ULSTER ARCHAEOLOGICAL SOCIETY



Survey Report: No. 22



Preliminary Survey of Chapel Island, Grey Abbey

UAS/09/07

In association with



Ian Gillespie

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Ulster Archaeological Society

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Cover photograph © Ian Gillespie

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1. Summary

1.1 Location

A multiple site survey was undertaken at Chapel Island (NISMR-DOW011:012), located in the Parish of Grey Abbey in the Barony of Ards Lower, County Down, Irish Grid reference - J 5549 6720.

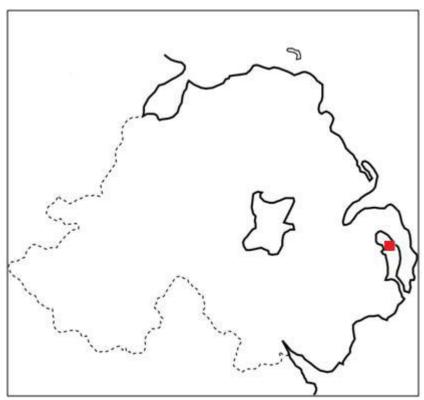


Figure 1: Location map for Chapel Island, County Down

Chapel Island is located in Strangford Lough approximately 700m off the W coast of the Ards Peninsula, 1.5 km W of the town of Greyabbey. The island is under the care of the National Trust and contains a number of sites of archaeological significance including an ecclesiastical site with possible graveyard, earthworks, a kelp house and a number of kelp kilns and fish traps.

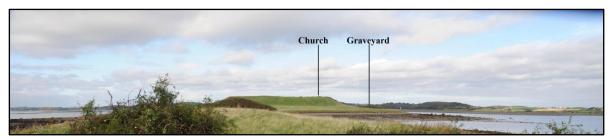


Figure 2: Chapel Island viewed from the South

In order to enhance the archaeological record of Chapel Island, the aim of this survey was to produce an accurate plan of the Chapel site, earthworks and the kelp kilns, and carry out a photographic survey. This information was compiled into a report that was submitted to the Environment and Heritage Service. It is envisaged that further surveys will be carried out to complete the archaeological record of the island.

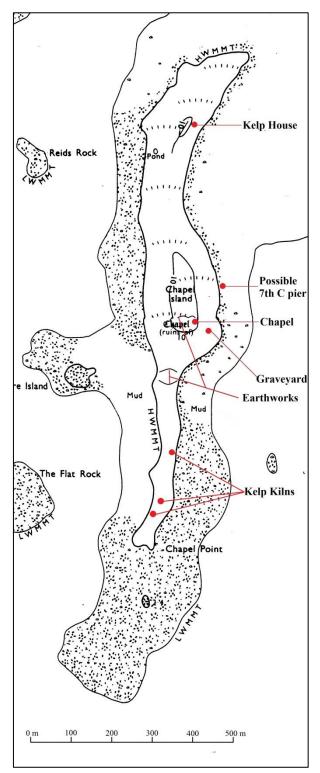


Figure 3: Archaeological Sites on Chapel Island

2. Introduction

2.1 Background

The decision to instigate a programme of surveys had been taken by the committee of the Society to extend an opportunity to members wishing to participate in practical surveys of archaeological monuments not previously recorded. This was facilitated by a bequest to the society from the late Dr Ann Hamlin, from which the items of survey equipment were purchased.

During discussions with Mr Malachy Conway, Survey Archaeologist of the National Trust in Northern Ireland, it was noted that many archaeological sites on National Trust property had not been subject to a detailed archaeological survey. It was therefore agreed that members of the society would commence a programme to survey these sites and the Chapel Island site was subsequently chosen to be the seventh of these surveyed during the 2009 season.

The survey of Chapel Island was carried out on Saturday 26 September 2009 and Saturday 3 October 2009 by members of the Ulster Archaeological Society (UAS) Survey Group. The island is accessible by foot at low tide from a car park adjacent to the entrance to Mount Stewart 1.5 km to the N (J 5551 6935). Advice regarding a safe route should be sought from the National Trust warden before attempting to visit the island.

2.2 Previous archaeological surveys

2.2.1 Reeves 1847 The earliest mention of Chapel Island is in *Ecclesiastical Antiquities of Down, Connor, and Dromore* by Reeves (1847). This work reproduces the 1306 Taxation of Pope Nicholas together with Reeves' comments. The Taxation records a "Church of Saint Korcany", valued at 2 Marks (Reeves translates this as 2s 8d). This record sits in the roll between entries for the Church of St Andrew (Black Abbey – later Grey Abbey) and the Church of Inyscargi (Inishargy). Of Korcany Reeves comments:

It is as uncertain what saint as what church is here intended. In the Irish calendar, at the 7th of January, there is a St. Cureneus or Corcanus of Kill-feacle in Muscrighe Breogan (the modern barony of Clanwilliam, in the county of Tipperary); and, at the 3^{rd} of November, a St Corcanus of Dorenabtlann (now Derryniflyn, a small parish, about two miles N.W. of Killenaule, in the same county).

There is an island of twenty-five acres, in Strangford Lough, accessible on foot at low tide, opposite to and in the parish of Grey Abbey; it is called ' Chapel Island', and at the southern extremity of it are the ruins of a small church Ord. Survey, s. 1 1. It lies about two miles due west of Black Abbey. Its ancient name is long lost, as the spot is marked 'Church Island' in Petty's map. Also, in the same parish, at the eastern edge of Mount Stewart demesne, are the ruins of an ancient church, measuring 51 by $24^{1/2}$ feet- Ord. Survey, s. 11. This building was called 'Templecrone'.

2.2.2 O'Laverty The Rev. James O'Laverty, Parish Priest of Holywood, addresses this same matter in his Historical Account of the Diocese of Down and Connor (O'Laverty (1878).

In the Taxation of Pope Nicholas, "the Church of Korcany" is valued at two marks; it is placed in the roll between the Churches of St. Andrew, or Black Abbey, and Inishargy. There can be little doubt that this is Temple *Crone, the ruins of which, measuring fifty-one by twenty-four and a-half* feet are at the eastern edge of Mount Stewart demesne. In the Ulster Inquisitions (75 Car. 1.) it is called "Ballytemplechronan" — the town of Cronan's Church. At the 7th of January the martyrologies record the festival of St. Cronan Beg, Bishop of Nendrum, or Mahee Island, who died January 7th 642; he was one of the ecclesiastics to whom was addressed the letter written from Rome, A.D. 640, on the subject of the paschal controversy. In the Martyrology of Donegal, at the 7th January, immediately after the name of St. Cronan Beg, occurs "Corcan Bishop," and on the same day is inserted the entry "Another Corcan." It is obvious that Corcan is only another form of Cronan, and that the church of "Korcany" is Temple Crone, which was formerly called Temple Cronan – Cronan's Church, so named from St Cronan Beg, Bishop of Mahee.

O'Laverty goes on to describe the island, seeming to borrow at least some of Reeves' narrative:

There is an island of twenty-five acres in Strangford Lough called "Chapel Island;" it is nearly opposite to Temple Crone, and is accessible on foot at low tide. Near the southern extremity of it are the ruins of a church which measure 29 ½ feet by 14 ½ feet. This church was surrounded by a circular cashel 180 feet in diameter, and from this circumvallation another cashel extended westward, so as to close in the entire southern extremity of the island. Along the shore, southward of the church, are four cairns and a well. It has been said that graves have been discovered to the east of the church. Its ancient name is long lost, as the place is marked "Church Island" in Petty's Map, but there is little doubt it was an appendage to Mahee Island (Nendrum).

Reeves, in 1847, describes the church as being at the 'southern extremity' of Chapel Island, which he reports as measuring 25 acres. This is interesting as present-day Chapel Island has an area of 30 acres and the church is almost exactly in the centre of the island. One explanation would be that the sea level had been slightly higher at the time of the description in Reeves. This would have had the effect of submerging the southern extremity of the island, an area of five acres, and placing the church site at the southern extremity of the island.

2.2.3 Lawlor 1924 There was a partial excavation of the site by Henry Cairnes Lawlor in 1924, with an account in the Preliminary Survey of the Ancient Monuments of Northern Ireland (Chart 1940 p88):

Of this very ancient church little more than the foundations remain, measuring only 29 ft. by 14 $\frac{1}{2}$ inside, the walls being 33 ins thick; the doorway, of which 6 ins high of the jambs remain on each side, carved out to fit a door, is on the S. Side. The walls are nowhere now more than $3\frac{1}{2}$ ft. high, and are cemented with stiff clay, the earliest form of cement. At the N.W. corner are the foundations of a small room 8 ft. by 6 ft., apparently a priest's kitchen. A partial excavation made here in early 1925 resulted in the discovery of potsherds of coarse ware attributed to the early centuries of the Christian period, as well as one fragment of early wheel-turned ware. From these and the primitive style of the masonry of the walls, the ruin probably dates from the 7th or 8th century. It is locally believed to be a chapel attached to Nendrum on the opposite shore, where the monks retired for meditation, or were sent as a disciplinary measure. A small enclosure lies to the E. of the church, lower down, evidently a cemetery.

Reference to the original excavation report, published in Proceedings of the Belfast Natural Historical and Philosophical Society (PBNHPS p 35-37 Lawlor 1925), reveals that this was neither a thorough, accurate, nor well documented excavation.

The report describes how a group of antiquarians visited Chapel Island on 3rd September 1924. The morning was spent investigating five structures, originally thought to represent prehistoric burial cairns, at the southern end of the island. It was quickly determined that the structures were not prehistoric, however Lawlor wrongly assumed that these were the remains of kelp-burners' shelters, rather than kelp kilns.

In the afternoon an excavation of the chapel site was undertaken, starting with the removal of a "...modern mortared erection used apparently as a cattle shelter at one time, and a kelp burner's house at another, as in the debris was found a kelp sickle."

On the debris being cleared it was determined that the early chapel had been "...constructed of clay cemented stones, dating probably contemporaneous with the school at Nendrum, say 9^{th} or 10^{th} century."

The report continued to document the pottery finds as well as the survey results of the measurements of the church, corroborating with those contained in the PSAMNI report with the notable discrepancy that the door is therein described as being located in the N wall, rather than the S wall as described in the PSAMNI.

The current survey (vide infra) confirms that the door is, in fact, located in the N wall.

The quality of Lawlor's excavation at Nendrum has been criticised by Mallory who commented that the quality of Lawlor's excavation was bad "...even by the standards of the time." (Mallory 1991) and therefore, it is fair to assume, the excavation at Chapel Island was not of a particularly high standard.

The pottery sherds recovered, apparently deposited with the Ulster Museum, appear to have been lost and so are not available for further interpretation.

Hamlin, in her PhD thesis, published posthumously, (Hamlin 2008) comments that Lawlor's excavation did not clarify the date of the church and suggests that the enclosure referred to by O'Laverty may predate the church. She is unable to identify O'Laverty's circular 'Cashel' although it can be clearly seen from aerial photography.



Figure 4: Aerial photograph showing earthworks © Ian Gillespie

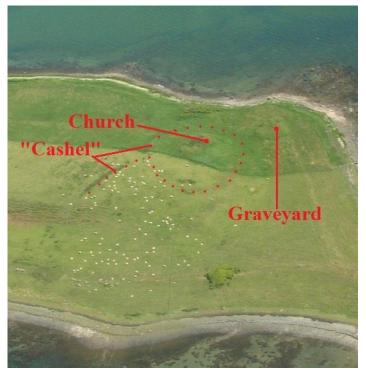


Figure 5: Earthworks highlighted © Ian Gillespie

2.2.4 Archaeological Survey of Co Down H.M.S.O (1966 p.296)

916. STRANGFORD LOUGH; CHAPEL ISLAND

0.s. 11. Grid ref. 554672

Church and earthwork, on Chapel Island, 3 mile off the E. coast of Strangford Lough, 11 miles W. of Grey Abbey village. The island, which is accessible on foot at low tide, is long and narrow, with a central ridge which rises at the highest point just over the 50 ft. contour, and descends steeply on the flanks to a coastal strip of varving width. The church is sited at the S. end of the ridge, on the edge of the E. facing scarp; it is 29 ft. by 141 ft. internally, built of boulders said to have been originally bonded in clay but now pointed in cement-mortar. The walls are no more than grassgrown foundations, surviving to a maximum height of 4 ft. on the E.; the E. wall is 3 ft. 6 in., the N. wall 3 ft. wide. In the N.W. angle of the building is an enclosure, 6 ft. 9 in. by 4 ft. 5 in., of large stone slabs on edge, one of which is 4 ft. 9 in. in length. The church was excavated in 1925 (H. C. Lawlor, in Prelim. Survey Anc. Mons N.I. (1940), 88) and the lower jambs of a door were reputedly found on the S. side; the opening is no longer traceable. Pottery 'attributed to the early centuries of the Christian period' (including 'one fragment of early wheel-turned ware') was found during the digging but cannot now be traced; it may indicate a Dark Age settlement on the site which did not necessarily include the present church.

To the N. of the church and apparently associated with it, extending across the width of the ridge, is an earthwork about 36 ft. wide overall, comprising a bank 3 ft. high, of stone and earth construction and possibly stone revetted, and a ditch about 4 ft. deep. The present approach on foot to the island is by firm going to the N. end; the earthwork faces N. and was probably intended as an obstacle to an approach to the church along the ridge from this direction.

2.2.5 Environment & Heritage Service (EHS) 1987

Chapel Island attracted the attention of a number of local archaeologists in the late 1980s, and the following information was obtained from site notes and internal memos filed in the Sites & Monuments record (SM7-DOW-011-012B).

Dr Philip Robinson, Keeper and Head of Collections in the Ulster Folk Museum, had written to the EHS on 3rd February 1987 asking for cooperation to visit Chapel Island to further investigate its archaeological features. He had recently visited the island and had noted the presence of exposed wooden stakes on the shore immediately below the chapel site which he interpreted as a pier or jetty.

He also produced copy of a 20 year old photograph (Fig. 6) of a carved sandstone lancet window which had apparently been found adjacent to the kelp house (Fig. 3) at the northern end of the island. The stone had disappeared shortly after the picture was taken and has never been recovered. Dr Ann Hamlin later advised that the window head was of 13th century style.

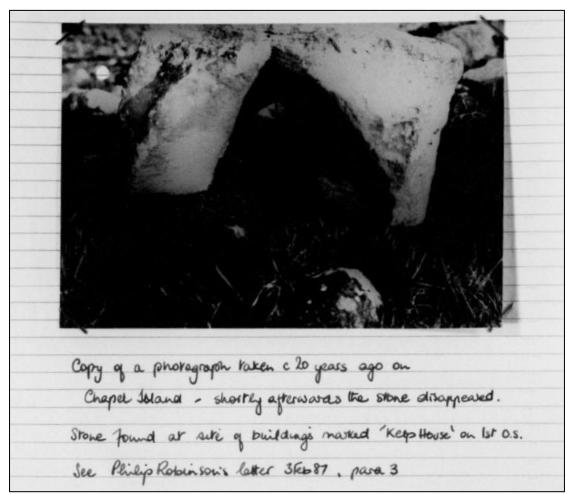


Figure 6: Lancet Window fragment (SM7-DOW-011-012B)

A site visit with Robinson and Dr Brian Williams (EHS) took place on 20th July 1987. They concentrated on what Robinson had interpreted as a stone pier revetted with stakes.

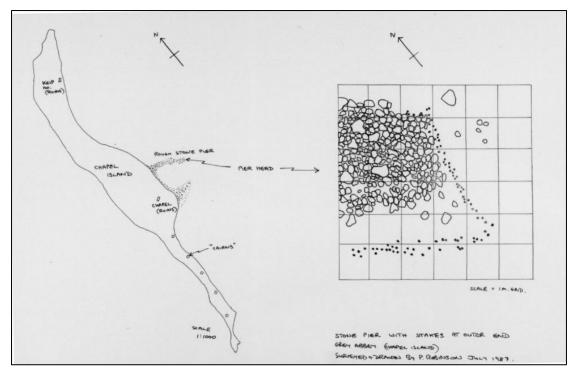


Figure 7: Diagram of possible stone pier (Robinson SM7-DOW-011-012B)

One of the stakes	was taken for	·C14 dating	and gave a date	e of approxim	ately 750AD:
one of the states	mus tunten 101	CITUM	una suve a auto	e or approxim	atory 10011D.

		Palaeoecolo (Radiocarbo	gy Centre n Dating Research Unit)	
			1NN Northern Ireland	of Belfast Telex 74487
Dr. G.W. P MSc, Pl	earson hD, MInstP, MInstMC	Telephone 245133 Ext. 3489		
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Archaeol 66 Balmo	Ailliams, Logical Survey, Dral Avenue, BT9 6NY.			
Dear Bri	an,			
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	Chapel Island	Sample 1	1213 ± 30 [#]	$-25.0 \pm 0.$
3034				

Figure 8: C14 result (SM7-DOW-011-012B)

The Island was next visited on 13th March 1989 by Richard Warner, Keeper of Antiquities at the Ulster Museum, and Bob Brown from the Environment and Heritage Service. Warner suggested that the scarp to the south of the church site may have been artificially 'sharpened' as a defensive feature. This observation is

reinforced by the fact that, in Strangford Lough, it was typically the N headlands that were steeply scarped in the Mesolithic, while the land to the S slopes gently down.



Figure 9: Scarp from SW

2.2 Cartographic evidence

2.2.1 Medieval maps



Figure 10: Ultoniae Orientalis Pars. Mercator, G. 1595

The designation 'Pascafdry ennomies', engraved on Fig. 10 in what is now Greyabbey Bay, is a term which may be understood as referring to a 'general fishery' and serves to highlight the former existence of an important medieval foreshore fishery in this area.

2.2.2 The Down Survey of Ireland

Taken in the years 1656-1658, the Down Survey of Ireland is the first ever detailed land survey on a national scale anywhere in the world. The survey, overseen by the surgeon-general of the English army William Petty, sought to measure all the land to be forfeited by the Catholic Irish in order to facilitate its redistribution to Merchant Adventurers and English soldiers. Chapel Island is shown on both the "County of Downe" and the "Barony of Ards" surveys – designated as "Church Island".

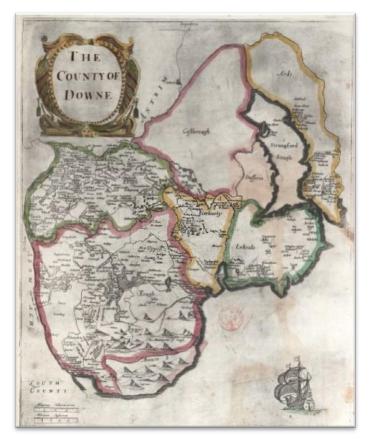


Figure 11: The County of Downe © Trinity College Dublin



Figure 12: Detail from Figure 11 © Trinity College Dublin

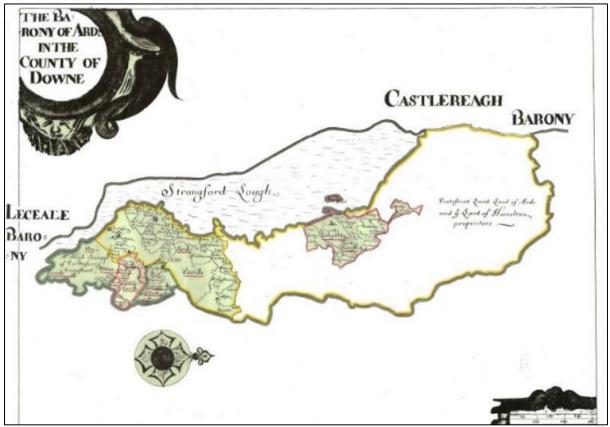


Figure 13: The Barony of Ards in the County of Downe © Trinity College Dublin

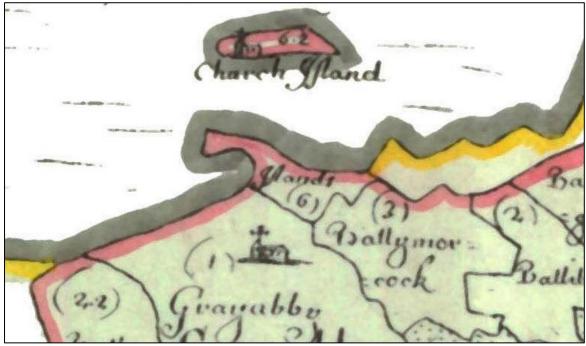


Figure 14: Detail from Figure 13 © Trinity College Dublin

2.2.3 Ordnance Survey maps

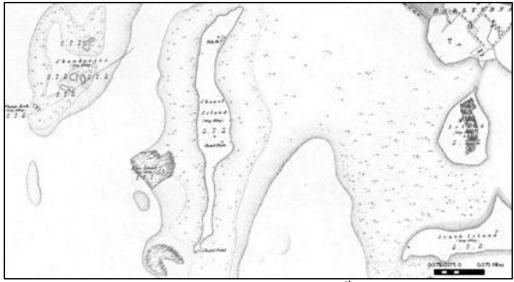


Figure 15: Ordnance Survey six inch map 1st Edition 1835 © OSNI

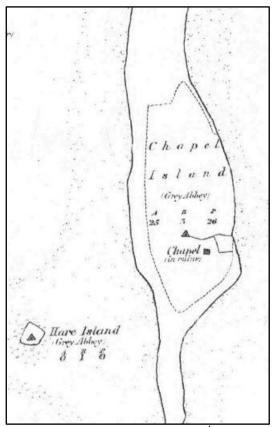


Figure 16: Ordnance Survey six inch map 2nd Edition 1859 © OSNI

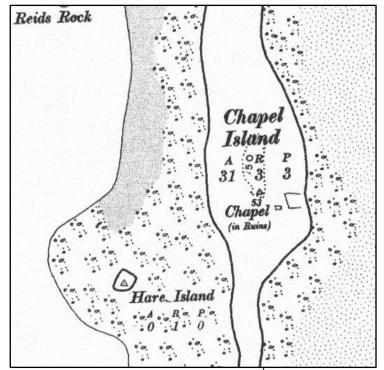


Figure 17: Ordnance Survey six inch map 3rd Edition 1900 © OSNI



Figure 18: Ordnance Survey "Discoverer" Series 1:50,000 © OSNI

2.2.4 Griffiths Valuation

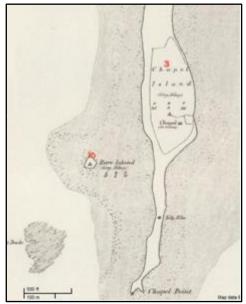


Figure 19: Griffiths Valuation Map 1863

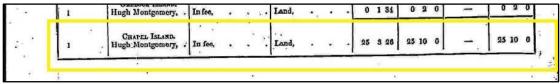


Figure 20: Griffiths Valuation Entry

2.3 Archiving

Copies of this report have been deposited with the Environment and Heritage Service. All site records are temporarily archived with the Honorary Archivist of the Ulster Archaeological Society.

2.4 Credits and Acknowledgements

The survey was led by Harry Welsh and other members of the survey team included Duncan Berryman, Colin & Hilary Boyd, Michael Catney, Billy Dunlop, Tom Fairly, Ian Gillespie, Lee Gordon, Yvonne Griffiths, Ian Macauley, Anne MacDermott, Peter McCready, Liz McShane, Pat O'Neil, Ken Pullen, George Rutherford, Janey Sproule and June Welsh. Archaeologists Thomas McErlean, Centre for Maritime Archaeology, and Brian Sloan, Centre for Archaeological Fieldwork also participated.

Journalist and broadcaster Brian Black joined the survey party on 26th September filming for his UTV documentary series 'Hidden Heritage', later broadcast on 22nd January 2010.

The Ulster Archaeological Society is particularly grateful to Mr Malachy Conway, Survey Archaeologist of the National Trust, who has worked closely with the survey team. Thanks are also due to the National Trust volunteers who visited the island on 30^{th} July 2009 to clear vegetation which had overgrown the monuments.

3. Survey

3.1 Methodology

It was decided that this preliminary survey would focus on the chapel site and earthworks and two of the kelp kilns. The survey included production of plan drawings, accompanied by a photographic survey. A report was compiled using the information obtained from these sources, in addition to background documentary material.



Figure 21: Approaching Chapel Island from NE

3.2 Field notes

Chapel Island is situated in Greyabbey Bay, Strangford Lough. It is long and narrow measuring 1.25 km by 0.175 km and is orientated N-S. It has a pronounced central ridge with a littoral plain. It is grass-covered to HWM with localised clumps of brambles and blackthorn and, on the steeper slopes, bracken.

The remains of the chapel is a little to the S of the island's centre on the eastern edge of the ridge. Immediately to the N of the chapel a bank, with a ditch on the N side, divides the ridge from E-W.

At the E end of the chapel there is a steep drop to the coastal plain. About 20m S of the chapel the ground falls rapidly, giving a rounded termination to the ridge. From here to its southern tip the island is low-lying.

Several artificial features were observed on this southern region. There is a grassy hollow approximately 1.5m deep just above HWM. It was suggested that this had been excavated to collect fresh water for livestock. Two low banks, about 50m apart, cross the island E-W, HWM-HWM. Three circular stone features were revealed following clearance of blackthorn that had been covering them. These have been interpreted as kelp kilns.

The beach NE of Chapel Island is firm sand at low tide with an increasing number of stones and boulders towards the S. To the W of the chapel the beach is composed of cobbles, however to the S and around Hare Island boulders dominate.

At the N end of the island, just below HWM, is a cairn. To the NW between HWM and LWM are parallel walls of boulders running N at intervals of almost 2m separated by floors of shingle.

On the E side of the N tip of Chapel Island sea erosion has exposed a section of red clay capped by 20cm of brown soil. Red sandstone pebbles washed from the clay are strewn on the beach. At one point a lens of shells are seen in section lying on the red clay. From the beach surface immediately below a struck flint was found.

3.3 Production of plan drawings

Plan drawings were completed, using data obtained from a field survey. Measurements were obtained by using the society's Leica Sprinter 100 electronic measuring device, as well as by using tape and offsets.

Sketch plans at 1:50 scale were completed on site by recording these measurements and backing up the data on a field notebook for subsequent reference. Field plans were later transferred to a computer-based format for printing.

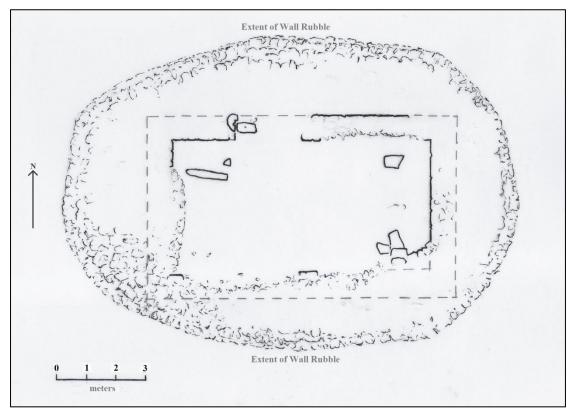


Figure 22: Plan of Chapel Site 1:50



Figure 23: Chapel from E showing doorway in N wall and Cell in NW corner

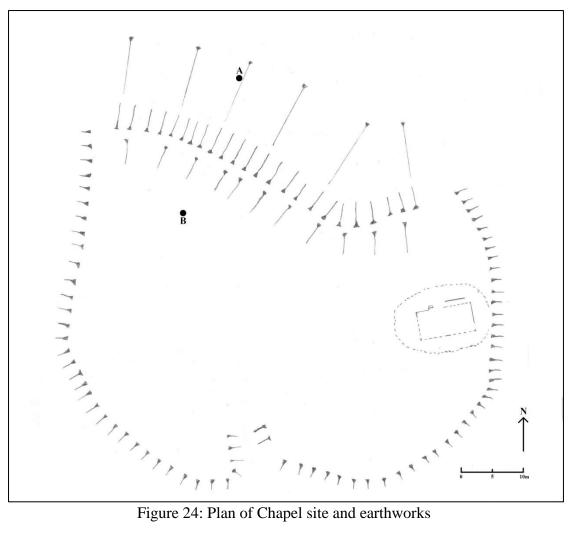


Figure 24: Plan of Chapel site and earthworks

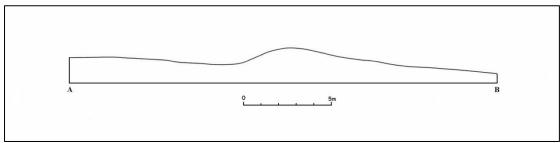


Figure 25: Profile of earthworks

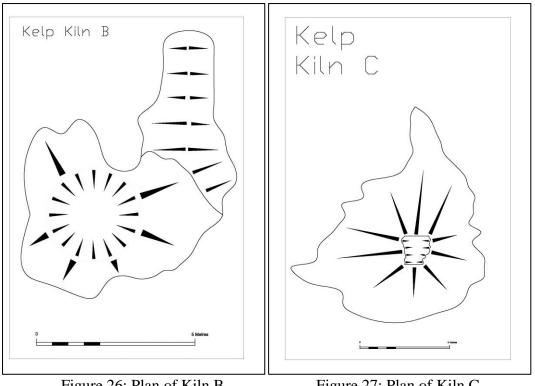


Figure 26: Plan of Kiln B

Figure 27: Plan of Kiln C

3.4 Photographic archive

A photographic record of the site was taken by using a Nikon Coolpix S1 5.1 megapixel digital camera and a photograph record sheet was employed, corresponding to photographs taken during the site survey on 26 September 2009.

The archive has been compiled in jpeg format and saved to compact disc.

4. Discussion

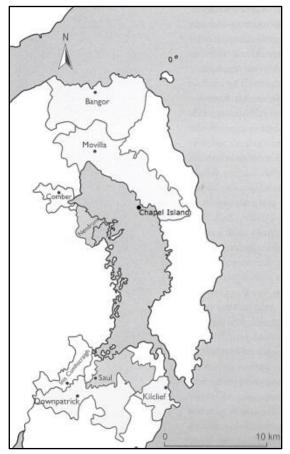
4.1 Monastic Strangford

Strangford Lough is widely associated as the landing place of Saint Patrick in the fifth century.

The small church on Chapel Island must be considered in the context of Strangford Lough's importance as a centre for early Christian ecclesiastical sites from the 6th century.

Bangor Abbey, established by St Comgall in 558, is 14.9 km NNW. This was an important centre of learning until it was destroyed by Vikings in 824.

Movilla (Magh Bile - Plain of the Sacred Tree), founded by St Finnian in 540, lies 8.9 km NW. This was also an important centre, and Chapel Island is on the southern boundary of the Movilla estate (McErlane 2002).



Nendrum, founded by St Mochai in 450 (Reeves p189) lies 4.7 km SW of Chapel Island.

McErlane (2002, p78) suggests that as Chapel Island is within the estate of Movilla it may have been part of the Movilla monastery. O'Laverty (1878) and Hamlin (2008) suggest the island was associated with nearby Nendrum.

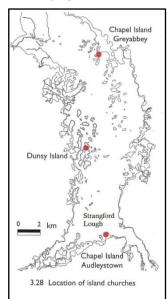
This closely spaced cluster of important monastic houses is hard to parallel elsewhere in the country (Forsythe 2002)

Figure 28: Probable extent of Monastic estates (McErlane)

4.1.1 Island Churches

Chapel Island is one of three island church sites in Strangford Lough, the others being Chapel Island (Audleystown) and Dunsy Island off Ringhaddy. Referring to Dunsy Island Reeves (1847) states:

There is no ecclesiastical building upon the island, nor the tradition that such ever existed there; but there can be little doubt that the spot was once held sacred, as large numbers of human bones, indicative of a cemetery, were discovered, within the memory of those alive, on and around the site now occupied by a farm house.



O'Laverty (1878) describes the remains on Chapel Island (Audleystown):

The ruins of this insular chapel measure 45 feet by 24, and the door seems to have been in the northside wall. There were once a cemetery and a holy well attached to this chapel, but unfortunately the history of the chapel is entirely lost. About thirty years ago a beautiful bronze fibula was found beside the ruin.

This chapel has some similarities with that on Chapel Island (Greyabbey). They both have a length to width ratio

Figure 29: Location of island churches

of approximately 2:1. Both, unusually, have doors in the N wall.

It has been suggested that the building on Chapel Island represents a hermitic cell, or *dísert*, to be used by monks attached to one of the nearby monastic sites.

4.1.2 Dísert (syn Desert, Dysert) sites

Reeves (1857) gives an account of hermitic practice in "The Life of Saint Columba":

Those who desired to follow a more ascetic life than that which the society afforded to its ordinary members, withdrew to a solitary place in the neighbourhood of the monastery, where they enjoyed undisturbed meditation without breaking the fraternal bond. Such, in 634, was Beccan the solitarius; and such, in Adamnan's time, was Finan the recluse of Durrow (95), and Fergna of Muirbulemair in Himba (237). At Hy an anchorite held the abbacy in 747 (F. Mast.), an anchorite was abbot elect in 935 (F. M.), and another, bishop in 964 (F. M.) The abode of such was called a disert, from the Latin desertum ; and as the heremitical life was held in such honour among the Scotic churches, we frequently find the word Desert an element in religious nomenclature. There was a Disert beside the monastery of Derry (Ult. 1122) ; and that belonging to Hy was situate near the shore in the low ground north of the Cathedral, as may be inferred from Port-an-Diseart, the name of a little bay in this situation.

Leask (1955, p.11) comments:

The more austere among Irish holy men sought even greater isolation as hermits, and built their cells and oratories in relatively inaccessible and often inhospitable places: islands in sea or lake, headlands, even hilltops, remote valleys, "deserts" (dyserts) in the marginal lands.

A constant feature of these early hermitages and monasteries, small or large, was its enclosure an encircling rampart of earth or stone. This was as necessary to a monastery as to a farmhouse of the times, and for the hermit it served, in addition, to shut out all but the heavens from his sight and thoughts.

It is reasonable to suppose that the hermits on Chapel Island would have used the fish traps to the west between Hare Island and Chapel Island to sustain themselves.

The organisational and technological skills of the monastic communities are evident in their ambitious schemes to exploit the marine environment. For example, a number of wooden foreshore fish traps at Chapel Island were designed to catch fish for the community on a large scale. These early foreshore fisheries have been dated to the seventh century (Forsythe 2002)

4.2 Viking Strangford

It is possible that an early church on Chapel Island may have been attacked by the Vikings.

The Annals of Ulster records Viking attacks against monasteries. The first attack was in 795 against Rathlin Island. Bangor was attacked in 823 and Movilla was attacked the following year. The following account is given by Keating (1906):

It was in the reign of this Conchubhar over Ireland... that Beannchair (Bangor) and Dun Leathghlaise (Downpatrick) were plundered by the Lochlonnaigh ("men strong at sea"); and they burned Magh Bile (Movilla) and its penitential cells.

O'Laverty (1878, p. xxxiv) commenting on the Annals of Ulster suggests that Chapel Island (? Inis-Doimhle) may have been raided in 823:

nephew, Muireadhac (Murough), son of Eochaidh, who mounted the vacant throne. During his reign the Danes commenced their plundering expeditions. They plundered A.D. 823, Downpatrick, Movilla, and Inis-Doimhle (perhaps Chapel Island off Grey Abbey); the foreigners, however, suffered a severe defeat in Lecale. In the year 826 the

⁹ Inis-Daimle.—In the Martyr. of Donegal, at July 4, Inis-Daimle (or Inis-Doimhle, as the name is there written) is described as between Ui-Cennselaigh [county of Wexford] and the Deisi [co. Waterford]. Dr. Todd thought Inis-Daimle was probably the same as "Little Island," in the expansion of the Suir, near Waterford. War of the Gaedhil, &c.,

O'Lavery's interpretation of Inis-Doimhle is supported by Hennessy (1887 p. 253) who equates Inis-Doimhle with Inis-Daimle which Todd (1864) had translated as 'little island':

4.3 Anglo-Norman Strangford

In 1177 John de Courcy invaded Downpatrick and annexed the local kingdom of Dal Fiatach. In a relatively short time he brought the region into the Norman world, notably by the introduction of a number of Cistercian abbeys like Grey Abbey, Inch and Comber. The first two were founded from Cumbrian monasteries, and the links between this part of the English coastline and Strangford were strong. Downpatrick, then a maritime port but now far inland owing to land reclamation, developed in the thirteenth century as an important small town with a large number of religious houses.

4.3.1 Medieval Fish traps

A later phase of fish trap-building was initiated by the Cistercians at Grey Abbey in 1193. These traps take the form of stone and wooden structures on the foreshore, and the Greyabbey Bay area stands out as having the densest concentration of both types. It seems that the wooden traps went out of use by the end of the thirteenth century and were replaced by stone structures.

In the past the lough had a large fish population, which included salmon, sea trout, plaice, flounder, mackerel, cod, grey mullet and skate. The traps are generally located on the tidal channels, some of which have a freshwater component, which would have provided nutrients for feeding fish. All of the fish traps are ebb weirs, intended to catch fish drifting down with the falling tide. Both the wooden and stone fish traps utilise natural features like islands and pladdies in their location and orientation.

In their present condition, the wooden traps are represented by the survival of lines of post stumps which would have supported wattle fencing. Tidal erosion and natural decay have reduced the wooden traps down to ground level or below, so that only the foundation parts of the structures have survived.

Two types are present - very large traps with leaders in excess of 200m and smaller traps with leaders of around 50m. All of the wooden traps are V- shaped, with the apex pointing in the direction of the falling tide. The stone fish traps are broadly similar to the wooden examples in size and shape. They are represented by low, double-boulder dry stone walls on the foreshore; few survive to more than one course high. They vary in form from V-shaped to curvilinear or crescentic stone spreads up - to an average of 5m wide, within which a well-built core of rubble on average just over 1 m wide can be observed.

4.4 Plantation Strangford

Chapel Island was part of the land acquired by Hugh Montgomery in 1605 as part of the Scottish settlement in the territory of Ard-Uladh at the beginning of the 17th century (Hill, 1869). The property has remained in the Montgomery family until Grey Abbey bay, including Chapel Island, was purchased by the National Trust from H.C. Montgomery in 1987.

4.5 The Kelp Industry

Seaweed has been harvested and processed in Ireland for centuries. Initially it was used as fertilizer or animal feed, however there have been two distinct phases for its

industrial use in Ireland (O'Sullivan et al, 2010). The 'Alkali' or 'Soda' phase ran from 1700 to 1820 and the kelp product was extensively used for dyeing, paper making and bleaching (linen). This was followed by the 'Iodine phase' where the kelp product was used for medicine and photography however by this stage the industry had largely died out in Strangford.

Phases	Main chemical produced	Main uses	Important seaweed sources
Alkali phase (1700–1820)	Alkali/soda (sodium carbonate)	Soap, glass, alum for dying, paper-making, bleaching	Laminaria digitata, L. hyperborea and Saccharina latissima
lodine phase (1820–1940)	lodine	Medicine, photography	As above
Alginate phase (1940–continuing)	Alginates	Thickening agents in foods, cosmetics	Ascophyllum nodosum and Laminaria hyperborea
Contemporary phase	Sea vegetables—dulse, Carrageen r Agro-chemicals—organic farming, Body products—algotherapy, thala:	horticulture	

Figure 30: Milestones in the Irish seaweed industry (O'Sullivan et al, 2010)

4.5.1 The Kelp Industry in Strangford

The importance of kelp as an asset in Strangford is reflected by its inclusion in a deed drawn up between James Montgomery and his trustees in July 1717, in relation to the sale of Rosemount his ancestral seat in Greyabbey (Hill, 1869 p240). Amongst the assets listed within the deed is the seaweed (kelp) to be found on the shores rocks and islands, amongst which is named Chapel Island:

"...the manor of Rosemount, together with the Scite, circuit, and precinct of the Abbey of Leigh, alias Jugo Dei, alias Grayabbie, alias Hoare Abbey, and also the demesne lands of Rosemount, and the Town and Lands of Grayabbie, Bogleboe, Buetown, Ballymistore, Ballymurphy, alias Ballymurcock, and the Islands & Peninsulas commonly called or known by the names of Killhill, Island Buys, Island Middle, Island South, Island Chapel, Island Bourtree, Island Gobback, Island Longshelas and Channell, with all Rocks and Scars, and all Kelp, wreck, and Sea-Weed growing or being, or that shall hereafter grow or be on the said Manor, Towns, Lands, Rocks and Premises, or on the coasts or shores thereof, or of any part thereof..."

Dubourdieu (1802 p. 240-241) gives an insight into the relative quality and quantity of kelp produced on Strangford side compared with that produced on the eastern side of the Ards peninsula:

A confiderable

quantity of kelp is made every fummer along the coafts, but particularly on the lough of Strangford; the whole quantity manufactured there, as I am informed by a gentleman, from whom I have received a most accurate account of the manner of preparing it from feaweed, amounts to between four and five hundred tons, whilft that made on the eastern coast does not amount to more than one hundred tons per annum; that on the shores of the lake is much superior in quality to that on the open shore, but neither the one nor the other are of fo good a quality as formerly, owing to the avarice of the labourers employed in making it, who, to increase the weight, mix more than the proper proportion of gravel with the ashes, after they are reduced to a fluid ftate; the proper proportion is as one to twenty, but, by putting more than that quantity, the kelp is not fo much in demand as it formerly was. If I recollect aright, there is a law against the adulteration of kelp, which directs it to be broken in pieces, and thrown upon the fields, excepting, however, the fields of the perfon fo adulterating it.

4.5.2 Archaeological features of the kelp industry

The five main processes of the kelp industry are cultivation, harvesting, drying, processing and storage. Archaeological evidence of some of these processes can be found in the vicinity of Chapel Island.

4.5.2.1 Cultivation

The seaweed grows in the intertidal zone. The seaweed plants can only attach their roots to stones or boulders so in order to maximise the crop the kelp harvesters laid out 'kelp grids' in sandy bays. These are created by laying out a grid of heavy boulders, which can be regularly turned to maximise kelp growth.



Figure 31: Kelp Grid in Greyabbey Bay

4.5.2.2 Processing

In Strangford Lough 21 surviving kelp kilns have been recorded (McErlean et al. 2002). They are all located on islands and most survive as a low spread or setting of stones on the shoreline just above HWM. The kelp kilns on Chapel Island appear to be larger, much better preserved and oval in shape.

Burning seaweed to produce kelp was a slow process that had to be carefully controlled and involved arduous and filthy work. The kiln was lit at one end, and the dried seaweed was added slowly to the smouldering fire. The molten kelp coalesced at the bottom of the kiln and, upon cooling, hardened to a very dense, heavy block. This was broken down into manageable pieces using hammers, crowbars, picks, etc., a process that involved the removal of one of the long sides of the kiln. During the burning, kilns gave off dense plumes of white oily smoke, which clouded large parts of the coastline and drifted far inland.



Figure 32: Kiln B from N



Figure 33: Kiln C from S

4.5.2.3 Storage

The processed kelp is vulnerable to rapid deterioration if exposed to rain. Consequently substantial Kelp Houses were built to store the processed kelp until it was ready for shipment. There are the remains of a substantial Kelp House measuring 13m by 3.5m at the NE end of the Island. This structure was not included in the current survey.

5. Recommendations for further work

Much more remains to be surveyed on Chapel Island, in particular the probable graveyard located on the littoral plain to E of the chapel site, the kelp house, the 'pier' described by Robinson and the fish traps in the vicinity of the island.



Figure 34: Graveyard viewed from the Chapel site looking E

As can be seen, many built structures on the island have been overgrown by vegetation and as such require cutting back in advance of the survey. Such work cannot be undertaken between 1^{st} March and 31^{st} July – birds' nesting season. This, along with the constraints imposed by the need complete the survey work between low tides, makes surveying on Chapel Island particularly challenging.

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Appendix 1: Photographic Record

Nikon Coolpix S1 Digital Camera Ricoh Caplio 500G wide

Frame No	Viewed From	Details
DSC_2884	SW	Scarp
DSC_2885	Ν	Kiln B
DSC_2888	NW	Kiln C
DSC_2895	S	Door threshold
DSC_2897	W	Graveyard
DSC_2899	S	Kiln C
DSC_2902	W	Chapel
DSC_2903	Е	Chapel
DSC_2905	S	Detail of threshold
DSC_2906	Е	Cell in NW corner of chapel
DSC_2907	NE	SW corner of chapel
DSC_2908	Ν	SE corner of chapel
DSC_2909	S	NE corner of chapel
DSC_2916	W	Detail of door jamb
RIMG_0003	Е	Kelp grid