



SAPHIRE

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

Annual Report 2014



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Project SAMPHIRE is managed, coordinated and implemented by WA Coastal & Marine in Edinburgh (part of Wessex Archaeology Limited) with the participation and support of local communities throughout Scotland. Project partners for 2014 included RCAHMS, The Scottish Association of Marine Science (SAMS), Lochaline Dive Centre and Dalriada Sub-Aqua Club and Flinders University. Community engagement fieldwork for the project in 2014 was undertaken by John McCarthy and Andrew Roberts (WA Coastal & Marine). Ground-truthing fieldwork was undertaken by John McCarthy and Andrew Roberts (WA Coastal & Marine), Dr. Jonathan Benjamin and Chelsea Colwell-Pasch (Flinders University), Dr. Karen Hardy (Institutio Catalana De Recerca i Estudis Avançats), and Robert Mackintosh (volunteer and student at the University of Southampton) with the support of numerous other occasional volunteers. Report illustrations by Andrew Roberts and the report was typeset by Kenneth Lymer.

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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 2014 (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 John and Jo Beaton, Jeff Darby, Dr. John Howe, Dr. Karen Hardy, Lochaline Dive Centre, Chelsea Colwell-Pasch and Bob MacKenzie who have helped to make the SAMPHIRE 2014 project a success. The SAMPHIRE team would like to thank The Crown Estate for supporting the 2014 season of the project through the Marine Stewardship Fund. Our apologies to anyone mistakenly left off this list.

John and Jo Beaton, Jeff Darby and the Dalriada Dive Club	Jim Kilcullen (Kylebhan Charters)
Steven Birch	Rod McDonald
Matt Baron and Dornie Divers	Denis Rixson
Professor Karen Hardy	Martin Sayer and Elaine Azzopardi (SAMS dive team)
Professor Colin Martin	Sam Walton
George Brown, Phil Mitchell, Bruce Greig and the Highland Council Divers	Charles Trollope
Simon Exley (Loch Fyne Dive Charters)	Chris Knight
Jonie Guest	Archie Gilp (Jr. and Sr.)
Jimmy Watt	John MacMillan
Ewen Johnson	Kiara King
Bob Drewery	Liam Griffin
Charles Barrington	Martin Briscoe
Graham MacKenzie	Melanie Baines
Iain Thornber	Ryngan and Beandri Pyper
Alison Stewart	Cameron and Morag Wilson
Shane Wasik (Basking Shark Scotland)	Robert Gordon
Richard Lodge	Jeff Sanders (SoCANT)
David Oakes and family (Sconser Scallops)	Chris Lamb and the Stirling Sub-Aqua Club
Camille Dressler	Alasdair Scouler
David Henderson	Buxton Dive Club
John Howe (SAMS)	James McLean
Mark and Annabel Lawrence (Lochaline Dive Centre)	Malcolm Poole
Maggie MacDonald (Clan McDonald Heritage Centre)	Phil Robertson (Historic Scotland)
	Chris Knight (RAF Brize Norton Sub-Aqua Club)

1 INTRODUCTION

This is a non-technical report which presents a summary of the work and results from the second 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. This is the second annual report, preceded by SAMPHIRE Annual Report 2013 (McCarthy and Benjamin 2013). A full technical publication will be produced at the completion of the three year 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 facilitate dialogue and cooperation between professional marine archaeologists and local maritime communities. It aims to bring historic material to the attention of heritage professionals and technical expertise to local communities in a bilateral exchange of information and experience. 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 accomplished 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.

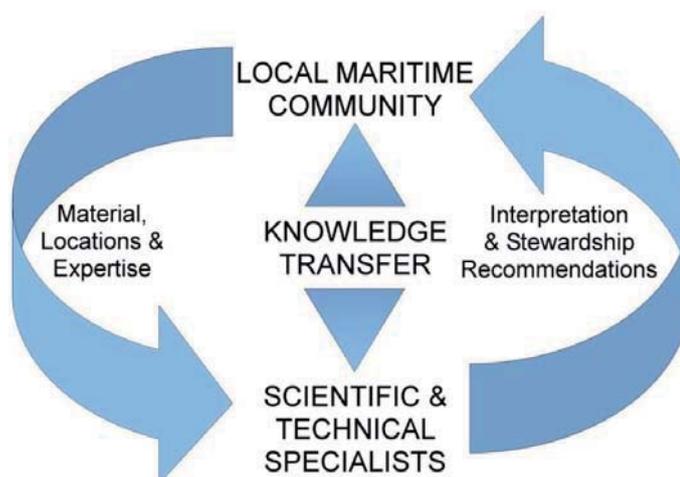


Figure 1: The key concepts of Project SAMPHIRE

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 and highlight the importance of such collaboration for future research and management.

For a full background for Project SAMPHIRE please see the *SAMPHIRE Annual Report 2013* (McCarthy and Benjamin 2013).

1.2 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 Built Environment Forum of Scotland's (2009, 14) strategy document 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 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 participants¹.

Since the beginning of the project, the SAMPHIRE team has worked carefully to ensure that the data gathered can be added directly to the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) National Database. The information has been gathered and entered into a pro forma Access database provided by RCAHMS. In this way the project data will be made available to the public with the minimum amount 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. The use of online media allows for non-participants to become new participants in the project, even if peripherally, as the project seeks to ensure public access to new and enhanced knowledge of Scotland's marine historic environment. In some cases the project team it has been able to return to communities to discuss, in person, the sites discovered and recorded.

1.3 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. The fieldwork for SAMPHIRE during 2013 focused on the northwest coast, from Skye north to Cape Wrath. SAMPHIRE 2014 focuses on the west-central region, encompassing Skye, the Small Isles and farther south to Argyll and Bute. Though slightly more populated than the region of focus during 2013, the 2014 study area is still remote with many geographical barriers, including numerous islands.

This comparatively low level of population density has presented both challenges and opportunities for the project in both 2013 and 2014. This is an enormous area to target for a heritage project but as the settlements within the landscape tend to be relatively small (and often consolidated) 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.

1. 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.

2 METHODOLOGY

Project SAMPHIRE is divided annually into four distinct phases.

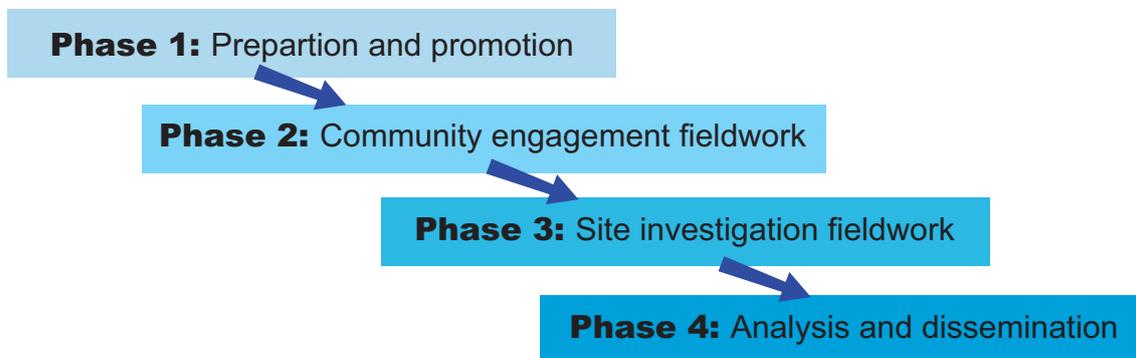


Figure 2: Project SAMPHIRE phases

2.1 Phase 1 – Preparation and Promotion

Phase 1 of the 2014 season took place between January and May of 2014. It centred on public outreach for Project SAMPHIRE, developing project tools and material and on preparation for fieldwork in Phase 2 and Phase 3.

The first task of 2014 was posting out copies of the SAMPHIRE 2013 Annual Report to the project participants. Thanks to generous funding by The Crown Estate, 100 copies of the SAMPHIRE 2013 Annual Report were professionally printed and bound and sent to individuals and organisations that had participated with the project during 2013 (**Plate 1**).

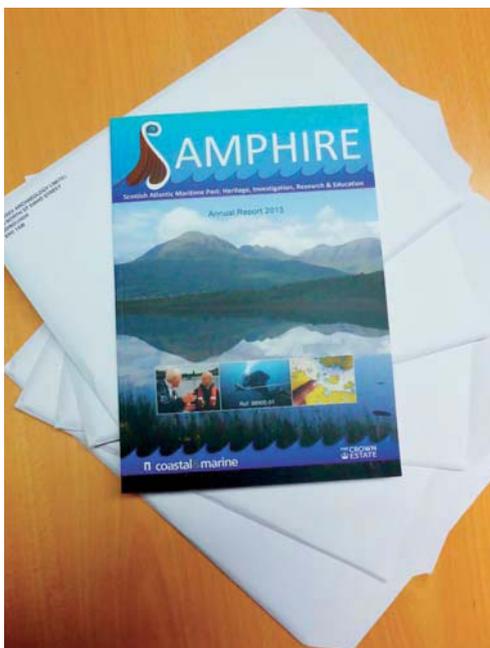


Plate 1: Printed and bound copies of the SAMPHIRE Annual Report 2013 ready to be posted to project participants



Plate 2: SAMPHIRE team members discussing the project at the DIG IT! 2014 launch event

Building upon the success of SAMPHIRE 2013, SAMPHIRE 2014 started off with several public events promoting community archaeology. SAMPHIRE team members attended the DIG IT! 2014 launch event in Glasgow on 15th March, 2014 (**Plate 2**). DIG IT! 2014 is a year-long celebration of Scottish Archaeology co-ordinated by the Society of Antiquaries and Archaeology Scotland. DIG IT! 2014 emphasizes community involvement in archaeological work and was an excellent venue to promote and discuss Project SAMPHIRE. The following weekend, 22nd March, 2014, SAMPHIRE team members participated in the Ask an Expert conference. Ask an Expert was an engagement opportunity, allowing members of the public to interact with archaeologists and ask technical questions concerning methods and artefacts. Both events were excellent opportunities to engage with communities and allowed the team to showcase Project SAMPHIRE as an ongoing community archaeology project.

In addition to conferences and public speaking events, SAMPHIRE was also promoted through media outlets such as the Stornaway Gazette and the BBC. This media attention helped reach communities and individuals that might not have been contacted through other means. The immediate impact of media promotion was evident as several emails were received from members of west-coast maritime communities submitting details of archaeological sites they knew of.

Aside from public dissemination of the 2013 results, the main task of Phase 1 was the organisation and preparation for Phases 2 and 3 of 2014. Thanks to the experience of the 2013 season, the SAMPHIRE team had a better understanding of what to expect during the community engagement and fieldwork seasons. Though most of the tools for Phases 2 and 3 had already been developed during 2013, there were opportunities to enhance and build on these resources. One change that has helped to gather data more consistently and efficiently was the creation of a Site Reporting sheet (**Figure 3**). This form allowed for data to be gathered in a more organised way during interviews and engagement events. These Site Recording sheets were also passed out at events and sent via email to interested parties. This allowed for individuals to complete the sheets at their own convenience and send them back to the SAMPHIRE team.

Similar to 2013, 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.

The organisation of Phase 3 diving and other fieldwork equipment was a major task and a comprehensive list of equipment was produced 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 required detailed risk assessments and health and safety documentation particularly for activities associated with diving at work. 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.

During Phase 3 in 2013, the dive team had driven between several different locations where mobilisation for diving operations was undertaken using either shore diving or a local charter boat. The rugged topography of the west coast and the time required for loading and unloading of equipment and movement onto different dive vessels resulted in some time being lost to logistics and thus reduced the amount of potential diving time. To minimise this, it was decided to hire a single liveaboard dive vessel for the entire duration of the 2014 diving operations (**Plate 3**). The *Kylebhan*, a local liveaboard based in Oban was chartered for the project.



SITE REPORTING SHEET

Correspondent Name: _____	Date: _____	WA Ref: 88901
Description of Find (how it was discovered/description/artefacts/date of discovery/any records or photographs of the site):		
Location/Coordinates of Site? WGS1984/British National Grid (underline) _____ Estimate based on chart/ verbal description/ GPS/ proximity to landmark/ Sonar/ other (underline) _____ Estimated accuracy in metres (radius)? _____		
When was the site last visited/dived? _____		
What are the conditions on the site? Depth (metres/feet/fathoms etc)/ Seabed/ Currents/ Visibility/ Kelp/ Hazards _____		
If this record was made with a SAMPHIRE team member during a Community Engagement event then include: SAMPHIRE team member initials _____ Location of event _____		
Contact Details Address: _____ Postcode: _____ Phone: _____ Email: _____		
We understand that the project team may be taking photographs and recordings for recording/publicity purposes that may include us and we consent to the use of such photographs for these purposes. We agree that any material (photographs/sketches etc) provided to the team may be published with appropriate credit given. Signature _____ Date _____		

Figure 3: Blank Site Reporting sheet created for Phase 2



Plate 3: The Kylebhan liveaboard served as the centre of operations for the 2014 fieldwork season

The liveaboard would serve as a mobile field centre and would allow the SAMPHIRE team to work more efficiently. In addition, the liveaboard allowed the team greater access to difficult regions such as the Small Isles and the northwest coast of Skye. This was a major advancement for the 2014 field season, enabling increased efficiency and coverage of a greater number of targets.

It was important to create a list of key contacts within the communities along the central western coast. This drew partly on the database created during the SAMPHIRE 2013 but consisted mainly of new contact details gathered through web searches, phone calls and other means. Once again, thanks to the success of SAMPHIRE 2013 and the network of existing contacts, it proved easier to build a new network of contacts for the new fieldwork area and it was clear that the process of community engagement was facilitated by the fact that SAMPHIRE is a multi-year project. The website created in 2013 also proved to be a valuable resource, with a lot of information being submitted online. Several individuals also contacted the team directly either through email or telephone. Following the protocol established in 2013, a database was created to manage the large number of contacts and keep a note of interactions with community members to ensure that important leads were followed up.

2.2 Phase 2 – Community Engagement Fieldwork

For a general methodology concerning the approach to community engagement fieldwork, please refer to SAMPHIRE Annual Report 2013 (McCarthy and Benjamin 2013).

Phase 2 of SAMPHIRE 2014 was a bespoke fieldtrip dedicated to community engagement, undertaken by the project outreach team between the 19th and 26th of May 2014. After mobilising from Edinburgh Phase 2 began in Oban where the SAMPHIRE team met with Dr. John Howe and John Beaton from Scottish Association of Marine Science (SAMS) and discussed the ongoing project and cooperative efforts that would take place during Phase 3 (see Section 3. New Partners for more information).

After leaving Dunstaffnage, the SAMPHIRE team travelled through Fort William, Arisaig, and Mallaig before taking the ferry across the Sound of Sleat onto the Isle of Skye and travelled north as far as Sconser. The team returned south through Oban and continued south onto Kintyre as far as Tarbert. The trip concluded at Lochaline on the Sound of Mull (**Figure 4**).

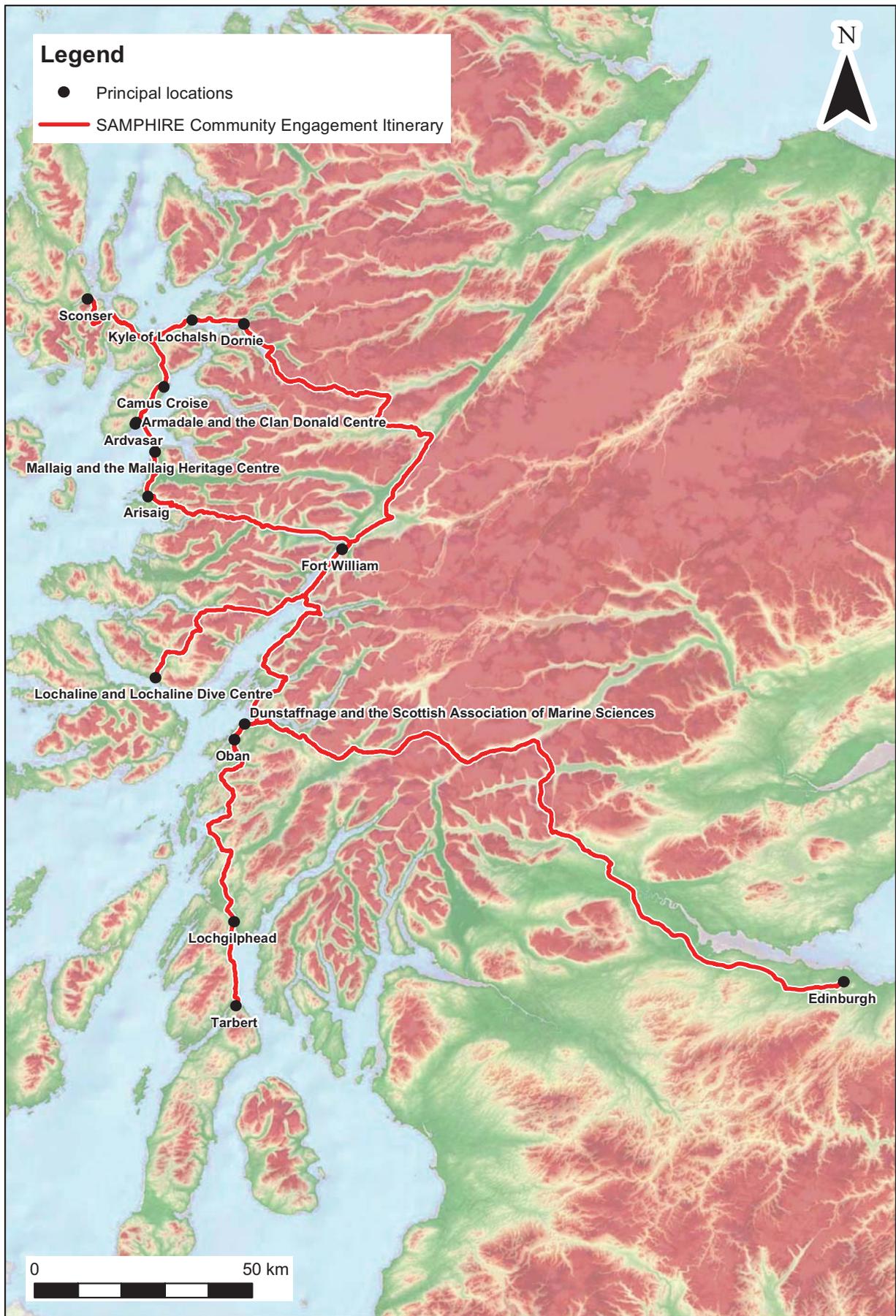


Figure 4: Map of the community engagement fieldwork

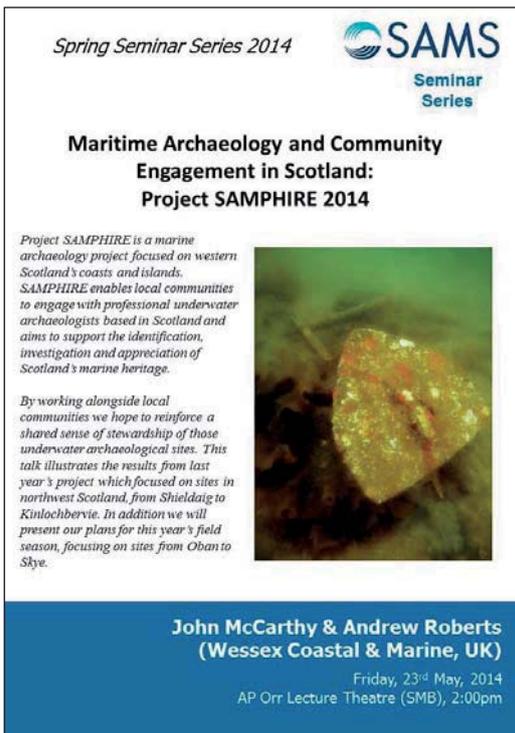


Figure 5: Poster for the outreach lecture at the Ocean Explorer Centre, SAMS, Dunstaffnage

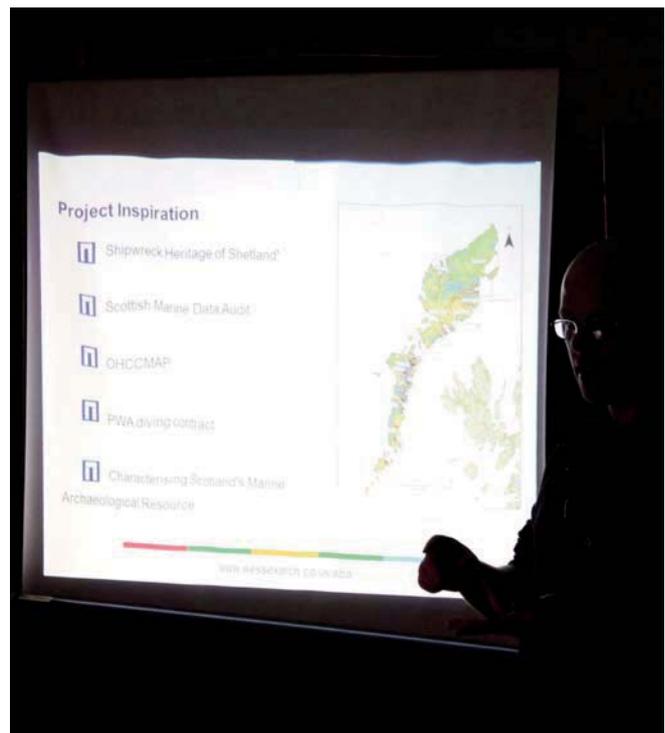


Plate 4: John McCarthy conducting the community outreach lecture at the Mallaig Heritage Centre



Plate 5: SAMPHIRE team member John McCarthy conducting the outreach lecture to a group of divers at the Lochaline Dive Centre

Phase 2 included three pre-arranged lectures and several pre-arranged meetings with various organisations and individuals. Public lectures, which included open question-and-answer dialogue, were held at local community centres and dive clubs in Mallaig, at the Ocean Explorer Centre on SAMS' campus in Dunstaffnage, and at the Lochaline Dive Centre in Lochaline. Informational material was prepared and disseminated prior to the lectures and team members were on hand to answer questions and discuss the project (**Figure 5**) (**Plate 4**).

The lecture at the Mallaig Heritage Centre was targeted towards local residents and enthusiasts and though scheduled for a weekday evening, the turnout was excellent. Attendants were encouraged to engage with a significant majority of participants active, they asked questions after the presentation and were very forthcoming with sites and ideas for further contacts and information. The second lecture was scheduled at the Ocean Explorer Centre at SAMS in Dunstaffnage. Many professional marine scientists as well as local divers and local community members from Dunstaffnage and Oban attended the talk. Once again, the feedback was very positive. The final lecture of Phase 2 was conducted at the Lochaline dive centre and was targeted towards dive groups visiting the centre over the weekend. This talk was more informal, running over several hours as groups returned from or left for diving expeditions (**Plate 5**). At each lecture the SAMPHIRE team distributed flyers for Project SAMPHIRE and also for related projects by colleagues at the Nautical Archaeology Society (NAS) and the Society of Antiquaries of Scotland (**Plate 6**)

In addition to the lectures, there were several prearranged meetings with local individuals who expressed interest in the project. At the Clan Donald Centre at the Museum of the Isles in Armadale, the team met with Maggie MacDonald, the museum manager. Ms. MacDonald facilitated a viewing of the special collections at the museum including several artefacts recovered from the seabed by local scallop divers. Additionally, an anchor that was discovered near Camus Croise had been donated to the museum and was available for recording at the time of the visit (**Plate 7**).



Plate 6: SAMPHIRE team member Andrew Roberts with related project material at Lochaline Dive Centre



Plate 7: SAMPHIRE team member Andrew Roberts recording an anchor at the Clan Donald Centre



Plate 8: Graeme MacKenzie of Camus Croise, showing the SAMPHIRE team where he discovered a possible medieval anchor



Plate 9: David Oakes sharing site locations with the SAMPHIRE team

In Camus Croise, the team met with Graeme MacKenzie, a local resident who had discovered a possible medieval anchor in his garden. Mr. Mackenzie related the discovery to the team and showed them the location where he discovered it (**Plate 8**). In Sconser, the team met with David Oakes and his family. David Oakes has been scallop diving around Skye for decades and is extremely knowledgeable about local shipwrecks. Mr. Oakes and his family invited the team into their home shared their knowledge of several previously unknown local shipwreck sites and also provided valuable additional local contacts (**Plate 9**).



Plate 10: SAMPHIRE team member Andrew Roberts with two scallop divers fresh off the boat!

Though this was a busy schedule, there was plenty of time in between the talks to pass out flyers and talk to locals in each community that we visited. Following the proven methodology from 2013, the SAMPHIRE team targeted harbour masters, fishermen, and workers at piers and harbours. As with last year, many of the best sites came from scallop divers and fishermen and similar individuals most familiar with the seafloor (**Plates 10 and 11**).

Utilizing the context recording sheet, paper Admiralty Charts and various useful websites such as Google Earth (when wifi was available), all the information provided was recorded and logged. The Site Reporting sheet provided useful prompts to ensure that all the necessary information was collected and Google Earth allowed a greater level of resolution in identifying the exact location of a site (Plate 12).

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 normal working hours it was also found that important information regularly came in from local people during 'off' hours', often in the middle of the team's dinner!



Plate 11: Mallaig Harbour Master shares several locations of reported wrecks with SAMPHIRE team member Andrew Roberts



Plate 12: Using Google Earth, a SAMPHIRE team member pinpoints a site that a local participant has shared

In this sense the project's community and research goals greatly benefited from a flexible approach, with dedicated personnel focused on results and unafraid to work irregular hours.

2.3 Phase 3 – Survey Fieldwork

As in 2013, Phase 3 of Project SAMPHIRE in 2014 was focused on testing (sometimes referred to as 'ground-truthing'), the accuracy of the marine archaeological sites reported during Phase 2. The main method for investigating these reports was through diver survey. The diving fieldwork was undertaken in a single block over the course of thirteen days. As with 2013, a selection of the most accessible and promising reports were chosen for testing since it is not possible to survey all the sites reported due to the volume of reports and the great distances involved between reported sites. Further, in many cases depths of sites reported are beyond the limits of SCUBA diving (in the case of the SAMPHIRE team, who are limited to 25m on SCUBA), in some cases considerably.

In 2014, the dive team was composed of professional marine archaeologists and experienced marine archaeology graduate students. In addition, volunteer technical divers and professional scientific divers from the National Facility of Scientific Diving at SAMS assisted in the fieldwork (further details of project participants can be found in *Section 3: New Partners*)

Ultimately, the dive team visited five locations during Phase 3 of 2014. Thanks to the mobility of the liveaboard, dive operations were able to be conducted at remote locations and were not constrained by land access. In addition, the skipper of the *Kylebhan*, Jim Kilcullen, was a valuable resource for information concerning wreck locations and local history.

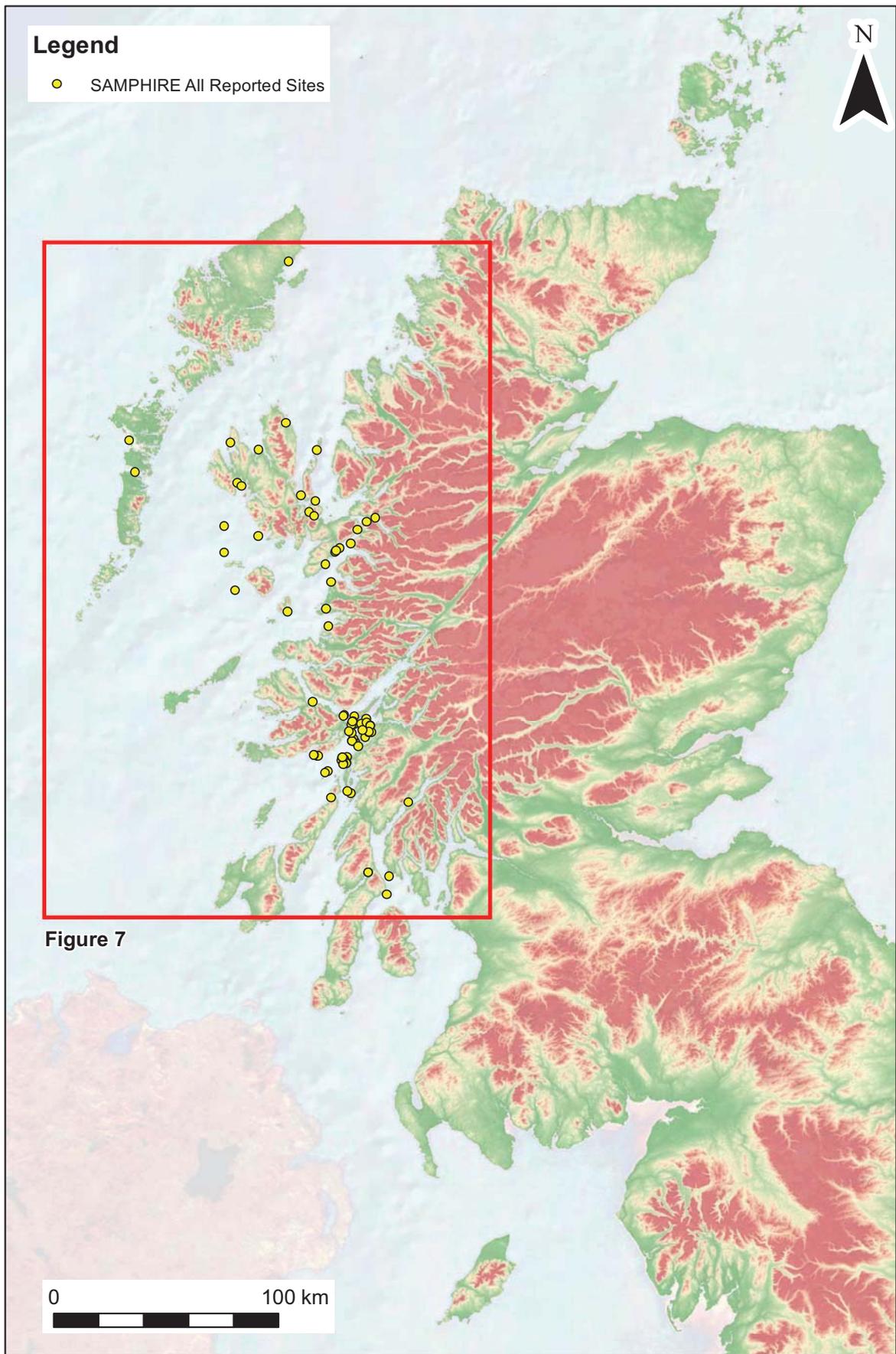


Figure 6: Marine heritage sites reported by community members during SAMPHIRE 2014

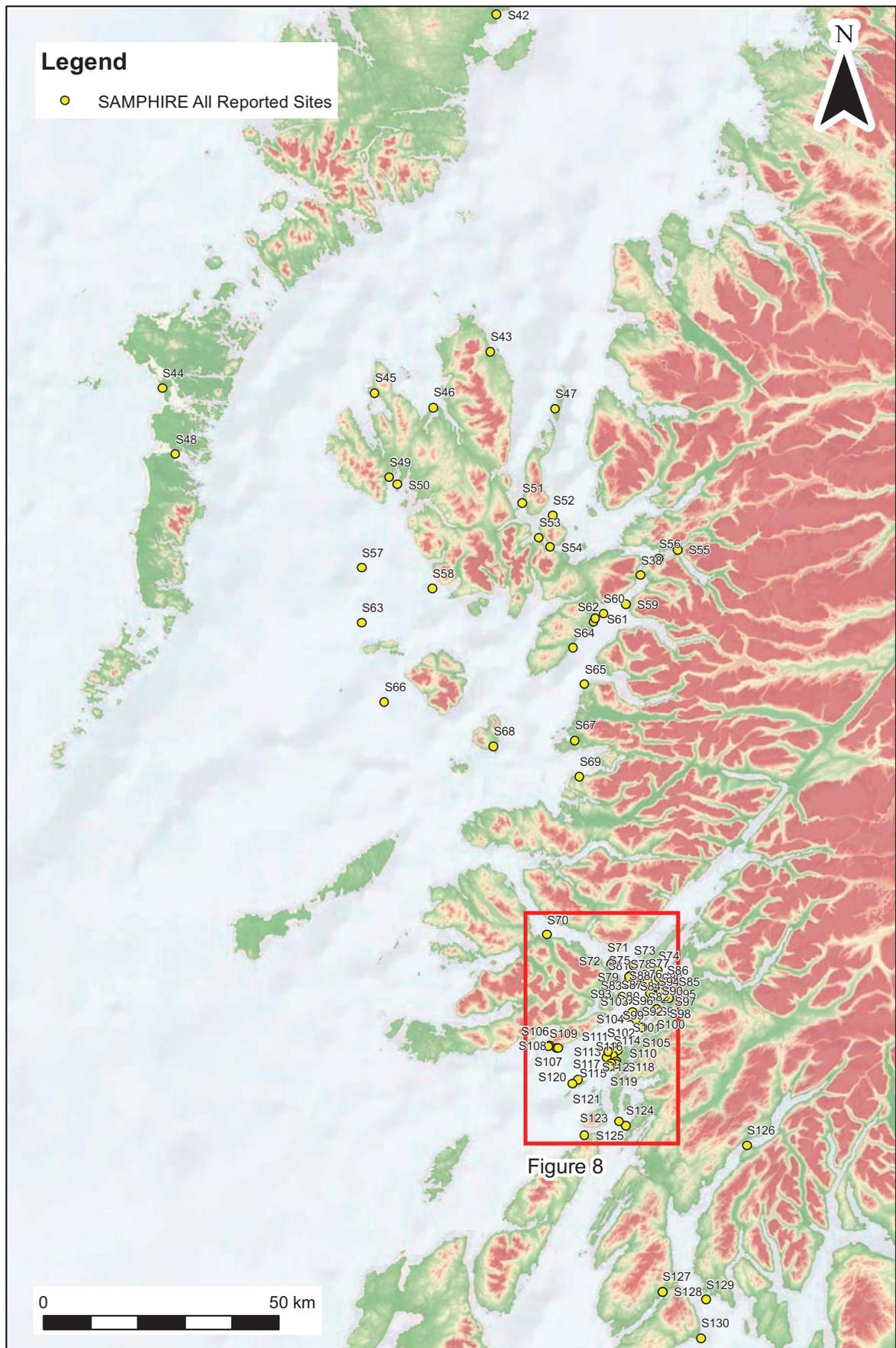


Figure 8

Figure 7: Marine heritage sites reported by community members during SAMPHIRE 2014

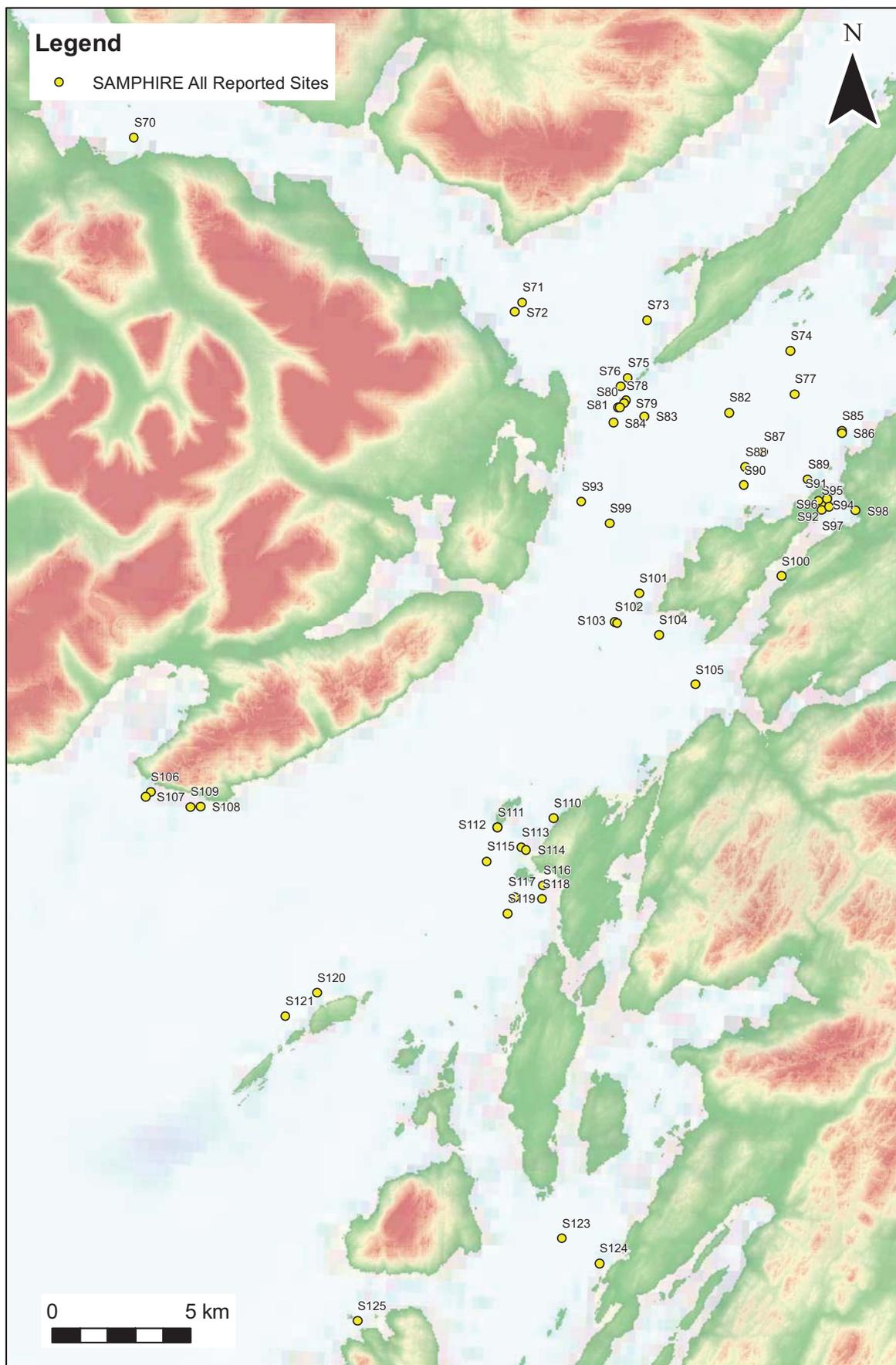


Figure 8: Marine heritage sites reported by community members during SAMPHIRE 2014 (Oban Area)

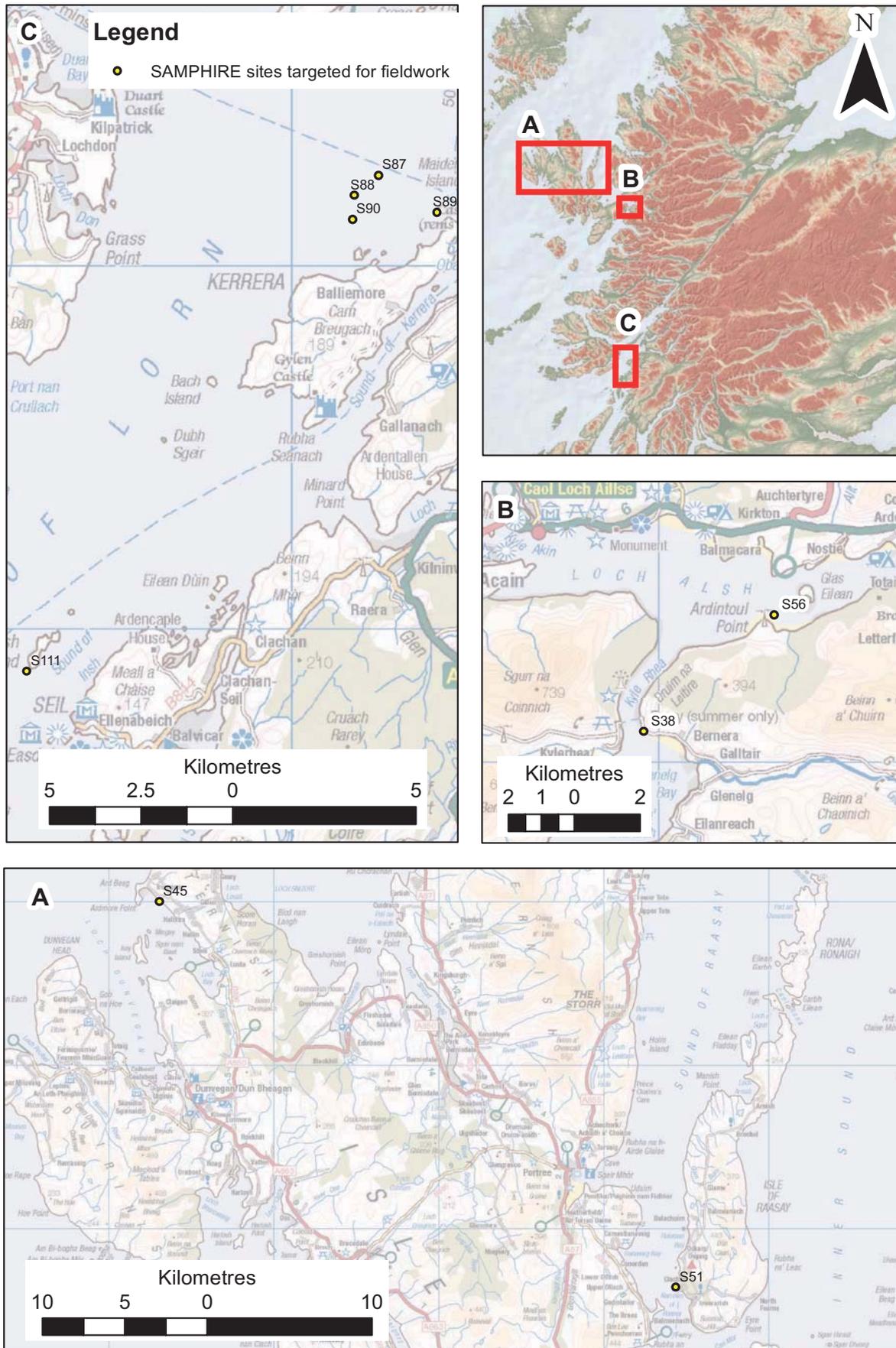


Figure 9: Community-reported marine heritage sites visited/surveyed as part of the 2014 SAMPHIRE Phase 3 fieldwork

3 NEW PARTNERS

3.1 Research Institutions

Though SAMPHIRE has always focused on community involvement and engagement, in 2014 the project has benefitted from new partnerships with local businesses and research organisations. One of the earliest and most important of these has been that with SAMS. Early on in Phase 1 of 2014, the SAMPHIRE team contacted Dr. John Howe of SAMS, Head of the Biogeochemistry and Earth Science Department, who was particularly interested in the opportunities for collaboration related to ground-truthing of recent SAMS sonar surveys in the area. John Beaton, another employee of SAMS, has also had an ongoing involvement with Project SAMPHIRE in 2013 and their involvement facilitated a more formal and wide-ranging collaboration.

Though SAMS is large marine research facility, most of their research is focused on oceanographic and biological studies without dedicated archaeological specialists. This provided an ideal opportunity for Project SAMPHIRE to collaborate with SAMS' scientists and hydrographic specialists. Dr. Howe provided Project SAMPHIRE with high-resolution multibeam data recently collected from the Firth of Lorne section of the Ireland, Northern Ireland, Scotland Hydrographic Survey project (INIS Hydro). This survey project focused on collecting high resolution mapping of the seafloor over a wide area. This data, in the form of multibeam geophysical data and 3D point clouds provided a unique opportunity to identify submerged maritime heritage. Dr. Howe had previously identified a series of wreck sites and had prepared H525 Wreck Report Investigation sheets for several sites. The SAMPHIRE team was able to work with SAMS and local dive clubs such as the Oban-based Dalriada Sub-Aqua Club (BSAC), to identify numerous further anomalies and ground truth them through diving, full details of which are outlined on a site-by-site basis in the Appendix. SAMS was also able to provide significant support for the project through another branch, that of the National Facility for Scientific Diving, a full scientific diving operation based at Dunstaffnage. At the outset of the 2014 diving operations a maritime archaeological specialist from the SAMPHIRE team was embedded within the SAMS scientific diving team, led by Dr. Martin Sayer to conduct dive investigations on several high priority targets in the nearby Firth of Lorne.

Finally, as mentioned above, during Phase 2 of 2014 SAMPHIRE, the SAMPHIRE team was also able to provide a lecture at the Ocean Explorer Centre on SAMS' campus in Dunstaffnage. Needless to say, SAMS' involvement with SAMPHIRE 2014 was a great asset and provided access to data, resources, and specialist personnel that would not have been normally available. The partnership with SAMS continues and we hope that they will have further involvement with the 2015 season.

3.2 Dive Centres and Sub Aqua Clubs

In addition to SAMS, Project SAMPHIRE also partnered with the Lochaline Dive Centre, based on the Sound of Mull. The Lochaline Dive centre has a long standing working history with the NAS and was very interested in facilitating Project SAMPHIRE.

During Phase 3 of the 2014 season, Lochaline Dive centre provided additional dive boats and teams of volunteer technical divers to investigate sites beyond the diving depths possible for the regular SAMPHIRE team. Lochaline has continued to work with project SAMPHIRE after the 2014 field season ended by discussing the project with other dive groups, sharing the information collected from divers with the SAMPHIRE staff and promoting the overall project. Local sub-aqua clubs have continued to be valuable partners in the project. This year we have worked extensively with these clubs, in particular with divers from the Dalriada SAC based in Oban. Initially John and Jo Beaton, both past participants in SAMPHIRE and members of

Dalriada continued to provide data from their activities and this led directly to the subsequent discovery and recording of the previously unidentified 19th century shipwreck of the Iris. As the year progressed more members of the club became involved and together provided a wealth of information on wrecks in the Firth of Lorn, including a great deal of data on the collection of flying boats at Kerrera. As well as information derived from the club's own activities, members showed a great enthusiasm for participating in ongoing research, getting involved in ground-truthing of new anomalies, working both independently and sharing a dive platform with the SAMPHIRE team during our own fieldwork. This led to numerous new discoveries, including further shipwrecks and artefacts such as cannons. Other valuable partnerships with dive clubs were undertaken, notably with Dornie Divers who also participated in fieldwork and provided wreck data, with the Stirling Sub-Aqua Club who attended talks in Lochaline and who subsequently facilitated SAMPHIRE project participation in the Scottish Sub-Aqua Club's annual dive conference and with the RAF Brize Norton Sub-Aqua Club who provided documentation of some of the flying boat remains in the Firth of Lorne. The SAMPHIRE team looks forward to continuing and building upon its partnerships with local dive clubs into SAMPHIRE 2015.

3.3 Academic Partners

During 2014 it was also possible to expand on the collaboration with academic partners. The most significant of these collaborations resulted from the original SAMPHIRE Project Manager leaving WA Coastal & Marine to accept an academic position. Dr. Jonathan Benjamin (now co-investigator for 2014-2015), accepted an appointment as a Lecturer of Maritime Archaeology at Flinders University in Adelaide, Australia which began in January 2014. Fortunately it has been possible for Dr. Benjamin to continue his involvement with the project from abroad during Phase 1 and 2 and to join the team for Phase 3 fieldwork as both a researcher, as co-investigator and in a safety role as a nominated dive supervisor.

Dr. Benjamin also facilitated some student involvement, bringing a graduate student, Chelsea Colwell-Pasch. Chelsea completed her MA research on the topic of Historic Scottish ship-building, and the remains of the *Leven Lass*, a Scottish-built 19th century brig that sank off the south coast of Phillip Island, Victoria, Australia. Though Chelsea did not participate as a diver in 2014 she was an invaluable topside resource, providing equipment support, research and logistical assistance and demonstrated the high value of enthusiastic postgraduate student involvement.

The team was also joined by a second postgraduate student volunteer, Robert (Bob) MacKintosh. Bob is a Scottish student currently undertaking research for a PhD at the University of Southampton's Centre of Maritime Archaeology (CMA). Bob's research focuses on analysing the effectiveness of UNESCO's Convention on the Protection of Underwater Cultural Heritage. Bob's diving qualification and experience enabled him to join the SAMPHIRE dive team, and he assisted in all aspects of the fieldwork.

Finally, Dr. Karen Hardy of the Institutio Catalana de Recerca i Estudis Avancats (ICREA) joined the team as a collaborator. Dr. Hardy is a leading-expert in the early prehistory of Scotland and was a co-principal investigator of the Scotland First Settlers Project (Hardy and Wickham-Jones 2009). Dr. Hardy provided expert specialist knowledge of the region and coastal prehistoric sites. Dr. Hardy surveyed the coastal zones while the dive team was in operation. Dr. Hardy's interest in the project stems from early maritime colonisation and coastal adaptation as well as the potential submerged prehistoric sites the team intended to investigate. The SAMPHIRE project provided a unique opportunity to access some of the more remote locations visited by sea and demonstrated the practicality of studying historic maritime archaeology and older periods, particularly in remote working locations where a boat is required. Dr. Hardy has provided summary results of her research during the fieldwork for inclusion in this report.

4 RESULTS AND FUTURE DIRECTION

The 2014 programme of work undertaken for Project SAMPHIRE has been a success. A total of 90 archaeological sites have been reported to the SAMPHIRE project team over the summer. Of these, five 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.

As noted in 2013, perhaps the most valuable outcome of SAMPHIRE 2014 has been the building of links and trust between professional maritime archaeologists with members of the public and coastal communities. This intangible, yet significant outcome is difficult to quantify and the team has received a huge amount of input from community members who actively and positively engaged with local heritage.

SAMPHIRE is building momentum. The project website has been updated on a regular basis throughout each phase of the project with 40 posts (**Figure 10**) and over 4,500 views in 2014 alone. Since the beginning of the project, the website has a total of 8,492 views as of December 2014. Extensive use was also made of social media, in particular Twitter and Facebook. Many members of the public and participants have contacted the project team through email or through the website form to express their appreciation for the project.

At present it is planned to continue the project in its current form through the end of 2015. It will follow a similar phased approach and complete the goal to cover as much of west coast of Scotland as is realistic given time and resource. It is clear that the project is gaining awareness in local communities and that the number and quality of newly discovered maritime archaeological sites continues to increase.

Success in Skye: New Historic Shipwreck Confirmed



The SAMPHIRE team undertook a shipwreck hunt this Sunday and Monday at Loch Bay at the NW corner of the Isle of Skye. We have been searching for a 19th century wooden shipwreck reported to us by John Beaton of the Dalriada Sub-Aqua Club. Although this wreck has never been charted by hydrographers or archaeologists, its location has been known for some years to a small number of local divers. We were first told of the wreck after our recent talks in Oban, undertaken as part of our community engagement fieldwork. Although John was unable to join us for the diving he did provide a coordinate and we set out to verify this location.

John's coordinate proved to be spot on and on our first dive we found ourselves surrounded by a wide variety of wreckage. The wreckage is spread over an area of around 30 metres and includes structural components, copper sheathing, hull planking and machinery. Our dive team were able to take measurements, video and photographs and will use these to attempt to identify the wreck. One possible answer is that this is *Iris*, a Clyde-built merchant vessel lost in the bay in the mid-19th century. Through careful examination of our survey data we should be able to test this theory.



Figure 10: A typical blog entry on the SAMPHIRE website, one of 40 published during 2014

5 REFERENCES

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APPENDIX I

SAMPHIRE (2014) Gazetteer

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 as part of the SAMPHIRE 2015 research.

SAMPHIRE ID: 38

Classification: STEAM TRAWLER (20TH CENTURY)

Site Name: *Medora*

Canmore ID: 284916

Coordinates: 179570, 820940

Accuracy: 20m

Description:

This wreck was first reported to the SAMPHIRE team during the Phase 2 community outreach field-work of 2013. The team spoke to Highland Council diver Bruce Greig and local resident Matt Baron who both mentioned wreckage on the northern shore of Glenelg Bay. They both described finding a boiler lying in the intertidal zone along with fully submerged wreckage spread around an adjacent gully to a depth of 16 metres. The wreckage reportedly included deck lights and condenser tubes. The SAMPHIRE team recorded the location of the site in our report last year (SAMPHIRE ID 38) and returned this year to make a preliminary survey and dive the site. We were joined by Glenelg resident Jimmy Watt. Jimmy previously provided us with an exact location for the boiler and came alongside the *Kylebhan* in his own boat, the *Mayflower* during the diving operation. He also reported that local people believed this to be a 19th century steamship with a cargo of coal which wrecked in Kylerhea and pushed by the strong tidal currents to its final resting place.

It is only possible to dive this site for a short period due to its proximity to the narrow strait at Kylerhea and strong local tides. The team carried out a single dive on the site at low tide on the 10th July 2014, carrying out a thorough search of the gully below the boiler. Divers found a small number of artefacts which may relate to the wreck but were unable to locate the main concentration of wreckage described by local divers before tidal conditions meant that they had to return to the dive platform. At the same time our volunteer researcher Chelsea accompanied Mr. Watt to carry out an investigation of the boiler on the shoreline which is exposed at low tides (**Plate B1**).



Plate B1: The exposed boiler on the shores of Glenelg bay, potentially from the schooner Medora

Chelsea was later able to identify the boiler as a Scotch Marine Boiler, a type in common use from the mid-19th century to the early 20th century. This is significant as it allows us to rule out a number of possible reported losses in the area and to make a possible identification.

Given the local tradition that the vessel had a cargo of coal and the identification of the steam boiler, it first appeared that this could be the wreck of the *Deerpark* (CANMORE ID 102015). The *Deerpark* was a steel steamship built in 1901 and lost on the 11th November 1912 in Glenelg Bay with its cargo of coal. However further research for the SAMPHIRE project showed that the *Deerpark* was refloated in 1914 and sold for repair before being sunk by a German U-Boat in 1916. There are several other vessels recorded as lost in Glenelg but most of them are somewhat too early to have had a boiler of this type. The remaining possibility is that this is the *Medora* (CANMORE ID 284916), a schooner reported as having stranded in Glenelg in 1860 with a cargo of staves.

SAMPHIRE ID: 42

Classification: ANCHOR

Site Name:

Canmore ID: Unknown

Coordinates: 148973, 941168

Accuracy: 100m

Description:

James Crawford contacted the SAMPHIRE team with a report of a stone anchor at the beginning of 2014. The anchor was first discovered in 1993 at Gress Beach on Lewis. The anchor was discovered under two metres of sand at the present mouth of the Gress River. The anchor weighs approximately 35kg and measures 54 cm x 35 cm x 13 cm and is made of Lewisian Gneiss (**Plate B2**). This find is very significant as it is only the second known location of a stone anchor findspot in Scotland and the date and use of these artefacts is at present very poorly understood.



Plate B2: Stone Anchor discovered on Gress Beach, Isle of Lewis

SAMPHIRE ID: 43

Classification: STEAMSHIP (20TH CENTURY)

Site Name: *Thomas Telford*

Canmore ID: 295379

Coordinates: 147677,868838

Accuracy: 20m

Description:

Maggie MacDonald from the Clan Donald Museum on Skye provided the SAMPHIRE team with the contact details of David Oakes, a scallop diver in Sconser, Skye who had reported and donated artefacts to the museum discovered while scallop diving. Mr. Oakes invited the SAMPHIRE team to visit him in Skye during the Phase 2 community engagement (**Plate B3**). Mr. Oakes, his wife Alison, and their son gave the team a warm welcome and shared a number of different sites with the team. The first site reported came from Mr. Oakes' wife Alison. Alison provided us with information concerning the wreck of the Clyde puffer, *Thomas Telford*, wrecked in the intertidal region of Staffin Bay, Skye. The vessel was carrying a cargo of bricks when it wrecked in Staffin Bay. According to Mrs. Oakes, bricks were salvaged from the wreck and reused in local houses. The wreck is known by locals and Allison remembers visiting it since she was a child. The wreck is still visible on the shore at low tide.



Plate B3: The Oakes family reporting maritime heritage sites to the SAMPHIRE team in Sconser, Skye

The RCAHMS database has a reported loss for the lighter *Tom Telford* (CANMORE ID 295379) in this location though no confirmed wreck has been recorded. Though the vessel is recorded in the database as a lighter, it is known to have been a Clyde Puffer. The *Thomas Telford* was built in 1844 and lost on the 19th September, 1919 with a cargo of bricks.

SAMPHIRE ID: 44

Classification: SHIP (19TH CENTURY)

Site Name: *James A. Wright*

Canmore ID: 213832

Coordinates: 78000,861000

Accuracy: 10m

Description:

Reverend Donald MacQuarrie contacted the SAMPHIRE team via email during Phase 1 of the 2014 project to share his information concerning two sites in the Outer Hebrides. This entry is his information concerning the wreck of the *James A Wright*, a 19th century sailing vessel that ran aground at Baile Sear Machair, Baleshare, North Uist in 1877 on a return voyage from Liverpool to Savannah, Georgia. Reverend MacQuarrie has been aware of the site location for several years and has visited it since the 1980s. He provided the SAMPHIRE team with a series of photographs of the site illustrating the changing level of sand coverage at the wreck location.



Plate B4: The remains of the James A. Wright in 1989 illustrating a high level of exposure



Plate B5: The remains of the James A. Wright in 1997 illustrating an increased level of sedimentation



Plate B6: Reverend MacQuarrie standing at the stempost of the James A. Wright in 2007, illustrating the substantial amount of sand covering the wreck.



Plate B7: Current exposure level of James A. Wright in July 2014. (credit Kirsty MacDonald)

The *James A. Wright* is recorded in the RCAHMS database (CANMORE ID 213832) as a reported loss without a confirmed location. The vessel is classified as an American-built, fully-rigged ship, constructed in 1868, and rated 1273 tons. Originally constructed in Bath, Maine, the vessel departed Liverpool in ballast, headed for Tybee Island, South Carolina, USA. The ship was driven ashore on the west side of North Uist on the 17th of November 1877. The crew made it safely ashore but the ship was a total loss.

The photographs and location provided by Reverend MacQuarrie are an invaluable resource, identifying the final resting place of the *James A. Wright* and illustrating the site's changing environment. Though largely exposed in 1989, the site was completely covered in 2007. A recent visit to the site by local residents in July 2014 discovered that the conditions had changed again and much of the vessel is now uncovered and also partially submerged.

SAMPHIRE ID: 45

Classification: SCHOONER (19TH CENTURY)

Site Name: *Iris*;

Canmore ID: 264359

Coordinates: 123070, 859994

Accuracy: 5m

Description:

John Beaton, an employee of SAMS and a contributor to SAMPHIRE 2013, provided the SAMPHIRE team with the location and description of a shipwreck in north Skye, near Ardmore Bay. According to John, the wreck is locally known as the *Iris*. John reported the location and coordinates as well as describing the wreck including copper sheathed hull remains, a bronze rudder gudgeon, coal, iron knees, pump, and chain pipes (**Plate B8**).

The RCAHMS database lists a reported loss of a ship called the *Iris* (CANMORE ID 264359) in the region, though there are conflicting contemporary newspaper accounts as to where exactly the ship sank. The *Iris* was a wooden brig, built in 1857 with a length of 34m, a beam of 7m and a gross tonnage of 236. It was lost with its cargo of coal in 1874 although all hands were saved. The Canmore entry for the wreck records an abortive attempt to tow it from the rocks where it had stranded, abandoned after it had stranded in deep water.

Thanks to the details that John provided us, this wreck was selected for investigation during Phase III of SAMPHIRE. The SAMPHIRE team arrived on site and began a diver investigation on 6th July, 2014. Divers immediately encountered the remains of the wreck upon reaching the seafloor on the

SITE REPORTING SHEET

Correspondent Name: <i>John Beaton</i>	Date: <i>10/6/14</i>	WA Ref: 88901
Description of Find (how it was discovered/description/artefacts/date of discovery/any records or photographs of the site): <i>Dived after information received from Gordon Mackay of 'Dive and Sea the Hebrides'. 10/09/2000</i>		
Visible parts: <i>timbers copper sheathing coal iron knees pump chain pipes bronze rudder gudgeon wreck known as 'Iris'</i>		
Location/Coordinates of Site? <u>WGS1984/British National Grid</u> (underline) <i>57° 32.697'N 06 37.810'W</i>		
Estimate based on <u>chart/verbal description/GPS</u> (underline)		
Estimated accuracy in metres (radius)? <i>15m</i>		
When was the site last visited/dived? <i>10/04/14 10/07/09</i>		
What are the conditions on the site? Depth (metres/feet/fathoms etc)/ Seabed/ Currents/ Visibility/ Kelp/ Hazards <i>10-13m, boulder slope to sand around 10m, no current, no hazards</i>		

Plate B8: John Beaton provided the SAMPHIRE team with a detailed context sheet concerning the *Iris*.



Plate B9: Details of diver investigation onto the Iris

first dive. The wreck was found to be very broken up with disarticulated portions of the hull and machinery scattered across the sandy bottom and onto the adjacent submerged boulder field. Divers photo-documented the debris field and identified concentrations of material (**Plate B9**). The second dive focused on continuing the photo documentation and traditional recording of the machinery and potentially diagnostic debris. Divers identified the remains of copper sheathing, hull planking, disarticulated hull structure, iron knees, large pipes and what appears to be steam engine machinery. Though the *Iris* was not a steamship, the vessel could have been fitted with auxiliary steam machinery as this was common at the time.

The artefacts appear to indicate a 19th century vessel, aligning with the identification of the *Iris*. Further research is necessary into the construction and auxiliary machinery on the *Iris* to match the artefacts on the seabed but it is considered to be the most likely candidate for the wreck.

SAMPHIRE ID: 46

Classification: SCHOONER (19TH CENTURY)

Site Name: Greshornish Yacht: *Lady Middleton*

Canmore ID: 285489

Coordinates: 135526,856903

Accuracy: 50m

Description:

This wreck site was reported to the SAMPHIRE team from two separate scallop divers. During Phase 1 of SAMPHIRE 2014, David Henderson, a retired scallop diver, contacted the team with the location of three wreck sites he had encountered while diving during the 1990s. This entry relates to a wreck he identified at base of a small drying rock located off of Eilean Mor at the mouth of Loch Snizort on the Isle of Skye. He reported coming across this wreck in 1996 and described a debris field of ceramics and metal along with an intact anchor. He had made no further dives at this location since that time.

Several months after receiving the report from Mr. Henderson, Maggie MacDonald of the Clan Donald Centre on Skye put us in contact with David Oakes (see FID 43). David was able to add to the description, stating that the wreck site included a copper clad rudder, copper sheets, and some ceramic plates and sherds. He commented that “the wreck is just a mound of rusted material now”. He believed the wreck to be the remains of a 19th century yacht, perhaps associated with Greshornish House, a residence on Loch Snizort.

The RCAMS database lists three reported losses in the area but no confirmed wrecks. The *Isabella* (CANMORE ID 286501) a 19th century schooner that wrecked in 1864, the *Lady Middleton* (CANMORE ID 285489), and the *Acquire*, a 20th century steam drifter (CANMORE ID 289926) that sank in 1935. The *Isabella* and the *Acquire* are both reported as being lost of Lyndale Point in Loch Snizort. Lyndale Point is located to the south of the Eilean Mor and therefore is not considered to be the same location as the reported wreck location. The *Lady Middleton* however, is reported as being lost after striking a sunken rock at the mouth of Loch Snizort. These details match the location of the wreck and therefore the *Lady Middleton* is believed to be the most likely candidate.

The *Lady Middleton* was built in Perth in 1867, measuring 24 metres in length and 6 metres in beam. *Lady Middleton* was lost the following year carrying a cargo of coal bound for Dublin from Newcastle, having struck a sunken rock. All of the crew were saved.

SAMPHIRE ID: 47

Classification: ANCHOR

Site Name: Unknown

Canmore ID: Unknown

Coordinates: 161463, 856587

Accuracy: 500m

Description:

While meeting with Maggie MacDonald at the Clan Donald Centre, she mentioned a local historian who may have useful information for us. Maggie contacted Mr. Charlie Barrington of nearby Ardvasar and the team was immediately invited to visit him that afternoon at his home (**Plate B10**). Though Mr. Barrington is not a diver, he has a wealth of knowledge concerning the maritime history and heritage of Skye and the surround region. He was able to provide us with several potential sites and many avenues for future research. This entry refers to anchor he discovered on the Isle of Rona. He recalled recovering an old anchor from the eastern pool of Rona Harbour. The RCAHMS database does not list any reported losses or recorded wrecks in this area. No further information is available regarding this find.



Plate B10: Mr. Barrington pointing out sites to SAMPHIRE team member Andrew Roberts in his home in Ardvasar

SAMPHIRE ID: 48

Classification: CRAFT

Site Name: Unknown, Benbecula Birlinn

Canmore ID: 334320

Coordinates: 80717,846878

Accuracy: N/A (no additional spatial information gathered)

Description:

Reverend Donald McQuarrie of Fort William contacted the SAMPHIRE team via email to report the possible location of a wrecked birlinn near Benbecula. The location has long been known to local residents but few details are recorded in the archaeological record. Reverend McQuarrie (**Plate B11**) related his personal account of the site and provided newspaper accounts concerning the site dating to 1894.

He provided two separate newspaper accounts concerning the wreck, both dated to 1894. *The Oban Times* reported on the exposed vessel on 8, March 1894 stating:

“BENBECULA – Interesting discovery.

‘During the recent storms and high tides, by which Benbecula has been visited, the upper part of an ancient boat has made its appearance in the sands between Benbecula and South Uist.

It was discovered beside the rocks at Sgeir na Birlin, and it is believed that the rocks derived their name from the birlin recently found there. The length from the stem to the stern is about 40ft.

No local tradition can throw any light on how the boat came to be embedded in the sand, but there is still living in Hacklett, Benbecula an old woman who says that that she heard from her great grandfather or grandfather that a boat of that description had struck the rocks near where it was found.

If that is true it must have lain there for about two centuries. When the tide and weather permit the boat will be excavated.”

Local tradition: In the late 1600’s a birlinn was wrecked and the crew were buried on the land above the wreck. The wreck is 15yds from the shore and now ‘humped backed’ with a sand dune.”



Plate B11: A diorama of the site built by Reverend MacQuarrie

The Scottish Highlander reported two days later:

“SOUTH UIST – Curious find

‘It is reported that a birlinn - the ancient Highland chieftain’s war boat has been exposed by the recent gales in the South Ford in Benbecula. The birlinn seems to be of considerable size, as some 30ft. of her length is said to be seen at present.

In connection with this matter, tradition says that a birlinn, on a raiding expedition, struck one stormy day at Rudha Aird-an Eoin some 200 years ago and immediately sank. The whole of her crew perishing in the gurgling water. The bodies were washed ashore at the point referred to, and were interned in a green spot close by, where they are mouldering to this day.

The birlinn was soon covered over by the continuously shifting sands and was never observed till now. The wood of the birlinn is said to be in an excellent state of preservation and is extremely hard.”

This site is recorded in the RCAHMS database as a reported loss (CANMORE ID 334320). No further information is available at this time.

SAMPHIRE ID: 49

Classification: SHIP (19TH CENTURY)

Site Name: Yemassee

Canmore ID: Unknown

Coordinates: 126173, 841966

Accuracy: 50m

Description:

During the visit of the SAMPHIRE team to his home in the summer of 2014, David Oakes of Sconser Scallops reported the remains of a shipwreck near Orbost on the south western coast of Skye. He reported that the wreck was large broken up, with a significant amount of wreckage. The artefact scatter is composed largely of ceramic fragments which David estimated to date to the mid 19th century. He also mentioned a Trotman anchor, wedged into a submerged cliff near the site. The Trotman anchor was a new design of anchor first introduced in the mid 19th century. According to David Oakes, the wreck site is known as the *Yemassee*.

The RCAHMS database lists the *Yemassee* (CANMORE ID 284423) as a reported loss with no confirmed location. Whitaker includes a description of this ship as the ‘China Plate’ wreck, a name that surely suggests a description derived from the wreck remains themselves and presumably given by divers or salvors. This description matches those of David Oakes and suggests that the location of the wreck may have been known and then lost again. Unfortunately no further information is supplied by Whitaker on this point. The *Yemassee* was an America fully rigged ship that was lost on a return voyage from Liverpool to Philadelphia. The vessel was stranded near Orbost on the 20th of January 1859. By the 25th after some salvage attempts and recovery of ‘bales’ of unknown cargo, the ship had become a total wreck. Little else is known about this wreck but further research is ongoing.

SAMPHIRE ID: 50

Classification: AIRCRAFT RECEIVER

Site Name: Unknown

Canmore ID: Unknown

Coordinates: 127886, 840390

Accuracy: 500m

Description:

During the same visit, David Oakes reported an aircraft receiver that had been recovered by other divers in about 20 metres of water south of Balmore. He believes that it could be the receiver from a B17 aircraft. The receiver is now in the Clan Donald Museum in Armadale.

The RCAHMS database does not list any aircraft losses in this region.

SAMPHIRE ID: 51

Classification: LITHIC SCATTER

Site Name: Clachan Harbour

Canmore ID: Unknown

Coordinates: 154429, 836391

Accuracy: 100m

Description:

Clachan Harbour, on the south west corner of the Island of Raasay was investigated as part of the Scotland's First Settlers project, in 2000-2001. An intertidal distribution of peat and tree trunks was identified, and a single lithic artefact was recovered, embedded in the peat. Due to its location in the intertidal zone, the site was understood to have been occupied during lower sea levels at some point before around 8000 years ago (**Figure B1**) (Hardy and Wickham-Jones 2009). A paleoenvironmental monolith core was taken in the area and a preliminary report (Dawson, 2009). The results of the diatom and pollen analysis of the material from this monolith indicate a fall then a subsequent rise in sea level in the early-mid Holocene (Cressey et al., 2007).

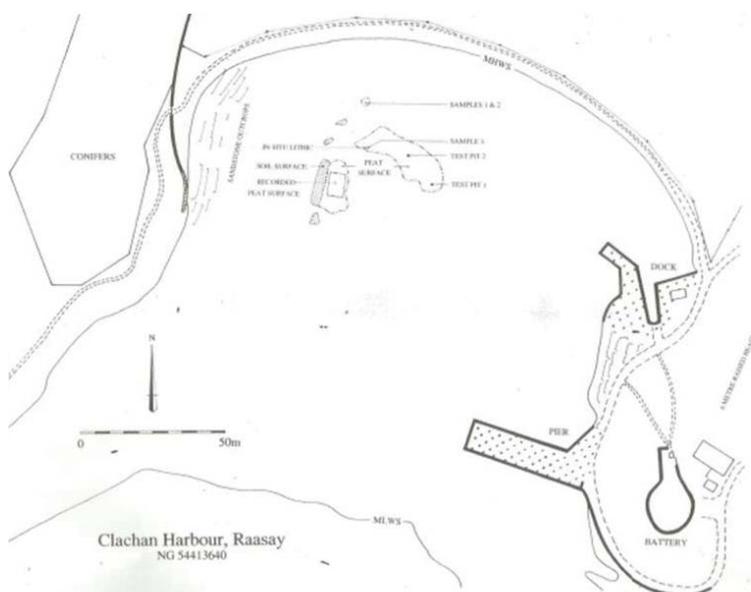


Figure B1: Plan of Clachan Beach and distribution of peat and tree trunks (from SFS project)

In January 2007, as part of the Clachan Harbour development plan, CFA Archaeology was contracted to undertake an assessment of the archaeology of the bay area (Cressey et al., 2007). This resulted in a small excavation in which 27 lithic artefacts were discovered, embedded in the peat deposit or in the underlying clay deposit. A boar's tooth was also identified, as was charcoal and some pits containing hazelnut shells. Two radiocarbon dates on *Betula* tree trunks gave dates to between



Plate B12: Artefact Cat 9. Opposed platform core. Described in Ballin et al. (2010) as relatively fresh tuff, this closely resembles lightly patinated baked mudstone. Top: The artefact; bottom: close-up of modern chip revealing the characteristic black baked mudstone beneath the patination.



Plate B13: Bevel ended pebble, Clachan Beach

8520–8200 uncal BP. Analysis of the lithic artefacts identified broad blades which can be characteristic of an early Holocene age, though the raw material was identified as tuff (Ballin et al., 2010).

As part of the SAMPHIRE 2014 diving fieldwork a visit to the site was carried out by Professor Karen Hardy with support from local archaeologist Martin Wildgoose and the SAMPHIRE team. Samples of raw material described as tuff were collected from south Skye, while samples of the baked mudstone had already been collected previously, and the artefacts were re-examined. While two artefacts were identified as a raw material that was not baked mudstone, and at least one of these could be tuff, all the rest closely resemble baked mudstone from Staffin in North Skye. Baked mudstone can be challenging to identify as it varies considerably, from fine grained black to coarse grained light grey. Several of the artefacts have the 'greasy' feel of the raw material, the light patination and the black fine grained material beneath this all of which are characteristic of baked mudstone. This was observed on several artefacts that had been chipped recently, possibly during excavation (**Plate B12**). Some of the other artefacts were of the grey, streaky, coarser grained material which is also highly characteristic of baked mudstone. A bevel ended stone tool with wear on the distal end, most likely based on a beach pebble, was also identified, as was a tooth crown of a molar identified as canid (**Plate B13**) (Cressey et al., 2007). A full investigation of the tuff identified originally by Ballin et al., (2010) must wait until the several sources described have been identified and samples collected and examined; however, tuff-like material that was collected nearby on Skye, beneath an outcrop described in Ballin et al., (2010) as part of the SAMPHIRE project, corresponds with only one artefact from the Clachan Harbour assemblage.

The SAMPHIRE visit to Clachan Harbour comprised a detailed walkover examination of the peat and tree trunk deposits. A snorkel survey was conducted below the low water line, and several shovel pits were dug. However, no submerged archaeological or peat deposits were identified due to ubiquitous sand cover. Five samples were taken of tree trunks, peat and the underlying clay, for radiocarbon dating (currently requested to Historic Scotland).

There is a clearly defined intertidal site at Clachan Harbour. The small test excavation that was undertaken revealed further extensive deposits beneath the storm beaches on the shore. This is an important site which can be dated both by characteristics of its lithic assemblage, and by its location in an intertidal zone, to early human occupation period in the region. If the material is in fact baked mudstone, it creates a link with An Corran, the only known source of this material. In addition to the raw material source at An Corran, a broad blade assemblage, similar to that found at Clachan Harbour, was found beneath the better known Mesolithic shell midden here (Saville et al., 2012).

There is a clearly defined intertidal site at Clachan Harbour. The small test excavation that was undertaken revealed further extensive deposits beneath the storm beaches on the shore. This is an important site which can be dated both by characteristics of its lithic assemblage, and by its location in an intertidal zone, to early human occupation period in the region. If the material is in fact baked mudstone, it creates a link with An Corran, the only known source of this material. In addition to the raw material source at An Corran, a broad blade assemblage, similar to that found at Clachan Harbour, was found beneath the better known Mesolithic shell midden here (Saville et al., 2012).

SAMPHIRE ID: 52

Classification: ANCHOR

Site Name: Unknown

Canmore ID: Unknown

Coordinates: 160911, 833752

Accuracy: 1000m

Description:

During the visit of the SAMPHIRE team to his home in the summer of 2014, David Oakes of Sconser Scallops reported a lost anchor that he discovered during scallop diving in the late 1980s. He recalls that it was a very large anchor with one pointed crown intact and one broken arm in about 20 metres of water. The shaft measure approximately 3-4 metres in length with a big ring on the end. One of the flukes was buried into the sand the other had broken away onto the seabed. The anchor was located in a large flat sand area and partially buried in the sand. The location provided for the anchor is very approximate, only accurate to about a kilometre.

The closest wreck listed in the RCAHMS database is a steam trawler (115527). No further information is available regarding this find.

SAMPHIRE ID: 53

Classification: SLOOP (19th CENTURY)

Site Name: *George and Jane*

Canmore ID: 327135

Coordinates: 158036, 828992

Accuracy: 100m

Description:

During the visit of the SAMPHIRE team to his home in the summer of 2014, David Oakes of Sconser Scallops reported the location of a ballast pile with associated 19th century ceramic debris in Loch na Cairidh immediately south of the Isle of Scalpay on Skye. Mr. Oakes dived the site fifteen years ago and recalls observing metal fragments but believes that the vessel was wooden. The ballast pile was in a 'boat shape' and located on a flat sandy seabed with some rocks in a low energy environment. He recalls that the site is in an approximate depth of 14 metres at the base of a low rise. Mr. Oakes commented that the seabed in this area was covered in 19th century ceramic sherds with some intact plates still visible.

The RCAHMS database has a reported loss of the *George and Jane* (CANMORE ID 327135), a nineteenth century sloop, in this location. The *George and Jane* was registered in Dumfries and was lost with a partial load of herring in 1860.

SAMPHIRE ID: 54

Classification: CRAFT (Possible)

Site Name: Unknown

Canmore ID: Unknown

Coordinates: 160393, 826990

Accuracy: 100m

Description:

During the visit of the SAMPHIRE team to his home in the summer of 2014, David Oakes of Sconser Scallops reported a second probable ballast dump in Loch na Cairidh, approximately 3 kilometres to the southwest of his home and very well-known to him. This ballast pile is reported to be visible at low springs tide but is not accessible by foot due to a very muddy seabed. No cultural material has been identified with the ballast pile but the site has not been properly investigated due to poor visibility.

The RCAHMS database does not list any reported losses or recorded wrecks in this area. No further information is available regarding this find.

SAMPHIRE ID: 55

Classification: CRAFT

Site Name: Norna (possibly)

Canmore ID: Unknown, 285476

Coordinates: 187490, 826407

Accuracy: 100m

Description:

Matt Baron of Dornie Divers was involved with Project SAMPHIRE in 2013 and continued to provide us with locations of sites this year. In 2014 he reported that the remains of a wooden wreck are currently being used as dive training by the Royal Navy south of Ardelve in Loch Alsh.

The RCAHMS database does not list any reported losses in this immediate area however, there is a reported loss of a smack at “the entrance of Loch Duich” (CANMORE ID 285476). The smack sank at its moorings loaded with ballast in 1876. There was an attempt to refloat her shortly after the sinking but it was unsuccessful. It is possible that this wooden vessel relates to the remains of the smack. Further investigation will be required to determine the identity of this vessel.

SAMPHIRE ID: 56

Classification: AIRCRAFT

Site Name: Unknown

Canmore ID: Unknown

Coordinates: 183530, 824510

Accuracy: 100m

Description:

Matt Baron of Dornie Divers reported the location of a possible flying boat near Ardintoul in Loch Alsh. A small Royal Navy oil tank farm was situated immediately north of Ardintoul House and served as a refuelling station during WWII. Matt reported that a friend recalled seeing the remains of an aircraft from the surface while in the area as a child.



Plate B14: Mooring blocks identified during diver survey

The site was selected to be investigated during the fieldwork phase of SAMPHIRE. Matt Baron was able to assist us in the investigation. Snorkelers were deployed first to conduct a search from the surface in the shallower portions of the area. A dive survey was then conducted in the deeper portions of the area. Divers swam along a linear transect survey in 10 metre lanes to cover more seafloor. Mooring blocks and the remains of an old pier were identified but no remains of an aircraft were identified (**Plate B14**).

During the dive investigation, a SAMPHIRE team member accompanied Matt Baron ashore to investigate the area and determine if any remains from the WWII station were still visible (**Plate B15**). There are substantial remains left of the fuelling tanks and storage buildings on shore. Photo documentation of the standing structures was conducted before returning to the dive vessel.

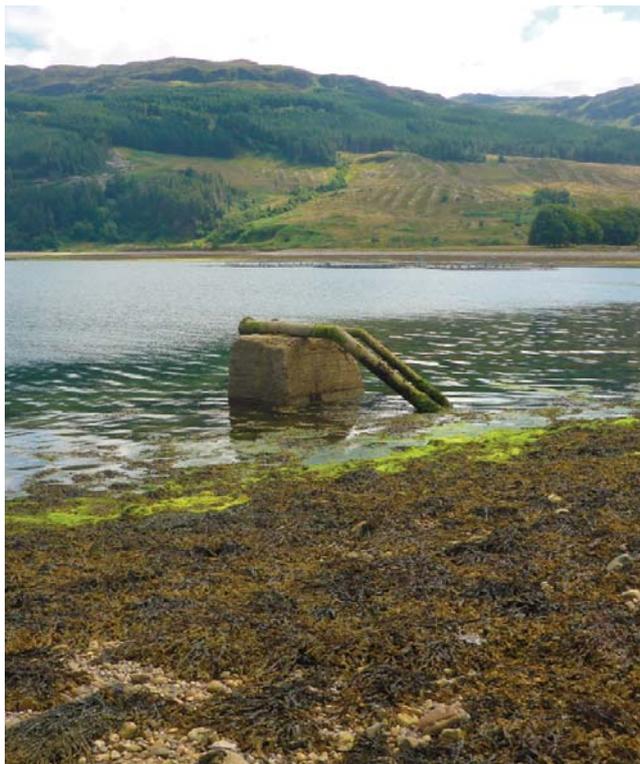


Plate B15: Onshore fuel stations at Ardintoul

SAMPHIRE ID: 57

Classification: UNKNOWN

Site Name: Unknown

Canmore ID: Unknown

Coordinates: 120358, 822550

Accuracy: 500m

Description:

The SAMPHIRE team met James, a crew member of the Misty Isle Boat Trips (mistyisleboattrips.co.uk) during community engagement in Broadford. James reported this fastener, claiming that Robert, the harbourmaster in Kyle has more details. No further details were provided.

SAMPHIRE ID: 58

Classification: UNKNOWN

Site Name: Unknown

Canmore ID: Unknown

Coordinates: 135392, 818128

Accuracy: 500m

Description:

James, a crew member of the Misty Isle Boat Trips (mistyisleboattrips.co.uk) during community engagement in Broadford. James from Misty Isle Boat Tours reported the location a wreck locally referred to as the Sovereign wreck. James reported that there is lots of wreckage in this area, possibly related to a large cargo vessel. He reported the location as accurate to approximately 500 metres, in 40-50 fathoms.

The RCAHMS database does not list any reported losses or recorded wrecks in this area.

SAMPHIRE ID: 59

Classification: MOTOR FISHING VESSEL (20TH CENTURY)

Site Name: Polar Star (possibly)

Canmore ID: Unknown

Coordinates: 176470, 814782

Accuracy: 100m

Description:

During a community engagement trip to the home of local historian Charlie Barrington of Ardvassar on May 21st 2014 the SAMPHIRE team was provided with the supposed location of the remains of the *Polar Star*, the boat that belonged to the well-known local author Gavin Maxwell (1914–1969).

The RCAHMS database does not list any reported losses or recorded wrecks in this area. No further information is available at this time.

SAMPHIRE ID: 60

Classification: CRAFT

Site Name: Unknown: Isle of Ornsay

Canmore ID: Unknown

Coordinates: 171749,812710

Accuracy: 100m

Description:

During Phase 1 of SAMPHIRE 2014, David Henderson, a retired scallop diver, contacted the team with the location of three wreck sites he had encountered while diving during the 1990s. This entry relates to the wreck of a wooden vessel located off the Isle of Ornsay near the lighthouse. The site consisted of wooden side-joined (carvel) planks flush with the seabed, well over 3 metres long and about 30 cm wide and remarkably thick. Though Mr. Henderson couldn't recall the exact depth he believes that it was less than 30 metres and closer to 20 metres below water. He recalls that the wreck was situated off a bay on a small plateau. He noted that there is nothing "ship shaped" about the wreck site and no additional equipment of wreckage.

There RCAHMS database lists five reported losses in this area, two 19th century schooners (CAMORE IDs 274227, 285440), two 19th century sloops (CANMORE IDs 327884, 285382) and one 20th century smack (CANMORE ID 292959). The earliest loss in this area is the sloop *Good Intent* (CANMORE 327884) which is reported as being "wrecked on Isle of Ornsay" 27th November, 1821. No additional information is recorded concerning this vessel.

In 1864, the *Margaret* (CANMORE 285382), variously reported as a sloop or a smack, was driven ashore near the Isle of Ornsay lighthouse with a cargo of potatoes. The vessel was severely damaged, with the sternpost and keel broken in two.

The schooner *Jane and Mary*, wrecked near the Isle of Ornsay lighthouse on 10th December, 1866. After successfully removing the crew from the vessel, efforts were made to recover the vessel and as much of the cargo as possible. The schooner *Beatrice* (285440) was involved with the recovery effort but in doing so, was driven ashore as well. Based on the historical accounts, it appears that the *Beatrice* was recovered with very little damage to the vessel and is therefore not considered to be a candidate for this wreck. On the 30th July, 1919, the smack *Cathie* (CANMORE 292959) was stranded 100 yards north of the Isle of Ornsay Lighthouse with a cargo of coal.

No further information concerning the wreck is available at this time.

SAMPHIRE ID: 61

Classification: ANCHOR

Site Name:

Canmore ID: Unknown

Coordinates: 170041, 811704

Accuracy: 500m

Description:

Maggie MacDonald of Clan Donald Centre informed the team of an additional anchor found by a local resident of Camus Croise, near the location of a similar anchor of possible medieval age discovered by Graham MacKenzie of Camus

Croise (See **S62**). This anchor is currently held at the Clan Donald Centre archives, and though similar in size and shape to the discovery by Mr. MacKenzie, it appears to be more modern in construction. The anchor is in better condition, perhaps indicating that it was not recovered from an inundated environment (**Plate B16**).



Plate B16: Anchor at Clan Donald Centre

SAMPHIRE ID: 62

Classification: ANCHOR

Site Name: Camus Croise Anchor

Canmore ID: None

Coordinates: 169663, 810901

Accuracy: 10m

Description:

Graeme Mackenzie of Camus Croise discovered an anchor in his croft while digging a drainage ditch. The anchor was discovered sitting upright with its base below an intact peat layer). The

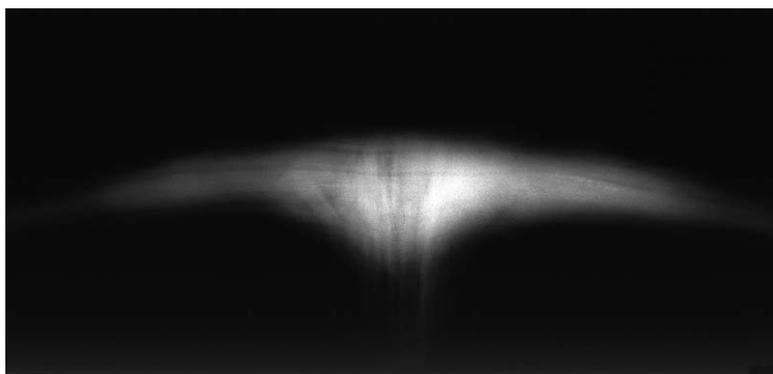


Plate B17: X-Ray of potential medieval anchor

anchor was discovered in 2009 and received extensive media attention at the time, with several news outlets referring to it as a 'Viking' anchor (i.e. the Scotsman 4th December 2009, the Sun 14th May 2010). The SAMPHIRE team was contacted in late 2013 by Maggie MacDonald, Archivist and Museum Manager of the Clan Donald Skye Visitor Centre in Skye, to whom the care and curation of the anchor had been entrusted. Maggie informed the team that despite the media attention, very little analysis of the anchor had taken place. The anchor, which is highly corroded and appears to have lost any trace of flukes or ring, had been donated to the Visitor Centre by the finder and was then sent to the Scottish Conservation Studio (SCS) in Edinburgh for conservation. The SAMPHIRE team was able to provide some advice on the conservation techniques most suitable for the anchor and also made a recommendation to have the anchor x-rayed in order to understand its construction. Although much work remains to be done on the typology of older anchor types it was felt that this could potentially be of value. An X-Ray was then taken of the anchor under the supervision of Will Murray, Artefacts Conservator at the SCS (**Plate B17**). The results of this scan clearly demonstrated that the crown and arms of the anchor had been cast as a single piece and the stock had been folded around them and back on itself in order to fasten them together, the joint being subsequently hammered flush. The SAMPHIRE team subsequently arranged to take the anchor into the Wessex Archaeology



Plate B18: Photogrammetric model of potential medieval anchor

offices in Edinburgh for a detailed survey in June 2014. This was carried out using tape measures and then scanned using multi-image photogrammetry (processed using Agisoft Photoscan) (**Plate B18**). The anchor was then returned to the SCS for the completion of conservation where it currently remains pending its eventual return to the museum. The SAMPHIRE team also contacted the finder, Graeme Mackenzie, in order to make a survey of the findspot during the community engagement fieldwork. The team travelled to Camuscross in Skye on May 22nd 2014 during the community engagement fieldwork and spoke to Graeme in his home. Graeme took the team to the anchor findspot in the croft adjacent to his home. This is a small enclosed area of waterlogged peat, close to the intertidal zone but now divided from it by a small modern coastal road. Graeme indicated that the anchor had been found during the excavation of a narrow drain channel using a mini-digger (see **Plate 8 in main report**). The mini-digger had struck a piece of metal. When the object was examined it was found to be an anchor standing vertically in the peat. This is potentially an important indication of the antiquity of the artefact as peat forms very slowly. The team examined the stratigraphy and quizzed Graeme about the original location. It is clear that the crown of the anchor was resting on the surface of a gravel layer below approximately 60cm of peat. This position does seem to indicate that the anchor could have been in place before the peat formed and would mean that the anchor is possibly several hundred years old. Further analysis of the anchor is required to confirm this, including further metallurgical or typological analysis.

SAMPHIRE ID: 63

Classification: SUBMARINE

Site Name: Unknown

Canmore ID: Unknown

Coordinates: 120328, 810699

Accuracy: 500m

Description:

James from Misty Isle Boat Tours reports a 'well known' submarine wreck here. No further information is available. The RCAHMS database lists four reported losses of submarines in the Sea of Hebrides (CANMORE IDs 119352, 293439, 119361, and 325952). All four entries have unconfirmed locations.

SAMPHIRE ID: 64

Classification: CRAFT

Site Name: Unknown

Canmore ID: None

Coordinates: 165272, 805450

Accuracy: 100m

Description:

During Phase 1 of SAMPHIRE 2014, David Henderson, a retired scallop diver, contacted the team with the location of three wreck sites he had encountered while diving during the 1990s. This entry relates to a wreck of a wooden vessel located south of the Gaelic College near Kilbeg in the Sound of Sleat. Mr. Henderson recalls encountering a large section of carvel planked wooden architecture, flush with the seabed in approximately 20-30 metres of water. No additional artefacts were identified with the wooden structure.

The RCAHMS database does not list any reported losses in the area. No further information concerning the wreck has been identified at this time.

SAMPHIRE ID: 65

Classification: STEAM DRIFTER (20TH CENTURY)

Site Name: Unknown, *Ocean Retriever II*

Canmore ID: 293427

Coordinates: 167730, 797555

Accuracy: 100m

Description:

During a community engagement trip to Mallaig on May 21st 2014, the SAMPHIRE team called in to the Harbour Master's Office to inquire about any local knowledge of wrecks. James McLean, Harbour Master at Mallaig reported the location of an old steam drifter that sank just outside of Mallaig harbour. McLean states that the engine and boilers are still present at the base of a large rock at the mouth of the modern harbour; little else remains of the wreck. The harbour is scheduled for redevelopment in the near future and the site may be impacted by the associated construction.

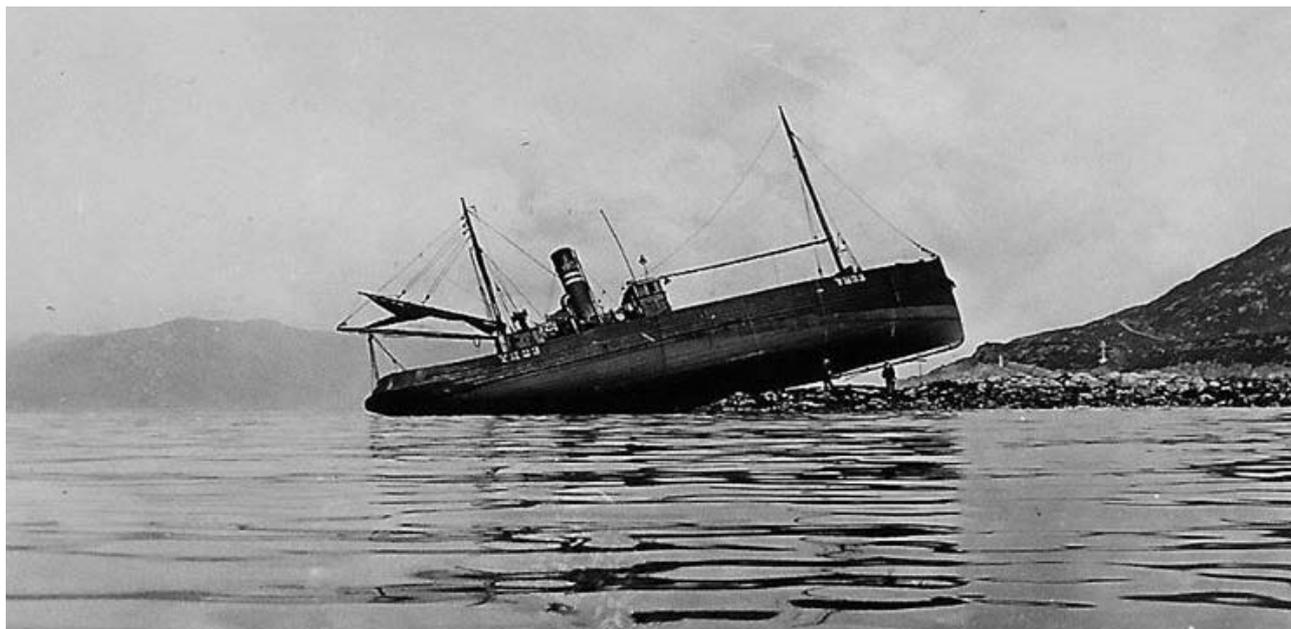


Plate 19: Historic photograph of Ocean Retriever II stranded on Red Red Rocks (Photo courtesy of Mallaig Heritage Centre).

The RCAHMS database lists two reported losses at this location, the *Wallflower* (213154), and the *Ocean Retriever II* (293427); both are 20th century steam drifters. The *Wallflower* is recorded as a steel-hulled drifter that stranded on Red Rocks, Mallaig. More of the vessel would be expected to have survived if it was in fact steel; therefore it is assumed that the remains are those of the *Ocean Retriever II*, a wooden steam drifter built in 1914 in Yarmouth that ran aground in 1931 (Plate B19).

SAMPHIRE ID: 66

Classification: SUBMARINE

Site Name: Unknown

Canmore ID: Unknown

Coordinates: 125139, 793750

Accuracy: 500m

Description:

A second submarine was reported by James from Misty Isle Boat Tours. Similar to the first, both of these locations are known locally by fishermen. James suggested that fishermen in Kyle would have more information regarding these sites. It was not possible to interview fishermen that knew of the sites mentioned.

The RCAHMS database lists four reported losses of submarines in the Sea of Hebrides (CANMORE IDs 119352, 293439, 119361, and 325952). All four entries have unconfirmed locations.

SAMPHIRE ID: 67

Classification: CRAFT (20TH CENTURY)

Site Name: Unknown

Canmore ID: Unknown

Coordinates: 165619, 785508

Accuracy: 10m

Description:

Local resident Ryngan Piper of Arisaig attended the community engagement lecture at the Mallaig Heritage Centre on the 20th of May 2014. Mr. Piper remained after the talk and reported several wooden vessels he had identified along the coast in the surrounding region, including the remains of a modern wooden boat in the foreshore area near Arisaig.

The RCAHMS database does not list any reported losses of vessels that match the description within this area. No further information is available at this time.

SAMPHIRE ID: 68

Classification: LITHIC SCATTER

Site Name: Unknown

Canmore ID: Unknown

Coordinates: 148335, 784298

Accuracy: 20m

Description:

During SAMPHIRE Phase 3, Dr. Karen Hardy accompanied the field team to undertake coastal survey. Dr. Hardy targeted the shores and intertidal areas in search of prehistoric remains while the dive While on the Isle of Eigg, Dr. Hardy visited a location that had been recorded previously as a lithic findspot (Wildgoose 2002). In the space of a couple of hours on the 5th July, which was the only time available, 22 lithic artefacts were recovered, from an area of track covering approximately 250 metres (Plate B20).

Though no diagnostic artefacts were recovered, the assemblage appears to be microlithic which suggests an early prehistoric date. The average length of the artefacts is 15mm; apart from one piece of Rum bloodstone, all the other material appears to be from small pebbles. The material was located in 4 places: NM 4831 8421 (14 pieces); NM 4833 8428 (1 piece); NM 4839 8437 (3 pieces); NM 4824 8416 (3 pieces).

As the material is on the track, it is unlikely to be in primary context. However, its spread and abundance, by comparison with the material found in 2001, suggests that it may be eroding out of a site nearby. Clearly further work to locate, identify and characterise this site would be extremely useful; particularly if it is an eroding site. Currently there are no secure Mesolithic sites known on Eigg; if the site can be located and is confirmed as Mesolithic, this could represent a significant new piece of evidence for the Mesolithic of this area of the west coast. As Eigg lies so close to the island of Rum, with its large Mesolithic site at Kinloch and its well known source of bloodstone, it is highly likely that Eigg was also occupied during the Mesolithic period. Though some of the coastline of Eigg is inhospitable and offers no landing or land access, certain places have been identified as potential areas for landing and access into the island. All of these would benefit from detailed coastal survey work.



Plate B20: Lithic assemblage collected from Eigg lithic scatter

As the material is on the track, it is unlikely to be in primary context. However, its spread and abundance, by comparison with the material found in 2001, suggests that it may be eroding out of a site nearby. Clearly further work to locate, identify and characterise this site would be extremely useful; particularly if it is an eroding site. Currently there are no secure Mesolithic sites known on Eigg; if the site can be located and is confirmed as Mesolithic, this could represent a significant new piece of evidence for the Mesolithic of this area of the west coast. As Eigg lies so close to the island of Rum, with its large Mesolithic site at Kinloch and its well known source of bloodstone, it is highly likely that Eigg was also occupied during the Mesolithic period. Though some of the coastline of Eigg is inhospitable and offers no landing or land access, certain places have been identified as potential areas for landing and access into the island. All of these would benefit from detailed coastal survey work.

SAMPHIRE ID: 69

Classification: CRAFT (20TH CENTURY)

Site Name: Unknown

Canmore ID: Unknown

Coordinates: 166631, 777755

Accuracy: 10m

Description:

Two wooden clinker vessels abandoned south of Arisaig were reported to the SAMPHIRE team by Ryngan Piper of Arisaig during a community engagement lecture given by the SAMPHIRE team at the Mallaig Heritage Centre on the 20th of May 2014. These vessels are most likely modern fishing boats that have been abandoned in the foreshore area.



Plate B21: Abandoned clinker fishing vessel identified by Ryngan Piper south of Arisaig

The RCAHMS database does not list any reported losses of vessels that match the description within this area. No further information is available at this time.

SAMPHIRE ID: 70

Classification: AIRCRAFT

Site Name: Unknown

Canmore ID: 119295

Coordinates: 159669, 743901

Accuracy: 500m

Description:

Cameron and Morag Wilson of Lochaline reported a possible sunken airplane in the Sound of Mull during the community engagement at Lochaline Dive Centre. Their friend, Bob Foster, a local scallop diver, is reported to have discovered the remains of a Cessna that disappeared on Christmas Eve in 1975. The loss of the plane has been a well-known Scottish mystery since the plane first disappeared and inspired the publication of a book, *The Great Mull Air Mystery* by Scott McAdam (1985). It should be noted that Scott MacAdam was a pseudonym of local resident David Howitt. Howitt's book stated that the plane was a Cessna C150 G-AVTN. The reason this crash has received so much attention is that the body of the pilot was found several months after his disappearance on a hill on Mull at a height of 400 feet but despite extensive searches, the only trace of the aircraft was the discovery of a single tyre with a serial number matching the plane discovered on October 5th 1976 on the shore of the Sound of Mull, two miles north of Glen Forsa airfield (Glasgow Herald, February 19th 1986). This appears to correspond with the location reported by the Wilson's which places the wreckage directly to the north of the Glenforsa airstrip. The RCAHMS database includes an entry for this loss, placing the wreck several kilometres to the east. The reported location is derived from Whitaker who states "This aircraft was found in 1986", presumably deriving his location from a diver report of that year. The entry goes on to state that "The location assigned to this record is essentially tentative, being derived from the unverified location that is cited by Whittaker." This note was added to the entry in 2004.

A BBC news report from the 7th of February 2004¹ and a follow up story from the 9th February 2004,² state that three Royal Navy minesweepers found a mystery aircraft on the sea bed around a mile off the coast of Oban. According to this report a Cessna was positively identified at a depth of 28–31 metres of a plane with one of its wings still attached and it was suggested that this might actually be the 1975 loss. This aircraft was later found not to be a Cessna but rather a JX596 Catalina flying boat (Herald Scotland 3rd April 2004). The report also refers to the earlier discovery by a clam diver, presumably the same Bob Foster, in 1986, shortly after the publication of Howitt's book. Further details are given in this report including the details that the wreck was a highly damaged remains light aircraft, missing both wings, in the Sound of Mull at a depth of 100 feet.

For further details of the flying boats near Oban see separate entries below.

SAMPHIRE ID: 71

Classification: BARGE (20TH CENTURY)

Site Name: Unknown

Canmore ID: None

Coordinates: 173692,737269

Accuracy: 2m

Description:

This wreck was first identified through review of geophysical data collected from the RV *Calanus* during the INIS Hydro project. During the community engagement phase of SAMPHIRE 2014 Dr. John Howe from SAMS provided the SAMPHIRE team with the H525 Report of Wreck Investigation for

1 <http://news.bbc.co.uk/1/hi/scotland/3467055.stm> Accessed 10/01/2014

2 <http://news.bbc.co.uk/1/hi/scotland/3474389.stm> Accessed 10/01/2014

this site. The site appears to be the remains of an intact vessel in approximately 45 meters of water LAT. The wreck appears to be sitting on its keel on a slope at the foot of a steep cliff.

In collaboration with the SAMPHIRE project, Jeff Darby of Dalriada Sub-Aqua Club (Oban) dived the site on the 20th of July 2014. He discovered the remains of a coal filled barge sitting upright on its keel. He reached a maximum depth of 54 metres and had only a short period to investigate the site. Further investigations to the site are planned by the club. No further information on the identity or date of the wreck is available at present.

There are no reports of a coal barge lost in the vicinity in the RCAHMS database. More research is ongoing on this site.

SAMPHIRE ID: 72

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown:

Canmore ID: Unknown

Coordinates: 173417, 737564

Accuracy: 5m

Description:

This is a possibly archaeological geophysical anomaly identified from INIS Hydro data during a detailed review by Dr. John Howe as part of collaboration with SAMPHIRE project in 2014. It is unclear whether the object is archaeological in nature. The object lies at an approximate depth of 19 metres LAT and is 10 metres long with a height of 1–2 metres.

The RCAHMS database does not have any recorded losses in this vicinity. Diver investigation will be needed to confirm the nature of this anomaly.

SAMPHIRE ID: 73

Classification: STEAM TRAWLER (20TH CENTURY)

Site Name: *George A. West* (possibly)

Canmore ID: 118078

Coordinates: 178203,737269

Accuracy: 2m

Description:

This wreck was first identified through review of geophysical data collected from the RV *Calanus* during the INIS Hydro project. During the community engagement phase of SAMPHIRE 2014 Dr. John Howe from SAMS provided the SAMPHIRE team with the H525 Report of Wreck Investigation for this site. Judging from the multibeam data, the wreck appears to be largely intact with a damaged stern section, resting in approximately 30m of water LAT.

The location was dived in May 2014 by members of the Dalriada and was confirmed to be a wreck. The wreck lies at an approximate depth of 35 metres LAT and is well broken up. The Dalriada divers believe it is the remains of the SS *George A. West* (CANMORE ID 118078).

The *George A. West* was a wooden steam trawler built in 1913, registered in Macduff and lost when it struck Liath Sgeir near Lismore on the 12th September 1927. It had a gross tonnage of 85 with a total length of 27 metres and a beam of 5 metres. Canmore currently states that the location assigned to this record is essentially tentative and gives a position based on Liath Sgeir at approximately 200m from the confirmed wreck location.

SAMPHIRE ID: 74

Classification: REQUISITIONED STEAM YACHT (20TH CENTURY)

Site Name: *Thalia* (possibly)

Canmore ID: 118104

Coordinates: 183360,736154

Accuracy: 10m

Description:

This wreck was first identified through review of geophysical data collected from the RV *Calanus* during the INIS Hydro project. During the community engagement phase of SAMPHIRE 2014 Dr. John Howe from SAMS provided the SAMPHIRE team with the H525 Report of Wreck Investigation for this site. The vessel is mostly intact, oriented NNE to SSW (15° to 200°). The bow of the vessel appears to be sunk in the mud and the stern stands proud of the seabed at an angle of approximately 43°. The object lies at an approximate depth of 45 metres LAT and is 30 metres long with a height of 1–2 metres.

This is believed to be the wreck of the *Thalia*. Canmore currently includes an entry for the *Thalia* based on its reported loss (CANMORE ID 118104). A second entry in Canmore (102428) may be related to this wreck. It is based on an undated report of a wreck made to the Receiver of Wreck. Subsequent survey of the location in 1974 failed to locate any remains and the UKHO entry was amended to dead.

The *Thalia*, originally named the *Protector*, was a steam yacht built in 1904 with a registered length of 33m and beam of 6m. The vessel was purchased by the Admiralty in March 1940 to be used as a danlayer. The vessel supposedly was used as a water carrier for the convoys that assembled in the Firth of Lorne. The *Thalia* sank after a collision with a Norwegian tanker on 11th October 1942 (Baird 1995).

SAMPHIRE ID: 75

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown: Lady's Rock

Canmore ID: Unknown

Coordinates: 177490, 735164

Accuracy: 5m

Description:

This geophysical anomaly was first identified through review of geophysical data collected from the RV *Calanus* during the INIS Hydro project. During the community engagement phase of SAMPHIRE 2014 Dr. John Howe from SAMS provided the SAMPHIRE team with multibeam data for this site. This anomaly is one of several around Lady's Rock (**Figure B2**). The object is 10 metres long and 2 metres high and lies at 36 metres LAT. It is unclear whether the object is archaeological in nature.

The SAMPHIRE project has recorded a number of geophysical anomalies (**S75, S76, S77, S78, S79, S80**) around Lady's Rock, some of which are undoubtedly archaeological in nature. There are six unlocated reported losses in RCAHMS database for the area surrounding Lady's Rock. There has been very little recreational diving in this area due to the highly tidal conditions. At present there is insufficient data to match the losses to the anomalies. A summary of the reported losses is given below.

The first reported loss was the *Margaret* (CANMORE ID 294262) a sloop that sank near Lady's Rock on 17 June, 1813. On 8 December, 1851 the schooner *Rhind* (CANMORE ID 248149) of Wick, was wrecked upon the rock in a heavy gale. Other unknown vessels were suspected to have been lost as well, with wreckage reported washing up on Kerrera and Lismore following the storm. The *Celerity* (CANMORE ID 255365), a ketch from Colchester carrying a cargo of railway iron and coke, struck

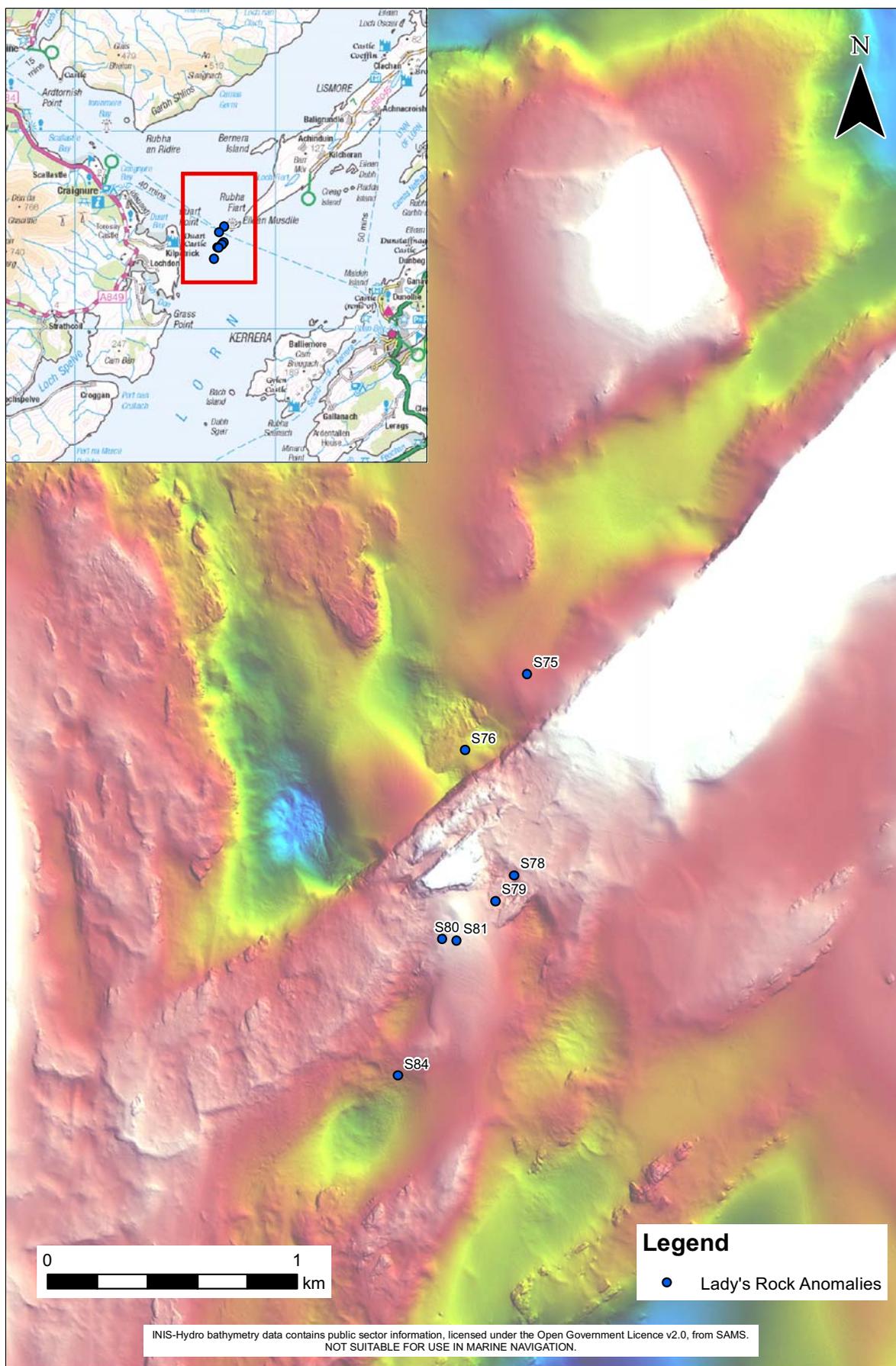


Figure B2: Multibeam images of anomalies around Lady's Rock

Lady's Rock on the 14th of November, 1858. The *Mountaineer* (CANMORE ID 118060), an iron paddle steamer from Glasgow ran aground on Lady's Rock on the 27th of September, 1889. The vessel was en route to Oban from Gairlock with a cargo of sheep, fish, and 23 passengers. The vessel was originally built in Glasgow in 1852 by J&G Thompson Govan for David Hutcheson & David MacBrayne. The vessel had a registered length of 58 metres, a beam of 6 metres, and 188grt. The *Mountaineer* is supposed to be the first steamship fitted with a bridge telegraph. Bad weather prevented salvage of the weather and it eventually broke in two on the 7th of October, 1889. On the 13th of January, 1905 the paddle steamer *Clydesdale* (CANMORE ID 117413) of the MacBrayne fleet ran aground on Lady's Rock. She was carrying the mail from Oban to Barra and struck the rock shortly after leaving Oban, around 7am. The *Oban Times* reports that heavy sleet showers obscured Lismore light, causing the misjudgement. The stranded passengers were taken off by the *Carbineer* shortly after the incident. On the 17th of June, 1937 the *Sea Fay* (CANMORE ID 294271), a cabin cruiser was stranded on Lady's Rock. No further information is available concerning this loss.

SAMPHIRE ID: 76

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown: Lady's Rock

Canmore ID: Unknown

Coordinates: 177241, 734857

Accuracy: 5m

Description:

This geophysical anomaly was first identified through review of geophysical data collected from the RV *Calanus* during the INIS Hydro project. During the community engagement phase of SAMPHIRE 2014 Dr. John Howe from SAMS provided the SAMPHIRE team with multibeam data for this site. This site consists of numerous objects lying approx 400 metres NNE of Lady's Rock. It is unclear whether the objects are archaeological in nature. The object lies at an approximate depth of 55-62 metres LAT with a maximum height of 2-3 metres. This anomaly is one of a series of several in this area and could represent the remains of one or more of several unlocated vessels lost in the area (see **S75**). Diver investigation will be needed to confirm the nature of this anomaly.

SAMPHIRE ID: 77

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 183521, 734572

Accuracy: 5m

Description:

This geophysical anomaly was first identified through review of geophysical data collected from the RV *Calanus* during the INIS Hydro project. During the community engagement phase of SAMPHIRE 2014 Dr. John Howe from SAMS provided the SAMPHIRE team with multibeam data for this site. It is unclear whether the object is archaeological in nature. The object lies at an approximate depth of 43-45 metres LAT and is 7 metres long with a height of 1-3 metres.

The RCAHMS database has three reported losses near this location with no recorded wrecks. The losses of the *Glencoe* (CANMORE ID 118079) a 19th century steam yacht lost in 1887, the *Scomber* (CANMORE ID 326804) a 20th century trawler lost in 1938, and AH547, a PBV Consolidated Catalina aircraft from Squadron 210 lost on the 11th of January, 1942 (CANMORE ID 294273). Diver investigation will be needed to confirm the nature of this anomaly.

SAMPHIRE ID: 78

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown: Lady's Rock Wreck

Canmore ID: 118060

Coordinates: 177437, 734350

Accuracy: 5m

Description:

This geophysical anomaly was first identified through review of geophysical data collected from the RV *Calanus* during the INIS Hydro project. During the community engagement phase of SAMPHIRE 2014 Dr. John Howe from SAMS provided the SAMPHIRE team with multibeam data for this site. It is unclear whether the object is archaeological in nature. The object lies at an approximate depth of 25 metres LAT around 200 metres to the east of Lady's Rock. This anomaly is one of a series of several in this area and could represent the remains of one or more of several vessels lost in the area (see **S75**). Diver investigation of the location will be necessary to determine if the anomaly is cultural or natural.

SAMPHIRE ID: 79

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown: Lady's Rock

Canmore ID: Unknown

Coordinates: 177363, 734247

Accuracy: 5m

Description:

This geophysical anomaly was first identified through review of geophysical data collected from the RV *Calanus* during the INIS Hydro project. During the community engagement phase of SAMPHIRE 2014 Dr. John Howe from SAMS provided the SAMPHIRE team with multibeam data for this site. It is unclear whether the object is archaeological in nature. The object lies at 25 metres depth LAT around 200 metres to the southeast of Lady's Rock. This anomaly is one of a series of several in this area and could represent the remains of one or more of several vessels lost in the area (see **S75**). Diver investigation will be needed to confirm the nature of this anomaly.

SAMPHIRE ID: 80

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown, Lady's Rock

Canmore ID: Unknown

Coordinates: 177150, 734094

Accuracy: 5m

Description:

This geophysical anomaly was first identified through review of geophysical data collected from the RV *Calanus* during the INIS Hydro project. During the community engagement phase of SAMPHIRE 2014 Dr. John Howe from SAMS provided the SAMPHIRE team with multibeam data for this site. It is unclear whether the object is archaeological in nature. It is 13 metres long at an approximate depth of 15 metres LAT. This anomaly is one of a series of several in this area and could represent the remains of one or more of several vessels lost in the area (see **S75**). Diver investigation will be needed to confirm the nature of this anomaly.

SAMPHIRE ID: 81

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown, Lady's Rock

Canmore ID: Unknown

Coordinates: 177208, 734087

Accuracy: 5m

Description:

This geophysical anomaly was first identified through review of geophysical data collected from the RV *Calanus* during the INIS Hydro project. During the community engagement phase of SAMPHIRE 2014 Dr. John Howe from SAMS provided the SAMPHIRE team with multibeam data for this site. It is unclear whether the object is archaeological in nature. The object lies at an approximate depth of 15-20 metres LAT around 300 metres SSE of Lady's Rock. The object is approximately 20 metres long and appears to be in two sections, around 2–3 metres proud of the seabed. This anomaly is one of a series of several in this area and could represent the remains of one or more of several vessels lost in the area (see **S75**). Diver investigation will be needed to confirm the nature of this anomaly.

SAMPHIRE ID: 82

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown; HMT *Appletree* (possibly)

Canmore ID: Unknown

Coordinates: 181153, 733898

Accuracy: 5m

Description:

This geophysical anomaly was first identified through review of geophysical data collected from the RV *Calanus* during the INIS Hydro project. During the community engagement phase of SAMPHIRE 2014 Dr. John Howe from SAMS provided the SAMPHIRE team with multibeam data for this site. It is unclear whether the object is archaeological in nature. The object lies at an approximate depth of 37 metres LAT and is 10 metres long with a height of 1–2 metres.

The RCAHMS database has one wreck recorded in this vicinity. The HMT *Appletree* (CANMORE 322203). Originally named *Progress*, the HMT *Appletree* was a wooden steam drifter built in 1907. The vessel sank in a collision outside of Oban harbour in 1940. The vessel was previously identified during a UKHO survey in 2012.

SAMPHIRE ID: 83

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown:

Canmore ID: Unknown

Coordinates: 178093,733758

Accuracy: 5m

This geophysical anomaly was first identified through review of geophysical data collected from the RV *Calanus* during the INIS Hydro project. During the community engagement phase of SAMPHIRE 2014 Dr. John Howe from SAMS provided the SAMPHIRE team with multibeam data for this site. It is unclear whether the object is archaeological in nature. It is unclear whether the object is archaeological in nature. The object lies at an approximate depth of 45 metres LAT.

There are two reported losses in this immediate vicinity; these include the *Hugh Crawford* (CANMORE 255296) variously described as a smack or sloop that foundered 5 miles east of Lismore Lighthouse in 1862 and a *Saro Lerwick I* (CANMORE 294272), a WWII flying boat that was stationed in Oban during the war.

Further investigations will be required to determine the identity of this anomaly.

SAMPHIRE ID: 84

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown: Lady's Rock

Canmore ID: Unknown

Coordinates: 176972, 733542

Accuracy: 5m

Description:

This geophysical anomaly was first identified through review of geophysical data collected from the RV *Calanus* during the INIS Hydro project. During the community engagement phase of SAMPHIRE 2014 Dr. John Howe from SAMS provided the SAMPHIRE team with multibeam data for this site. The object is 10 metres long. It is unclear whether the object is archaeological in nature. The object lies at an approximate depth of 70 metres LAT. This anomaly is one of a series of several in this area and could represent the remains of one or more of several vessels lost in the area (see **S75**). Diver investigation will be needed to confirm the nature of this anomaly.

SAMPHIRE ID: 85

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 185221,733234

Accuracy: 5m

Description:

This geophysical anomaly was first identified through review of geophysical data collected from the RV *Calanus* during the INIS Hydro project. During the community engagement phase of SAMPHIRE 2014 Dr. John Howe from SAMS provided the SAMPHIRE team with multibeam data for this site. It is unclear whether the object is archaeological in nature. The object lies at 55 metres depth LAT and is 7 metres long with a height of 0.5 metres.

The RCAHMS database does not have any confirmed wrecks or reported losses in this immediate vicinity. Diver investigation will be needed to confirm the nature of this anomaly.

SAMPHIRE ID: 86

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 185214, 733151

Accuracy: 5m

Description:

This geophysical anomaly was first identified through review of geophysical data collected from the RV *Calanus* during the INIS Hydro project. During the community engagement phase of SAMPHIRE 2014 Dr. John Howe from SAMS provided the SAMPHIRE team with multibeam data for this site. It is unclear whether the object is archaeological in nature. The object lies at an approximate depth of 43 metres depth and is 10 metres long with a height of 1 metre.

The RCAHMS database does not have any confirmed wrecks or known losses in this immediate vicinity. Diver investigation will be needed to confirm the nature of this anomaly.

SAMPHIRE ID: 87

Classification: AIRCRAFT

Site Name: *Consolidated Catalina JX596* (Possibly)

Canmore ID: 294291

Coordinates:

Accuracy: 5m

Description:

This geophysical anomaly was first identified through review of geophysical data collected from the RV *Calanus* during the INIS Hydro project. During the community engagement phase of SAMPHIRE 2014 Dr. John Howe from SAMS provided the SAMPHIRE team with multibeam data for this site. It lies in approximately 28 metres of water LAT. The anomaly has since been identified as the remains of a PBY Consolidated Catalina, one of several types of flying boat in use in the area during WWII (**Figure B3**). This anomaly, along with three others (see **S88, S89, S90, and S131**), have all been identified as flying boats that sank while stationed in Oban during WWII. These sites are very significant and are protected by the Protection of Military Remains Act 1986. Although the wrecks have not been charted by the UKHO and their locations are not recorded in the RCAHMS database they appear to have been well-known to some individuals in the local diving community for many years.

This anomaly was dived by Dalriada divers in September 2013 and by Shane Wasik of Basking Shark Scotland and again by a group of divers from the RAF Brize Norton Sub-Aqua Club in the summer of 2014, all of whom provided valuable information from their dives to the SAMPHIRE project. John Beaton of Dalriada divers provided a detailed description of the remains. It was found to be a well-preserved Consolidated Catalina flying boat with one wing missing. Though not intact, the remains of the aircraft are in a remarkably good state. The fuselage is intact from the nose to behind the starboard wing which is still attached. The rear of the fuselage, tail and port wing is missing. The port engine is present below its former position, the starboard engine was not seen but heavy-gauge fishing net covers that part of the starboard wing. Two propellers stand up out of the seabed a few metres forward of the nose. No undercarriage is fitted. There is a forward (nose) turret position but the turret is missing. The fuselage appears to be painted white on a green undercoat. No identification markings were seen, though a red roundel was visible on the starboard wing and white stencilled wording near the wing tip "DO NOT WALK IN THIS AREA". A Leigh light, used for detecting submerged submarines by British reconnaissance aircraft from June 1942 onwards, is fitted under the starboard wing; it appears undamaged (**Plate B22**). Jo Beaton of Dalriada provided a sketch of the aircraft as it appears today (**Plate B23**) Further information and photographs supplied by the Brize Norton RAF divers showed that the LHS control column/yoke and instrument panel are missing from the cockpit and that there appears to be a life raft or similar object wrapped around part of the wreckage. The site is extremely silty and draped in lost fishing net. It is also on the route of three ferry services that run from Oban.

The SAMPHIRE dive team conducted a dive on the site with the assistance of the SAMS dive team on the 3rd of July, 2014. Divers descended the shot line onto the site and commenced a brief photo reconnaissance survey of the site. The site is confirmed as a PBY Consolidated Catalina though it was not possible to confirm the identify the aircraft during the dive.

The first squadron to be based in Oban was the 209 in 1939. The 209 were equipped with biplane Supermarine Stranraer flying boats and later with Saunder Roe Lerwicks (Saro Lerwick). It wasn't until the 210 replaced the 209 at Oban in 1940 that Sunderlands and Catalinas were stationed at Oban (Hughes 1998). The RCAHMS database lists three PBY Consolidated Catalinas reportedly lost in the Firth of Lorn (all under CANMORE 294291). The entry is derived from Whitaker (1998, 299) who did not give locations for the wrecks.

Redacted from online version
due to site sensitivity

Figure B3: Flying boat remains identified in the Firth of Lorne



Plate B22: Detail images of PBY Consolidated Catalina (courtesy of Chris Knight Brize Norton Divers)

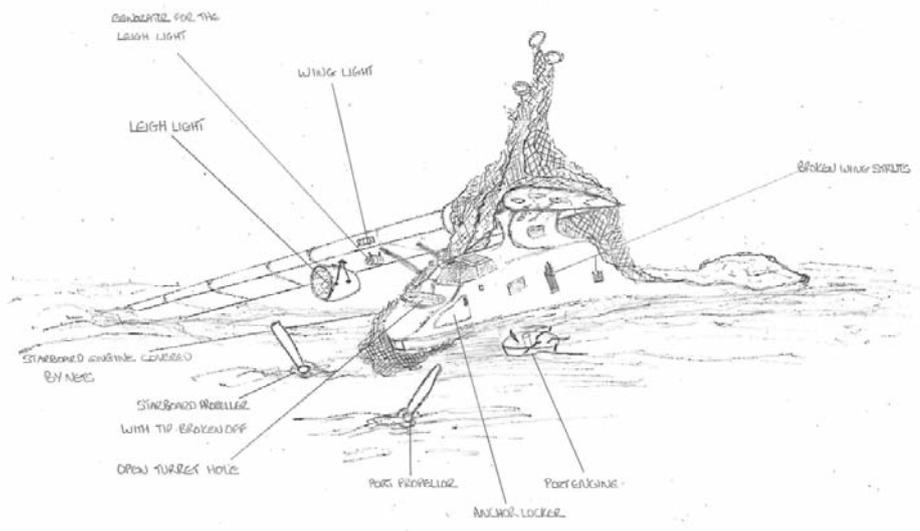


Plate B23: Sketch of PBY Catalina wreck (coutesy Jo Beaton)

Although the wreck is not listed in the UKHO records it is likely to be the same as an aircraft wreck discovered during a navy survey in 2004. A BBC news report from the 7th of February 2004³ and a follow up story from the 9th February 2004,⁴ state that three Royal Navy minesweepers had recently found a mystery aircraft on the sea bed around a mile off the coast of Oban. According to this report a Cessna was positively identified at a depth of 28-31 metres of a plane with one of its wings still attached and it was suggested that this might actually be a Cessna lost in 1975. After ROV and diver survey carried out by the navy this aircraft was later reported not to be a Cessna but rather a Catalina flying boat (Herald Scotland 3rd April 2004). No location was given in the report but it as it was described as a Catalina with a missing wing near Oban it is very likely to be the same wreck. The *Herald Scotland* report goes on to state that 'military aviation experts were able to confirm that it was a JX596 craft which carried a nine-man South African crew. The team was training at RAF Oban, an important flying boat station during the war. The flight set off for South Africa from the Firth of Lorne at 9.05am on April 12, 1945 when it crashed, caught fire and sank.' The report acknowledged assistance from the War and Peace Museum in Oban and the Air Accident Investigation Branch.

In 2008 a single wing was dredged up nearby with a large JX596 (an identification number rather than a type of aircraft as suggested in the *Herald Scotland* report) clearly visible on the wing⁵. This is almost certainly from the same plane (a caveat is only included as it is not clear whether the identity number was found on the main wreckage) and the wing, which was subsequently placed back on the seabed at another location, is included as a separate entry below (S89). Conflicting information now suggests that the disarticulated wing is not from the same aircraft, suggesting that this aircraft is not JX-596. Research is ongoing into the identity of this site.

SAMPHIRE ID: 88

Classification: AIRCRAFT

Site Name: Short Sunderland

Canmore ID: Unknown

Coordinates:

Accuracy: 5m

Description:

This geophysical anomaly was first identified through review of geophysical data collected from the RV *Calanus* during the INIS Hydro project. During the community engagement phase of SAMPHIRE 2014 Dr. John Howe from SAMS provided the SAMPHIRE team with multibeam data for this site. It is 20 metres long and 3 metres high.

The anomaly was dived by Dalriada club divers on the 29th June of 2014 and was found to be a well-preserved Short Sunderland flying boat in 30 metres LAT with an intact starboard wing with two engines. See entry **S87** for an overview of the flying boats in this area. It is worth repeating that although these wrecks have not been charted by the UKHO and their locations are not recorded in the RC-AHMS database they appear to have been well-known to some individuals in the local diving community for many years. The port wing of this aircraft is partly damaged but has an inboard engine intact. The aircraft lies inverted and is partially buried in soft sediment. The fuselage is partially intact but no markings were seen. The underside of the wing appears to be painted white. One wing-float lies detached just forward of the port wing. It is located south of the ferry route from Oban.

The SAMPHIRE dive team conducted a dive on the site with the assistance of the SAMS dive team on the 2nd of July, 2014. Photos were taken of the site and a brief visual condition assessment and

3 <http://news.bbc.co.uk/1/hi/scotland/3467055.stm> Accessed 10/01/2014

4 <http://news.bbc.co.uk/1/hi/scotland/3474389.stm> Accessed 10/01/2014

5 The Scotsman 15/05/2008

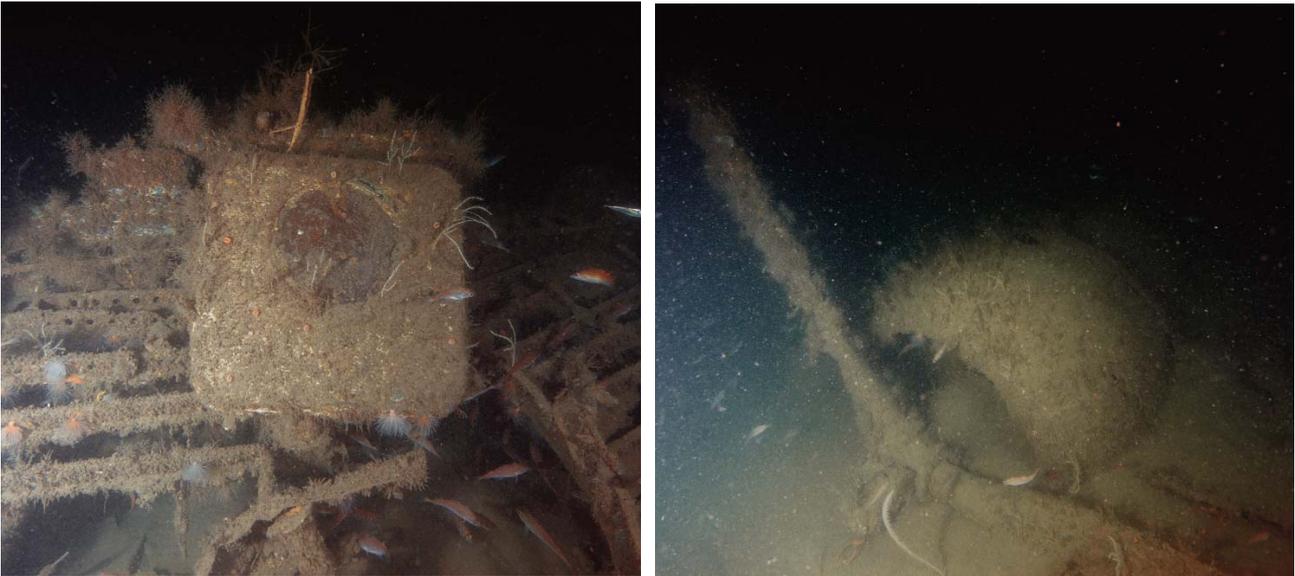


Plate B24: Detail Images of Short Sunderland aircraft (courtesy of Martin Sayer)

inspection of the site was conducted. Due to the depth of the site, the dive team were not able to remain on site very long but were able to verify that the site is the remains of a Short Sunderland, in remarkably good condition with a large portion of the aircraft preserved in the silty mud of the seafloor (**Plate B24**).

The RCAHMS database lists four reported losses of Short Sunderland aircrafts with the Firth of Lorne and two more in Loch Linnhe to the north. No confirmed wrecks are reported in the database. Research is ongoing to identify which aircraft this wreck represents.

SAMPHIRE ID: 89

Classification: AIRCRAFT

Site Name: Unknown, JX-596

Canmore ID: None

Coordinates:

Accuracy: 10m

Description:

John Howe from the SAMS provided the SAMPHIRE team with the H525 Report of Wreck Investigation for this site. Geophysical data was collected from the RV *Calanus* during the INIS Hydro project. The wreck was recorded in approximately 19m of water, orientated approximately 295° - 125°. The site was originally dived by members of the Dalriada and discovered to be an aircraft wing. See entry **S87** for an overview of the flying boats in this area.

This site was subsequently investigated by divers from SAMS and the SAMPHIRE team on the 3rd of July 2014. The wing was photographed and fully surveyed (**Plate B25**). No scouring can be observed around the wreck. No significant debris was detected around the wreckage. The wing is considered to be ex-situ, or out of context. It is believed to have been deposited here after being removed from its original location. An account of the initial recovery of the wing was reported in *The Scotsman* on the 15th of May, 2008:

'The trawler Ocean Vanguard snagged the plane wreckage while fishing off the north-west tip of the island of Kerrera. A barge from Tobermory was called in to recover the wing, which was judged to be a potential danger to shipping.'

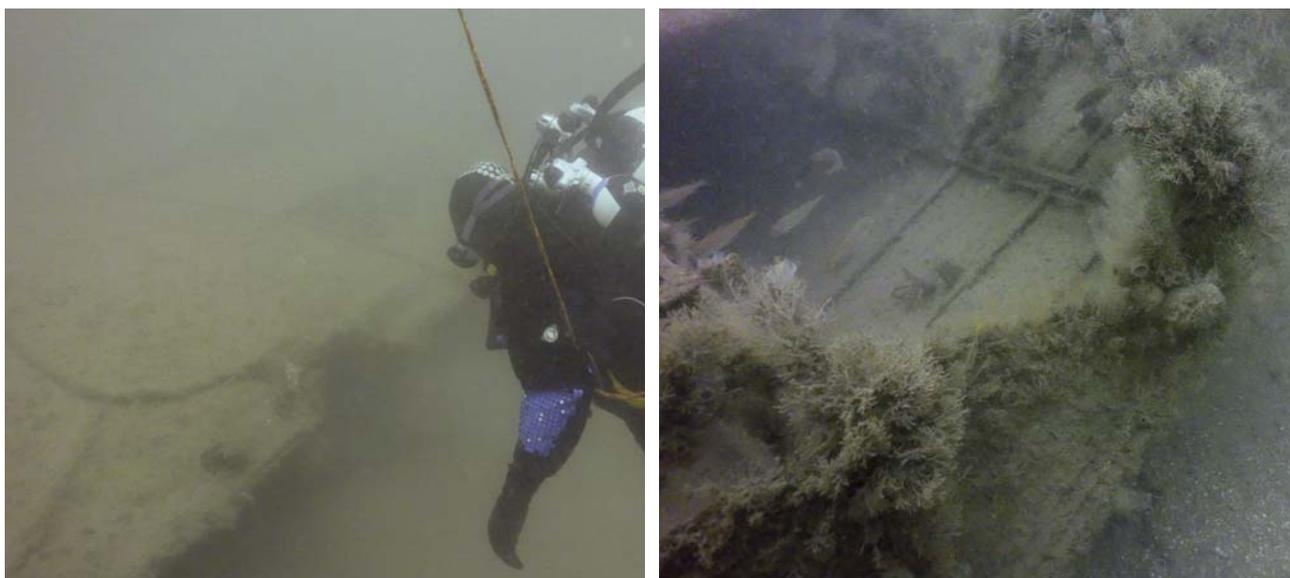


Plate B25: Photographs of aircraft wing

The Catalina flying boat was one of more than 4,000 built in the United States between 1936 and 1945, and used mainly in anti-submarine warfare and on convoy escort duty. When the wing was recovered, the plane's identification number – JX-596 – was still clearly visible.

Oban police sergeant Neil Owen, who researched the plane's origins, said: "The aircraft had a South African crew and crashed on take-off in 1945." There were no serious injuries.

"There are two other Catalinas and three Sunderlands on the seabed in that area because it was the main take-off and landing area for RAF Oban," he said.'

SAMPHIRE ID: 90

Classification: AIRCRAFT

Site Name: Unknown;

Canmore ID: Unknown

Coordinates:

Accuracy: 2m

Description:

This anomaly was identified by John Beaton during a data review of the INIS Hydro data. This anomaly was dived by Dalriada divers in September 2013 and by Shane Wasik of Basking Shark Scotland and again by a group of divers from the RAF Brize Norton Sub-Aqua Club in the summer of 2014, all of whom provided valuable information from their dives to the SAMPHIRE project.

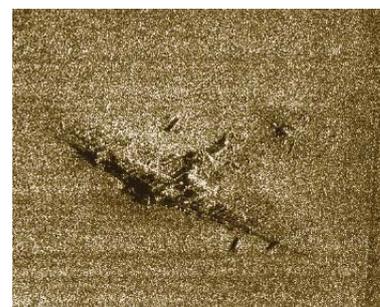


Plate B26: Sidescan Image of Short Sunderland aircraft, courtesy of SAMS (courtesy of the Scottish Association of Marine Scienceonfirm permission)

This is believed to be the remains of a Short Sunderland at an approximate depth of 22 metres. See entry **S87** for an overview of the flying boats in this area. It is worth repeating that although these wrecks have not been charted by the UKHO and their locations are not recorded in the RCAHMS database they appear to have been well-known to some individuals in the local diving community for many years. This aircraft retains its outline but is largely collapsed with no part standing more than approximately 2m high (**Plate B26**). The most identifiable part is the complete wingspan. The skin is mostly missing and the fuel tanks are visible. The engines were missing and no structure forward of the wing is evident. The aircraft lies inverted as the two lamp covers present on the leading edge of the port wing, outboard of the outer engine, are only



Plate B27: Photos of unidentified Sunderland aircraft (courtesy Chris Knight Brize Norton Divers)

visible on the “right hand wing” as viewed from above. One wing float lies 28m forward of the starboard wing tip. The site is silty and the wreck has a covering of brown seaweed but presents no other hazards. Chris Knight of Brize Norton divers identified and provided images of a gun lying away from the main wreckage and a heat exchanger on leading edge of the wing section. They also noted that an unbuoyed mooring line has been placed on the inboard wing of the wreck (**Plate B27**).

The RCAHMS database lists four reported losses of Short Sunderland aircrafts with the Firth of Lorne (Canmore ID 294294, 294364, 294365, 294345) and two more in Loch Linnhe to the north. No confirmed wreck locations are reported in the database. Further data is required to establish which aircraft this wreck represents.

SAMPHIRE ID: 91

Classification: CRAFT

Site Name: Unknown

Canmore ID: None

Coordinates: 184688,730780

Accuracy: 1m

Description:

John Howe from SAMS provided the SAMPHIRE team with the H525 Report of Wreck Investigation for this site. Geophysical data was collected from the vessel *White Ribbon* during the INIS Hydro project. Judging from the data, the site appears to be a small upturned vessel in 7m of water with a shallowest depth recorded of 7.06m LAT. The vessel appears to be intact with the bow pointing up the slope of the sea bed. The wreck is one of several anomalies lying near Kerrera Marina.

The RCAHMS database does not list any reported losses in this area. No further information is available at this time.

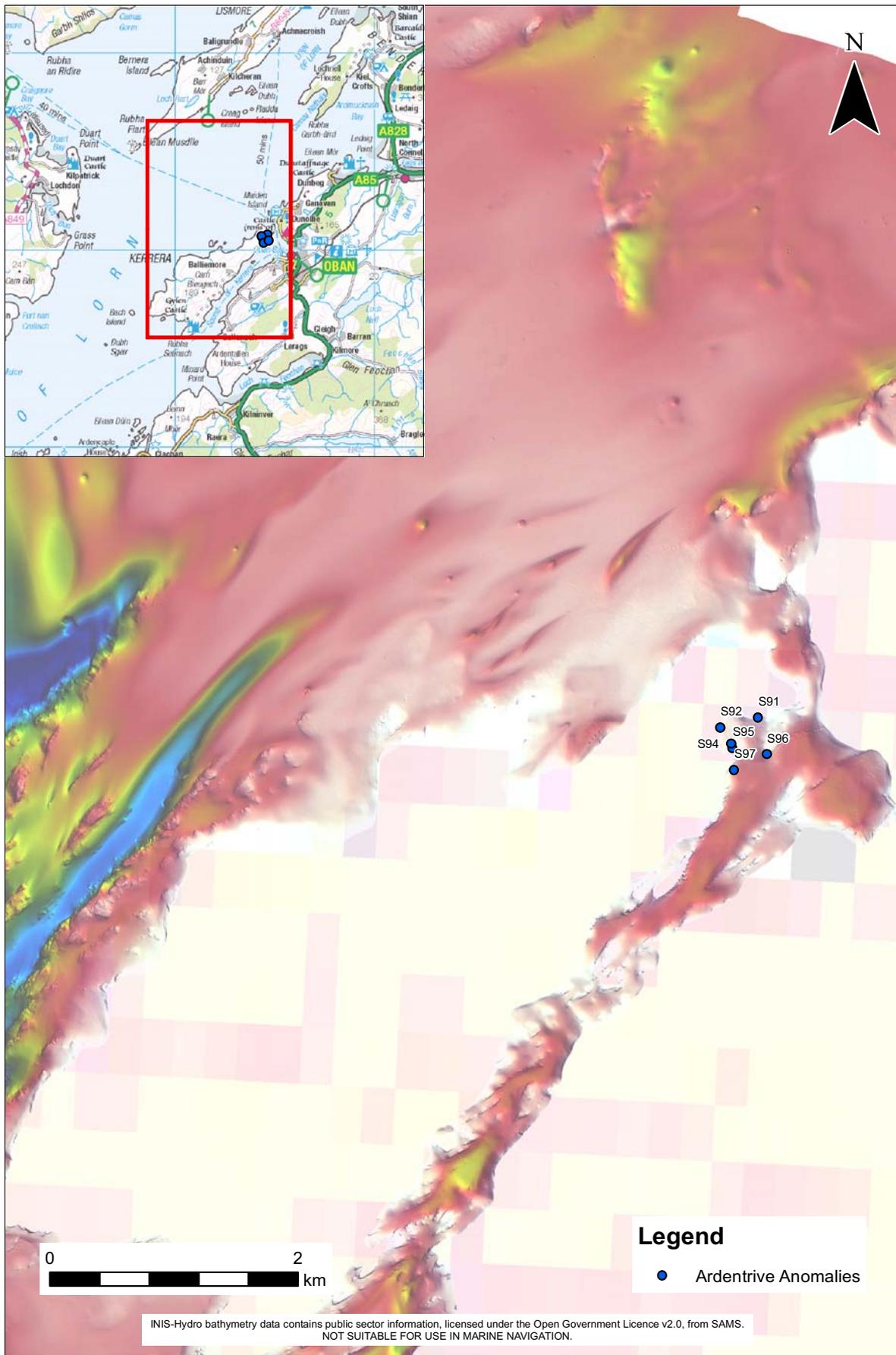


Figure B4: Geophysical anomalies identified in Ardentrive Bay

SAMPHIRE ID: 92

Classification: CRAFT

Site Name: Unknown

Canmore ID: None

Coordinates: 184382,730699

Accuracy: 1m

Description:

John Howe from the SAMS provided the SAMPHIRE team with the H525 Report of Wreck Investigation for this site. Geophysical data was collected from the vessel *White Ribbon* during the INIS Hydro Project. The site appears to be a 20 metre wreck in shallow water. The geophysical survey team was unable to complete a full investigation due to number of yachts and moorings surrounding the wreck. The wreck is orientated 335 - 155 ° with some identifiable debris to the east. This anomaly is one of several identified within the Kerrera Marina area (**Figure B4**).

It has long been known that this area contains a large number of wrecks, sometimes being referred to as the Ardantive/Ardentive Boat Graveyard, although existing wreck records are somewhat contradictory making positive identifications very difficult within this group. The RCAHMS database lists a number of reported losses known to have been lost in the vicinity of Ardantive/Ardentive Bay. These include the *Curllew* (CANMORE ID 294343), a 20th Century motor yacht; the *Helen Wilson* (CANMORE ID 102587), a wooden drifter lost in 1917; the *Hyacinth* (102568), a motor fishing boat sunk in 1920. There was also extensive activity here during WWII when the bay functioned as a flying boat base. It is clear that further research into this boat graveyard is required and that this will rely heavily on diver survey in order to make vessel identifications.

SAMPHIRE ID: 93

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 175824, 730671

Accuracy: 5m

Description:

This is a geophysical anomaly identified from INIS Hydro data during a detailed review by John Howe of marine multibeam data gathered for the INIS Hydro and provided to the SAMPHIRE project during the 2014 SAMPHIRE fieldwork phase.

The anomaly is approximately 34 metres long with a breadth of 12 metres at an approximate depth of 27 metres LAT. This is approximately wreck-sized but may be geological in origin. The RCAHMS database does not have any reported losses or recorded wrecks in the immediate vicinity of this location.

SAMPHIRE ID: 94

Classification: BARGE (20TH CENTURY)

Site Name: Unknown

Canmore ID: 102431

Coordinates: 184471,730570

Accuracy: 1m

Description:

This is a geophysical anomaly identified from INIS Hydro data during a detailed review by SAMS of marine multibeam data gathered for the INIS Hydro and provided to the SAMPHIRE project during the 2014 SAMPHIRE fieldwork phase. John Howe provided the SAMPHIRE team with the H525 Report of Wreck Investigation for this site. It is one of a number of geophysical anomalies seen in Kerrera

Marina (**Figure B3**). The geophysical data was collected from the vessel *White Ribbon* during the INIS Hydro project. The site appears to be a 20 metre concrete barge in 10-12 metre of water LAT located adjacent to Kerrera Marina, orientated E-W. Surrounding debris could be of numerous origins as there is another wreck 40 metre to the south and many mooring blocks in the vicinity causing large amount of scour and additional contacts around the wreck.

Three structures can be seen rising from the superstructure of the wreck. The largest at the stern are believed to be the remnants of the wheel house. The bow is partially buried in the mud. The RCAHMS database has several reported losses and previously identified wrecks plotted in and around Ardantrive/Ardentrive Bay. This wreck matches the description of a previously identified barge listed in the RCAHMS database (CANMORE ID 102431). There are two similar barge wrecks (**S95** and **S96**) in the surrounding vicinity. The proximity of the vessels and their similar construction could indicate that these wrecks represent a single or related wrecking or scuttling event.

Due to the steel shortage during WWII, UK shipyards began constructing barges and supply vessels from reinforced concrete. Many of these vessels were abandoned after war. Ardantrive Bay was the location of a boatyard and flying boat station during WWII and it is possible that these barges are related to the WWII era boatyard.

SAMPHIRE ID: 95

Classification: BARGE (20TH CENTURY)

Site Name: Unknown

Canmore ID: None

Coordinates: 184482,730534

Accuracy: 1m

Description:

This is a geophysical anomaly identified from INIS Hydro data during a detailed review by SAMS of marine multibeam data gathered for the INIS Hydro and provided to the SAMPHIRE project during the 2014 SAMPHIRE fieldwork phase. John Howe from SAMS provided the SAMPHIRE team with the H525 Report of Wreck Investigation for this site. Geophysical data was collected from the vessel *White Ribbon*. The site appears to be the remains of a 25 metre wreck resting in 5-10 metres of water LAT next to Kerrera Marina. The vessel appears mostly intact with some debris falling from the bow. The wreck rests upright and intact on a sloping sea bed of 7-10 °. A structure can be seen sticking up from the stern, possible the remnants of the wheel house and a large rectangular cargo hold is visible. It is one of a number of anomalies seen in Kerrera Marina (**Figure B3**)

The RCAHMS database has several reported losses and previously identified wrecks plotted in and around Ardantrive/Ardentrive Bay. This vessel appears similar to the description of an unknown 20th-century barge wrecked in the area (CANMORE ID 102431). The original survey identifies the wreck as measuring approximately 27m in length in approximately 10m of water. However, **S94** is currently interpreted as being the previously identified barge; therefore this wreck is interpreted as a previously unidentified barge. Additionally, there is a third barge to the south of this position. Due to the shared construction features and proximity to one another, these three sites could represent a single event.

SAMPHIRE ID: 96

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 184760, 730483

Accuracy: 2m

Description:

This is a geophysical anomaly identified from INIS Hydro data during a detailed review by SAMS of marine multibeam data gathered for the INIS Hydro and provided to the SAMPHIRE project during the 2014 SAMPHIRE fieldwork phase. Geophysical data was collected from the vessel *White Ribbon*. It is one of a number of anomalies seen in Kerrera Marina (**Figure B3**). The anomaly measures approximately 20 metres long with a height of 1-2 metres in a depth of 17 metres LAT.

Diver investigation will be necessary to confirm the nature of this anomaly. For an overview of the Ardantive/Ardentrive Boat Graveyard, see **S94**.

SAMPHIRE ID: 97

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 184496, 730355

Accuracy: 2m

Description:

Geophysical anomaly identified from INIS Hydro data during a detailed review by John Howe as part of the 2014 SAMPHIRE fieldwork phase. It is one of a number of anomalies seen in Kerrera Marina (**Figure B3**). The anomaly measures 23 metres in length with a height of 3 metres in a depth of 27 metres of water LAT.

For an overview of the Ardantive/Ardentrive Boat Graveyard, see **S94**.

SAMPHIRE ID: 98

Classification: STEAM DRIFTER (20TH CENTURY)

Site Name: *Golden Gift*

Canmore ID: 102430

Coordinates: 185711,730340

Accuracy: 2m

Description:

John Howe from the Scottish Association of Marine Sciences provided the SAMPHIRE team with the H525 Report of Wreck Investigation for this site. Geophysical data was collected from the vessel *White Ribbon*. Little of the wreck is identifiable, but it appears the wreck is resting on its side horizontal to the slope of the sea bed with the majority of the debris down slope of the main wreckage. The main wreckage is at an approximate depth of 9 metres LAT. The wreck is not intact and has a debris field to the northwest and south of the main wreckage.

The RCAHMS database lists the wreck of the *Golden Gift* (CANMORE ID 102430) in this location. The *Golden Gift* is a well-known wreck site and is commonly used as a dive site due to its proximity to the Oban waterfront. The vessel was a steam drifter that sank after a collision in Oban harbour in 1943.

SAMPHIRE ID: 99

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 176846, 729881

Accuracy: 2m

Description:

Geophysical anomaly identified from INIS Hydro data during a detailed review by John Howe as part of the 2014 SAMPHIRE fieldwork phase. The anomaly is approximately 60 metres long and 10 metres wide at a depth of 210 metres LAT. This anomaly is approximately wreck-sized but may be geological in origin.

The RCAHMS database has two possible craft listed in this area (CANMORE IDs 324776, 294367). Both are derived from Whitaker (1998) and neither includes sufficient detail on their origin or character to allow for comparison with this location.

SAMPHIRE ID: 100

Classification: CRAFT (20TH CENTURY)

Site Name: Unknown

Canmore ID: None

Coordinates: 183036,727970

Accuracy: 1m

Description:

John Howe from the SAMS provided the SAMPHIRE Project with the H525 Report of Wreck Investigation for this site. Geophysical data was collected from the RV *Calanus* during the INIS Hydro project. The site appears to be a shipwreck of 20 metres length resting in 35 metres LAT and orientated 115°–315°. The vessel is upright but has a list to starboard of approximately 15°.

The RCAHMS database has an entry for the recorded wreck of the *Young Fisherman* (CANMORE ID 294382). The Royal Navy loss reports state that the vessel was 95 gross tonnes and was a drifter. The *Young Fisherman* stranded in the area on the 29th November 1940. The vessel was acting as an auxiliary patrol vessel and was stranded 'near Oban'. The Canmore entry states that 'the location assigned to this record is essentially tentative, being derived from the unverified location that is cited by Whittaker' and it maps approximately 250m from the geophysical anomaly.

SAMPHIRE ID: 101

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 177907, 727338

Accuracy: 2m

Description:

Geophysical anomaly identified from INIS Hydro data during a detailed review by John Howe of SAMS in collaboration with the 2014 SAMPHIRE project. The anomaly measures approximately 9 metres long with a height of 2–3 metres at a depth of 22 metres LAT.

The RCAHMS database does not have any reported losses or recorded wrecks in the immediate vicinity of this location. Diver investigation will be necessary to confirm the nature of this anomaly.

SAMPHIRE ID: 102

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 177018, 726300

Accuracy: 5m

Description:

Geophysical anomaly identified from INIS Hydro data during a detailed review by John Howe of SAMS in collaboration with the 2014 SAMPHIRE project. The anomaly is approximately 15 metres long with a height of 2 metres at a depth of 39 metres LAT.

The RCAHMS database does not have any reported losses or recorded wrecks in the immediate vicinity of this location. Diver investigation will be necessary to confirm the nature of this anomaly.

SAMPHIRE ID: 103

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 177118, 726244

Accuracy: 2m

Description:

Geophysical anomaly identified from INIS Hydro data during a detailed review by John Howe of SAMS in collaboration with the 2014 SAMPHIRE project. The anomaly is approximately 6 metres long with a height of 1–2 metres at a depth of 47 metres LAT.

The RCAHMS database does not have any reported losses or recorded wrecks in the immediate vicinity of this location. Diver investigation will be necessary to confirm the nature of this anomaly.

SAMPHIRE ID: 104

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 178630, 725819

Accuracy: 2m

Description:

Geophysical anomaly identified from INIS Hydro data during a detailed review by John Howe of SAMS in collaboration with the 2014 SAMPHIRE project. The anomaly is approximately 10 metres long with a height of 1–2 metres in an approximate depth of 35 metres LAT.

According to John Beaton there may have been a yacht lost in the area in 1993. The RCAHMS database does not have any reported losses or recorded wrecks in the immediate vicinity of this location. Diver investigation will be necessary to confirm the nature of this anomaly.

SAMPHIRE ID: 105

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 179930, 724021

Accuracy: 5m

Description:

Geophysical anomaly identified from INIS Hydro data during a detailed review by John Howe of SAMS in collaboration with the 2014 SAMPHIRE project, in approximately 20 metres LAT. It is 20 metres long and 1 metre high. Geophysical data was collected from the RV *Calanus*. Dived by Dalriada SAC on the 28th June 2014 and discovered to be a large rock.

SAMPHIRE ID: 106

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 160285, 720104

Accuracy: 2m

Description:

Geophysical anomaly identified from INIS Hydro data during a detailed review by John Howe of SAMS in collaboration with the 2014 SAMPHIRE project at an approximate depth of 22 metres LAT. It is 20 metres long, 10 metres wide and 1 metre high. Geophysical data was collected from the RV *Calanus*.

The RCAHMS database has no record of any reported losses in this immediate area. The UKHO recorded position of the wreck of the boom defence vessel HMS *Barcombe* (CANMORE ID 117125) lies approximately 100m to the north of this location. This anomaly could relate to a portion of that wreck. Moir and Crawford (2014) note that though the wreck is located close to shore, there are reports of more material in approximately 18-20m LAT. This could relate to the identified anomaly. HMS *Barcombe* was a 750 tonne boom defence vessel of 45m length with a beam of 10m and a draught of 3m. It was built in 1938 and was lost in 1958. Diver investigation will be necessary to identify if this anomaly is cultural or natural.

SAMPHIRE ID: 107

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 160097, 719945

Accuracy: 2m

Description:

Geophysical anomaly identified from INIS Hydro data during a detailed review by John Howe of SAMS in collaboration with the 2014 SAMPHIRE project at an approximate depth of 24 metres LAT. It is 5 metres long and approximately 1 metre high. Geophysical data was collected from the RV *Calanus*.

The RCAHMS database has no record of any reported losses in this immediate area. Diver investigation will be necessary to identify if this anomaly is cultural or natural.

SAMPHIRE ID: 108

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 162090, 719581

Accuracy: 2m

Description:

Geophysical anomaly identified from INIS Hydro data during a detailed review by John Howe of SAMS in collaboration with the 2014 SAMPHIRE project at an approximate depth of 28 metres LAT. The anomaly appears to be two objects lying E-W, approximately 30 metres apart and measuring approximately 1 metre high. The anomaly is considered unlikely to be geological in nature. Geophysical data was collected from the RV *Calanus*.

The RCAHMS database has no record of any reported losses in this immediate area though the wreck of the hospital ship RFA *Maine* (CANMORE ID 102582) lies approximately 400 metres to the northeast of this location. It is possible that this anomaly represents debris from the *Maine*. Diver investigation will be necessary to determine the identity of this anomaly.

SAMPHIRE ID: 109

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 161719, 719564

Accuracy: 2m

Description:

Geophysical anomaly identified from INIS Hydro data during a detailed review by John Howe of SAMS in collaboration with the 2014 SAMPHIRE project at an approximate depth of 39 metres LAT. It is 15-20 metres long and 0.5-1 metre high. It appears to be a row of objects but could possibly be geological in nature. Geophysical data was collected from the RV *Calanus*.

The RCAHMS database has no record of any reported losses in this immediate area. Diver investigation will be necessary to identify if this anomaly is cultural or natural.

SAMPHIRE ID: 110

Classification: CRAFT (20TH CENTURY)

Site Name: Unknown

Canmore ID: None

Coordinates: 174813, 719170

Accuracy: 1m

Description:

Geophysical anomaly identified from the INIS Hydro survey multibeam data during a detailed review by SAMS in collaboration with the 2014 SAMPHIRE project. John Howe from SAMS provided the SAMPHIRE team with the H525 Report of Wreck Investigation for this site. Geophysical data was collected from the RV *Calanus* during the INIS Hydro survey. This site is the remains of a largely intact 22.5 metre vessel with one distinct cargo hold. The vessel lies upright in approximately 55-60 metres of water. The vessel is orientated 50-240° in an average depth of 58 metres LAT.

No reported losses were identified in the RCAHMS database for this location. Research is ongoing into this vessel.

SAMPHIRE ID: 111

Classification: SHIP (19th CENTURY)

Site Name: *Norval*

Canmore ID: 118059

Coordinates: 172790, 718830

Accuracy: 20m

Description:

Members of the Dalriada dive club mentioned one cannon and possible scattered remains of a vessel on the south side of Insh Island during Phase 2 outreach in 2014. A map of these cannons and some associated wreckage has been published in *Argyll Shipwrecks* (Moir and Crawford 2014a, 148) but the SAMPHIRE project has been able to gather further information on the wreck site with the help of local divers. During the Phase 3 diving, team members spoke to Simon Exley of Loch Fyne Diver Charters and he confirmed that one cannon was still in place in the gully. Other divers have also reported further remains of the wreck scattered among the gullies including copper pins and sheathing and unidentifiable concretions, anchor chain and some small cannon. At least one cannon has been removed from the wreck and is listed separately (see **S112**).

The SAMPHIRE team, along with volunteers Jeff Darby and Jo Beaton from Dalriada, attempted to dive on the wreck site during Phase 3. Unfortunately the conditions were not conducive to diving and the dive had to be abandoned. Although the dive location is shallow it should be noted that it is particularly vulnerable to westerly swells.

This is recorded as the reported wreck location of the *Norval* (CANMORE ID 118059). The *Norval* was a wooden sailing ship built in Dumbarton and launched in July 1864. The cannons are believed to be early 19th century in date and as such, likely predate the construction of the *Norval*, suggesting either that they originate from another ship or that they were transferred onto the vessel at some point, perhaps for use as signalling guns. The *Norval* was inward bound on the 20th December, 1870, from Montreal to Glasgow with a cargo of deals, battens and staves when it ran aground in fog on the southerly tip of Sheep Island (Insh Island). The vessel was quickly driven onto the rocks and gullies and believed to be lost. Once the crew was safely off the vessel they began to salvage the cargo. The vessel reportedly had been completely smashed and no longer visible by the 1st of January, 1871 (Moir and Crawford 2014a).

SAMPHIRE ID: 112

Classification: CANNON
 (19TH CENTURY)

Site Name: Norval Cannon

Canmore ID: 118059

Coordinates: 173700, 712650

Accuracy: 100m

Description:

This entry relates to one of the cannon reportedly removed from the location of the *Norval* wreck site (see **S111**) now is held in a private garden in Cullipool. It is not known who lifted the cannon but local divers stated that they believe it was lifted over a decade ago (i.e. pre-2004). At the request of the SAMPHIRE team, Jo Beaton of the Dalriada Sub-Aqua Club travelled from her home in Oban to Luìng to record the cannon. The SAMPHIRE team provided Jo with a cannon recording sheet and Jo also took several photographs (**Plates B28 and B29**).

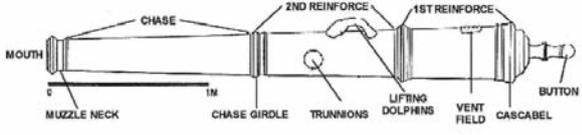
The cannon measures approximately 81cm long and 71cm in diameter at the cascabel with an 8 cm diameter muzzle. The lifting dolphins, portions of the trunions and button have been broken. The cannon has been removed from the marine environment and has been left in a garden without any reported conservation being undertaken, therefore the cannon is in a degraded state

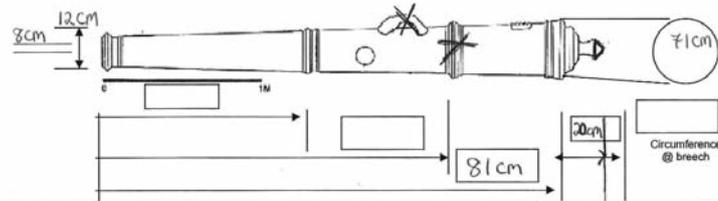


Nautical
Archaeology
Society

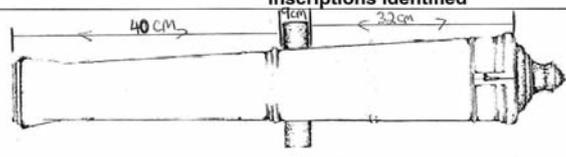
Recording Form Series
Gun Recording

PERSONAL DETAILS		SITE DETAILS	
Name: <u>JOANNE BEATON</u>		Site Name: <u>GROUND OF SHED NEXT TO LUING FIRE STATION</u>	
Contact details:		Location/position: <u>TEMPORARY LOCATION, BEING MOVED TO</u>	
Tel No.:		Orientation: <u>CULLIPOOL TO LUING COMMUNITY TRUST IN AWT.</u>	
Date: <u>23/04/14</u>		Archaeological references: <u>NM 738130</u>	
		Type of Gun:	





Inscriptions Identified



Inscription details	
A	<u>NAVE</u>
B	
C	
D	
E	
F	

Identify location of inscription on diagram above

SKETCH



Plate B28: Jo Beaton provided the SAMPHIRE team with a completed cannon recording sheet from her visit to the cannon on Luìng (courtesy Jo Beaton)



Plate B29: Detail of images of the cannon (courtesy Jo Beaton)

with signs of advanced corrosion (see **Plate B29**). It has been suggested that the person currently in possession of the cannon intends to donate it to a local museum.

Jo Beaton's notes were then passed by the SAMPHIRE team to independent cannon expert Charles Trollope, who was able to identify the cannon as a "civilian pattern trunnion carronade dating from the end of the Napoleonic war. The sort of thing that a small coaster would carry two or four of" (pers. comm. 31 July 2014). If the identification of the cannons is correct it suggests that they are likely to pre-date the *Norval*, which was built in 1864 but this does not rule out the possibility that they were used on that ship, perhaps as signalling guns.

SAMPHIRE ID: 113

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 173654, 718103

Accuracy: 2m

Description:

Geophysical anomaly identified from INIS Hydro data during a detailed review by John Howe as part of the 2014 SAMPHIRE fieldwork phase in approximately 37 metres depth LAT. It is 20 metres long and 1 metre high. Geophysical data was collected from the RV *Calanus*.

The RCAHMS database does not have any reported losses or recorded wrecks in the immediate vicinity of this location.

SAMPHIRE ID: 114

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 173831,718008

Accuracy: 2m

Description:

Geophysical anomaly identified from INIS Hydro data during a detailed review by John Howe as part of the 2014 SAMPHIRE fieldwork phase in approximately 44 metres depth LAT. It is 15 metres long and 1 metre high. Geophysical data was collected from the RV *Calanus*.

The RCAHMS database has no record of any reported losses in this area. Diver investigation will be necessary to identify if this anomaly is cultural or natural.

SAMPHIRE ID: 115

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 172407, 717588

Accuracy: 2m

Description:

Geophysical anomaly identified from INIS Hydro data during a detailed review by John Howe as part of the 2014 SAMPHIRE fieldwork phase in approximately 97 metres depth LAT. It is 16 metres long. There has been no H525 form submitted. Geophysical data was collected from the RV *Calanus*.

The RCAHMS database has no record of any reported losses in this area. Diver investigation will be necessary to identify if this anomaly is cultural or natural.

SAMPHIRE ID: 116

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 174429, 716720

Accuracy: 2m

Description:

Geophysical anomaly identified from INIS Hydro data during a detailed review by John Howe as part of the 2014 SAMPHIRE fieldwork phase at an approximate depth of 30 metres LAT. The anomaly is approximately 10 metres long and 1 metre high. Geophysical data was collected from the RV *Calanus*.

The RCAHMS database has no record of any reported losses in this area. Diver investigation will be necessary to identify if this anomaly is cultural or natural.

SAMPHIRE ID: 117

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 173418, 716290

Accuracy: 5m

Description:

Geophysical anomaly identified from INIS Hydro data during a detailed review by John Howe as part of the 2014 SAMPHIRE fieldwork phase in approximately 53 metres depth LAT. It is 20 metres long and 1.5 metres high. Geophysical data was collected from the RV *Calanus*.

The RCAHMS database has no record of any reported losses in this area. Diver investigation will be necessary to identify if this anomaly is cultural or natural.

SAMPHIRE ID: 118

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 174400,716229

Accuracy: 2m

Description:

Geophysical anomaly identified from INIS Hydro data during a detailed review by John Howe as part of the 2014 SAMPHIRE fieldwork phase at an approximate depth 22 metres LAT. It is 7 metres long and approximately 1 metre high. Geophysical data was collected from the RV *Calanus*.

The RCAHMS database has no record of any reported losses in this area. Diver investigation will be necessary to identify if this anomaly is cultural or natural.

SAMPHIRE ID: 119

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 173161, 715696

Accuracy: 5m

Description:

Geophysical anomaly identified from INIS Hydro data during a detailed review by John Howe as part of the 2014 SAMPHIRE fieldwork phase in at an approximate depth of 48 metres LAT. It is 10 metres long and 1.5 metres high. Geophysical data was collected from the RV *Calanus*.

The RCAHMS database has no record of any reported losses in this area. Diver investigation will be necessary to identify if this anomaly is cultural or natural.

SAMPHIRE ID: 120

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 166288, 712822

Accuracy: 5m

Description:

Geophysical anomaly identified from INIS Hydro data during a detailed review by John Howe as part of the 2014 SAMPHIRE fieldwork phase. The anomaly measures approximately 9 metres long and it is in approximately 143 metres of water LAT. Geophysical data was collected from the RV *Calanus*. John Howe has suggested that this may be the wreck of the fishing vessel *Enterprise*, lost in 1980 though there is another anomaly close by which is currently believed to be the *Enterprise*.

The RCAHMS database has no record of any reported losses in this area. Diver investigation will be necessary to identify if this anomaly is cultural or natural.

SAMPHIRE ID: 121

Classification: TRAWLER (20TH CENTURY)

Site Name: Enterprise

Canmore ID: Unknown

Coordinates: 165139,711961

Accuracy: 5m

Description:

Geophysical anomaly identified from INIS Hydro data during a detailed review by John Howe at an approximate depth of 117 metres LAT. It is 9 metres long and 3 metres high. Geophysical data was collected from the RV *Calanus*. John Howe has suggested that this may be the wreck of the fishing vessel *Enterprise*, lost in 1981.

The RCAHMS database has an entry for the *Enterprise* (CANMORE ID 322201) recorded at this location, identified in 2012 during the UKHO survey. The *Enterprise* reportedly foundered off the north-west coast of Garvellach on 3 March, 1981. The vessel was built in Oban in 1981, registered length of 9 metres and a beam of 3 metres.

SAMPHIRE ID: 122

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 175115, 703884

Accuracy: 5m

Description:

Geophysical anomaly identified from INIS Hydro data during a detailed review by John Howe as part of the 2014 SAMPHIRE fieldwork phase at an approximate depth of 43 metres LAT. It is 68 metres long and 3-4 metres high. It appears to be a linear feature with some scour around it but could possibly be geological in nature. Geophysical data was collected from the RV *Calanus*.

The RCAHMS database has no record of any reported losses in this area. Diver investigation will be necessary to identify if this anomaly is cultural or natural.

SAMPHIRE ID: 123

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 176480, 702

Accuracy: 5m

Description:

Geophysical anomaly identified from INIS Hydro data during a detailed review by John Howe as part of the 2014 SAMPHIRE fieldwork phase at an approximate depth of 54 metres LAT. It is 23 metres long and 3 metres high. It appears to be a linear feature lying NW-SE across an igneous dyke. Geophysical data was collected from the RV *Calanus*.

There are two reported losses listed in the RCAHMS database in this area. The *Snowflight* (CANMORE ID 294634) is listed as a 20th century auxiliary motor vessel abandoned and lost 12 February 1929. The *Nancy* (CANMORE ID 294635) is listed as a 19th century sloop, lost in Blackmile Bay in October 1918. No additional information is available at this time.

SAMPHIRE ID: 124

Classification: GEOPHYSICAL ANOMALY

Site Name: Unknown;

Canmore ID: Unknown

Coordinates: 167742, 700893

Accuracy: 5m

Description:

Geophysical anomaly identified from INIS Hydro data during a detailed review by John Howe as part of the 2014 SAMPHIRE fieldwork phase at an approximate depth of 14-25 metres LAT. It appears to lie on an area of scoured bedrock. It is 15 metres long and 5 metres high. Geophysical data was collected from the RV *Calanus*.

David Ainsley and Andy Mogg of the Dalriada Sub Aqua Club investigated the site on the 5th of July, 2014 and established that it was a rock (pers comm John Howe 21/07/2014).

SAMPHIRE ID: 125

Classification: CRAFT

Site Name: Unknown

Canmore ID: Unknown

Coordinates: 202246, 698735

Accuracy: 100m

Description:

During Phase 2 the SAMPHIRE team stopped in Lochgilphead on the 24th of May 2014 to hand out flyers and speak to local people. Our first contact with the local maritime community was made at a local business, Loch Fyne Tackle. The owner of the shop, Archie MacGilp Sr., an ex-trawler man from Tarbert was interested in the project and began recalling several wrecks from around the area that the team had not heard about. In addition his son, Archie Jr., a creeler man from Loch Arskaig shared several wrecks he was familiar with (**Plate B30**). This entry relates to the wreck of a prawn trawler in Loch Fyne that Archie Sr. reported. He remembered that the trawler was lost sometime in the 1980s and had been owned/skippered by Archie "Rigger" MacKinnon at the time of its loss. He recalled that vessel was a 40ft wooden trawler and was lost in about 40 fathoms of water.



Plate B30: Archie Jr and Sr. point out sites to SAMPHIRE team member Andrew Roberts in Loch Fyne Tackle, Lochgilphead

The RCAHMS database lists an unlocated reported loss of the *Janeil* (CANMORE ID 294708), a motor fishing vessel, registered in Tarbert. Originally built in 1934, the vessel measured 12 metres in length and had a beam of 12 metres. The RCAHMS database reports a vessel as being lost at Furnace in Loch Fyne and was captained by "MacKinnon" at the time of loss. This entry matches the report by Mr. MacGilp and is therefore considered to be the same vessel.

SAMPHIRE ID: 126

Classification: CRAFT

Site Name: Unknown

Canmore ID: Unknown

Coordinates: 184313, 667335

Accuracy: 20m

Description:

During a community engagement visit to Lochgilphead by the SAMPHIRE team on the 24th of May 2014 local resident Archie MacGilp Jr., of Loch Fyne Tackle (see **S125**) reported two vessels wrecked in the west end of Loch Tarbert. The vessels were reportedly fishing vessels lost in the 1980s but remained visible from the road.



Plate B31: Two trawlers stranded in West Loch Tarbert

The reported location was investigated the same day. Both wrecks were relocated in the reported location and were documented from shore by SAMPHIRE team members (**Plate B31**). Both vessels are stranded in the near-shore area of Loch Tarbert. Both vessels have their bows facing the shore and sit upright on their keels. Though vessels are degraded, they retain much of their original structural features and both vessels appear to be mid 20th-century trawlers. The RCAHMS database does not have any information concerning losses of any vessels in this area. After some web research the team was able to tentatively identify one of them as the *Kriesker* BA.207, a trawler originally built in France in 1958 that was based in Falmouth for many years before coming up to Scotland. The vessel is rumoured to have drifted free from its mooring at West Tarbert and run aground in the early 1980s.

SAMPHIRE ID: 127

Classification: CRAFT

Site Name: Unknown

Canmore ID: Unknown

Coordinates: 184313, 667335

Accuracy: 20m

Description:

This is the second trawler wreck reported by local resident Archie MacGilp Jr. during a community engagement visit to Lochgilphead by the SAMPHIRE team on the 24th of May 2014 (see **S126**). The wreck lies immediately adjacent to **S126** and is similar in construction and age.

SAMPHIRE ID: 128

Classification: CRAFT

Site Name: Unknown, *Moonlight*

Canmore ID: Unknown

Coordinates: 193571, 665709

Accuracy: 20m

Description:

During a community engagement visit to Lochgilphead by the SAMPHIRE team on the 24th of May 2014 local resident Archie MacGilp reported the remains of a wrecked puffer steamship outside of Kilbride Bay. The vessel was reportedly carrying a cargo of granite when it foundered 0.5 miles south of Wee Skate Island.

The RCAHMS database has the reported loss and confirmed location for the remains of the *Moonlight* (CANMORE ID 112352, 324140) a steamship built in 1913 that wrecked in the area in 1948 carrying a cargo of granite chips. This vessel, though not specified as a puffer, most likely correlates with the reported wreck by Mr. MacGilp. Research undertaken by the SAMPHIRE team has found further published details on the wreck in the latest edition of *Clyde Shipwrecks* (Moir and Crawford 2014b, 74–75) where the vessel is named as the *Moonlight II* and a detailed history of the vessel and its sinking is given as well as a photo before its sinking and a sketch of the wreck as it is now. Moir and Crawford also provide the following description of its current condition: “lying on an even keel on a gently sloping seabed she is orientated 010/90 degrees with her bow pointing south south-west. Depths around the wreck range from 38m at the bow to 36m at the stern. The wreck rises on average 3-4 metres above seabed level. The wreck is substantially intact although her engine casing appears to have been damaged on the starboard side, perhaps by a fisherman’s trawl. There are no hazards to diving this wreck which often provides an excellent dive with shoals of fish and good visibility” (Moir and Crawford 2014b, 75).

SAMPHIRE ID: 129

Classification: CRAFT

Site Name: Unknown

Canmore ID: Unknown

Coordinates: 192464, 657393

Accuracy: 100m

Description:

During a community engagement visit to Lochgilphead by the SAMPHIRE team on the 24th of May 2014 local resident Archie MacGilp reported the remains of a wooden vessel commonly referred to as “the smack” off Skipness. Though he did not know any additional information concerning the identity of the wreck, Archie commented that local fishermen (including himself) had collected coal from the wreck when in the area. He stated that the wreck is situated in approximately 20 fathoms though he suggests that little remains of it today.

The RCAHMS database has six reported losses in the surrounding vicinity with no confirmed wrecks identified. The *Helen* (302553), the *Johanna Sophia* (326284), and the *Loch Tralig* (302564) are all reported as crafts lost in the 19th and 20th century off of Skipness point. The *Witch* (220073) and the *Wallace* (112404) are both reported 20th century steamship losses east of Skipness point and the *L’Hiver* (247378) is a 19th century brig reportedly lost in the area.

SAMPHIRE ID: 130

Classification: FINDSPOT

Site Name: Unknown

Canmore ID: Unknown

Coordinates: 171130, 780240

Accuracy: 20m

Description:

Ryngan and Beandri Piper of Arisaig (see **S67**) contacted the SAMPHIRE team after discovering a worked piece of bone on the beach south of Arisaig (**Plate B32**). The bone is the tibia of sheep, or



Plate B32: Bone tool discovered by Ryngan and Beandri Piper (courtesy Ryngan and Beandri Piper)

potentially a roe deer. The bone appears to have been used as a net needle or net shuttle, a common tool used by fishing communities since the medieval period. Mr. Piper related that above the beach is an abandoned settlement of nearly a dozen rectangular stone buildings. The surrounding land shows signs of previous drainage and cultivation and there is a freshwater stream at the northern end of the beach with several additional stone enclosures. The tool was found in the intertidal zone, partially buried in a smaller stream cutting through the beach. It was Mr. Piper's opinion that the tool was exposed due to the stream eroding the beach and not wave action. A brief survey of the surrounding area did not identify any additional artefacts. The RCAHMS database does not have any records in this area.

SAMPHIRE ID: 131

Classification: AIRCRAFT

Site Name: Unknown; Saro Lerwick

Canmore ID: Unknown

Coordinates:

Accuracy: 20m

Description:

John Howe of SAMS reported the remains of a possible Saro Lerwick flying boat identified off the coast of Lismore in the Firth of Lorne. Video was collected by Marine Scotland during a video tow and divers from Dalriada investigated the site on 21 September 2014. The site was confirmed to be the remains of a twin engined aircraft with intact props.

The RCAHMS database has the reported loss of a Saro Lerwick I in the vicinity of the find. L7253 of the 209 squadron was lost on 20 February, 1940 when it collided with a rocky promontory near Lismore Lighthouse and sank with five of its crew. The Saro Lerwicks were some of the earliest flying boats stationed at Oban during WWII. The Lerwick was not popular with pilots, reportedly referred to as 'flying pigs' due to their bulk and underpowered engines (Hughes 1998). Further research is ongoing into this site.

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