Centre for Archaeological Fieldwork
School of Geography, Archaeology and Palaeoecology
Queen's University Belfast

Community excavation at Cushendun

Centre for Archaeological Fieldwork:
Evaluation Report No. 281

Heart of the Glens
Landscape Partnership Scheme

Community Excavation at Cushendun, Co. Antrim

Cormac McSparron
Centre for Archaeological Fieldwork
Queen's University Belfast

Introduction

The Centre for Archaeological Fieldwork at Queen's University Belfast were asked by the Causeway Coast and Glens Heritage Trust to conduct a Community Archaeological Excavation at Cushendun, Co. Antrim (Figure 1). This is an area of known archaeological significance, having been demonstrated from previous archaeological investigations to be rich in archaeological sites and artefacts from the Mesolithic Period through to the Middle Ages. The excavation focused on two areas, a grassy field owned at the shore to the east of Glenmona House Carpary, and the lawn at the front of Glenmona House. Both locations are owned by the National Trust. The grassy field at the shore was, at the outset, believed to have been a levelled area of sand dunes. Two trenches were excavated to a depth in excess of 2.5m and no archaeological finds or strata were uncovered (Figure 2). An auger was used to test a number of other locations in this field, revealing a similar series of sand layers, without intervening humic layers, to depth of at least 3m.

A third trench, 8m long by 1m wide, was excavated on the lawn in front of Glenmona house (Figure 2). No archaeological strata and only a few fragments of later 19th / early 20th pottery were found.

An annular crop mark is visible on an aerial photograph of the lawn of Glenmona house kindly provided to the CAF by Malachy Conway of the National Trust (Photo 1). The crop mark runs into and terminates at a circular flower bed in the centre of the lawn (Figure 2). As luck would have it the flower bed was in the process of being dug over and replanted by National Trust gardeners during the community excavation. The excavation team took the opportunity to clean and examine the surface left by the digging of the flower bed. This indicated that the crop mark seemed to be the result of a layer of iron pan gathering around the roots of plants, possibly an annular arrangement of shrubs, a small hedge, or similar. There was no evidence for any thing of an archaeological nature however. It seems that this cropmark is unlikely to indicate an antiquity.

The excavation was carried out under license from the Northern Ireland Environment Agency (License No. AE 14 / 34).

Location

The excavation site is located within the townland of Brablagh, and at its closest the site is only approximately 37m inland of the high tide mark. The site has an average OD of 8.7m. The Irish Grid Reference for the site is IG 3248 4329.The sand dune trenches are located in the field opposite the Glenmona House Carpark, to the east of the Bay Road (Figure 1). The Glenmona Lawn trench is located in the field immediately west of the Glenmona House Carpark

Archaeological sites in the vicinity of the excavations

There are several archaeological sites in the vicinity of the excavation. Several hundred metres north of the excavation area,located just back from the shoreline is the medieval tower Castle Carra, located above a mesolithic occupation site, which was excavated over several seasons by Declan Hurl of NIEA (see below). To the southwest of the excavation area is the mound “Cruicknadhuine” (SMR Ant 15:010) (Figure 2), which stands in woodland to a height of several metres with a diameter of approximately 10m. It has never been archaeologically investigated but is marked on the first edition of the Ordnance Survey as an annular feature and on the second edition map as a mound (Figures 3 and 4). Reeves (1847,284) notes the mound citing local tradition that it was the site of combat between the champion of the O'Neills and the MacDonnells. An aerial photograph (Photo 1) has indicated a possible cropmark close to the centre of the lawn of Glenmona House, although it seems now unlikely that this is an antiquity.

Previous archaeological work carried out in the Cushendun Bay area.

There have been a number of archaeological excavations carried out at Cushendun. As part of the Harvard Archaeological Mission to Ireland Hallam Movius excavated widely in east Antrim looking for evidence of early prehistoric occupation . In 1935 he excavated in a number of areas along the course of the River Dun and in Cushendun Bay (Movius 1940/41). Most of his trenches were simply small test trenches to examine the stratigraphy around the Cushendun area, his main excavation was slightly upstream along the south bank of the River Dun at Knocknacarry. Although he didn't find any actual settlements he was able to identify a number of post glacial phases of human activity and a progression in early prehistoric (Mesolithic) flint artefact types from smaller bladed flint implements to much larger bladed implements. He was also able to demonstrate the changing sea level in the Cushendun area in the immediate post glacial millennia, from an initial post-glacial springing up of the land (called isostatic uplift) when sea levels were much lower to a period of “maximum transgression” when sea levels were approximately 10m higher than today.

From 1995 to 2004 Declan Hurl of the Northern Ireland Environment Agency carried out a series of excavations at Castle Carra (Ant 015:014). The excavation focused both on the interior of the castle and the exterior of the castle where a number of trenches were excavated over several years (Hurl 1995, 2002 and 2004). The excavations to the exterior of the castle uncovered evidence for Mesolithic occupation. A horizon of rounded stones, which may have been deliberately deposited, was uncovered with several layers of undisturbed prehistoric strata above it. As with Movius' excavation at Knocknacarry there was a progression in the Mesolithc flint artfect types from smaller flint artefacts to very large, almost brutish examples in the later layers. Mixed in with these flints were large amounts of charred hazelnuts, wood charcoal and burnt bone. It is likely that the excavation had encountered part of an actual Mesolithic habitation site. Radiocarbon dating was carried out on charred hazelnut shells from the individual strata. This identified three phases of use of this site. The earliest strata at this excavation were dated to circa 4700BC with a second phase dating to around 4200BC and a final phase of activity at about 3500BC. The two earlier dates are very typical of Irish mesolithic dates, the later dates were somewhat surprising as they are rather younger than might be expected on a Mesolithic site and are more typical of what might be expected on a Neolithic site, however the existence of residual activity in the Neolithic has been argued by Mitchell (1970) who suggested the survival of what he termed “Ultimate Larnian” flint technology beyond the conventional end of the Mesolithic. The flints from the last phase of activity at the prehistoric site at Castle Carra may well support Mitchell's position.

The excavation in the interior of the Castle Carra revealed a complex series of deposits. in the Post-Medieval period the site was utilised as a *cillin*, a burial place for unbaptised infants, and a number of burials of babies and very young children were uncovered. Beneath this there was evidence that the site had been used for iron production with large amounts of charcoal and iron slag. This was presumeably re-use of the abandoned tower, possibly because it both gave shelter and draught for the furnace. Stratified below this layer there were the remnants of the earthen floor of the tower. Numerous fragments of Medieval pottery dating from the 13th and 14th centuries AD were found in these lowest deposits.

Research Methodology

It was initially proposed that up to eight evaluation trenches, measuring 2m by 2m would excavated in the presumed levelled sand dune area. . The trenches were located so as to avoid the path which runs through the centre of the field in which they are located. When it was established that this coastal area had been significantly altered by sand dredging in the relatively recent past a decision was made to excavate a trench on Glenmona Lawn, which we hoped was far enough back from the shore to have been unaffected by sand dredging.

The standard context recording method, with a drawn, written and photographic record, was utilized for recording artefacts, features and strata uncovered by the excavation.

Acknowledgments

There are a number of institutions and individuals I would like to take the opportunity to thank for their help and assistance in making this project a success. I would like to thank Ciara OhArtghaile and Réamaí Mathers of the Causeway Coast and Glens Heritage Trust who set this project in motion. I would also like to thank the Glens of Antrim Historical Society, Iain Bradley, Deirdre McAllister, Eileen McAuley, Sheila McGoran, Brigid McSparran, Dominic O'Loan and Frank Rodgers, who were also instrumental in creating this project and who also helped with site selection and who volunteered to work on the excavation. I would like to thank Harry welsh of the Centre for Archaeological Fieldwork for assisting with the choice of site and giving Health and Safety advice. Finally I would like to thank Malachy Conway and Frank Rodgers of the National Trust who gave us permission to dig at the locations, facilitated us, helped us on site and made us welcome in every way.

Account of the excavations

Three trenches were dug during the excavation and an already dug-over flower bed was cleaned and examined by the excavation team.

Trench 1 (Figure 1 and 2, Photo 2)

Trench 1 measured 2m by 2m. The topsoil in the trench was a mixed loam and sand (101) upon which grew the grassy sod. It was approximately 15cm thick. It was set upon a layer of silver sand mixed with a little loam (102), also approximately 15cm thick. Beneath this there was a somewhat purer sand, albeit with some root penetration (103) which was approximately 20cm thick. This sand gave way to a very silvery, but slightly coarser sand (104) which was also about 20cm deep. At the base of this sand, at a depth of approximately 0.7m from the top of the trench, there was a thin layer of sandwiched sand and loam layers (105), presumably the remnant of a period when there was growth of vegetation on top of the sand. It was, at its thickest, no more than approximately 15cm thick, and to the west of the trench was thinner. Beneath this humic layer there was a golden, quite fine, sand (106), 0.5m, thick which was above a coarser, silver, sand (107) which was first encountered at a depth of about 1.4m from the old ground surface and continued to a depth of at least 1.75m at which point excavation was discontinued.

Trench 2 (Figure 1 and 2, Photo 3)

The sequence of strata in Trench 2 was similar to that found in Trench 1 but simpler. The topsoil (201) was a similar loam sand mix, approximately 15cm thick. A further 15cm of loamy sand (202) was encountered beneath it, which was also about 15cm thick. This mixed loam and sand layer gave way to a soft golden sand (203) which continued for a further 40cm until a coarse silver sand (204) was uncovered. It continued, more or less unaltered, to a depth of about 2.20m, where a very fine gravel (205) was exposed in a very small 0.5m by 0.5m step in the east of the trench.

The auger tests (Figure 2)

An auger was used to test the depth of sand at a point equidistant from Trench 1 and Trench 2.

The results of the auger test were as follows.

0 to 1.0m Golden Sand

1.0 to 1.5m Golden Sand – slightly grittier

1.5 to 2.0m Golden sand with small stones

2.0 to 2.4m Silver Sand

2.4 to2.5m Gravel layer

2.5 to 3.0m Silver coarse sand and gravel

3.0 to 3.3m Very gravelly sand

Auger hole stopped at 3.3m

A second Auger test was made within Trench 1 beginning at it lowest point at a depth of 1.8m

1.8m to 2.8m Increasingly coarse sand

2.8 to 3.0 Gravel / small stones

Auger Survey stopped at 3.0m

Trench 3 (Figure 1 and 2, Photo 4 and 5)

A 10m by 2m trench was excavated in the south east of the lawn of Glenmona house. The sod was a thick, humic rich layer approximately 10cm thick which was removed to reveal a humic loam topsoil (302). In the north of the trench this humic loam gave way to the sand subsoil (305) at a depth of approximately 30cm but in the south it gave way on to a darker, charcoally, humic topsoil (304) and a variant of topsoil (303) which was very similar to (302) but which had a slightly firmer consistency. When these topsoil variants were removed the sand subsoil was revealed across the entire site, varying in depth from 30cm, beneath the surface at the north end of the trench, to 40cm beneath the surface at the south. A number of features were visible cut into this subsoil surface, To the south of the trench a "U" shaped gully (311) cut the subsoil and was filled with the dark loam (309), very similar to the topsoil. In section it could clearly be seen that it had been cut from just below the modern sod, indicating its lack of antiquity. In the north of the trench a drain was found (312), which was filled by a stoney fill (313) and capped in earth (310) similar, again, to the topsoil. Along the north end of the trench there were hints of linear features, slight undulations in the subsoil, which probably are the very truncated remains of rigs, indicating that this lawn was used for potato cultivation at some stage. These features were very ephemeral however.

The Flower Bed (Figure 1 and 2, Photo 6 and 7)

In the approximate centre of the lawn in front of Glenmona House there is a crop mark visible from aerial photographs. Plotting the location of this cropmark at ground level indicated that it ran into and terminated in the flower bed. Fortuitously the flower bed was being dug and replanted during the excavation. Due to the shallow nature of the subsoil this re-digging of the bed had turned over the ground to the depth of the topsoil. The excavation team took the opportunity to examine the surface revealed by the gardeners digging. No archaeological features were found but iron pan was noted at the position where the crop mark should have entered the bed and terminated. This iron pan seems to have formed at the base or of the roots of a plant, possibly indicating that the annular cropmark shows the position of a now removed plantation or garden feature.

Artefacts found during the excavation

Trench 1

No Artefacts were found during the excavation of Trench 1. This is unusual as it would normally be expected that some artefacts, even relatively modern items, would be found in a landscaped sand dune environment.

Trench 2

One interesting, although relatively modern artefact found in Trench 2 was a Bushmills Whiskey bottle measuring 150mm by 73mm by 35mm. The bottle has mould casting marks on the sides and on the neck and lip, which indicates that it is twentieth century in date. The bottle has the legend “THE OLD BUSHMILLS DISTILLERY C^{o} LIMITED” written in relief on the front of the bottle. Below this is the Bushmills pot still trademark and below this is written in relief “EST^{D} 1784”. On the base of the bottle, written in relief, is OBD, presumeably an acronym for Old Bushmills Distillery. No other artefacts were found in this trench.

Trench 3

A number of artefacts were found in the topsoil layer (302) of Trench 3. The oldest artefacts were a number of pieces of struck flint. One butt fragment of a flint blade was found, it has a prepared striking platform and a clear bulb of percussion and was probably part of a flint tool which was fractured in antiquity. Seven fragments of burnt chalk and flint were also found in this topsoil layer, one of which is probably a burnt flint core (pers comm Brian Sloan, QUB). Four fragments of relatively modern red brick and roofing slate were also found.

A variety of fragments of 19th and 20th century pottery were found in the topsoil layer. Fragments of at least eight vessels were found

Vessel 1 Eight fragments of a vessel with a creamware type fabric, black, green, blue and red underglaze decoration in a light, modernist style perhaps more typical of early 20th century rather than earlier ceramics.

Vessel 2 Single fragment of a plate with a cream fabric and glaze and gold underglaze painted decoration at the rim.

Vessel 3 Single fragment of a willow pattern type vessel.

Vessel 4 Single fragment of a vessel with a cream fabric, cl;ear glaze and brown and blue bands of underglaze decoration.

Vessel 5 Three pieces of a vessel with cream fabric, clear glaze and an undulating rim.

Vessel 6 Fragment of a large earthenware vessel.

Vessel 7 Fragment of a small earthenware vessel, possibly a small flower pot.

Vessel 8 Neck and rim of a stoneware bottle.

A number of very small pieces of cream fabric, clear glaze, undecorated vessels were also found which may (probably) belong to some of the identified vessels or possibly one or more further vessels.

Discussion

The absence of any archaeological finds or strata from Trench 1 and Trench 2 was surprising. It was assumed that, at the very least, stray finds of prehistoric flint tools would be uncovered in significant quantities. In addition the stratigraphy of the sand dunes was much more homogenous than expected before the excavation. Dune systems typically have numerous stratified horizons of differential sand, gravel, rock and, sometimes, humic rich materials or even peat. The relative homogeneity of the sands uncovered and the absence of ancient artefacts, or even relatively more modern rubbish suggests that the sand layers at the site accumulated rapidly. The absence of any significant accumulations of humic material, in particular, suggests that there was rapid buildup of sand in this area. Although it was clear early in the excavation that the nature of accumulation of sand was unusual for a natural dune system, the mechanism for this accumulation was unclear. However thanks to information supplied by the volunteers on the excavation it can be proposed that this unusual accumulation of sands was the result of dredging and stockpiling of sand for construction purposes in Cushendun Bay during the nineteenth and twentieth centuries (pers comm Eileen McAuley).

The auger survey conducted at the end of the excavation of these two trenches, which was capable of probing strata safely to a significantly deeper depth than an excavation trench, suggests that there is no significant change in the sands here until a depth of *at least* 1.8m suggesting that at a minimum this amount of material was deposited at in this area during the sand dredging and stockpiling.

The excavation trench on the lawn in front of Glenmona House was also disappointing. Although a few features were uncovered they were not ancient. Artefacts were limited to a few pieces of struck flint and 19th and early 20th century pottery, brick and window glass found in the topsoil. The fragment of a struck flake and the pieces of burnt flint, one a core, are suggestive of possible archaeological activity in the immediately surrounding area however.

The presence of a flower bed in the centre of the lawn at the front of of Glenmona house did provide an interesting opportunity to ground test a possible archaeological site known from aerial photographs (SMR No.). This examination revealed only what appeared to be the action of the roots of, now gone, shrubs and it seems likely that the “crop-mark” visible from the aerial photograph is in fact where a layer of iron pan accumulated at the interface of the roots of a circular plantation of shrub sized plants with the sand subsoil. The iron pan, being impervious to water, would have held more water than the surrounding well drained sand, which, in turn, would have caused this area of the lawn to seem more verdant than the surrounding lawn, especially in dry conditions.

Conclusions

The excavation was disappointing in that it did not find any archaeological structures or strata. The absence of any meaningful artefacts from the trenches located at the edge of the beach was especially surprising, although it now seems to have been explained by sand dredging and stockpiling in this area over the last two hundred years. The auger tests which were used to suplement the results of the excavation trenches suggest that at least 1.8 to 2.0m of sand would have to be removed in a future excavation in this area before any reasonable chance of uncovering undisturbed strata.

The single trench, Trench 3, on the lawn of Glenmona House, revealed no ancient archaeological features, only drains and possibly traces of potato rigs but there were some artefacts in the topsoil There was a quantity of 19th and 20th century finewares, possibly table ware from the house, as well as relatively modern brick and slate but in addition there were a few fragments of flint, at least one of which was the butt of a broken artefact, and several pieces of burnt flint, one of which was a flint core, left over after flint flakes had been removed from it during the flint manufacture process. Given the presence of the probable burial mound known as the Cruickaduinne approximately 30m from this trench it is not unexpected that prehistoric artefacts may be found at this location.

References

Hurl, D.P. 1995 “Castle Carra, Castle Park, Cushendun”, in I. Bennett (ed) *Excavations Bulletin 1995,* Wordwell

Hurl, D.P. 2002 “Castle Carra, Cushendun”, in I. Bennett (ed) *Excavations Bulletin 2002,* Wordwell

Hurl, D.P. 2004 “Castle Carra”, in I. Bennett (ed) *Excavations Bulletin 2004,* Wordwell

Mallory, J.P. and Woodman, P. C. 1984 “Oughtymore: An Early Christian shell midden”, *Ulster Journal of Archaeology*, 47, 51-62.

McL May, A. and Batty, J. 1948 “The snd hills cultures of the River Bann Estuary, Co. Londonderry”, *Journal of the Royal Society of Antiquaries of Ireland,* 78, 130-156.

Mitchell, G.F. 1970 “Some chronological implications of the Irish Mesolithic”, *Ulster Journal of Archaeology,* 33, 3-14.

Movius, H. 1940/1 “An early post-glacial site at Cushendun, Co. Antrim”, *Proceedings of the Royal Irish Academy,* C, 46, 1-84.

Reeves, W. 1847 *Ecclesiastical Antiquities of Down, Connor and Dromore*. Dublin: Hodges and Smith.

Figure 1: General Location map showing areas investigated during the project in red.

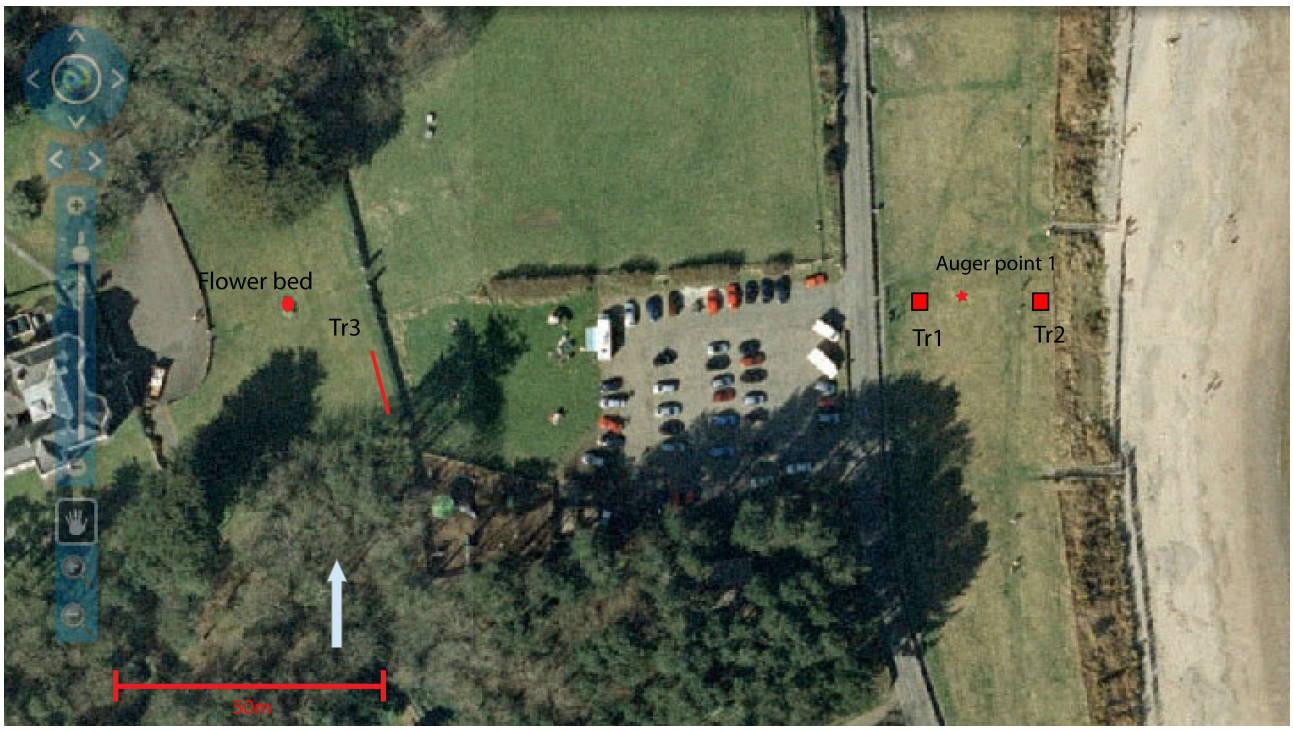

Figure 2: Detailed Location map showing position of areas investigated during the project (in red) and approximate location of Cruicknadhuine (ANT 15:10) (blue arrow).

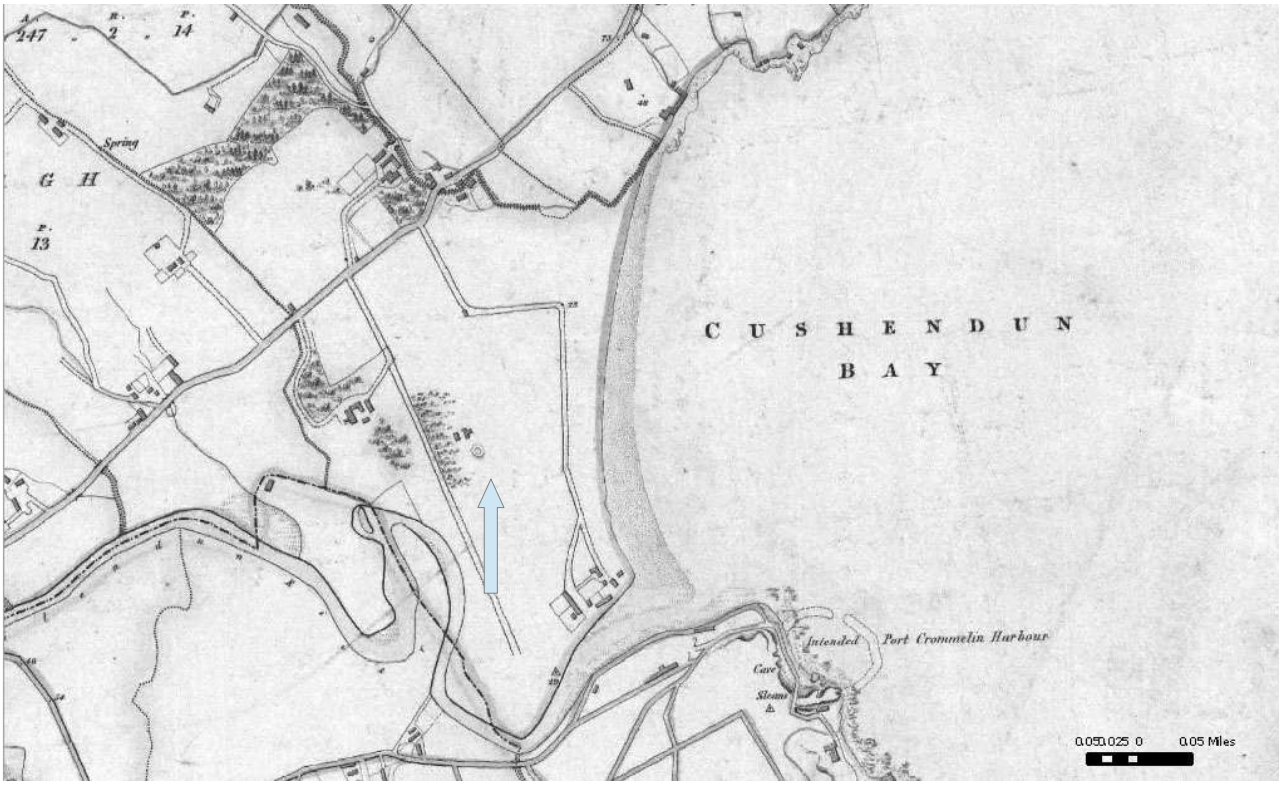

Figure 3: First edition OS Map of Cushendun bay showing Cruicknadhuine

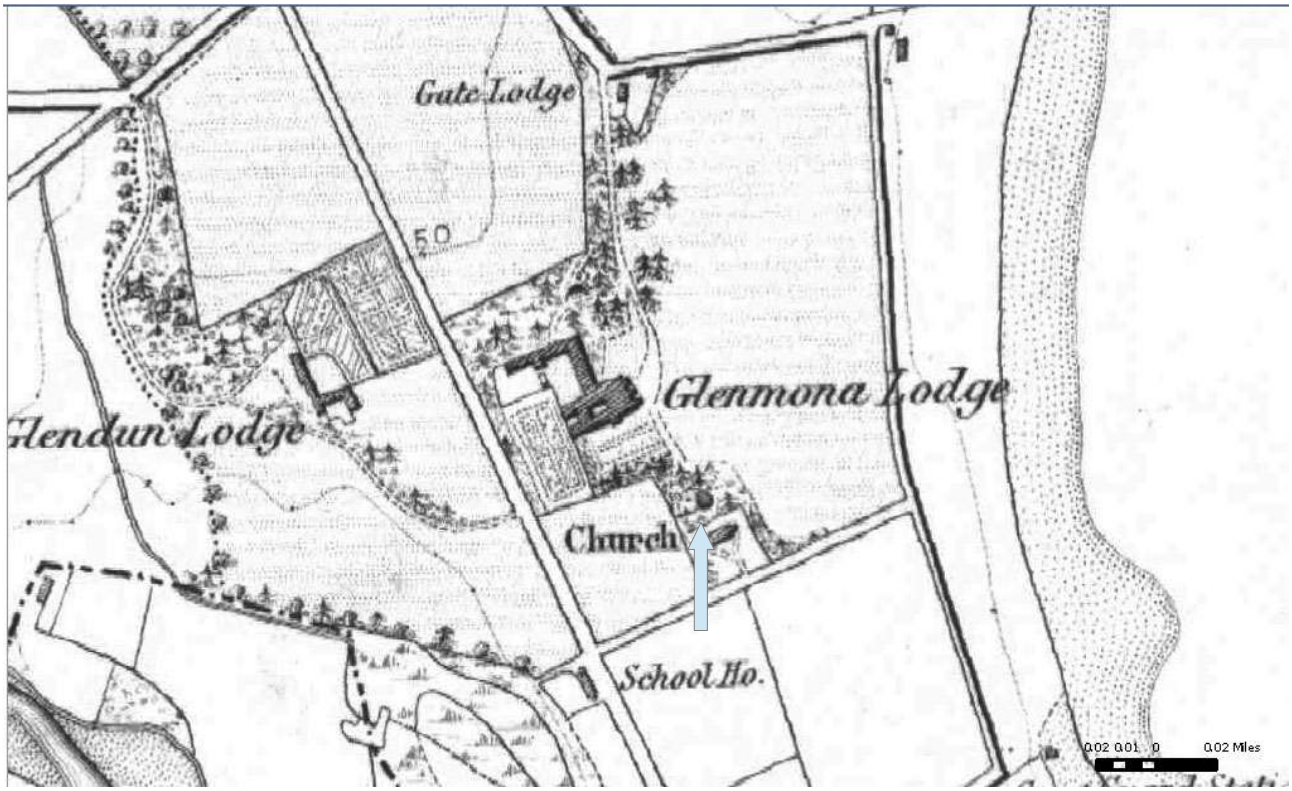

Figure 4: First edition OS Map of Cushendun bay showing Cruicknadhuine

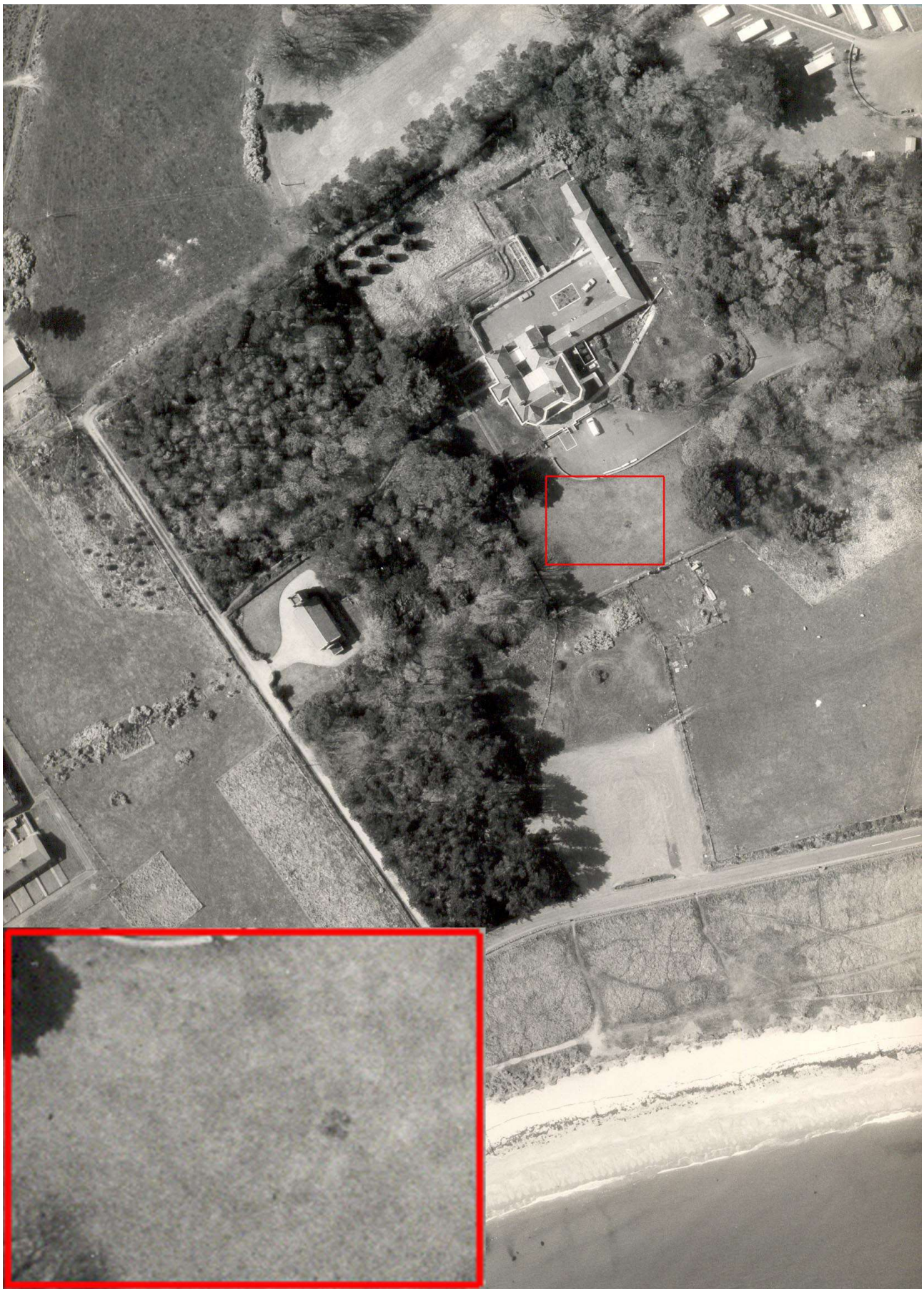

Photo 1 Aerial Photograph of Glenmona House, grounds and seafront showing crop mark, area of cropmark in red box and enlarged fourfold in bottom left corner of photograph.

Photo 2: South section of Trench 1

Photo 3: East section of Trench 2

Photo 4: Trench 3 from the south showing the modern gully (311) and the drain (312)

Photo 5: Drain (312) and it's earth and stone fill (313)

Photo 6: Drain (312) and it's earth and stone fill (313)

Photo 7: Flowerbed from west

Photo 8: Detail of iron pan in flowerbed