Centre for Archaeological Fieldwork

School of Archaeology and Palaeoecology Queen's University Belfast



Data Structure Report: No.9.

Investigations at Ballyarnet Lake, Shantallow, Co. Londonderry AE/02/72

On behalf of



Data Structure Report: Ballyarnet Lake, Shantallow, County Londonderry

John Ó Néill and Dr. Rick Schulting

(Grid Reference C447215)

(CAF DSR 005)

(Licence No. AE/02/72)

(SMR No. LDY 14A:020)

Contents	Page
List of Figures List of Plates Summary Introduction	
General	
Background	
Reason for Excavation and Research Objectives	
Archiving	
Credits and Acknowledgements	
Excavation	
Methodology	
Account of the excavations	
Trench 1	
Test Pits	
Results and Discussion	
Results	
Discussion	
Recommendations for further work Introduction	
Bibliography	

List of Figures:

		Page
Figure 1. Figure 2: Figure 3.	General location map Map showing the location of excavation, pollen cores and nearby sites. Plan showing the position of trench one and the twenty-two test trenches	7 8 s 9
List of Plates		
Plate 1. Plate 2.	Aerial photograph: V(SVY)S058(D) 16AUG02 02/3974. Photo of mound.	13 13

1. Summary

1.1 The site of the Shantallow investigations lies to the south of Ballyarnet Lake, 4 km to the north-west of Derry City. The area where the excavations took place lay beyond the south-westerns margin of the existing fens around the lake, where previous investigations had suggested the presence of Neolithic activity, recorded in the SMR as LDY14A:026. The ground to the west of the site sloped up to Springfield Road.

- 1.2 In 1996, a 20 m long section of a mechanically excavated pipe trench revealed a 15 m long and 0.50 m thick 'platform' of soil, stones and timber associated with sherds of a western Neolithic bowl and Lyles Hill pottery along with flint and a porcellanite axe (Hurl 1996). Subsequent work on the pipeline, in 1998, revealed further traces of the platform, although no further artefacts were recovered (McSparron 1998).
- 1.3 Further investigation was undertaken in 2002, in attempt to procure environmental samples that may be contemporary with the Neolithic activity uncovered previously at Thornhill (Logue 2000). While the 1998 investigations suggested that little of the archaeological material may be recovered *in situ*, exploration of the site was undertaken due to the possibility of recovering peat deposits that would be certain to date to that period.
- 1.4 On the 23rd and 24th July, 2002, one test trench and twenty-two pits were opened across the area where the previous features were noted. No evidence was noted of *in situ* deposits, either archaeological or peat. On this basis, it must be concluded that the occupation site has now been completely removed.

2. Introduction

2.1 General

2.1.1 The following report details the preliminary results of the topographic survey, palaeoenvironmental sampling and archaeological excavation at Shantallow, undertaken by the Centre for Archaeological Fieldwork, School of Archaeology and Palaeoecology at Queen's University Belfast in July and August 2002. This programme of work was undertaken on behalf of the Environment and Heritage Service, DOE NI, who funded the survey and excavations.

2.2 Background

- 2.2.1 Ballyarnet Lake lies 4 5 km to the north-west of Derry City, around 1.5 km from the shores of Lough Foyle (see Figure 1). Now surrounded by farmlands, a golf course and residential developments, the lake and its surrounding fens have been retained by the local council as a public park. The fenlands around the lake include some stands of willow, alder and hazel and substantial reed lawns largely obscuring the remaining area of open water in the centre of the lake basin. The fens are fringed by meadows, with the land rising quite steeply away from the basin to the north and south. The site of the Shantallow excavations lies at the junction of three townlands (Shantallow, Ballynashallog and Ballyarnet), during the 2002 investigations the site was erroneously recorded as lying in Ballyarnet townland (see figure 2 for townland boundaries).
- 2.2.2 The site was first reported to EHS by Mr. Ian Leitch, a local amateur archaeologist and member of the Templemore Archaeological Field-Walkers Society. He had noted that a number of archaeological materials were recovered from a pipe trench to the south of the lake in 1996. Closer examination produced a number of artefacts, and the site was duly referred to Environment and Heritage Service. A subsequent short excavation by Declan Hurl of Environment and Heritage Service confirmed the initial findings and the site was entered on the Sites and Monuments Record as LDY14A:020.
- 2.2.3 The summary account of this excavation describes the finds as 'A layer of peat, overlying the clay subsoil, had groups of stakes driven down through it, whilst on it rested a 'platform', at least 15m long and 0.5m thick, composed of compact sandy soils, stones and timbers. Associated with it was a small Western Neolithic bowl and part of a Lyle's Hill pot; also found in the trench were some crude flints and part of a porcellanite axe.' (Hurl 1996)
- 2.2.4 Further investigation of the site occurred in 1998 when there was further pipe-laying on the site, monitored by Cormac McSparron of Northern Archaeological Consultancy. Further traces

of deposits were identified in the course of this work. These were considered as similar to those recovered during the 1996 investigations and excavated. No further finds of archaeological interest were recovered.

- 2.2.5 The following is the summary account of the 1998 excavation. 'During the excavation of the main trench for the pipeline, which was c. 8m wide, a large deposit of packed gravel material, similar to the main constituent of the platform material discovered in 1996, was encountered. This was identified as probably being the same platform material, and construction work was temporarily halted until excavation of portions of the platform could take place. The platform was c. 17m north-east by south-west. At right angles to this Declan Hurl had measured the platform as being c. 20m long. The dimensions of the platform appeared, therefore, to be c. 20m x 17m. Given the positioning of the platform in a very boggy area it seems reasonable to conclude that its purpose was to provide some sort of dry, solid surface. Based on the presence of Neolithic pottery in the previously investigated section of the platform it had been suggested that the platform was probably Neolithic, possibly part of a roadway or working area. In the aftermath of the excavation, in which no artefacts were recovered, this must be reconsidered. It is possible that the platform is later than the Neolithic period and that it disturbed some localised Neolithic archaeology during its construction. The platform is near the old Ballyarnet racecourse, which changed its route on a number of occasions since first being constructed in around 1700. It is known that the racecourse was 17m wide (J. Thompson, pers. comm.), the north-east/south-west dimension of the platform. It is possible that the platform was in fact a part of the racecourse that was laid down over a boggy stretch of land to give firm footing for the horses.' (McSparron 1998).
- 2.3 Reason for Excavation and Research Objectives
- 2.3.1 The potential of the SMR site LDY14A:020 was noted during a general survey of the area, undertaken in 2002, for suitable sites for a programme of palaeoecological sampling aimed at establishing the environmental background to the Neolithic occupation site at Thornhill (Logue 2000). On this basis, the Environment and Heritage Service, DOE NI, consented to some investigation of the archaeological deposits at LDY14A:020 to establish a context for the sampling programme.
- 2.3.2 A limited number of objectives were decided for the excavation, addressing several issues relevant to the site. The main objective of the excavation was to establish the presence and location of surviving elements of the structure at the site. Primarily, the availability of students from the excavations at Ballynashallog (Thornhill College), allowed for limited excavation to be undertaken in advance of coring for environmental samples. This would allow for the more precise location of suitable samples for analysis. It was also hoped, that the location of any

surviving elements of the structure would allow for the retrieval of a suitable dating sample and examination of the suggestion that the structure may be Neolithic in date.

2.4 Archiving

2.4.1 A copy of this report has been deposited with the Environment and Heritage Service, DOE NI. All site records and finds are temporarily archived within the School of Archaeology and Palaeoecology, Queen's University Belfast. Site records, including context sheets, plans and photographic archive, small finds and samples, as retained by the School of Archaeology and Palaeoecology, are listed in the Appendices at the end of this report.

2.5 Credits and Acknowledgements

- 2.5.1 The excavations were directed by John Ó Néill and Rick Schulting. The excavation team consisted of the School of Archaeology and Palaeoecology students undertaking the taught excavations module in 2002.
- 2.5.2 The illustrations and images included in this report were produced by Keith Adams, John Ó Néill and Rick Schulting.

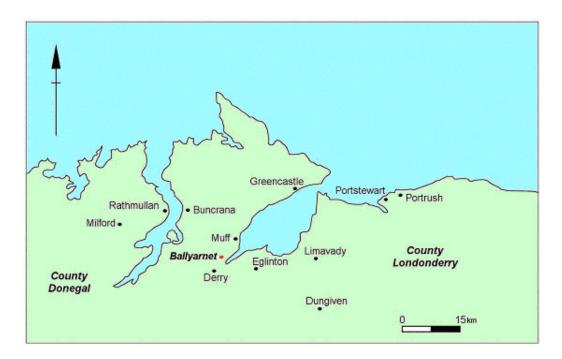


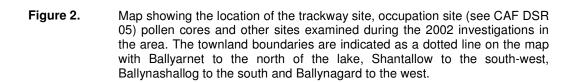
Figure 1. General location map.

Burnt mound
Occupation
site
Cropmarks

Trackway site

Key:

Pollen core (PC) Mound Drain Burnt Mound



500 metres

■ TP17 TP15 TP14 ■ TP16 TP5 1P6 TP3 ■ ■ TP12 ■ TP2 TP21 ■TP1 ■ TP13 TP22 TP8 ■ TP11 Springfield Road KEY Test Pit ■ Test Trench 20 metres

Figure 3: Plan showing the position of trench one and the twenty-two test trenches

3. Excavation

3.1 Methodology

3.1.1 The original aim of the excavation was to try and identify any archaeological materials or structures, as identified in previous investigations of the site. In total, one trench and twenty-two test pits were opened across the field where, previously, archaeological materials had been recovered. The results of this work is outlined below. There are no appendices to this report, since neither finds nor archaeological materials were encountered.

3.2 Account of the excavations

3.2.1 The results of the excavation is described here, with Trench 1 described is Section 3.3 and the Test Pits described in Section 3.4. No context numbers were assigned, nor a matrix recorded, since only modern disturbed deposits were noted.

3.3 Trench 1.

- 3.3.1 Trench 1 was opened across an area of low ground where some traces of the archaeological structure might have survived intact. The area selected lay between the two areas of higher ground where peaty soil was present at ground level, and lay close to where the archaeological deposits were previously identified. The location of these deposits was indicated by Declan Hurl of Environment and Heritage Service. The trench measured 6 m by 1 m and was orientated north-south. The southern end was placed across the interface between the better drained soil and the peaty soil.
- 3.3.2 Excavation proceeded to a depth of 0.30 m, when glacial till was encountered. No evidence of archaeologically significant soils or finds was noted in the trench. Some modern dumped finds were recovered, suggesting that the upper levels had been heavily disturbed in recent years.

3.4 Test Pits

- 3.4.1 Test Pit 1 measured 0.50 m by 0.50 m. No evidence of archaeological soils was encountered and glacial till was identified at 0.30 m.
- 3.4.2 Test Pit 2 measured 1 m by 1 m. No evidence of archaeological soils was encountered and glacial till was identified at 0.30 m.

- 3.4.3 Test Pit 3 measured 1 m by 1 m. No evidence of archaeological soils was encountered and glacial till was identified at 0.20 m.
- 3.4.4 Test Pit 4 measured 1 m by 1 m. No evidence of archaeological soils was encountered and glacial till was identified at 0.45 m.
- 3.4.5 Test Pit 5 measured 1 m by 1 m. No evidence of archaeological soils was encountered and glacial till was identified at 0.58 m.
- 3.4.6 Test Pit 6 measured 0.50 m by 0.50 m. No evidence of archaeological soils was encountered and glacial till was identified at 0.38 m.
- 3.4.7 Test Pit 7 measured 0.50 m by 0.50 m. No evidence of archaeological soils was encountered and glacial till was identified at 0.25 m.
- 3.4.8 Test Pit 8 measured 0.50 m by 0.50 m. No evidence of archaeological soils was encountered and glacial till was identified at 0.18 m.
- 3.4.9 Test Pit 9 measured 0.50 m by 0.50 m. No evidence of archaeological soils was encountered and glacial till was identified at 0.22 m.
- 3.4.10 Test Pit 10 measured 0.50 m by 0.50 m. No evidence of archaeological soils was encountered and glacial till was identified at 0.25 m.
- 3.4.11 Test Pit 11 measured 0.50 m by 0.50 m. No evidence of archaeological soils was encountered and glacial till was identified at 0.10 m.
- 3.4.12 Test Pit 12 measured 1 m by 1 m. No evidence of archaeological soils was encountered and glacial till was identified at 0.38 m.
- 3.4.13 Test Pit 13 measured 0.50 m by 0.50 m. No evidence of archaeological soils was encountered and glacial till was identified at 0.25 m.
- 3.4.14 Test Pit 14 measured 0.50 m by 0.50 m. No evidence of archaeological soils was encountered and glacial till was identified at 0.15 m.
- 3.4.15 Test Pit 15 measured 0.50 m by 0.50 m. No evidence of archaeological soils was encountered and glacial till was identified at 0.15 m.

- 3.4.16 Test Pit 16 measured 0.50 m by 0.50 m. No evidence of archaeological soils was encountered and glacial till was identified at 0.15 m.
- 3.4.17 Test Pit 17 measured 0.50 m by 0.50 m. No evidence of archaeological soils was encountered and glacial till was identified at 0.15 m.
- 3.4.18 Test Pit 18 measured 1 m by 1 m. No evidence of archaeological soils was encountered and glacial till was identified at 0.15 m.
- 3.4.19 Test Pit 19 measured 0.50 m by 0.50 m. No evidence of archaeological soils was encountered and glacial till was identified at 0.10 m.
- 3.4.20 Test Pit 20 measured 0.50 m by 0.50 m. No evidence of archaeological soils was encountered and glacial till was identified at 0.10 m.
- 3.4.21 Test Pit 21 measured 0.50 m by 0.50 m. No evidence of archaeological soils was encountered and glacial till was identified at 0.10 m.
- 3.4.22 Test Pit 22 measured 0.50 m by 0.50 m. No evidence of archaeological soils was encountered and glacial till was identified at 0.10 m.

Plates



Plate 1: View of the depression where the archaeological deposits were noted in 1996 and 1998, from the north-west.



Plate 2: Modern disturbed deposits as visible in Trench One, during excavation.

4. Results and Discussion

4.1 Results

- 4.1.1 The 2002 investigations at Shantallow were unable to locate any surviving remains of the archaeological features identified in 1996 and 1998.
- 4.1.2 The test trench opened close to where the archaeological materials were noted in 1996 did not reveal any further finds of archaeological significance.
- 4.1.3 A total of twenty-two test pits were opened across the peat deposits that were visible at ground level. In no instance was any evidence of archaeological activity noted.

4.2 Discussion

4.2.1 The absence of archaeological deposits or *in situ* peat deposits suggests that the pipe-laying exercise at Shantallow, initially disturbed, then fully removed almost all traces of the archaeological structure first examined in 1996, and then re-visited in 1998. While the idea that the deposits represented a re-alignment of the local racecourse (McSparron 1998), there is an absence of seventeenth and eighteenth century finds to corroborate this. There was local, anecdotal, evidence that the two areas of high ground, either side of the boggy area where the archaeological deposits were noted, had been quarried. This was borne out by pitting and scarring of the relevant ground surfaces. It may be that the finds noted in 1996 represented material stripped from the top of the quarry pits. This may have been the genesis of the Neolithic finds recovered in 1996. In truth, with the destruction of the structure now almost certainly complete, we are unlikely to be able to fully explain the origin and date of the archaeological features at Shantallow.

7. Recommendations for further work

- 7.1 *Introduction*
- 7.1.1 There are no recommendations for further work arising from the excavations at Shantallow.

8. Bibliography

Hurl, D. 1996 Ballyarnet Lake, Shantallow, County Derry. In I. Bennet (ed) *Excavations 1996:* a summary account of archaeological excavations in Ireland: 58.

McSparron, C. 1998 Ballyarnet, County Derry. In I. Bennet (ed) *Excavations 1998: a summary account of archaeological excavations in Ireland*: 92.