

THE PEMBROKESHIRE CEMETERIES PROJECT

EXCAVATIONS AT

ST BRIDE'S HAVEN, PEMBROKESHIRE, 2011



ymdiriedolaeth archaeolegol
DYFED
archaeological trust



DYFED ARCHAEOLOGICAL TRUST

RHIF YR ADRODDIAD / REPORT NO. 2011/29
RHIF Y PROSIECT / PROJECT RECORD NO. 100746

Mehfin 2011
June 2011

THE PEMBROKESHIRE CEMETERIES PROJECT

EXCAVATIONS AT

ST BRIDE'S HAVEN, PEMBROKESHIRE 2011

Gan / By

Duncan Schlee

Paratowyd yr adroddiad yma at ddefnydd y cwsmer yn unig. Ni dderbynnir cyfrifoldeb gan Ymddiriedolaeth Archaeolegol Dyfed am ei ddefnyddio gan unrhyw berson na phersonau eraill a fydd yn ei ddarllen neu ddibynnu ar y gwybodaeth y mae'n ei gynnwys

The report has been prepared for the specific use of the client. The Dyfed Archaeological Trust Ltd can accept no responsibility for its use by any other person or persons who may read it or rely on the information it contains.

YMDDIRIEDOLAETH ARCHAEOLEGOL DYFED CYF
Neuadd y Sir, Stryd Caerfyrddin, Llandeilo, Sir
Gaerfyrddin SA19 6AF
Ffon: Ymholiadau Cyffredinol 01558 823121
Adran Rheoli Treftadaeth 01558 823131
Ffacs: 01558 823133
Epost: info@dyfedarchaeology.org.uk
Gwefan: www.archaeolegdyfed.org.uk

DYFED ARCHAEOLOGICAL TRUST LIMITED
The Shire Hall, Carmarthen Street, Llandeilo,
Carmarthenshire SA19 6AF
Tel: General Enquiries 01558 823121
Heritage Management Section 01558 823131
Fax: 01558 823133
Email: info@dyfedarchaeology.org.uk
Website: www.dyfedarchaeology.org.uk

Cwmni cyfyngedig (1198990) ynghyd ag elusen gofrestrdig (504616) yw'r Ymddiriedolaeth. The Trust is both a Limited Company (No. 1198990) and a Registered Charity (No. 504616)

CADEIRYDD CHAIRMAN: C R MUSSON MBE B Arch FSA MIFA.
CYFARWYDDWR DIRECTOR: K MURPHY BA MIFA.

CONTENTS

	Page
SUMMARY	1
ACKNOWLEDGEMENTS	1
INTRODUCTION	2
Project Background	2
Project Objectives	2
Site Description	2
Historical and Archaeological Background	3
Methodology	4
<i>Excavation</i>	4
<i>Geophysical Survey</i>	5
<i>Topographic survey</i>	5
<i>Outreach</i>	5
EXCAVATION RESULTS	6
Deposits removed by 'mini-digger'	6
Hand excavated deposits	6
<i>Wall 006</i>	6
<i>Wall 007</i>	6
Graves	7
<i>Cist Graves</i>	7
<i>Dug graves</i>	7
<i>Other graves</i>	7
<i>Grave markers</i>	7
<i>Grave stratigraphy</i>	7
<i>Grave alignment and cemetery layout</i>	8
Skeletal material	8
Artefacts	8
DISCUSSION	9
The Cemetery	9
Coastal erosion and archaeological mitigation	9
GEOPHYSICAL SURVEY RESULTS	10
OUTREACH RESULTS	10
Visitor feedback comments	11
Volunteer feedback comments	12
Number crunching	12
FUTURE WORK	15
Community engagement	16

CONCLUSIONS 16

SOURCES 17

ILLUSTRATIONS

Figures

Figure 1: Location of St Bride's Haven

Figure 2: Site location map

Figure 3: Plan showing 2009 and 2011 excavation areas

Figure 4: Plan of 2011 excavation area showing locations of burials

Figure 5: Plan showing geophysical survey

Figure 6: Aerial photograph of St Brides

Photos

Photo 1: View of St Bride's church looking east

Photo 2: General view of central part of cemetery

Photo 3: Wall 007 looking south

Photo 4: Wall 006 looking west

Photo 5: Grave SK 017 looking east

Photo 6: Cist grave SK012 looking south

Photo 7: Graves 026 and 015 during excavation

Photo 8: Intercutting group of dug graves SK003, 009 etc.

Photo 9: SK008 after removal of lintel slabs and fill

Photo 10: Cist grave SK020 with grave marker and overlying cist SK038

Photo 11: Cist Grave SK032 looking west

Photo 12: Cist graves SK019 (right) and SK038 (left)

Photo 13: A site tour

SUMMARY

Following the evaluation of the site in 2009, The Dyfed Archaeological Trust (DAT) undertook a larger excavation at St Bride's Haven, Pembrokeshire (NGR SM 8021 1094) for four weeks from March 2010 and April 2011. Over 35 graves were excavated. Bone preservation was generally poor; some graves contained no bone, others only skull fragments and teeth. Some burials, however, were better preserved. It is hoped that the material recovered will provide further C14 dating evidence, and potentially material for stable isotope analysis. The cemetery seemed different in character to other cemetery sites excavated recently in the region, and following specialist analyses of the human skeletal material and the character of the burials, the results will provide useful information for comparison with other sites investigated as part of the Pembrokeshire Early Medieval Cemeteries Project. Further analysis will also provide information about the history of St Bride's Haven that could form the basis of further public outreach.

The excavation was undertaken by staff from DAT and volunteers from the local community. The project was funded with grant aid from Cadw and PLANED and with the participation of the PCNPA archaeologist.

ACKNOWLEDGEMENTS

Thanks to: Hubert Wilson, Mike Ings, Chris Chinnock, Helen Whitear, Pete Crane, Hugh and Harriet Bishop, Margaret Copley, Gareth Nicholls, Margaret Redfern, Judy and Nik Wilkinson, Flick Sage, Ann Barkworth, Irene Payne, Tom and Emma Walter, Rob and Jude Walter.

INTRODUCTION

Project background

The site lies at NGR SM 8021 1094 within the Pembrokeshire Coast National Park, close to the popular beach of St Bride's Haven. It is one of approximately 38 known or possible early medieval cemetery sites in Pembrokeshire.

In 2009, Dyfed Archaeological Trust was grant aided by Cadw and Pembrokeshire Coast National Park Authority (PCNPA) to undertake an archaeological evaluation of the site to clarify its nature, extent and survival. The main goal of the project was to obtain information on the extent, complexity and significance of the archaeological resource that might require consideration within a management plan for the site.

Various options for mitigating the impacts of coastal erosion on the site were identified, with the preferred option being to excavate the cemetery to obtain as much information about it as possible in advance of its eventual destruction.

The availability of Cadw contingency funding towards the end of the 2010/2011 financial year offered the opportunity to undertake a three week excavation of the site, with a further week added from funding from the 2011 financial year.

Project objectives

The excavation aimed to excavate all the features revealed on the site through a process of 'preservation by record', thereby solving the problem of loss of cultural material to erosion for several decades, if not centuries.

In addition to the archaeological objectives, community engagement and involvement was an important aspect of the project. Local volunteers undertook the majority of excavation, providing a rare opportunity to gain archaeological experience.

From the previous excavation it was recognized that the location of the site and the popularity of St Bride's Haven as a place to access the coastal path, resulted in a steady stream of visitors to the excavation. The opportunity to effectively engage with the public was consequently identified as a specific part of any future excavation at the site. With funding from PLANED it was possible to include a team member specifically dedicated to 'public engagement' during the excavation.

Site description

St Bride's Haven is a small, sheltered north-facing inlet on St. Bride's Bay (Figure 2 and 3; Plate 1; Photo 1). To the south of the inlet is a low-lying flat valley with two streams flowing into the inlet.

The excavation area is located immediately south of the low cliffs at the back of the beach, to the east of the restored lime-kiln, and to the north of the present church (Figures 2, 3 and 5). The eastern limit of the area is defined by a stone wall built around the edge of a former pond. The southern limit of the excavation area was approximately 7m from the northern edge of Trench 1 in 2009 and was partly defined by the line of an 'unofficial' footpath across the site which it was considered prudent to leave undisturbed. The southern edge of the excavation was sufficiently far from the actively eroding cliff face to adequately mitigate the likely effects of future erosion.

Much of the site was formerly covered with gorse and brambles, but these were cleared to enable the geophysical survey and excavations to proceed. Two mature, 'wind-pruned' Ash trees located between the cliff edge and the car park area were left.

Historical and archaeological background

St Bride's church (PRN 3131) is dedicated to Saint Bridget (aka St Fraed, St Bridig), who is thought to have come from Ireland to Pembrokeshire c.550-600AD and possibly to have established a nunnery at St Bride's. St Bride's was possibly mentioned in an early 13th century source, as rendering a pension to Ewenny Priory, Glamorgan (Conway Davies 1946, 336). There are no known earlier documentary references. The fabric of the church is probably 14th century at the earliest, but an 'Ecclesia de Sancta Brigida' was listed in the Taxatio of 1291 (Record Commission 1802).

A Group I inscribed stone (PRN 46854), of probable 5th-7th century date (Edwards 2008) is recorded by or on behalf of Edward Lhuyd (in about 1698) as having been found 'On ye sea shore near St Bride's Pembrokeshire'. The record includes a sketch of the stone which appears to be a flat slab with vertical downwards lettering that appears to read 'Awaaos' or 'Avvaos'. The letters have no known meaning, but may be incomplete (Edwards 2008). The stone is now lost.

The cemetery is traditionally associated with a medieval chapelry (PRN 3138) also recorded by Edward Lhuyd in c.1698 (BL Stowe MS 1023, fo 23). The remains of the chapel were still visible in 1833 when Lewis recorded that:

'... at the neck of a small inlet from the bay, which flows up almost to the churchyard, forming what is now called St Bride's Haven. A considerable herring fishery, which has been discontinued for many years, was formerly carried on here with very great advantage, and there are still remnants of an ancient chapel on the beach, which according to tradition, was subsequently appropriated as a salting-house for curing the fish. In the cemetery belonging to this chapel were numerous stone coffins, of which several have been washed away by the encroachment of the sea, which has here gained considerably on the shore, as was proved some years ago, during an extraordinary recess of the tide, by the discovery of several stumps of trees.' (Lewis 1833)

However, Fenton records that the chapel appears to have been lost to coastal erosion by the 19th century:

'In the little creek which almost comes up to the churchyard wall there was in former days a great fishery of herrings; and close on the shore a little raised above the beach stood a small chapel, where the fishermen were used to put up their prayers for their success and averting the dangers of the sea, and round which they were buried, as to this day many stone coffins are seen peeping out of the crumbling earth, eaten away by the sea at high tides.' (Fenton 1903 edn)

Fenton also records that:

'There is a tradition that out of the ruins of the chapel a salt-house for the convenience and use of the fishery was erected, and from that time the fishery failed, which occasioned the following distich:

*'When St Bride's chapel a salt-house was made,
St Bride's lost the herring trade.'* (Fenton 1903 edn)

In addition to the chapel and cemetery therefore, it seems likely that there would have been various buildings and structures associated with the fishing industry at St Bride's Haven.

The limekiln (PRN 23815) is a 'three-quarter circular' type with two rounded drawing arches, and demonstrates another industry that was practiced at St Bride's and which is likely to have left an archaeological legacy apart from the restored lime-kiln itself.

Local tradition holds that the westernmost part of Cliff Cottage (to the north of the cemetery) was formerly a 'fisherman's chapel'. The building does indeed seem

to be of some antiquity, and has an interesting blocked arched doorway on the seaward side (Photo 3). Having been blessed, this doorway is thought to have been a means of exiting the chapel without having to retrace one's steps, before embarking on a sea voyage. The present owners say that they have a photograph of the house before it was pebble-dashed, in which it is possible to see arched window openings in the front elevation. Unfortunately, it has not been possible to see the photograph.

It is possible therefore; that St Bride's may have been a multiple church site, and that the status of 'primary church' may have switched from one site to the other during the pre- or post-Conquest periods. In 1985 two radiocarbon samples obtained from burials eroding from the cliff cemetery were processed at the department of Plant Sciences, University College Cardiff. Sample CAR917, from a cist burial produced a date of 1000 +/- 70 b.p (810-1090 Cal AD at 2 sigma). Sample CAR931 from a simple dug burial, provided a date of 150 +/- 60 b.p. (c.1650 Cal AD at 2 sigma.) was obtained. This may suggest that burial rights continued in the chapel cemetery after the later church was built, or that a tradition of sanctity was maintained there (Ludlow 2002).

Further inland are the remains of a manor house known as 'The Abbey' (PRN 3139). The bulk of the buildings are of post-medieval date, but at its core is a tower house of possible 15th century date. At St Bride's Green are the remains of ornamental fishponds (PRN 27983).

The known history and archaeology of St Bride's therefore suggests that in the past there was likely to have been much more settlement, commerce, industrial and religious activity in the area than is apparent or imaginable at St Bride's Haven today.

In addition to occasional monitoring (Crane 2006; Crane 2003; Murphy 1997) and recording of the eroding burials (Ludlow 2005), two 'watching briefs' on groundworks undertaken in the vicinity have been carried out (Ludlow 1995 and Crane 2004). In both instances, no significant archaeological features were revealed.

Methodology

Excavation

An excavation area of approximately 200 sq m was originally proposed. In the light of a variety of constraints, however, a smaller area was excavated, of irregular shape covering an area of approximately 85 sq m. A 'mini-digger' was used to remove turf and topsoil down to the top of archaeologically significant deposits. Due to the cliff-top location of the site and the involvement of volunteers, a 2m berm was preserved between the site and the cliff edge to allow a safe working area.

The berm also prevented the excavation inadvertently exacerbating the process of coastal erosion, and minimised the visual impact of the excavation on the landscape, specifically upon the cliff face which is included in a SSSI partially for its geological significance.

Excavation of burials closer to the cliff face would require additional health and safety measures, and would potentially require specialist involvement in reinstatement to prevent damage to the SSSI and general appearance of the Haven. The excavation was limited to the north by the coastal pathway and a stone wall. To the south the excavation area was limited by an area of rough terrain and the presence of a lime kiln.

Lastly, the number of graves revealed in the smaller excavation area was greater than anticipated and it was considered more important to fully excavate the exposed features in a smaller area rather than partially excavate a larger area.

All archaeological features were hand-excavated, and recorded using the standard system employed by Dyfed Archaeological Trust. Plans and section drawings were drawn at 1:20 scale and excavated features photographed in digital format. The majority of the excavation was undertaken by local volunteers under the supervision of DAT staff. The trench was backfilled at the end of the excavation.

Consent to work within the SSSI was obtained from CCW and an exhumation license was obtained from the home office prior to the start of the works.

Geophysical survey

The excavation area had been the focus of a geophysical (magnetometer) survey prior to the 2009 excavations. In 2011, additional geophysical survey was undertaken in the field to the south and west of the present churchyard and on the 'green' to the north of the walled garden.

Topographic survey

An additional topographic survey of the areas that were geophysically surveyed was made. The excavation area and its environs were also surveyed, as was the cliff face so that the extent and rate of future erosion can be assessed.

Outreach

Due to the large number of visitors to the site noted during the 2009 excavation, the need for a dedicated outreach 'officer' was identified as an important requirement for any future excavation at the site. In 2011, funding was obtained from PLANED to support the outreach element of the project. Considering the time of year, the location and the focus of the excavation, and on the evidence of the visitor demographic obtained from the evidence of the previous excavation it was decided to focus efforts on engaging with local and visiting communities with an existing interest in history and archaeology, rather than engaging with schools and attempting to appeal to new audiences. A summary of the outreach element of the project is included at the end of this report.

EXCAVATION RESULTS

The irregular shape of the excavation area was dictated by the various constraints and the presence of two walls within the trench. Over the majority of the excavation area all archaeological deposits were excavated down to natural geological deposits. The results of the 2011 excavations are considered in combination with the results of the 2009 excavations.

Deposits removed by 'mini-digger'

Turf and topsoil (001) were removed by machine down to a much stonier deposit across the majority of the site. The two walls (006 and 007) traversing the site were also revealed at this stage. This stonier deposit was also removed by machine since no archaeologically significant features could be discerned within it.

Hand excavated deposits

Following an initial hand clean across the entire site, different context numbers were allotted to the areas separated by the exposed walls (002, 003, 004, and 005). On the east side of the trench machining stopped at a level where significant quantities of animal bone were encountered. In the central portion machine excavation stopped when occasional flat lying stones were encountered and changes in soil colour were noted. In the western part of the site stones suggesting the presence of graves were encountered at a higher level to the south than in the north, so the trench was reduced to a greater depth in the northern part of the area.

Wall 006

Wall 006 was constructed mostly from angular shale slabs, each about 5cm thick, but varying in other dimensions and shapes. These were arranged to form an irregularly coursed but neatly constructed and faced wall with a rubble core 0.66m wide and surviving to a depth of 0.20m. The wall did not appear to be constructed in a foundation cut, and it rose up to the south, respecting the local topography. As a result, its southern extent was less well preserved, apparently having been damaged by ploughing or other ground disturbance. The wall was built on top of a shale rich clay silt soil horizon overlying the natural shale clay silt. Several burials ran below the wall line, and although their cuts could not be discerned, these are assumed to predate the soil horizon on which the wall is constructed. Disturbed portions of this wall were removed to reveal underlying burials, but elsewhere the wall was left *in situ*.

Wall 007

Wall 007 was substantial and carefully constructed from large (sometimes very large) boulders on its outer faces, with a core of smaller stones. The wall was 0.75m wide and survived to a height of 0.60m. The stone appeared to be mostly some form of grit stone. The stone was not dressed, and was irregularly shaped and randomly coursed. Whether as a result of quarrying or naturally, most stones had at least one roughly flat face, which was oriented to form roughly even wall faces. Some rounded beach rocks were also incorporated in the wall. It was noted that this stone was not the same as the stone bedrock exposed on the beach and nearby cliffs.

The wall did not appear to have been constructed within a foundation trench and did not appear to be part of a structure. It was constructed directly upon what appeared to be the top of natural weathered shale and clay silt bedrock. In places, the west face of the wall had slumped, and collapsed stone appeared to lie at the base of the wall directly above the natural.

Animal bone and pottery fragments recovered during the cleaning of the wall and removal of the collapsed stone, suggest it was an extant feature in the post medieval period, but it had 'the feel' of having earlier origins. Evidence of two burials beneath the line of the wall indicate that it post-dates at least part of the cemetery. The projected alignment of the wall (which was not entirely straight) runs approximately north-south, on a similar but different alignment to wall 006. It was not apparent as a surface feature and did not appear to respect any extant walls or other archaeological features in the area. The exposed structure was left intact.

Graves

Thirty-four graves were entirely excavated, with evidence of at least another ten further graves occurring partially within the excavation area. There was evidence for 26 cist graves and 15 dug graves.

Cist Graves

With the possible exception of two infant burials, all the cist graves had lintel slabs. With the possible exception of one infant burial, none of the cist graves had basal slabs. Two graves had lintel slabs but no side slabs. Three graves had lintel slabs and at least some stones along one side of the grave. Two lintel graves appeared to have significant piles of rock carefully arranged over the cist.

Dug graves

Evidence for at least 15 plain dug graves was revealed.

Other graves

One grave (SK017) had no cist, but appeared to have a curb filled with stones including numerous quartz pebbles built over the backfilled grave.

Grave markers

Three possible post holes may represent grave markers. At the west end of burial SK020, the shattered remains of a stone slab grave marker set in a shallow pit were excavated. A general increase in the frequency of stones overlying graves in the western part of the excavation, may also be derived from piles of stones constructed over graves, or to support wooden grave markers, but which have been spread by later agricultural activity.

Grave stratigraphy

Several clusters of intercutting graves were identified (see Figure 4). In several instances it was possible to demonstrate that infant burials were later in the stratigraphic sequence.

Grave alignment and cemetery layout

While all the graves were east-west aligned, some (often stratigraphically later) varied from the norm by a few degrees. Burial SK031 was arranged with its head to the east rather than to the west as is usual. The burials appear to become less frequent towards the east. There appear to be more cist graves than dug graves in the west part of the excavation area. There is some evidence for graves being arranged in rows. Some graves may represent groups, with several possible paired graves (adult and infant buried in adjacent graves).

Skeletal material

Skeletal material was recovered from 21 burials. In some instances this amounted to little other than a few badly preserved fragments of bone or teeth. Skull bones and teeth were the most frequent survivals. Occasionally long bone fragments were also present. Only four graves contained relatively well-preserved bone. In three graves it was possible to identify voids where the skull had previously been present.

The differential bone preservation may be a consequence of different burial dates, but is perhaps more likely to be due to localised variation in soil acidity, drainage and protection by cist structures.

Evidence of 5 burials was identified during the 2009 excavation, but these were not excavated.

Artefacts

A small quantity of struck flints, animal bone and pottery were recovered during both excavation seasons. Two metal objects were recovered from grave fills- a possible iron knife blade and a possible lead bead.

DISCUSSION

The cemetery

From the limited evidence of the excavations of 2009, it was suggested that the cemetery was not completely filled with graves and that instead they may have been arranged in groups, or possibly rows, separated by areas devoid of burials.

Bearing in mind the presumed early origins of the cemetery, and the two radiocarbon dates from Cal AD 810-1090 (2 sigma) and Cal AD 1650 (2 sigma) it would seem reasonable to suggest that the cemetery was in use until the present church and churchyard had been established. However, although there was a diversity of grave types within the excavated area, and in places, a significant degree of intercutting, there was no clear evidence to suggest that the cemetery was in use for as much as 600 years.

In 2011, although more burials were revealed than was expected (at Brownslade a similar number of burials were excavated in a much larger excavation area), evidence of groups of burials, stratified clusters, rows and areas devoid of burials were indeed found. It is hoped that further analysis of the skeletal material (especially C14 dating) and of cemetery morphology may help to explain the distribution patterns of the burials.

Cist grave types and their relative proportions seem somewhat different to those from other recently excavated cemeteries in the region. Possible explanations for these differences are as yet uncertain, but may be clarified by further analysis.

Over the two seasons of excavation, several features have been suggested as possible cemetery boundaries. None has so far been conclusively proven to be a cemetery boundary, and it is possible that the limits of the cemetery changed during its period of use. Although the excavation has identified two possible boundaries to the cemetery, ditch 017 is the most likely candidate since it is demonstrably earlier than the probable post medieval building in Trench 4. In addition, an extension of the known orientation of the ditch towards the cliff would lie to the west of (and would therefore effectively enclose) all the known burials.

Coastal erosion and archaeological mitigation

The excavation of a significant proportion of the surviving archaeology has effectively mitigated the gradual loss of the early medieval cemetery while taking into account other environmental factors. This has been achieved by accepting the continued loss of unexcavated actively eroding burials in return for obtaining a greater understanding of the site as a whole. Some parts of the site, however, remain unexcavated and some aspects of its character remain unknown.

The process of erosion has not been halted, but the evidence that erodes from the cliff in the future now has a more clearly defined context to which it can be related, and the significance of newly revealed evidence can be judged. The survey of the cliff face and edge will allow the rate and progress of the erosion process to be monitored.

With the cliff face remaining in its present state, the opportunity to experiment with low impact measures to try and stabilize the eroding cliff face remains. Measures might include altering the angle of the cliff face to make it less vertical and to encourage the re-establishment of turf cover, or trimming back the turf on the cliff edge to break the cycle of topsoil erosion. If funding for such a project was obtained, it would be an opportunity for archaeologists geologists, ecologists and coastal engineers to collaborate in the project design and execution.

GEOPHYSICAL SURVEY RESULTS

The geophysical survey was undertaken in the field located to the south and west of the present rectangular churchyard (PRN 27990). An earlier rectangular churchyard boundary is still visible as an earthwork within the existing churchyard (Photo 2). Part of an apparently curving cropmark feature (PRN 13294) visible in this field on an aerial photograph (Plate 1), has been interpreted as a possible early medieval enclosure (with a north-south diameter of c.70m). If circular, the existing St Bride's Church would appear to lie outside, or perhaps on the very periphery of, the enclosure, and may therefore post-date it. The cist cemetery (PRN 7606) lies 50m to the north of the present churchyard and would also appear to lie beyond the projected circumference of the circular enclosure. The topography in the location of the cropmark, however, does not suggest a likely location for an early medieval enclosure.

The geophysical survey has indicated a variety of intriguing features which are difficult to interpret, and may represent a combination of several different phases of activity. To the south of the churchyard is what appears to be the curved corner of a substantial rectilinear enclosure. To the west of the churchyard, at the north end of the field, are more enclosures that may represent property boundaries. Immediately south of these are anomalies that might suggest house sites associated with the enclosures. South of these are two linear features of unknown significance, one running roughly east-west, the other on a roughly northwest-southeast orientation. What is lacking is any convincing evidence to support the interpretation of the cropmark as a circular enclosure, as no clear remains of this feature could be identified.

It has been suggested (P. Crane pers. comm.) that the cropmark feature may mark the course of a trackway along which the materials for the construction of the church were transported from the beach. Such a feature might not be clearly defined on a geophysical survey.

As has also been demonstrated by the excavations, the survey does indicate that archaeological evidence for a significant degree of past activity, potentially covering a considerable time span, survives below the present ground surface at St Bride's Haven. Further excavation would be required to characterise the archaeological features indicated by geophysical survey.

OUTREACH RESULTS

A total of 16 volunteer excavators were recruited by circulating an e-mailed letter of invitation to volunteers in the local community via the local Coastlands History Group. Volunteers on previous excavations were also contacted, and enquiries from people that had seen the volunteering opportunities posted on the DAT website were also invited. The volunteers encompassed a wide age range and included an archaeology graduate from Lampeter, a palaeopathology Masters graduate from Durham University, and an Open University archaeology student. Three volunteers who had signed up, were unfortunately unable to attend. It was intended to have between 6 and 8 volunteers attending on each day. Inevitably these numbers varied, but volunteer attendance was generally high and they were highly motivated. Volunteers were kept informed of developments and provided with background history about the site, kit lists etc.

In total 25 Local History Groups were contacted prior to the commencement of the excavation to invite them to book group visits to the site. Six of these made bookings. The size of the groups varied from a handful to over 15. As a result of contacting the local history groups, the excavation appeared in the 'What's on' section of a local newspaper. Site visits were also provided to 'Natur' membership and participants in 'Arfordir'.

A bilingual information leaflet was produced explaining the history of the site and the circumstances of the excavation. The leaflet included a map and description of other nearby sites of interest. A feedback form was included with the leaflet. 300 of the leaflets were handed out to visitors to the excavation, on the basis of which an estimated 900 people were 'engaged' during the 4 weeks of the excavation. Several people visited the site repeatedly. Many visitors were holidaying in the area from all over Britain and as far afield as Canada.

In total 24 feedback forms were returned. All were overwhelmingly positive in nature. A daily 'dig diary' was regularly posted on the DAT website, and press releases appeared in several local and national newspapers. An interview on Radio Wales and a TV news item for ITV Wales were also undertaken. The media coverage was mentioned by several visitors, as was the dig diary. Immediately following the excavation an article was produced for the on-line magazine 'Past Times'.

During the project a brief update on the excavation was made at the Coastland History Group AGM, and a presentation will be made to the community in January.

Visitor feedback comments

'The dig was an attraction for everyone, interested in history or not and well worth the investment. On site the workings were well explained and info added to appreciation of the area'.

'Dyfed Archaeology group staff were friendly, enthusiastic and helpful. We would gladly have contributed to a donations box'.

'What an unexpected pleasure. The young lady on site gave us a full explanation of what was going on. I hope that the funds will last for a full exploration of this site'.

'Very interesting and kindly explained what was going on by a gentleman working on site. Unaware of any of the information until today'.

'Hopefully in future a visitor 'board' could be erected on site to give visitors an idea of the historical background to this area/ and excavation'.

'We will follow you on the website when we get home. Good luck.'

'I look forward with interest on accessing your website in future to learn the outcome/ report of your finds'.

'Fascinating to see the early graves- I hope to obtain a copy of the archaeological report when published'.

'...thank you for welcoming us to the St Bride's Bay site a month or so ago. We enjoyed our visit: you have a great crew, and thank you for all the information you patiently explained to us. We have looked at Mike's blog too'.

'....a BIG THANK YOU for permitting our visit on Wednesday. The members were delighted to have had the opportunity to see what has been done and to speak with the workers on site. Many of our members are regular visitors to the location and all were amazed to learn what has been lying beneath their picnic place'.

'We visited ona very dismal day, but all the workers were so enthusiastic, they inspired us and we thoroughly enjoyed our visit'.

Volunteer feedback comments

'...thank you very much for the experience and opportunity of the last few weeks. Honestly, we had more fun than we ever expected, and it was so refreshing to get away from the books and get some real hands on stuff'.

'(We) really enjoyed joining you for our all-too-brief two days at the St Bride's dig...As complete novices, we particularly appreciated the way that you and the others took the trouble to explain things so clearly....By the way, we enjoyed reading the dig diary for St Bride's on the website'.

'The instruction we received was top class, both of us learnt more in the three weeks we were on site than we had done academically. We also made good friends along the way. The wealth of knowledge available was invaluable, and we certainly felt like we had helped the project progress'.

'Thank you for the opportunities that this experience has provided us with. We are both going on to volunteer at another archaeological site in east Wales, our interest has certainly been caught. It was great that we had the chance to do so many different tasks around the site, it was certainly a sad day when the project drew to a close. We are both looking forward to reading the report, and hope that the dig yielded everything that was being sought'.

'Obviously I was fascinated with the skeletal material and thoroughly enjoyed that part of the excavation. However I found the interaction with the public equally enjoyable. I particularly enjoyed talking them through what I was doing and explaining what I could from the material at my feet. This extended to the community integration at local history groups in the area. It quickly became apparent how much the history of the area meant to the local populace, their excitement fuelled my desire to understand more about the local area and the site of St Bride's..... It goes without saying that events such as this remain a vital part of the local community and should be supported by those who are able with as much vigour as all of those who volunteer and visit on a daily basis'.

'We particularly appreciated the way that the experts went out of their way to explain things and make us feel part of the process'.

'I enjoyed watching the site take form, and the delicate excavation of the bones. I also enjoyed getting to know people and having a laugh, playing silly games and having surreal conversations. This was an invaluable experience which I enjoyed immensely and I would love to do more excavations'.

Number crunching

24 visitor feedback forms were returned with the following responses:

Age

62.5% of respondents were 65+

25% of respondents were 51-65

12.5% of respondents did not reply

I've enjoyed myself

91.6% of respondents positive

8.3% of respondents did not reply

I have learnt something new

91.6% of respondents positive
8.3% of respondents did not reply

I'm inspired to find out more

83.3% of respondents positive
8.3% of respondents neutral
8.3% of respondents did not reply

How did you hear about the activity?

4.1% Website
4.1% DAT
8.3% Press
16.6% PLANED
12.5% Local History Society
20.8% Passing by
20.8% Word of mouth
8.3% no comment

Based on 9 respondents the volunteers rated the following:

Event organization

55.5% excellent
44.5% very good

Training/information given

55.5% excellent
33.3% very good
22.2% adequate

Learning experience

55.5% excellent
33.3% very good
22.2% good

Staff helpfulness

100% excellent

The volunteers responded to the following questions:

My interest in heritage has been broadened

66.7% strongly agree

33.3% agree

I have gained new skills

55.6% strongly agree

11.2% agree

33.3% neutral

This was a good experience

100 % strongly agree

There should be more opportunities like this

77.7% strongly agree

22.3% agree

Heritage is important to local communities

100% strongly agree

FUTURE WORK

The backfilled excavation area will need to be monitored and managed to ensure that the reinstatement of the site is successful.

Before proceeding with the analysis and reporting for this project, it would be useful to undertake a post excavation assessment of the archaeological record, and the artefactual material. The assessment would enable the costs and timetables for reporting and analyses to be accurately assessed.

Bone preservation on the site was not good. All the skeletal material has been cleaned of most adhering soil, air dried, and currently packed in acid free paper. Most of the material is too fragile to risk washing it.

Despite the poor bone preservation, analysis should include an inventory of the assemblage, and a basic assessment of potential before further analysis is undertaken to provide information about age, sex, pathology etc.

Even with poor bone preservation there is still potential for isotopic analysis and AMS carbon dating. An assessment of the potential of the material for stable isotope analysis therefore needs to be undertaken.

The importance of isotopic analysis in interpreting cemetery sites has recently been demonstrated for several excavated sites in Pembrokeshire (Brownslade Barrow, West Angle Bay and Porthclew) and elsewhere in Wales. Considering that isotopic analysis has been undertaken for these sites, it is additionally desirable to obtain comparative data from St Bride's. It remains to be seen if funding can be obtained to undertake such analysis.

Coupled with the stratigraphic analysis of the burials, the results of the human bone assessment (and possible isotopic analysis) will also influence decisions on which (and how many) of the burials it would be most important to get radiocarbon dated.

Some work remains to be done to complete the records and archive for the site and to phase and interpret the significance of the burial assemblage. The assessment would also enable sufficient time to be allocated for this.

During both seasons of excavation a small quantity of ceramics, struck flints and animal bone were recovered from post-medieval deposits. These will need to be assessed for further analysis.

Two metal objects were recovered from burial contexts: a possible ferrous knife blade and a possible lead bead. These will need to be conserved and identified by specialists, and may need illustration and further research.

A bulk soil sample from the possible cemetery enclosure ditch excavated in 2009 has already been processed and charcoal for potential C14 dating has been identified. No other suitable deposits for environmental analysis were present in the 2011 excavation area.

The conditions of the Home Office exhumation license are that the human remains are reburied within two years from their excavation. Following archaeological analyses, arrangements for this will be made.

Although the resources of the HER were consulted as part of the work already undertaken at St Bride's Haven, as yet, no comprehensive documentary research for the site and its environs has been undertaken at other archives such as RCAHMW and NLW etc.

It seems likely that the St Bride's excavation marks the end of the series of excavations that have become referred to as the Pembrokeshire Cemeteries Project. Following, or as part of the post excavation work on the St Bride's material, may therefore be an appropriate time to review and synthesize the results of all these projects, presenting the results together as a significant body

of new evidence which will make a significant contribution to the early medieval research agenda for the early medieval period in the southwest and the rest of Wales. The combined body of work could form the basis of academic and popular publications, articles, presentations and displays. The research questions arising from this work could form the basis of future projects, and supporting material for grant funding applications. Sources of funding to undertake these aspects of the excavations would need to be identified.

Community engagement

A presentation to local communities is planned for January 2012. The possibility of producing information panels for display in the Pump House at St. Bride's Haven could be explored. Updating the dig diary in the light of future analyses should be undertaken. As suggested above, academic and popular publications presenting the recent cemetery excavations as a group could be produced, to provide information to a wider audience including visitors to the region.

In addition to the burials, the lime-kiln and the stone building footings are also likely to eventually succumb to erosion. Within the constraints of the 2011 excavation it was not possible to establish the archaeological relationship between the stone building foundations and the cemetery. This would be an interesting relationship to establish which could perhaps form the focus of a future community based excavation, if sufficient funding could be secured.

CONCLUSIONS

The excavations have recovered a significant assemblage of archaeological material, while respecting the SSSI status of the site and its visual landscape appeal. Further analysis and interpretation of this material will aid the formulation of successful mitigation of the effects of coastal erosion upon a significant proportion of the site. The results will have the potential to add to the body of data recovered from other cemeteries in the region, adding significantly to our understanding of the medieval period.

The scope of further work on the material has been identified, as well as other possibilities for further archaeological work on other parts of the site. The need for interpretation of the results and comparison with other sites has been identified. This information will inform an application to Cadw for undertaking a programme of post-excavation works.

Aspects of the site that remain unknown or would benefit from further mitigation have also been identified. These could form the basis of future archaeological projects funded from other sources.

SOURCES

- Anon. (nd) St Bride's Church Guide.
- Conway Davies, J. (ed.), 1946 *Episcopal Acts relating to the Welsh Dioceses, 1066-1272*, Vol. I (Cardiff, Historical Society of the Church in Wales No. 1).
- Crane, P. 2003. *Intertidal zone coastal survey*. Unpublished Cambria Archaeology report PRN 48116.
- Crane, P. 2004 *'The footpath at St Bride's, a watching brief.'* Unpublished Cambria Archaeology report PRN 50459.
- Crane, P. 2006 *'Archaeological monitoring of the intertidal and coastal zone, Pembrokeshire 2004-5'*. Unpublished Cambria Report PRN 52686.
- Edwards J.D. (nd) *'Dale and St Bride's' some of their history*.
- Edwards. N et al 2005 'Early medieval Wales: a framework for archaeological research' in: *Arch in Wales* 45, 33-43.
- Edwards, N. 2008 *Corpus of Early Medieval Inscribed Stones and Stone Sculpture in Wales, Vol. 2, The South West*.
- Fenton R., 1903 edn. *A Historical Tour Through Pembrokeshire*
- James, H., 1993 'The Cult of St David in the Middle Ages', in: *In Search of Cult: Archaeological Investigations in Honour of Philip Rahtz* (Woodbridge), 105-112.
- Lane, A. (eds.), 1992 *The Early Church in Wales & West* (Oxford, Oxbow Monograph 16)
- Lewis, S., 1833 *A Topographical Dictionary of Wales* (London).
- Ludlow, N. D., 1995 *'Archaeological Watching brief at St. Bride's Green'*, unpublished Dyfed Archaeological Trust Report PRN 27982.
- Ludlow, N. D., 2000 *'The Cadw Historic Churches Project: Pembrokeshire'*, unpublished Cambria Archaeology report.
- Ludlow, N. D., 2002 *'The Cadw Early Medieval Ecclesiastical Sites Project: Pembrokeshire'*, unpublished Cambria Archaeology report.
- Ludlow, N. D., 2005 *'Archaeological Evaluation at Longoar Bay, St Ishmaels, Pembrokeshire'*, unpublished Cambria Archaeology report.
- Ludlow, N. D., 2006 *'Pembrokeshire Cemeteries Project, 2005'*, unpublished Cambria Archaeology report. PRN 55789
- Murphy K and Allen B. 1997 *'Coastal Survey 1996-97, Strumble Head to Ginst Point'*. unpublished DAT report. PRN 33470
- RCAHM (W) 1917, *Inventory: Pembrokeshire*.
- Record Commission, 1802 *Taxatio ecclesiastica Angliae et Walliae auctoritate P. Nicolai circa AD 1291* (London).
- Schlee, D. E., 2009 *'The Pembrokeshire Cemeteries Project, excavations at St Bride's Haven 2009'*, Unpublished Dyfed Archaeological Trust. Report PRN 94896

Arial photographs

James TA. 1987. AP87.150.33

Cartographic sources

Ordnance Survey 1:25,00, First Edition, Sheet XXXII.1.

Ordnance Survey 1:25,00, Second Edition, Sheet XXXII.1.

Parish of St Bride's Tithe Map, 1839.

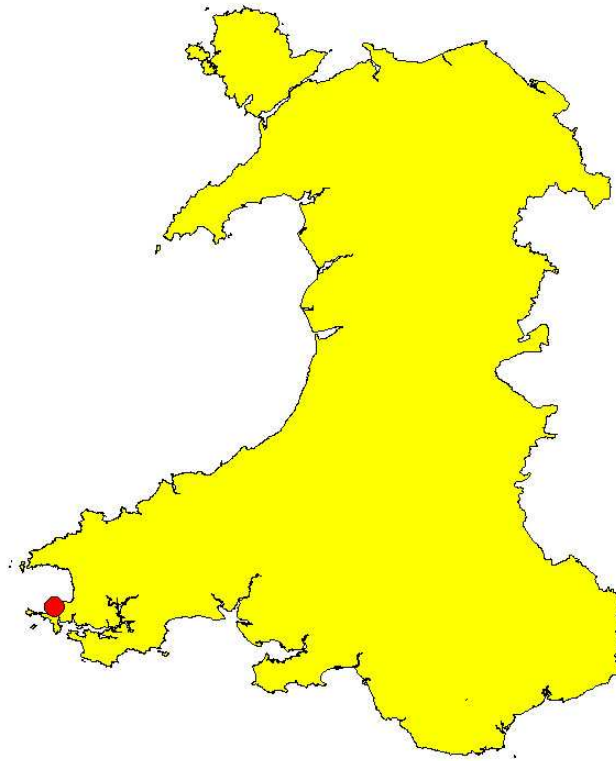


Figure 1: Location of St Brides Haven



Figure 2: Site location map

Reproduced from the 1997 Ordnance Survey 1:50,000 scale Landranger Map with the permission of The Controller of Her Majesty's Stationery Office, © Crown Copyright Dyfed Archaeological Trust, The Shire Hall, Carmarthen Street, Llandeilo, Carmarthenshire SA19 6AF. Licence No AL51842A.

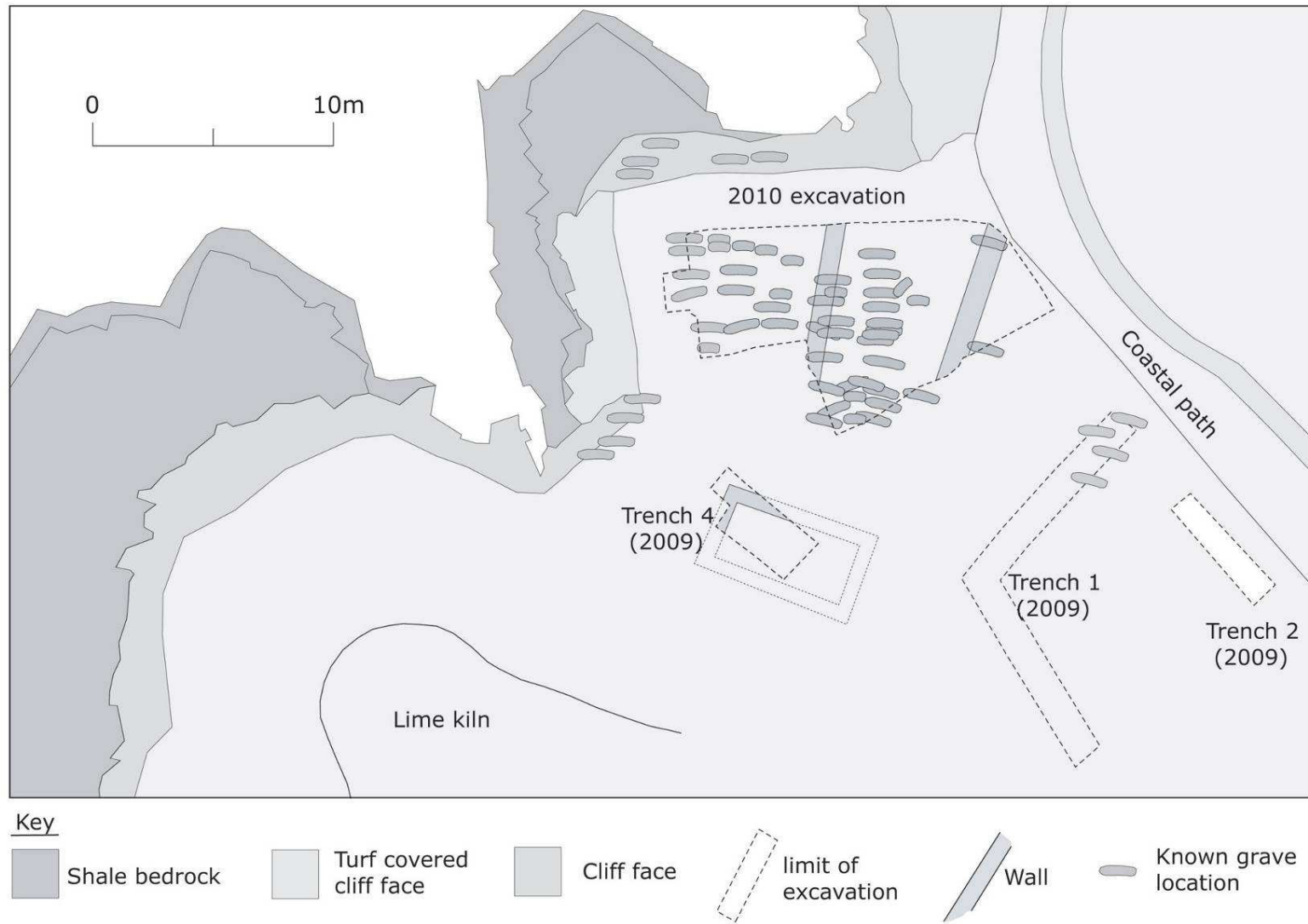


Figure 3: Plan showing 2009 and 2011 excavation areas and location of main features

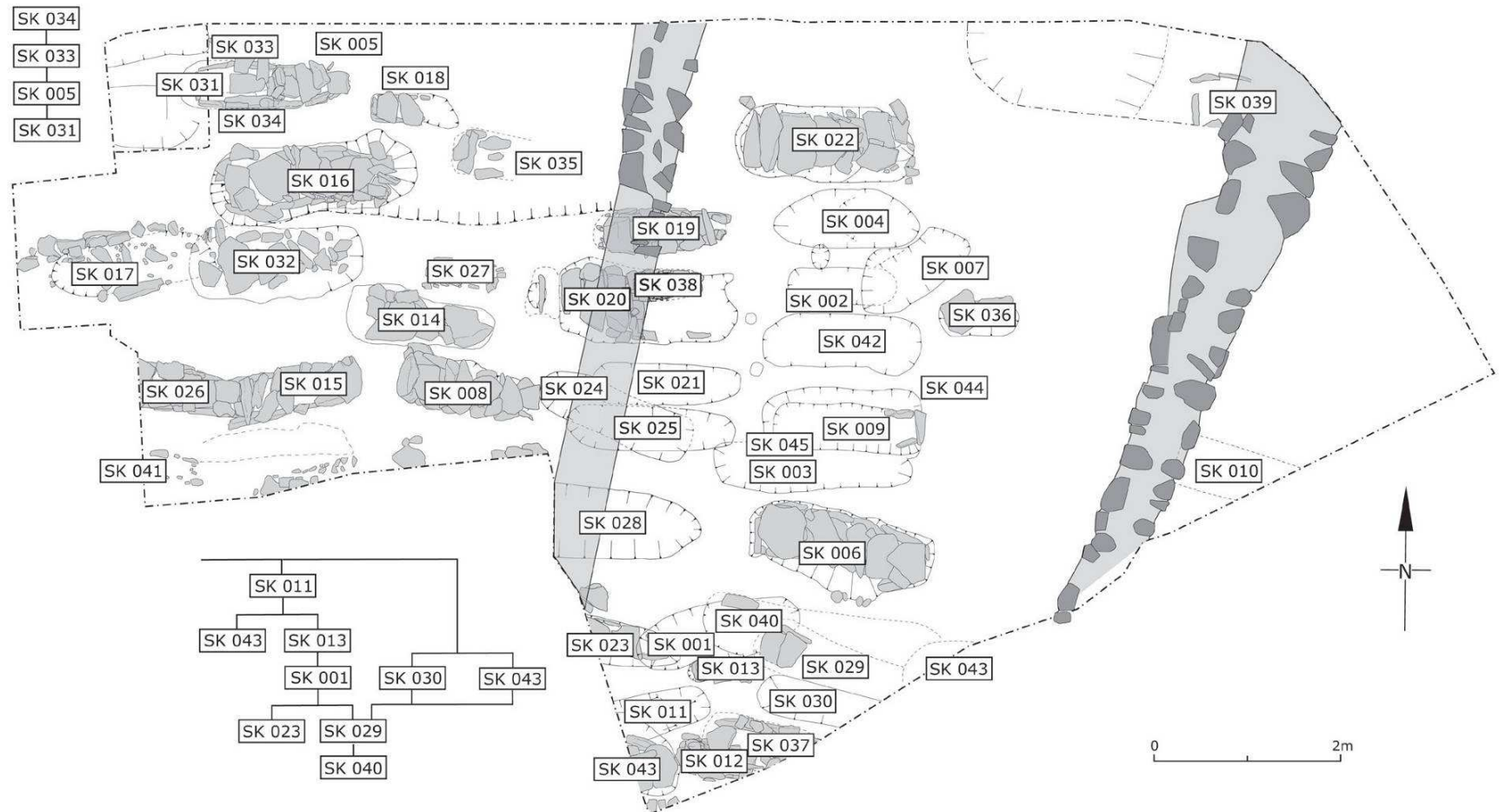


Figure 4: Plan of 2011 excavation area showing locations of burials and other features.
Preliminary matrices for stratified burials are included

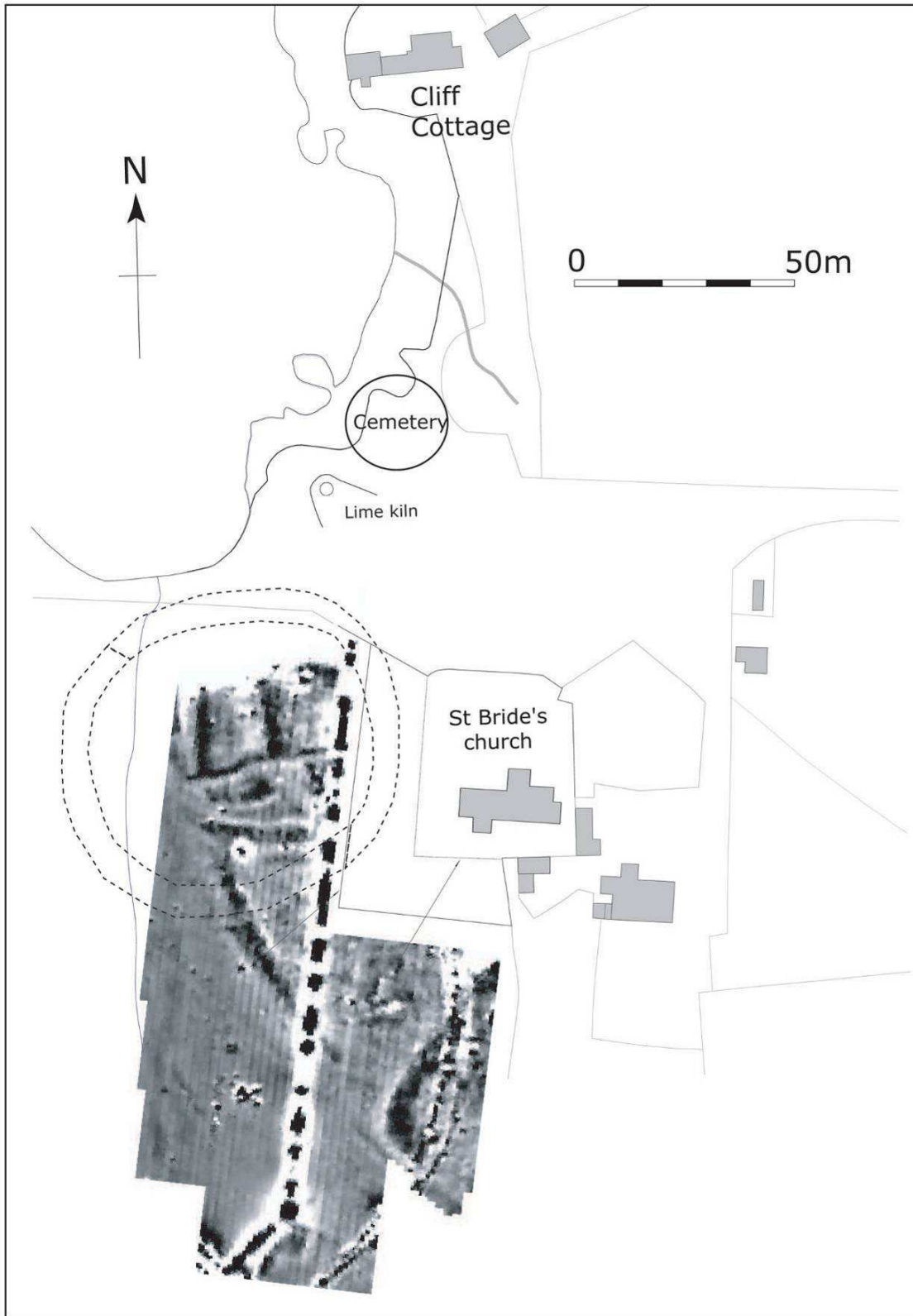


Figure 5: Plan showing geophysical survey plot in relation to other sites at St Bride's Haven



Figure 6: Aerial photograph of St Brides. The arrow indicate the possible crop mark feature



Photo 1: View of St Bride's church looking east. The geophysical survey was undertaken on the far side of the stream dissecting the field.



Photo 2: General view of central part of cemetery, looking north.



Photo 3: Wall 007 looking south.



Photo 4: Wall 006 looking west.



Photo 5: Grave SK 017 looking east, before excavation, showing kerb stones and quartz pebbles.



Photo 6: Cist grave SK012 looking south, after excavation.



Photo 7: Graves 026 and 015 during excavation. Looking north



Photo 8: Intercutting group of dug graves SK003, 009 etc. Looking west



Photo 9: SK008 after removal of lintel slabs and fill.
Looking west.



Photo 10: Cist grave SK020 with grave marker (behind scale)
and overlying infant cist SK038. Looking west



Photo 11: Cist Grave SK032 looking west



Photo 12: Cist graves SK019 (right) and SK038 (left) looking west. Note the careful positioning of the lintel slabs of SK019.



Photo 13: A site tour

THE PEMBROKESHIRE CEMETERIES PROJECT
EXCAVATIONS AT ST BRIDES BAY 2011

RHIF YR ADRODDIAD / REPORT NUMBER 2011/29

June 2011
Mehefin 2011

Paratowyd yr adroddiad hwn gan / This report has been prepared by:

Duncan Schlee

Swydd / Position: Project Manager

Llofnod / Signature  Dyddiad / Date 27/06/2011

Mae'r adroddiad hwn wedi ei gael yn gywir a derbyn sêl bendith
This report has been checked and approved by:

James Meek

ar ran Archaeolegol Dyfed Cyf.
on behalf of Dyfed Archaeological Trust Ltd.

Swydd / Position: Head of Field Services

Llofnod / Signature  Dyddiad / Date 27/06/2011

Yn unol â'n nôd i roddi gwasanaeth o ansawdd uchel, croesawn unrhyw
sylwadausydd gennych ar gynnwys neu strwythur yr adroddiad hwn

As part of our desire to provide a quality service we would welcome any
comments you may have on the content or presentation of this report

ymdiriedolaeth archaeolegol

