** 20m

**Description:**

A position for the wreck of the *Enterprise*, a fishing vessel that sank in 2010 was provided by James Corrigan, during a community engagement visit to Portree on the 14<sup>th</sup> May 2013, from his own GPS echo sounder system. He gave the location of the wreck as DDM 57.42.703N, 006.41.205W in a depth of 69 fathoms (126 metres).

The location given by Mr. Corrigan is approximately 250 metres to the south of that given in the RCAHMS database. Both coordinates are derived from echo sounders. The current location in the RCAHMS database (and the UKHO database of Wrecks and Obstructions) was derived from a report from the FV *Louise* in 2010, giving a depth of 105 metres. It is not clear which location is more accurate.

**SAMPHIRE ID: 14**

**Classification:** MOTOR FISHING VESSEL (20TH CENTURY)

**Site Name:** *Stroma*: North Minch

**Canmore ID:** 102008



**Coordinates:** 157107, 874902

**Accuracy:** 20m

**Description:**

The *Stroma* was a fishing vessel that sank in 1974 after a fire on board. The RCAHMS entry for the site states that it sank 'in a position 7 miles west by north of Longa Island, or 8 miles east by south of Trodday Island, Skye' and that 'The map sheet assigned to this record is essentially arbitrary, being derived from the unverified location of loss that is cited by Whittaker.' A hydrographic survey of the area was carried out in 1977 but failed to find any traces of a wreck at this location.

An accurate position for the wreck was provided by James Corrigan, during a community engagement visit to Portree on the 14<sup>th</sup> May 2013, from his own GPS echo sounder system. He gave the location of the wreck as DDM 57.41.885N, 006.04.688W, in a depth of 41 fathoms (75 metres).

**SAMPHIRE ID: 15**

**Classification:** MOTOR FISHING VESSEL (20TH CENTURY)

**Site Name:** *Girl Shona*

**Canmore ID:** 321811

**Coordinates:** 133305, 870815

**Accuracy:** 20m

**Description:**

A position for the wreck of the *Girl Shona*, a fishing vessel that sank in 1985 was provided by James Corrigan, during a community engagement visit to Portree on the 14<sup>th</sup> May 2013, from his own GPS echo sounder system. He gave the location of the wreck as DDM 57.38.880N, 006.28.296W in a depth of 47 fathoms (86 metres).

The RCAHMS entry for the site is derived directly from the UKHO database. The entry in the UKHO database for the *Girl Shona* is categorised as 'Dead', as a survey of the area in 2010 failed to find a wreck at the recorded location of sinking. This position is approximately 5 kilometres from the position given by Mr. Corrigan.

**SAMPHIRE ID: 16**

**Classification:** MOTOR FISHING VESSEL (20TH CENTURY) (POSSIBLE)

**Site Name:** Unknown: Ascrib Islands

**Canmore ID:**

**Coordinates:**

**Accuracy:**

**Description:**

A position for an unknown wreck was provided by skipper James Corrigan, during a community engagement visit to Portree on the 14<sup>th</sup> May 2013, from his own GPS echo sounder system. He gave the location of the wreck as DDM, 57.36.300N, 006.30.588W in a depth of 19 fathoms (35 metres). He believed that it was the wreck of a vessel which had hit Sgeir a Chuain around the 1970s/1980s.

There are a number of recorded losses in the RCAHMS database in this area. These are all modern fishing vessels, including the *Mary Croan*, sunk after hitting the Ascrib Islands in 1980 (Canmore ID 119394), the *Ben Aigen*, that sank in 1978 in the same area (Canmore ID 119393) and the *Kylona*, also a fishing vessel that sank in 1990 off Ardnamurchan (Canmore ID 295404).

**SAMPHIRE ID: 17**

**Classification:** STEAMSHIP (19TH CENTURY)

**Site Name:** SS *Viscount* (possibly)

**Canmore ID:** 101930

**Coordinates:** 170530, 861323

**Accuracy:** 25m

**Description:**

An uncharted wreck at Murchadh Breac was first reported to the SAMPHIRE team in May 2013 during a community engagement visit to Plockton, by Iain MacLennan, a fisherman based at Diabaig. Mr. MacLennan marked a chart with the location of a wreck he said was known of in the area and suggested that it might be a coal transport.



*Plate A21: Although the SAMPHIRE team met creel fisherman Iain MacLennan in Plockton on the 13th May 2013, he was also a visitor and is based in Diabaig. He reported a wreck at Loch Torridon which proved to be the first clue to what later turned out to be not one but three wrecks! (© WA Coastal & Marine 2013).*

Local information was also provided by Robert Gordon, a retired former seaman and local historian during a community engagement visit to Shieldaig on the 11<sup>th</sup> May 2013. Mr. Gordon provided information in person and subsequently through numerous emails, and also accompanied the SAMPHIRE dive team on a partial survey of the area in July 2013. Mr. Gordon canvassed many of the older local residents during the SAMPHIRE project to establish further details of this site. Among the many interesting details discovered by Mr. Gordon are anecdotes that Shieldaig-based fisherman John MacGregor who fished for lobsters at Murchadh Breach around 1980 often recovered lobsters of an unusually red colour at this site. This has often been cited to the SAMPHIRE team at many other sites as indicative of a wreck as the lobsters are affected by the iron of the wreck.



Plate A22: Shieldaig resident and local historian Robert Gordon accompanies the SAMPHIRE dive team on the MV Seaflower for their survey of Murchadh Breac. Mr. Gordon's information proved key in disentangling the complex history of the wrecks in the area (© WA Coastal & Marine 2013).

In July 2013 the SAMPHIRE team undertook a dive at Murchadh Breac from the MV Seaflower. Mr. Gordon was also invited along as a spectator. A shot was placed at 57°34.971N, 5°30.513W and survey conducted 35m to the north and 20m to the south of that position along the edge of the rock. The seabed was noted to be largely rocky with numerous sandy gullies but the divers were unable to locate any archaeological remains.



Plate A23: A SAMPHIRE diver conducting a survey of the reported wreck site at Murchadh Breac (© WA Coastal & Marine 2013).

There are a number of recorded losses in the general area of Murchadh Breac. Although the wreck at this location was originally thought by some informants to be the *Sheila* (Canmore ID 119391)

further community engagement and research by the SAMPHIRE team and by Mr. Gordon suggested that that ship was actually at another location near Chuaig Bay (see separate entry for Sheila). The RCAHMS database currently holds a record of two losses at Murchadh Breac, neither of which has been previously located. The earliest of these is a 1902 loss, the *Fair Geraldine* (Canmore ID 212965), a wood-built cutter of 11 tons lost with a cargo of ballast. The second is the SS *Viscount* (Canmore ID 101930) an iron cargo steamship built in Paisley in 1892 and lost with its cargo of oats after it stranded on the rock on the 17th of February 1924. It was a relatively large vessel with a gross tonnage of 383, a length of 43 metres and a beam of 8 metres. It had a compound expansion engine and a single boiler. A sonar survey of the site was undertaken by the HMS *Hecla* in 1975 but no wreckage was found and it was noted that there was no local knowledge of the wreck. The UKHO record was amended to 'dead'. Ridley (1985, 111) records that the vessel appeared on charts at that time to the north east of the rock but that it was not known to divers and suggested it might have broken up or shifted into deeper waters. Baird (1995, 241-2) gives two adjacent locations very close to this reported position for both the *Sheila* (57° 35' 00", -05° 50' 30") and the *Viscount* (57° 35' 05", -05° 50' 20") but gives no further details or confirmation of wreck location.

Post-survey research undertaken during reporting for the SAMPHIRE project turned up an online reference to recreational dives undertaken in 2011 at Murchadh Breac and Chuaig Island by the now-defunct Aberdeen Sub-Aqua club, where wreck material was encountered at both sites. The SAMPHIRE team was able to contact some of these divers through existing contacts with the Inverness Sub-Aqua Club (with the kind assistance of Neil MacInnes and Alex Gallego). Two of the divers from the Aberdeen Sub-Aqua Club, John and Jo Beaton kindly provided descriptions and sketches of the both sites from their dive logs as well as a number of photographs and coordinates (pers. comm. 14/08/2013).

*"12/7/11 Murchadh Breac*

*Reefs that just break the surface at low water.*

*Found the boiler and engine of the Viscount steam ship sunk in 1924."*

*(from the dive log of Jo Beaton).*

Mr. Beaton stated that their own identification of the wreckage as the SS *Viscount* was based upon Ridley's reference to the site rather than any material encountered. The sketch provided by Jo Beaton shows the two reefs of Murchadh Breac as viewed from the north-east. The wreckage is the shallows on the north side of the northernmost reef. The sketch also shows a tangle net on the east side (no longer present). The Beaton's stated that they were experienced wreck divers and were certain of the identification of engines and boilers as well as other related debris running down the slope.

The images provided by the Beaton's show several large metal objects. Many of these are of details rather than whole objects meaning that they are difficult to identify with certainty but they do appear to show the interior of a large boiler with fire tubes exposed and what may be a triple expansion engine. On this basis it is probable that the wreckage is that of the SS *Viscount* rather than the *Fair Geraldine*. It also appears unlikely that this is the *Sheila* based upon local knowledge and contemporary reports. The Beaton's also provided coordinates of the wreckage they found, derived from their sketches which are likely to be accurate to around 50 metres in each case and from which the location of this entry is derived. The coordinates provided for this wreck place it to the immediate east of the northernmost of two drying rocks at Murchadh Breac (N57 35.006 W5 50.426) approximately 100 metres to the north west of the area covered by the SAMPHIRE dive survey.

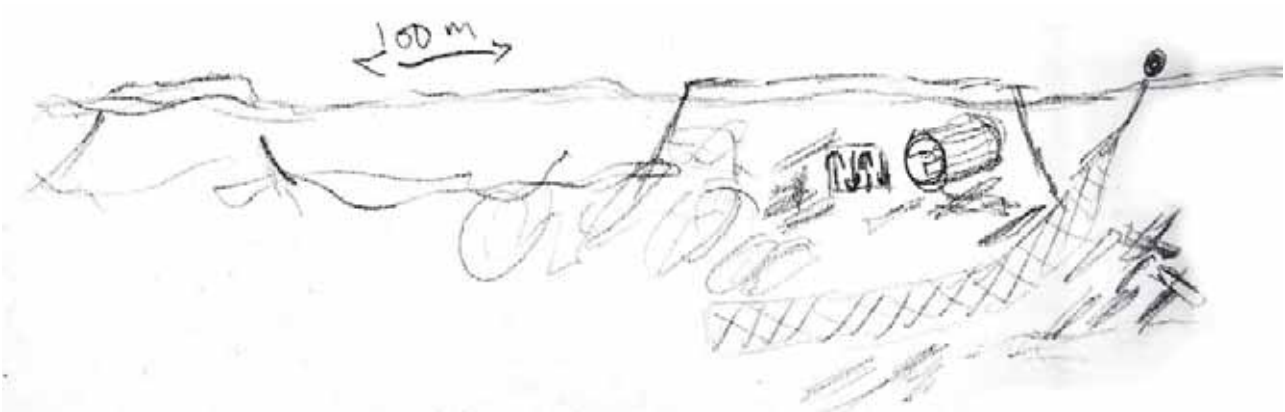


Plate A24: A sketch from Aberdeen Sub-Aqua Club diver Jo Beaton's dive logs dated to the 12th of July 2011. It shows the two drying rocks at Murchadh Breac as seen from the east, with the wreck material lying to the east of the northern part of the rock. A barrel-like boiler is visible on the right of the sketch, beside an engine. A fishing net can also be seen on the far right of the image.



Plate A25: Provided by J. and J. Beaton.



*Plate A26: This image provided by John and Jo Beaton, shows a diver looking through a gap in the wreckage at Murchadh Breac.*

**SAMPHIRE ID: 18**

**Classification:** STEAMSHIP (20TH CENTURY)

**Site Name:** *Hersilia* (possibly): Chuaig Island

**Canmore ID:** 214434

**Coordinates:** 170000, 859650

**Accuracy:** 50m

**Description:**

One of several wreck locations near Chuaig Bay recorded through community engagement undertaken for the SAMPHIRE project. This location was first mentioned by locals in Shieldaig as a possible site of the SS *Sheila*. Review of all available information now suggests that the *Sheila* is probably at another location 500 metres to the south of this wreck, on the edge of Chuaig Bay (see separate entry). Wreckage at this location at Chuaig Island has been confirmed but the identity of the vessel is unknown.



Plate A27: Local skipper Kenny Livingstone brought the SAMPHIRE team to Chuaig Island on the 26th of July 2013 to point out the location of a locally-known wreck site. This photo shows the island from the south. Subsequent contact with the Aberdeen Sub-Aqua club resulted in acquisition of photos of the wreck and clues to its possible identity (© WA Coastal & Marine 2013).

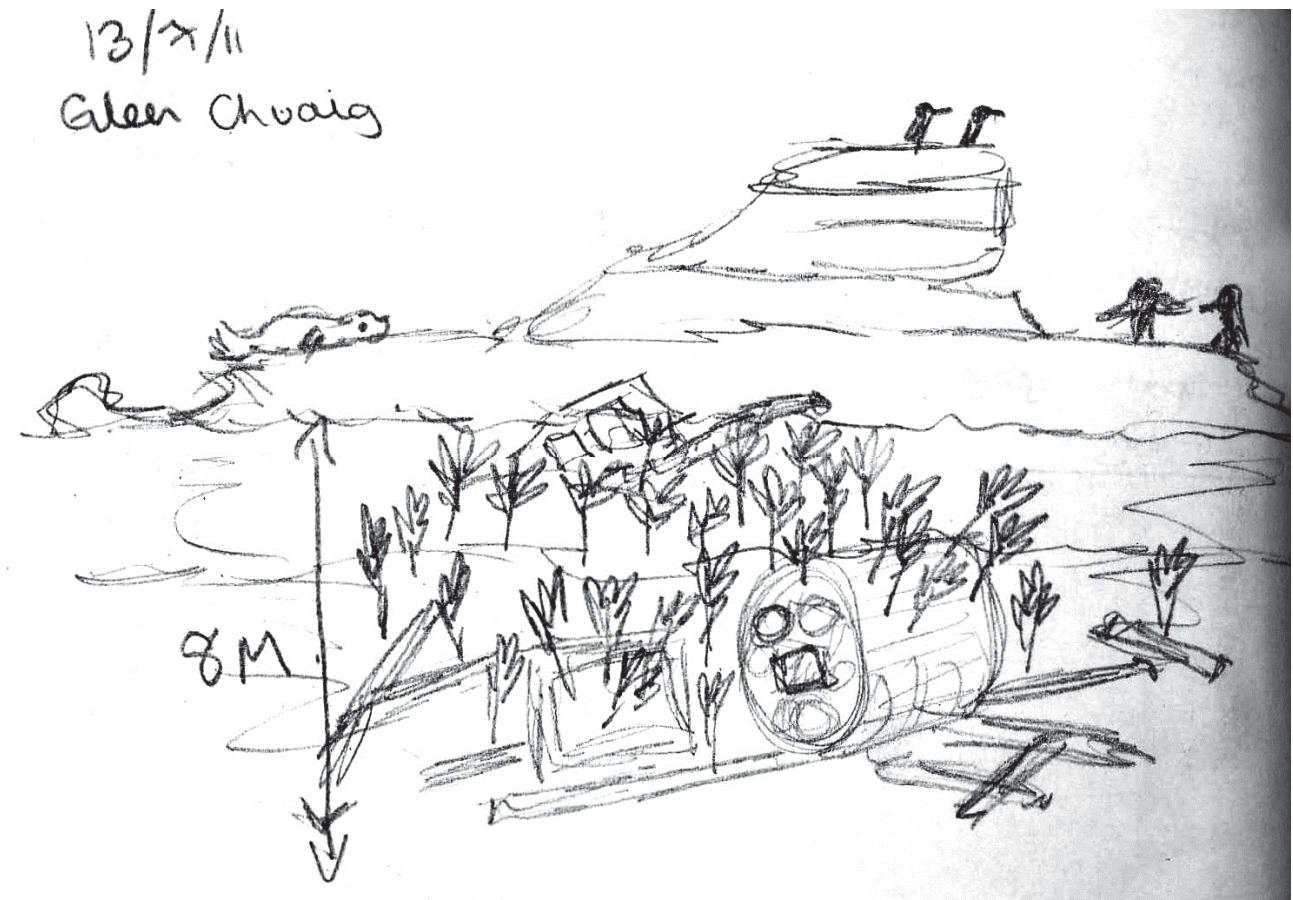


Plate A28: A sketch of the wreck at Chuaig Island from Aberdeen Sub-Aqua Club diver Jo Beaton's dive logs dated to the 12th of July 2011. It shows a large boiler and a possible propeller shaft. This sketch and photos provided by the Beaton's show that the propeller shaft is visible above the water line at low tides.

Post-survey research undertaken during reporting for the SAMHPHIRE project turned up an online reference to recreational dives undertaken at Murchadh Breac and Chuaig Island by the now-defunct Aberdeen Sub-Aqua club in 2011 with wreck material encountered at both sites. It was possible to contact some of these divers through existing contacts with the Inverness Sub-Aqua Club (with the assistance of Neil MacInnes and Alex Gallego). Two of the divers from the Aberdeen Sub-Aqua Club, John and Jo Beaton kindly provided descriptions and sketches of the both sites from their dive logs as well as a number of photographs and coordinates (pers. comm. 14/08/2013).

Their logbook entry for the unknown wreck at Chuaig Island reads:

*"13/7/11 Eilean Chuaig, Chuaig Bay*

*The remains of a steamer- the Sheila. Masses of kelp and at low water two pieces of wreck show at the surface. Found the main boiler and possibly a smaller boiler. "*

Mr. Beaton stated that their own identification of the wreckage as the SS *Sheila* was based upon a reference in Baird (1995, 241) to the site rather than any material encountered. The sketch provided by Jo Beaton shows Eilean Chuaig as viewed from the east. The wreckage is at a depth of 8 metres on the east side of the island. The sketch shows a large boiler and what may be a second smaller boiler to the south and a large near-horizontal twisted metal pole joined to a square framework. This may be a propeller shaft attached to a gearbox. The uppermost end of the shaft appears to have been bent and may suggest that the propeller, now missing, was impacted during the wrecking event. The uppermost part of the shaft and the square framework break the water at low tide.

The Beaton's also provided coordinates for this wreck which are estimated to be accurate to around 50 metres and from which the location of this entry is derived (57 34.090N 05 50.852W).

It remains possible that the wreckage at this location is that of all or part of the SS *Sheila* and there is nothing in the photographs of the site which preclude this. However as stated above, credible information from local residents suggests this is not the case. Another possibility is that this could be part of the wreck of the *Hersilia* (Canmore ID 214434) whose loss is recorded at the island in 1916 and which has never been located. The *Hersilia* was an armed iron naval yacht built in 1895 and registered in Leith. It was 52 metres long with a beam of 7 metres and a gross tonnage of 330. It sank at Chuaig Island in 1916. Records related to the wrecking are held at the National Archives (ADM 156 Admiralty: Courts Martial Cases and Files) entitled 'Liability of temporary R.N.R. officers to Court Martial under Naval Discipline Act. Court of Enquiry into grounding and loss of HM Yacht *HERSILIA*'. An account of time spent on the *Hersilia* during WWI is given in the memoirs Of Lieutenant-Commander Charles E. Evans (1946).





Plate A29: A selection of the photographs of the previously unrecorded shipwreck at Chuaig Island provided to the SAMPHIRE project by John and Jo Beaton of Aberdeen Sub-Aqua Club. These show the possible propeller shaft, which is visible above the waterline at low tide and which appears to be twisted. Other images show details of the boiler.

**SAMPHIRE ID: 19**

**Classification:** STEAMSHIP (20TH CENTURY)

**Site Name:** Sheila: Chuaig, Inner Sound

**Canmore ID:** 119391

**Coordinates:** 170000, 859150

**Accuracy:** 100m

**Description:**

This entry relates to the unconfirmed location of a wreck at Chuaig Bay, believed to be the SS *Sheila*. An uncharted wreck at Murchadh Breac was first reported to the SAMPHIRE team in May 2013 during a community engagement visit to Plockton, by Iain MacLennan, a fisherman based at Diabaig. During subsequent community engagement in Shieldaig it was speculated by several local informants that this might be the *Sheila*, a MacBrayne ferry built in 1904 which sunk in Chuaig Bay in 1927. This ship spent most of its life as a mail and passenger ferry operating between Stornoway and Kyle of Lochalsh (Duckworth and Langmuir 1987). Subsequent dive survey and research at Murchadh Breac revealed it to be the location of another wreck known as the *Viscount* (see separate entry). However further discussion with locals in Shieldaig subsequent to the dive survey revealed that there were actually a number of additional wrecks in the vicinity, one of which is now thought to be the true location of the *Sheila*.

During the fieldwork for the SAMPHIRE project, local resident and historian Robert Gordon was able to uncover numerous accounts from the more elderly residents and former residents of Chuaig Bay of material having been recovered from the wreck and being used in the houses around Chuaig Bay. He also reported that some artefacts from the *Sheila* are preserved in the Applecross Heritage Museum, including ceramics and spoons. The spoons are monogrammed with DMB, the delFTWARE reads Royal Mail Line David MacBrayne. Mr. Gordon visited the museum in September 2013 and provided images of the collection to the SAMPHIRE Project.



Plate A30: Artefacts recovered from the wreck of the SS *Sheila*, now on display in the Applecross Museum. Local volunteer Robert Gordon arranged to photograph these items on behalf of the SAMPHIRE project.

Baird (1995, 241-2) gives a location at the mouth of Loch Torridon for the *Sheila* almost two kilometres away from this location (57° 35' 00", -05° 50' 30"). This is likely to be based on a mix up with the *Viscount*, for which he gives a very similar location (57° 35' 05", -05° 50' 20") and he gives no further details or confirmation of wreck location in either case. The position of the wreck given

here is based upon information provided by local charter boat operator Kenny Livingstone. He stated that a stern post from the wreck had been visible above the water line in the past at low tide. At the end of a dive survey at Murchadh Breac on Mr. Livingstone's boat he brought the SAMPHIRE survey team to this location to point out the approximate location of the *Sheila*. Mr. Livingstone described the wreck site as somewhere along the cliff face on the west side of Chuaig Bay at a point where the cliffs faced directly towards Chuaig Island. He described the wreckage as lying on the sand at the base of the cliffs, noting that the sand was only exposed in this area at low tides. Mr. Livingstone noted that this was distinct from another wreck site at the east side of Chuaig Island (see separate entry).

Although there was insufficient time to conduct a dive survey at the reported location, the survey team returned to the area by land later the same day to conduct a walkover survey from the shore at low tide. Despite surveying an extensive area of coastline at low water no wreck remains were seen. A subsequent follow-up visit, again at low tide, was made by volunteer Robert Gordon and again no wreck material could be seen.



Plate A31: SAMPHIRE team member Dr Jonathan Benjamin conducting a low tide walkover survey at the reported location of the SS *Sheila* near Chuaig Bay (© WA Coastal & Marine 2013).

Mr. Gordon subsequently provided a reference to a photograph of the wreck of the *Sheila* in a newly published book (Tucker 2013). It was not possible to obtain a copy of the image in time for inclusion in this report but Mr. Gordon described the photo as showing the vessel partly submerged at the aft end, with foremast intact but missing the funnel and most of the deck housing. This book also furnishes some additional historical details of the wrecking.

It is now considered that the west side of Chuaig Bay is the most credible position for the *Sheila*, based on information from Mr. Tucker's book and from knowledgeable local informants such as

Kenny Livingstone and Robert Gordon, much of which has been passed down from parents and grandparents living in Chuaig Bay at the time of the wrecking event. However there remains a need to quantify the character and extent of the wreckage and to establish its relationship, if any, with other nearby wrecks.

**SAMPHIRE ID: 20**

**Classification:** TRAWLER (20TH CENTURY)

**Site Name:** *Mafeking* (possibly)

**Canmore ID:**

**Coordinates:** 170400, 858400

**Accuracy:** 100m

**Description:**

One of several wreck locations near Chuaig Bay recorded through community engagement undertaken for the SAMPHIRE project. During the diving phase of the SAMPHIRE project, dive Shieldaig-based charter operator Kenny Livingstone described wreckage in the intertidal part of a burn running out to Chuaig Bay. A walkover survey of the area was undertaken by the SAMPHIRE team on the 26<sup>th</sup> of July 2013. Numerous items of wreckage were found including an intact capstan, a donkey boiler and a possible parrel, spread over an area of approximately 100m<sup>2</sup>.



*Plate A32: The SAMPHIRE team recording a well-preserved capstan of early 20th century date found in the intertidal part of the burn at Chuaig Bay (© WA Coastal & Marine 2013).*

These items, taken together, suggest that this is the wreckage of a sailing vessel with a steam capstan, likely to date to the early part of the 20<sup>th</sup> century.



Plate A33: A donkey boiler, lying close to the capstan, adjacent to the burn at Chuaig Bay. This is similar to the remains of the *Muirneag* on Lewis (see separate listing) (© WA Coastal & Marine 2013).



Plate A34: Wreckage from the vessel is strewn over a wide area (© WA Coastal & Marine 2013).

Although there are thought to be two confirmed wreck sites in the vicinity of Chuaig Bay (see separate entries) some locals believe this may be the remains of the *Mafeking*. According to Robert Gordon, local resident and historian, the *Mafeking* was a vessel wrecked during salvage or rescue of the SS *Sheila* in 1924. Details of the objects have been sent to the Scottish Fisheries Museum for comment. No record of a vessel with the name *Mafeking* has been found in the RCAHMS of UKHO databases or in any published sources consulted during the desk-based

research. The local informants stated that this may be due to the vessel being very small and it has been suggested that the *Mafeking* was a salvage barge or a tug. No mention of a salvage vessel was made by Tucker (2013).

**SAMPHIRE ID: 21**

**Classification:** CANNON

**Site Name:** Cannon: Fort George

**Canmore ID:** None

**Coordinates:** redacted, pending confirmation

**Accuracy:** 50m

**Description:**

A pair of cannons lying on the seabed was reported at this location by divers from the Highland Council during a community engagement visit for project SAMPHIRE to Lochinver on the 9<sup>th</sup> May 2013. The informants, Bruce Greig and Phil Mitchell, stated that they believed the cannons were still *in-situ* and lay at a depth of 3-4 metres and were never exposed at low tide. Coordinates for the cannons were given, estimated to be accurate to approximately 50 metres.

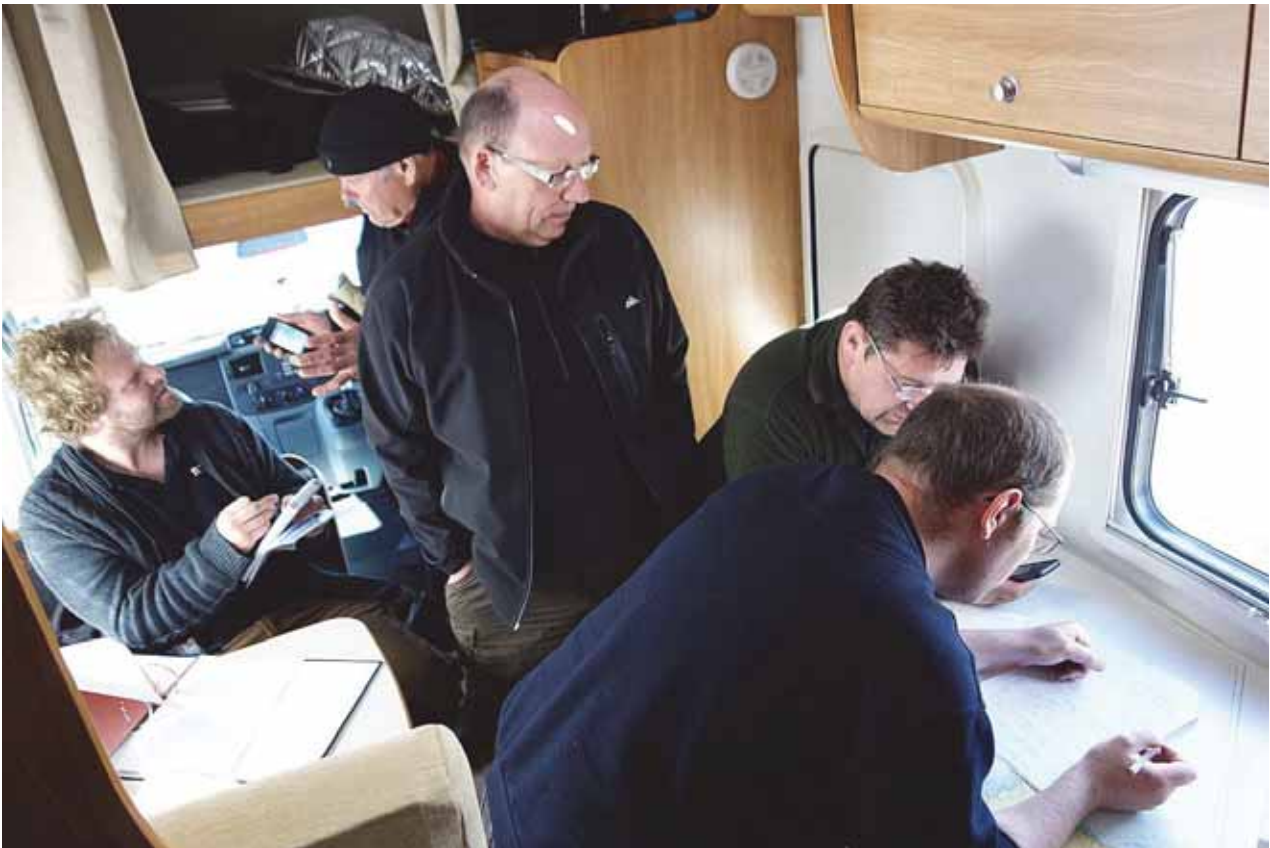


Plate A35: The SAMPHIRE team met the Highland Council dive team in Lochinver on the 9th May 2013 during the community outreach phase of the project (© WA Coastal & Marine 2013).

The informants suggested the cannons may be linked to a vessel that went down off the fort called the *Lively* (1800s), which they believe was partly salvaged, before slipping back into deep water. The RCAHMS database includes a record of this vessel (Canmore ID 291817) and records that it was a 13 metre sloop with a general cargo, lost in 1827.

There are also a number of other unlocated losses recorded in the RCAHMS database recorded as stranded at Fort George that could be linked with these cannons including the schooner *Helena*, stranded in 1853 (Canmore ID 291896) and an unknown schooner stranded in 1822 (Canmore ID 327063). Another possibility is that the cannons are from the fort itself rather than any vessel.

Also included in the RCAHMS database is a record of a Live Obstruction (Canmore ID 324546, UKHO Identifier 076540), derived directly from the UKHO database and recorded in 2010. Although classified as an obstruction the surveying details for the site describe a 24 metre long wreck lying upright, with intact wheelhouse. It is not stated whether the wreck is of metal construction although it seems likely. Although it is not far from the cannons it is considered unlikely to be related to them.

**SAMPHIRE ID: 22**

**Classification:** CANNON - FINDSPOT

**Site Name:** Cannon - Ardheslaig

**Canmore ID:** None

**Coordinates:** 178230, 856040

**Accuracy:** 10m

**Description:**

Reported findspot of a cannon, now situated on the main street in Shieldaig. This cannon was reported to the SAMPHIRE team by local informant Kenny Livingstone, whose father had recovered it from the beach at Ardheslaig. Mr. Livingstone stated that his father had been a fisherman at Ardheslaig and that the cannon had been used by local fishermen as a makeshift anchor before it was recovered.



Plate A36: SAMPHIRE team member Dr Simon Davidson, taking measurements of the previously unrecorded cannon on Shieldaig main street on the 11th May 2013 (© WA Coastal & Marine 2013).

The current location of the cannon is listed separately. It now sits upon a modern carriage and bears a plaque. Both were made by a local man, the late Ian McLeod, at the time that the cannon was placed on the main street around 2007 after he had been given the cannon by the Livingstones. The plaque reads 'a relic of the Spanish Armada 1588'. The SAMPHIRE team made a full photographic record of the cannon and also made a complete series of measurements.

Length [Cascabel – Muzzle Face]	1.10m
Length [Muzzle Face – Knob]	1.22m
Length [Cascabel – Rimbase]	0.40m
Length [Rimbase – Muzzle Face]	0.46m

Length [Knob – Breech]	0.20m
Length [Rimbase – Breech]	0.08m
Width [Breech at Rimbase]	0.26m
Width [Breech inc. Trunnions]	0.40m
Diameter [Trunnions]	0.08m
Diameter [Muzzle Face]	0.16m
Diameter [Knob]	0.10m
Calibre	0.10m



Plate A37: Kenny Livingstone, whose father recovered the *Shieldaig* cannon from the harbour at Ardhessaig, discusses the site with SAMPHIRE team member Andrew Roberts, on board the MV *Seaflower* (© WA Coastal & Marine 2013).

Charles Trollop, independent cannon expert was subsequently provided with the images and measurements of the cannon and made an expert assessment of it: "*the Shieldaig sea front gun, or what is left of it, is the remains of a carronade gun, a halfway house between a carronade and a gun, introduced into the merchant service in the last years of the Napoleonic war, say 1812. Probably a 4 Pounder*" (pers. comm. 22/5/2013). This information was subsequently passed back to Mr. Livingstone and other informants in *Shieldaig*.

Robert Gordon, long term resident of *Shieldaig*, recounted a story relating to the cannon told to him by his late father. Herring was exported from *Shieldaig* during the 1800s in smacks, a type of schooner, some of which carried a single cannon. According to the story, the cannon had been in use by an armed schooner involved in the export trade to the Baltic. The schooner was owned by a resident of the village called George Lead who had come to the village at the time of its construction in the early 1800s. In the late 1870s or 1880s George Leith was returning from a voyage on a Sabbath. He had fallen out with the local Free Church minister Donald McDonald over the issue of Sabbath-keeping. Mr. Gordon relates that as his boat returned via *Shieldaig* Island 'out



of pique, George Leith fired the cannon he had on his yacht, and lo and behold, the thing malfunctioned, blew up and blew off his arm'. Interestingly the muzzle of the cannon is indeed missing. Mr. Gordon states that this story has been passed down the generations since then and the dates given also fit the interpretation provided by Charles Trollop.

**SAMPHIRE ID: 23**

**Classification:** ANCHOR

**Site Name:** Rubha nan Craobh

**Canmore ID:** None

**Coordinates:** 187340, 855020

**Accuracy:** 10m

**Description:**

An anchor was reported at Lub Dubh Aird by local informants to the SAMPHIRE team during a community engagement visit to Shildaig in May 2013. No details of the anchor other than location were available at that time. A dive survey was carried out at the site as part of the diving phase of the SAMPHIRE project on the 27<sup>th</sup> of July 2013.

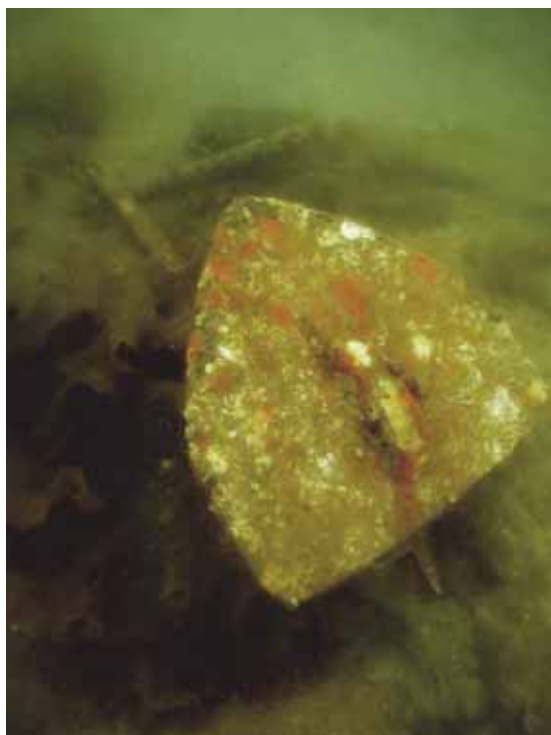


Plate A38: The anchor was found to be modern in date (© WA Coastal & Marine 2013).

Two divers entered the water at Lub Dubh Aird beach and proceeded along the seabed to the reported location of the anchor at Rubha nan Craobh. A large anchor was encountered at this location at a depth of 3 metres but was clearly modern in date, having one large fluke only and a long chain wound around nearby boulders. This anchor although abandoned or lost, is likely to relate to a nearby fish farm. No further recording was undertaken of this feature.

**SAMPHIRE ID: 24**

**Classification:** CANNON

**Site Name:** Cannon: Shildaig

**Canmore ID:** None

**Coordinates:** 181450, 854510

**Accuracy:** 10m

**Description:**

The SAMPHIRE team was informed of the location of a second cannon in the village of Shieldaig by local resident Andrew Patrick during a community outreach visit to the village in May 2013.



Plate A39: SAMPHIRE team member John McCarthy and local resident Andrew Patrick recording the dimensions of a carronade at Shieldaig during a community engagement visit on the 11th May 2013 (© WA Coastal & Marine 2013).

The cannon was found to be very small and currently sits in the front garden of a house near the village, facing out towards Shieldaig Island. The owner of the cannon, John Webb, was unavailable at the time of survey but passed on some details subsequently. Mr. Webb stated that the cannon was dredged out of the Congo river in Kinshasa and only brought to Shieldaig in recent times.

Given the lack of exact provenance for the carronade its archaeological value is somewhat diminished. The cannon is in excellent condition with a clearly visible crest. The SAMPHIRE team made a full record of its dimensions. These were passed on to independent cannon expert Charles Trollop (pers. comm 25/05/2013).

Length [Cascabel – Muzzle Face]	0.72m
Length [Muzzle Face – Knob]	0.80m
Length [Cascabel – Rimbase]	0.30m
Length [Rimbase – Muzzle Face]	0.41m
Length [Knob – Breech]	0.085m
Length [Rimbase – Breech]	0.08m
Width [Breech at Rimbase]	0.13m
Width [Breech inc Trunnions]	0.25m
Diameter [Trunnions]	0.052m
Diameter [Muzzle Face]	0.13m
Diameter [Knob]	0.065m
Calibre	0.05m



Plate A40: A detail of the breech of the carronade, showing the royal insignia (© WA Coastal & Marine 2013).

Charles Trollop provided the following analysis of the cannon: "The carronade at John Webb's house was cast by the Bailey Pegg Company, who started in business in London in 1812. It is a One Pounder with a bore of two inches and is not intended as a serious defensive weapon. It is in fact a signal gun, which all ships of any size were required to carry up until the introduction of the wireless."

**SAMPHIRE ID: 25**

**Classification:** SURVEY

**Site Name:** Ob Mheallaidh

**Canmore ID:** None

**Coordinates:** 182900, 854100

**Accuracy:** 100m

**Description:**

Numerous locals in Shieldaig and environs reported that Deception Bay had a high archaeological potential and that it was associated with a Viking battle. No published evidence of this association has been found.

The name Ob Mheallaidh translates to Deceitful Bay, supposedly due to the fact that "it appears a safe haven but gives no real protection in a storm" (Macrow 1962). A slightly different explanation is given by locals who say that the bay was used by Vikings who did not realise that the entrance to the north dries at low tide and found themselves trapped, allowing locals to attack and defeat them.



*Plate A41: SAMPHIRE team member Paolo Croce completes a visual survey of the intertidal basin at Ob Mheallaidh on July 27th 2013 (© WA Coastal & Marine 2013).*

The SAMPHIRE team undertook a snorkel survey of Ob Mheallaidh, focussing on the deepest parts of the bay at low tide as part of the diving phase of the SAMPHIRE project. No features of archaeological significance were noted although it was not possible to see to the deepest areas. The bed of the bay was covered in fine sediment. The maximum depth at low tide is 7.6 metres when the bay shrinks to less than half its area.

**SAMPHIRE ID: 26**

**Classification:** SUBMARINE (POSSIBLE)

**Site Name:** Unknown: Loch Dunvegan

**Canmore ID:** None

**Coordinates:** 121000, 854000

**Accuracy:** 200m

**Description:**

A position for an unknown wreck was provided by skipper James Corrigan, during a community engagement visit to Portree on the 14<sup>th</sup> May 2013. He gave the location of an unrecorded wreck site believed by local fishermen to be a submarine at DDM 57.29.580N, 006.39.006W in a depth of 19 fathoms (35 metres). He stated that the identification of the feature as a submarine was based upon some pipe which had been dredged accidentally from the site some years earlier. The position given was approximate and was not from a GPS Echo sounder reading.

The RCAHMS database holds entries for losses of two 19<sup>th</sup> century sloops (Canmore IDs 327134, 295574) in this general area but no records of any submarines in Loch Dunvegan. Further away the German submarine *U-722* (Canmore ID 119361) was depth-charged by HMS *Fitzroy*, HMS *Redmill* and HMS *Byron* in 1945 20 miles east of Loch Boisdale with the loss of all 44 crew. No trace of this submarine has been found since its sinking. The recorded location of this loss in the Minch places it 20 miles south-west of the location reported by Mr. Corrigan although further evidence is needed before any positive correlation can be made.

**SAMPHIRE ID: 27**

**Classification:** CANNON

**Site Name:** Cannon: Shialdaig

**Canmore ID:** None

**Coordinates:** 181500, 854000

**Accuracy:** 10m

**Description:**

Current location of a carronade dating to the early 19<sup>th</sup> century, recorded for the first time as part of the SAMPHIRE project. See full details in separate entry for findspot at Ardheslaig (Samphire 22).

**SAMPHIRE ID: 28**

**Classification:** MOTOR FISHING VESSEL (20TH CENTURY)

**Site Name:** *Ivanhoe*: Sound of Raasay

**Canmore ID:** 295575

**Coordinates:** 153166, 853032

**Accuracy:** 100m

**Description:** The *Ivanhoe* was a fishing boat that sank in 1982 after an explosion on board. The entry for the ship in the RCAHMS database states that 'The map sheet assigned to this record is essentially arbitrary, being derived from the unverified location of loss that is cited by Whittaker.'

Several locals mentioned the location of this wreck during community engagement visits for Project SAMPHIRE to Applecross and Portree during May 2013. A position for the wreck was annotated on an Admiralty chart by Portree coastguard Davie Urquhart. He described it as being on 'the peaks', i.e. between the two peaks shown on Admiralty charts in a general depth of 80m or more. This places it approximately a kilometre to the north of the current position recorded in the RCAHMS database.



Plate A42: Portree coastguard Davie Urquhart marks an Admiralty Chart with the location of a locally-known wreck for the SAMPHIRE team (© WA Coastal & Marine 2013).

**SAMPHIRE ID: 29**

**Classification:** MOTOR FISHING VESSEL (20TH CENTURY)

**Site Name:** *Spetznova*: Sound of Raasay

**Canmore ID:** None

**Coordinates:** 152702, 851953

**Accuracy:** 20m

**Description:**

A report of a recent wreck at this location was made to the SAMPHIRE team by Assistant Harbourmaster Ron Henderson and Portree-based fisherman James Corrigan during a community engagement visit to Portree harbour on the 14<sup>th</sup> May 2013. This is believed to be the location of the *Spetznova*, a fishing boat sunk around 2008 after striking Holme Island. The crew were picked up before it sank. No further references for a vessel of this name were found.

The position given here was provided by from a GPS system by Mr. Corrigan. He gave the two coordinates for the site, separated by approximately 140 metres. Only the first of these has been used to generate the NGR coordinates for this entry.

DDM 57.29.405N, 006.07.600W 33 fathoms

DDM 57.29.348N, 006.07.698W 22 fathoms



Plate A43: Portree Assistant Harbourmaster Ron Henderson describes the location of the Spetznova wreck to team member John McCarthy during a SAMPHIRE community engagement visit to Skye on May 14th 2013 (© WA Coastal & Marine 2013).

**SAMPHIRE ID: 30**

**Classification:** AMPHORA (ROMAN)

**Site Name:** Unknown: Sand, Applecross, Inner Sound

**Canmore ID:** None

**Coordinates:** 167900, 849100

**Accuracy:** 100m

**Description:**

A report of the discovery of a large amphora fragment was made to the SAMPHIRE team during a community engagement visit to the village of Applecross on the 12<sup>th</sup> of May 2013. Local professional archaeologist Nick Goldthorpe informed the team that his uncle, a diver, had recovered the fragment while working on setting out a jetty for the B.U.T.E.C. range control building at Lonbain. He has showed this to Mr. Goldthorpe around 2000. The fragment is currently still in the possession of Mr. Goldthorpe's uncle who lives in England. The fragment was described as quite large and with marks where the handle had broken off. Some barnacles had accumulated on the sherd. Mr. Goldthorpe said that he would attempt to follow up with his uncle and try to get details of the original divers. The position given for this entry is based on the location of the jetty.

**SAMPHIRE ID: 31**

**Classification:** CRAFT

**Site Name:** Unknown: Sand, Applecross, Inner Sound

**Canmore ID:** None

**Coordinates:** 168300, 847430

**Accuracy:** 100m

**Description:**

A report of a possible wreck at this location was made to the SAMPHIRE team during a community engagement visit to the village of Applecross on the 12th of May 2013. Local professional archaeologist Nick Goldthorpe informed the team that he had been told of a wreck at this location

by a local fisherman, although no further details were given. The position given for this entry is based on an estimate by Mr. Goldthorpe and is of uncertain accuracy.



Plate A44: The SAMPHIRE team have also had success speaking to professional terrestrial archaeologists about the marine environment. Here Applecross-based archaeologist Nick Goldthorpe (right) describes the discovery of an amphora fragment (S30) by his uncle during a visit by the SAMPHIRE team on the 12th May 2013 (© WA Coastal & Marine 2013).

**SAMPHIRE ID: 32**

**Classification:** MOTOR FISHING VESSEL (20TH CENTURY)

**Site Name:** *Valiant*

**Canmore ID:** 324561

**Coordinates:** 108930, 847368

**Accuracy:** 20m

**Description:**

A position for an unknown wreck was provided by skipper James Corrigan, during a community engagement visit to Portree on the 14th May 2013, from his own GPS echo sounder system. He gave the location of a wreck site he believed to be the *Valiant*, owned by a local man named Billy Summers, at DDM 57.25.384N, 006.51.030W in a depth of 46 fathoms (84 metres).

The RCAHMS database holds an entry for the *Valiant*, derived directly from the UKHO database of Wrecks and Obstructions. The entry gives details of the sinking of the vessel but states that the position given is approximate and for filing purposes only.

The *Valiant* (Canmore ID 324561, UKHO Identifier 077547) was a British registered fishing vessel of 34 tons that sank following a collision with a Polish M tanker *Siarkopol* on the 19<sup>th</sup> of September 1980. The crew of four was recovered by the tanker.

**SAMPHIRE ID: 33**

**Classification:** CRAFT



**Site Name:** Unknown: Sound of Raasay

**Canmore ID:** None

**Coordinates:** 153106, 846489

**Accuracy:** 20m

**Description:**

A report of a possible wreck at this location was made to the SAMPHIRE team by Portree-based fisherman James Corrigan during a community engagement visit to Portree harbour on the 14<sup>th</sup> May 2013. He stated that whenever trawling gear is snagged at this location, black grease or organic material is found on the gear. He stated that he believes it to be a wooden wreck. The wreck was first noted by a local fisherman named Billy and is consequently known among the local fishermen as 'Billy's wreck'.

The position given here was provided by from a GPS system by Mr. Corrigan. He gave the following coordinates and depth for the site.

66 fathoms (120 metres)

DDM 57.26.481N 006.06.964W

There are no known wrecks recorded in this area. There are two unlocated recorded losses held in the RCAHMS database, the *Rose*, a lugger lost in 1885 (Canmore ID 253848) and the *Albatross*, lost in 1983 (Canmore ID 295640).

**SAMPHIRE ID: 34**

**Classification:** MOTOR FISHING VESSEL (20TH CENTURY) (POSSIBLE)

**Site Name:** Unknown: Sound of Raasay

**Canmore ID:** None

**Coordinates:** 151183, 844170

**Accuracy:** 20m

**Description:**

A report of a possible wreck at this location was made to the SAMPHIRE team by fisherman Ewen Gillies during a community engagement visit to Applecross on the 12<sup>th</sup> May 2013. Mr. Gillies described this as a fishing fastener. During a subsequent community outreach visit to Portree on the 14<sup>th</sup> May 2013, further information was given by assistant coastguard Ron Henderson and coastguard and local fisherman James Corrigan. They noted that the fastener was believed to be a metal shipwreck called the *Sea Otter* which went down around the early 1970s between Brae and Raasay after it collided with the Caledonian MacBrayne ferry. There is no record of a fishing vessel with this name in the RCAHMS database.

The position given here was provided by from a GPS system by local fisherman James Corrigan on the same day. He gave the following coordinates and depth for the site.

55 fathoms (100 metres)

DDM 57.25.171N 006.08.074W

**SAMPHIRE ID: 35**

**Classification:** CANNON: FINDSPOT

**Site Name:** Cannon: Lorgill Bay

**Canmore ID:** None

**Coordinates:** 117470, 840940

**Accuracy:** 50m

**Description:**

A position for a cannon of unknown provenance was provided by local trawler skipper Willie Murdo, during a community engagement visit to Dunvegan on the 14<sup>th</sup> May 2013. He described a cannon found in Lorgill Bay by children on a school trip from Portree school. He stated that the cannon was now on display at the village hall in Glendale together with information boards describing its

discovery. He believed that the discovery was made around 1980. Contact was subsequently made with the village hall who confirmed the cannon was stored with them and passed a query on to the Skye and Lochalsh Archive Centre. The Archive Centre was able to provide extensive documentation relating to the cannon.



Plate A45: Dunvegan trawler skipper Willie Murdo shows the SAMPHIRE team some of the material recovered in his nets, during a community engagement visit to Dunvegan on the 14th May 2013 (© WA Coastal & Marine 2013).

The files provided by the archive showed that the cannon was discovered by a Paisley-based police sergeant, David Trimmer, while on holiday in the area on the 20<sup>th</sup> June 1979. He had been informed of the location by a local shepherd who told him that the position of the gun was known to the older islanders. The gun was subsequently located at the bottom of an intertidal pool in Lorgill Bay in a depth of three feet. It was described as an iron carronade, approximately 36" long and in good condition. Mr. Trimmer subsequently located 'a lot of pieces of what at this stage I presume to be iron fused in crevices, in fact near the pool there are two pieces which could be bolts which at one time have fastened the cannon to its mounting through the lugs... there are many objects fused into the rocks at the site'.

Mr. Trimmer made contact made shortly afterwards with Colin Martin at St. Andrews University who identified it from photographs as a carronade, made by the Carron Iron Works in Falkirk sometime between 1750 and 1820. The gun was reported to the Receiver of Wreck (Droit 1701/1980/81) and subsequently recovered from the beach. It was stored briefly in a burn behind the Talisker Distillery before being sent to Portree High School where the pupils undertook a programme of research and conservation, using instructions from the Carron Iron Works. The cannon is now held in Glendale Village Hall and the original archives relating to the site are held in the Skye and Lochalsh Archive Centre.

It is unclear whether a serious search of the area below MLWS has been undertaken. Willie Murdo recalled speaking to some divers around this time who were returning from an unsuccessful attempt to find further wreckage around the cannon findspot but did not know if the group were

recreational divers or archaeologists. Some of the correspondence with Colin Martin suggested that a possible dive survey might have been planned but Professor Martin was contacted and confirmed that no survey was undertaken by St. Andrews (email 02/09/2013).

It was not possible to contact Mr. Trimmer and therefore the images of the cannon from the archive have not been reproduced here. However the documentation relating to the gun was collected for the SAMPHIRE project and will be passed on as part of the project archives to RCAHMS.

**SAMPHIRE ID: 36**

**Classification:** MOTOR FISHING VESSEL (20TH CENTURY) (POSSIBLE)

**Site Name:** Unknown: Sound of Raasay

**Canmore ID:** None

**Coordinates:** 153682, 837353

**Accuracy:** 100m

**Description:**

A report of a possible wreck at this location was made to the SAMPHIRE team by the Assistant harbourmaster Ron Henderson during a community engagement visit to Portree harbour on the 14<sup>th</sup> May 2013. The wreck was described as lying just to the south of a power cable between Raasay and the mainland. The position of the site is known as a fastener and has been seen on echo sounders. One of the local crewmen took up part of the rudder years ago but let it go again. It is locally believed to be an old puffer, possibly a coal boat that sank in the early 20<sup>th</sup> century. The wreck is said to stand about 2-3 metres off the bottom in a general depth of 50 metres. The position given here was provided by from a GPS system by local fisherman James Corrigan on the same day. He gave two coordinates for the site. The position given here in NGR is based on the first of these entries.

DDM 57.21.588N, 006.05.839W (northern part)

DDM 57.21.561N, 006.05.840W

There are no wrecks shown at this location on charts. There are a number of unlocated recorded losses in this area of Raasay Sound, including the *Economy*, lost in 1923 (Canmore ID 295675) and the *Heedful*, lost in 1887 (Canmore ID 214121).

**SAMPHIRE ID: 37**

**Classification:** BARGE

**Site Name:** Unknown: Loch Kishorn

**Canmore ID:** 295667

**Coordinates:** 179700, 837000

**Accuracy:** 500m

**Description:**

A report of a possible wreck at this location was made to the SAMPHIRE team during a community engagement visit to the village of Applecross on the 12<sup>th</sup> of May 2013. Local fisherman Ewen Gillies gave this as the approximate location of three barges that went down in 1978 and stated that they were in a depth of 65 fathoms (119 metres) within a deep depression on the seafloor (Admiralty charts show least depths of around 40-90m in this area). The RCAHMS database includes an entry for this site (Canmore ID 295667) but lists it as currently unlocated and maps it approximately 3 kilometres to the north east. The position given here is based on an estimate by Mr. Gillies. Mr. Gillies stated that he believed the barges were part of the construction of the Kishorn Offshore Platform (Canmore ID 295669).

**SAMPHIRE ID: 38**

**Classification:** STEAM TRAWLER (19TH CENTURY)

**Site Name:** Unknown: Glenelg Bay

**Canmore ID:** None

**Coordinates:** 179570, 820940

**Accuracy:** 50m

**Description:**

A report of a possible wreck at this location was made to the SAMPHIRE team during a community engagement visit to the village of Dornie on the 13<sup>th</sup> of May 2013. Dornie Divers SAC member and local resident Matt Baron stated that he had dived on a wooden fishing vessel at a depth of approximately 16m, with some further wreckage at 12-14 metres. He was uncertain whether any hull/superstructure was present.



Plate A46: Matt Baron of Kintail-based dive club Dornie Divers invited the SAMPHIRE team into his premises to discuss local wreck sites. The SAMPHIRE team demonstrate the RCAHMS Canmore portal as a tool for researching local wrecks (© WA Coastal & Marine 2013).

Further information on the site was given by Highland Council Bruce Greig during his participation as a volunteer for the SAMPHIRE diving survey in July 2013. Mr. Greig stated that he was very familiar with the site and had dived on it several times. His most recent dive there had been in early 2013 and he described the site as sitting in a gully. Mr. Greig stated that much of the wreckage was much shallower than previously reported, lying at a depth of 2-3 metres, with a boiler visible from the road at low water. He described the wreckage as including numerous deck lights (some of which have been removed by other divers) and condenser tubes. He also warned that the tides were very strong at this location. The position given here is based upon an estimate by Mr. Greig and is thought to be accurate to about 50 metres.

There are a number of recorded losses in the vicinity of Glenelg Bay, including the *Union*, lost in 1824 (Canmore ID 268848), the *James*, lost in 1804, the *Harmony*, lost in 1825 (Canmore ID 271847) and the schooner *Medora*, lost in 1860 (Canmore ID 284916).

**SAMPHIRE ID:** 39

**Classification:** AIRCRAFT (POSSIBLE)

**Site Name:** Unknown: Glenelg Bay

**Canmore ID:** None

**Coordinates:** 180000, 820900

**Accuracy:** 500m

**Description:**

A report of a possible wreck at this location was made to the SAMPHIRE team during a community engagement visit to the village of Dornie on the 13th of May 2013. Dornie Divers SAC member and local resident Matt Baron stated that he had heard of the wreck of a WWII flying boat somewhere in this area and that he believed a propeller might have been taken up at some point by a local fisherman. He was not able to offer any more information. The RCAHMS database holds a record of the loss of a Vickers Supermarine Sea Otter (Canmore ID 295884 and duplicate entry 328551) that crashed 'whilst landing at East Lochalsh, near Glas Eileen in 1945. The entry for the loss states that 'the map sheet assigned to this record is essentially tentative. East Lochalsh is not noted as such on the 1998 edition of the OS 1:50,000 map, but Glas Eileen lies within the eastern part of Loch Alsh'.



*Plate A47: The participation of local divers in the SAMPHIRE fieldwork allowed for far more time to discuss potential sites. Here Bruce Greig (right) talks to the SAMPHIRE team while they kit up for a dive at Loch Laxford (© WA Coastal & Marine 2013).*

**SAMPHIRE ID: 40**

**Classification:** CRAFT

**Site Name:** Unknown: Sound of Sleat

**Canmore ID:** None

**Coordinates:** 173200, 814000

**Accuracy:** 200m

**Description:**

A report of a possible wreck at this location was made to the SAMPHIRE team by Highland Council Bruce Greig during his participation as a volunteer in the SAMPHIRE diving survey in July 2013. Mr. Greig stated that he knew of a wreck at this approximate location and that a bell had been recovered from the site by other divers. The coordinates given for the site are based upon his estimate. He stated that the wreck was in a depth of approximately 16 metres.

**SAMPHIRE ID: 41**

**Classification:** HARBOUR

**Site Name:** Brigurd Point, Hunterston Sands

**Canmore ID:** 40655

**Coordinates:** 217660, 652330

**Accuracy:** 10m

**Description:**

Subsequent to completion of the diving phase of SAMPHIRE a separate element of fieldwork was conducted at a single reported site at Hunterston Sands, Ayrshire. This fieldwork took the form of aerial survey and land-based dGPS and photographic survey of a complex of intertidal features



Plate A48: An aerial survey of the features at Hunterston was undertaken at low tide by the SAMPHIRE team in August 2013 (© WA Coastal & Marine 2013).

A complex of intertidal features including a possible harbour site was first noted at Hunterston, in the lower Firth of Clyde, by professional archaeologists (Newall 1966; Newall and Lonie 1972 and Newall 1976). However no survey or detailed investigation of the site seems to have been

undertaken at that time. Subsequent renewed interest in the site by local community members, particularly by local power station employee Michael Scott, brought it to the attention of the SAMPHIRE team.

An aerial survey of the site was undertaken by the SAMPHIRE team on August 30<sup>th</sup> 2013. The resulting images were analysed in detail and also processed using photogrammetry and the resulting data was used to help target subsequent fieldwork.

A further intertidal field survey of the site was undertaken on the 19<sup>th</sup> and 20<sup>th</sup> September 2013 by a SAMPHIRE team including Dr. Alex Hale of RCAHMS and Dr. Andrew Bicket of WA Coastal and Marine. Isabel Garret (Friends of Portencross Castle) and local residents Mike and Catherine Scott accompanied the survey team, providing invaluable knowledge and assistance.

Mr. Scott informed the team that the features on the site extended throughout the intertidal zone and partially below it. Because of this the terrestrial survey was timed to coincide with the equinoctial spring tides in September 2013.



Plate A49: The SAMPHIRE team conducted a dGPS survey of harbour feature at Hunterston in September 2013 (© WA Coastal & Marine 2013).

The terrestrial fieldwork confirmed that there are two main archaeological components to the intertidal zone at Hunterston Sands. The first is a series of long, linear features that run both perpendicular and parallel to the current shoreline; the second is a stone-built harbour.

The linear features are mainly long, straight field walls, probably of early 19<sup>th</sup> century date, which have become submerged. Towards the outer limits of these are a number of other linear features, which appear to be earlier in date. Along with these is a series of roughly circular dumps of stone arranged in a dog-leg. Together, these earlier features appear to form part of a fish-trap complex. The stone-built harbour lies at the very low water mark. Rectangular on plan but open to the sea on the SW, it measures over 61m from NE to SW by at least 46m transversely over a ruinous wall constructed of large boulders, but now standing no more than two courses high. The corners of this wall are faceted and the outer face appears to have been strengthened by positioning large boulders with their flat, long sides facing seawards. As indicated on the aerial photographs, there appears to be a cleared area of sea-bed running into the sub-tidal zone from the open mouth of the harbour.

The harbour is extremely unusual in both its position relative to the current sea level and its engineering and design. Further investigation into its original position to sea-level, its age and function should all be considered as priority.



*Plate A50: The sun rises over Hunterston and the final survey of SAMPHIRE 2013 (© WA Coastal & Marine 2013).*



## APPENDIX REFERENCES

- Duckworth, C. L. D. and Langmuir, G. E. (1987) *West Highland Steamers*, Revised Edition, Brown, Son & Ferguson Ltd., Glasgow
- Evans, C. E. (1946) *Memoirs of Lieutenant - Commander Charles E Evans Sept. 14th 1858-May 11, 1944*, Western Mail & Echo, Cardiff
- Macrow, B. G. 1962, *Torridon Highlands*, Robert Hale Limited, London
- Newall, F. (1976) 'The Roman signal fortlet at Outerwards, Ayrshire', *Glasgow Archaeological Journal*, Vol. 4, pp.111-23.
- Newall, F. (1966) 'Kilwinning-Hunterston, the Avondale Roman road', *Discovery and Excavation in Scotland*, pp.15-17.
- Newall, F. and Lonie, W. (1972) 'Briguard harbour', *Discovery and Excavation in Scotland*, p.14.
- Upham, N. E. (2001) *Anchors*, Shire, Buckinghamshire
- Tucker, C. (2013) *Steamers to Stornoway*, Islands Book Trust, Kershader



THE CROWN  
ESTATE

**wessex**  
archaeology

Wessex Archaeology Ltd registered office Portway House, Old Sarum Park, Salisbury, Wiltshire SP4 6EB  
Tel: 01722 326867 Fax: 01722 337562 info@wessexarch.co.uk www.wessexarch.co.uk  
For more information visit: <http://blogs.wessexarch.co.uk/samphire/>

Funded by The Crown Estate, 16 New Burlington Place, London W1S 2HX  
Tel: 020 7851 5000 enquiries@thecrownestate.co.uk

In partnership with



Royal  
Commission on the  
Ancient and  
Historical  
Monuments of  
Scotland

Wessex Archaeology Ltd is a company limited by guarantee registered in England, company number 1712772. It is also a Charity registered in England and Wales, number 287786; and in Scotland, Scottish Charity number SC042630. Our registered office is at Portway House, Old Sarum Park, Salisbury, Wiltshire SP4 6EB.