

# **Survey Report**

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Location:





Surface Artefact Collection Ballytaylor County Antrim

With an Appendix by Brian Sloan, Centre for Archaeological Fieldwork, Queen's University, Belfast © Ulster Archaeological Society

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## 1. Introduction

## 1.1 Location

A site survey and surface artefact collection were carried out at Ballytaylor Townland, County Antrim, in the Parish of Billy and Barony of Cary, Irish Grid reference C 9400 4200 at an altitude of 25m + OD on 8 March 2014. The preliminary details of the survey and surface artefact collection have previously been reported (Welsh *et al.*, 2014 (a) and (b)). This supplement details the results of the post-survey specialist analysis.

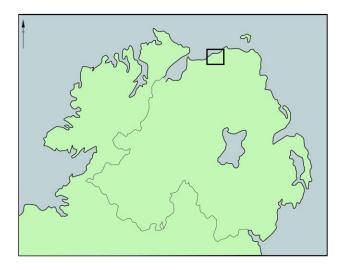


Figure 01: Location map for Ballytaylor, County Antrim



Figure 02: Location of Ballytaylor site Google Earth

## 1.2 The survey site

The survey site was situated within private farmland, then owned by MacNaghten Farms Limited and known locally as Field 22, which is immediately to the east of the Bush River (Figure 02). The adjacent field, known as Field 23, was traversed in order to reach the survey site. At the time of the 2014 survey, this had also been heavily ploughed and many flint items were observed by the survey group while travelling to the survey site. The survey was the first in a series of planned surveys undertaken by members of the Ulster Archaeological Society (UAS) during 2014.

The survey site comprised of two separate grids, named A and B (Figure 03) and finds were collected and recorded for each grid square. The search area of Grid A was 50m north-west/south-east by 50m north-east/south-west and the Grid B search area was 50m north-west/south-east by 20m north-east/south-west. The total search area of 3,500 square metres divided into 10m by 10m grids to identify any clustering of artefacts.

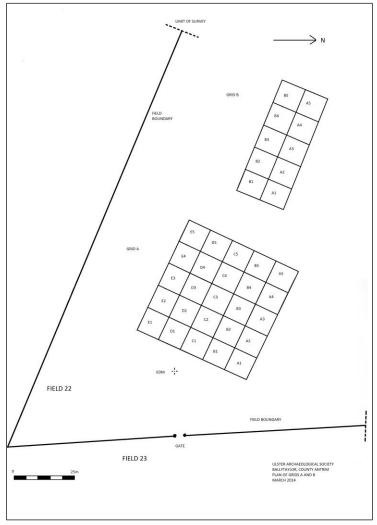


Figure 03: Plan of Grids A and B

## 2. Post-survey work undertaken

Following the recovery of artefacts, an application was made to the Northern Ireland Environment Agency: Built Heritage (now Historic Environment Division) for funding to permit specialist analysis. This was subsequently granted and the flint items were examined by Brian Sloan of the Centre for Archaeological Fieldwork, Queen's University, Belfast (CAF). His report is appended below.

The distribution of the different elements of the lithic assemblage proved to be very significant and indicated a substantial degree of prehistoric activity in the eastern portion of Area A, as well as smaller scale activity in Area B. It is possible that the assemblage represents domestic activity dating to the Neolithic with the possibility of a structure in either Grid B2 or B3, with the production of lithic tools carried out in the vicinity.

In addition to the flint items, eight shards of coarse pottery were recovered. These were examined by Cormac McSparron of CAF, who reported that while there were no distinguishing features present to provide an accurate date, these were most likely to be of prehistoric origin, possibly Neolithic. Part of a Neolithic axe head was recovered from outside the survey area and was identified as porcellanite by geologist Dr Ian Meighan. Dr Meighan also examined a number of slate fragments, which he considered to have an origin in County Down. These were of a size and shape reminiscent of arrowheads and were found along with the prehistoric flint items. It is tempting to think that they may have been contemporary, perhaps representing an experiment to utilise other rock types rather than flint for projectile points. A probable whetstone was also recovered from outside the survey area. This was identified by Dr Meighan as being of fine-grained sandstone or siltstone, commonly used for this purpose. A number of fragments of clay pipes were recovered, along with several shards of glazed pottery. These were examined by Ruairí Ó Baoill of QUB, who reported that there were no distinguishing features on the clay pipe fragments that would permit accurate dating or source and that the assemblage probably represented the residual debris from the distribution of night soil.

As a result of the findings of the UAS survey, the HED have recorded the site on the Northern Ireland Sites and Monuments Record as ANT 003:115.

## 3. Recommendations for further work

The artefact evidence from the Ballytaylor site strongly suggests the presence of a prehistoric habitation, perhaps Neolithic in date, in the immediate area of Survey Grid A. However, it is only with geophysical survey and excavation that the presence and survival of archaeological features will be clarified, as well as hopefully recovering stratified, diagnostic lithic tool forms that might advise on the chronology of the site as a whole. It is recommended that the HED consider a geophysical survey here as a matter of urgency, as further ploughing in this area may destroy any in-situ remains and with it the opportunity to study one of Irish archaeology's scarce resources.

## 4. References

- Sloan, B. 2015. The Lithics recovered during field walking at Ballytaylor Townland, Bushmills, County Antrim, Unpublished Report, Belfast: Centre for Archaeological Fieldwork.
- Welsh, H., Ward, K. and O'Rourke, M. 2014 (a). Survey and surface artefact collection at Ballytaylor, County Antrim, Survey Report No. 45, Belfast: Ulster Archaeological Society.
- Welsh, H., Ward, K. and O'Rourke, M. 2014 (b). 'A possible prehistoric settlement discovered in County Antrim', *Archaeology Ireland*, Vol. 28(3), 13-14.

## **APPENDIX**



The Lithics recovered during field walking at Ballytaylor Townland, Bushmills, County Antrim

Brian Sloan

January 2015

## Preliminary analysis of the lithic assemblage recovered during a fieldwalking exercise at Ballytaylor townland, Bushmills, Co. Antrim

#### Introduction

An assemblage of lithic artefacts, totalling 3483 pieces, was presented for identification and quantification following their recovery during field walking in March 2014. The field walking exercise was undertaken by members of the Ulster Archaeological Society (UAS) with the assistance of the Downpatrick Branch of the Young Archaeologists Club (YAC) with participation from the Northern Ireland Environment Agency (NIEA). The site was identified by members of the NIEA following ploughing, when a large number of lithics and coarse pottery sherds were observed on the surface of the ploughed soil (Welsh et al 2014, 6). The site lies to the immediate east of the River Bush at a height of approximately 25m above sea level (Grid ref. C94004200). Two areas (designated Area A and B) were subject to archaeological field walking, with lithic artefacts being recovered from both. The assemblage is relatively undiagnostic, although a date of the Early Neolithic is proposed for the activity represented by the artefacts (based primarily on the reduction strategies exhibited by the flake debitage component of the assemblage as well as the modified tools.

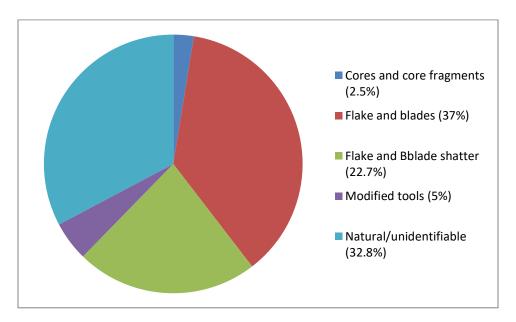


Figure 1: Overall composition of the lithic assemblage (including artefacts recovered from Areas A and B, and those recovered outside these areas)

## Assemblage composition

The Ballytaylor assemblage is comprised entirely of flint artefacts. In short, the lithic assemblage comprised of: Cores and core fragments (89/3483 pieces: 2.5%), complete flakes and blades (1289/3483 pieces: 37%), flake and blade shatter (792/3483 pieces: 22.7%), Modified tools (172/3483 pieces: 5%) and Natural thermally damaged pieces (1141/3483 pieces: 32.8%) (Figure 1). On the whole the assemblage displayed a high degree of patination, abrasion and edge damage, consistent with post-depositional disturbance. In general the condition of the lithic assemblage was fresh, with substantial abrasion and edge damage not prevalent on many pieces. Where patination was present, it was mostly of a whitish grey colour consistent with exposure to weathering. Some pieces exhibited a yellowish brown patination that may be related to the presence of iron minerals in the soil.

## Primary technology

The assemblage is entirely platform based, with all stages of lithic production being represented. Cores and core fragments accounted for 2.5% of the overall assemblage (89/3483 pieces; 2.5%). The majority of these are multi-directional cores, with the remainder being too fragmentary for formal identification. In all instances, the cores were discarded prior to them being fully exhausted as a viable item. Inherent flaws in the raw material, such as inclusions, cavities and internal cracking, have presumably encouraged their discard, although the abandonment at their stage of flake production may also be an indicator of the availability of suitable raw material in the area. Multi-directional cores are common occurrences amongst lithic assemblages dating to the Neolithic and the Bronze Age, and as such lend little to the chronological interpretation of the Ballytaylor lithic assemblage.

Flake debitage (i.e. complete and shattered flakes and blades) together accounted for 59.7% of the overall assemblage (2081/3483 pieces; 59.7%). Complete flakes and blades (i.e. pieces exhibiting an intact proximal and distall end) accounted for 37% of the overall assemblage (1289/3483 pieces).

This component of the assemblage exhibited relatively simple reduction strategies, with planar platforms and feathered terminations being the norm suggesting the production of flakes using a hard hammer stone and percussion. Preparation of the platform surface is evident on a minority of the surviving proximal ends, with facetted (occasional flake scar) and strictly facetted (100% of the platform surface exhibiting flake scars) both represented. The complete flakes and blades in the assemblage are rather squat, with the length ranging between 10mm – 80mm and the widths between 10-75mm. The bulk of the completed flakes and blades are diminutive in size, suggesting that the raw material originated as small pebbles.

## Secondary technology

Modified tools account for 5% of the assemblage (172/3483 pieces). On the whole, generic scrapers and scraper fragments dominate the modified tool component (109/172 pieces; Figure 2). In general, the scrapers exceed 35mm in length; with very few falling in the dimensions ascribed as 'thumbnail' scrapers. Traditionally this is seen as representing Neolithic rather than Bronze Age activity when small forms of this tool become more prominent. However, the size of scrapers is just as likely to be functional rather than chronological (Nelis 2004, 168) so using this tool form to suggest a sites chronology must be considered tentative at best. Retouched flakes and blades were also present amongst the modified tool component of the assemblage. On the whole these exhibit semi-invasive retouch and/or pressure flaking along one or more dorsal laterals, and could have held a number of possible functions but were most likely utilised as cutting implements (although not formal knives). This tool form is undiagnostic, having been used throughout prehistory.

The other modified tools observed in the assemblage (drill bits, knives and awls) although small in comparison to the amount of scrapers and retouched flakes are interesting as they are in comparison to assemblages recovered from the excavation of Early Neolithic domestic sites, for example at Ballyharry Co. Antrim (Nelis and Sloan 2004).

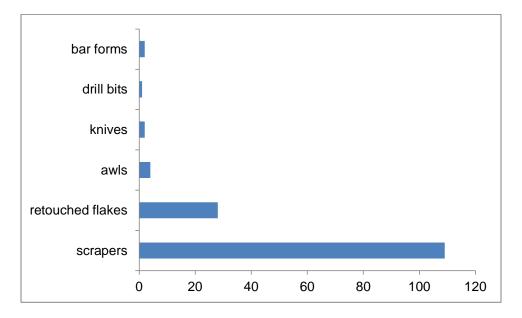


Figure 2: Typology of Modified tools recovered during the field walking exercise

## Distribution

By plotting the various lithics onto a site plan (Figures 3, 4 and 5) patterns in the distribution can be observed. The lithics recovered during the field walking exercise, particularly in Area A, suggest the activity to be domestic and possibly dating to the Neolithic. When plotted, the primary technology (i.e. cores and flake debitage) appears to focus on an area encompassing Grids B1 and C2 (Cores and core fragments in Area A) with the flake debitage assemblage focused on Grids B1 and B3 (Area A). There is also a concentration in Area B focussed on Grids A3 and B2 (in the case of both cores and flake debitage). When plotted the distribution of the modified tools (Figure 3) suggests a concentration of this activity around Grid Squares B2, and B3 (Area A) with a smaller concentration in B1, C1, C3 and B4 (Area A).

The distribution of the different elements of the lithic assemblage is interesting, indicating a substantial degree of prehistoric activity in the eastern portion of Area A, as well as smaller scale activity in Area B. It is possible that the assemblage represents domestic activity dating to the Neolithic with the possibility of a structure in either Grid B2 or B3, with the production of lithic tools carried out in the vicinity. However, it is only with excavation that the presence and survival of archaeological features will be clarified, as well as hopefully recovering stratified, diagnostic lithic tool forms that might advise on the chronology of the site as a whole.

## References

Nelis, E. 2004. 'Neolithic flint-work from the North of Ireland'. In Gibson, A. & Sheridan, A. (eds) (2004) From Sickles to Circles; Britain and Ireland at the time of Stonehenge. Gloucestershire: Tempus Press. 155-176.

Nelis, E, and Sloan, B. 2004. *Ballyharry Flint Assemblage*. Unpublished specialist report prepared by the Centre for Archaeological Fieldwork, Queen's University Belfast on behalf of the Northern Ireland Environment Agency (formally the Environment and Heritage Service).

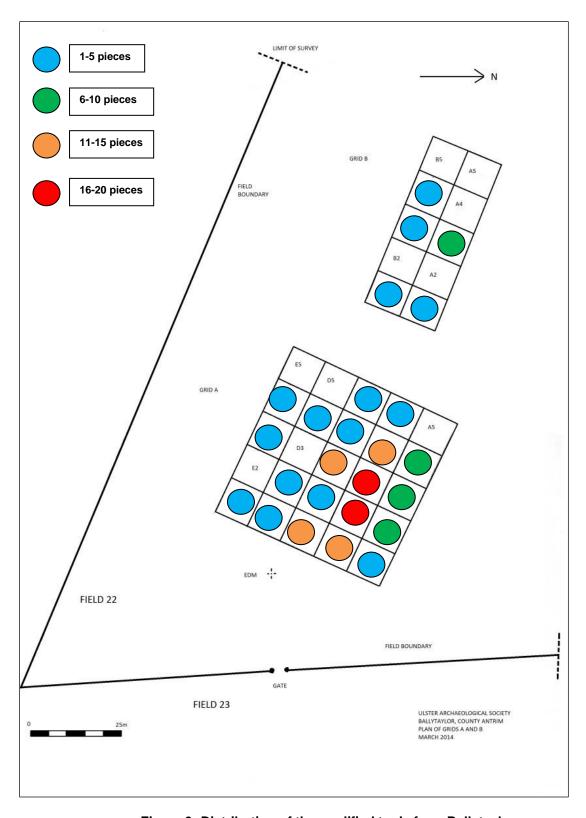


Figure 3: Distribution of the modified tools from Ballytaylor

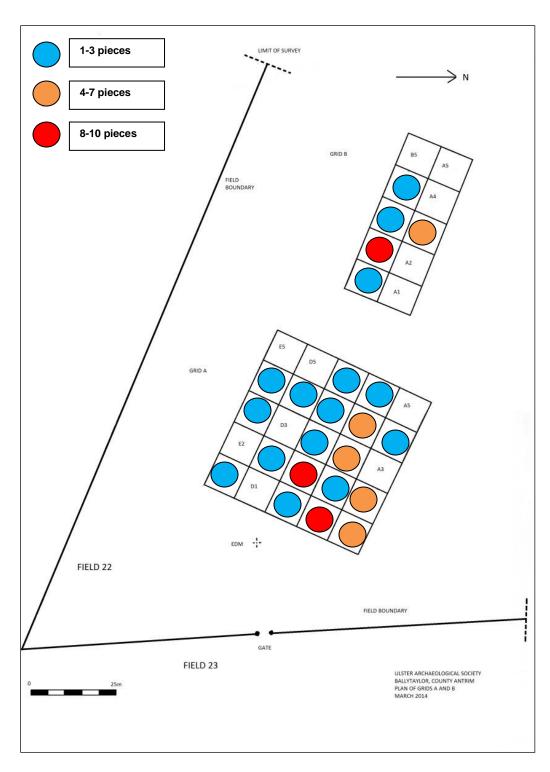


Figure 4: Distribution of the cores from Ballytaylor

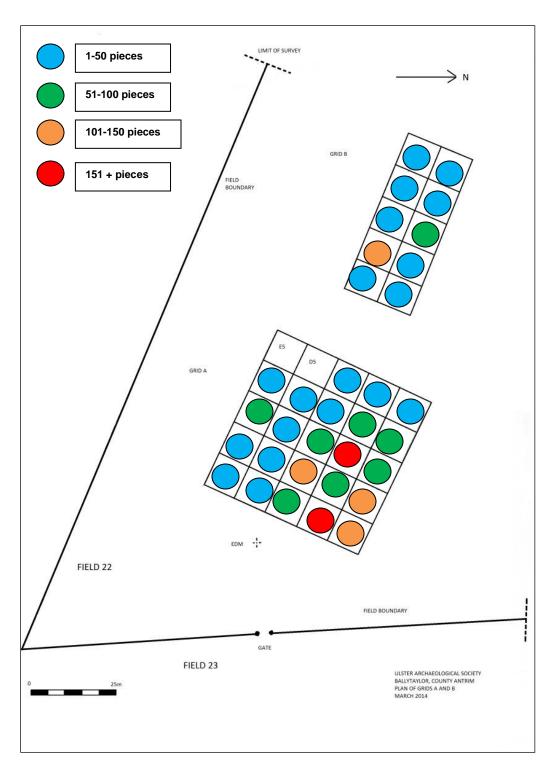


Figure 5: Distribution of flake debitage component of the Ballytaylor assemblage

Area	Grid	Core	Flake/blad e	Flake/blade shatter	Modified tool	Natural/unidentifiable	Total
Α	A1	6	85	55	3	26	175
Α	A2	4	75	30	10	25	144
Α	A3	0	56	29	8	6	99
Α	A4	1	33	24	7	19	84
Α	A5	0	17	5	0	5	27
Α	B1	8	91	63	13	39	214
Α	B2	1	48	21	5	21	96
Α	В3	6	117	73	20	40	256
Α	B4	5	52	20	14	16	107
Α	B5	2	23	15	1	17	58
Α	C1	3	60	36	11	36	146
Α	C2	8	63	43	5	16	135
Α	C3	1	50	42	15	15	123
Α	C4	1	31	14	3	14	63
Α	C5	2	7	1	2	5	17
Α	D1	0	21	18	2	10	51
Α	D2	2	20	26	3	16	67
Α	D3	0	12	10	0	15	37
Α	D4	1	21	6	3	13	44
Α	E1	2	10	8	1	27	48
Α	E2	0	18	17	0	48	83
Α	E3	3	31	28	2	35	99
Α	E4	3	17	5	5	17	47
В	A1	0	12	19	3	46	80
В	A2	0	10	16	0	60	86
В	А3	5	30	32	7	85	159
В	A4	0	25	12	0	161	198
В	A5	0	12	3	0	12	27
В	B1	3	13	8	1	28	53
В	B2	10	93	48	10	46	207
В	В3	2	9	4	1	28	44
В	B4	2	13	5	1	18	39
В	B5	0	14	11	0	36	61
N/A	field 22	0	12	3	5	8	28
N/A	Field 23	0	2	0	1	3	6
N/A	Outside grid	0	4	1	1	1	7
N/A	Outside grid	0	20	4	2	0	26
N/A	outcrop	0	12	10	3	16	41
N/A	outcrop	6	30	8	3	13	60
N/A	outcrop	2	8	3	0	38	51
N/A	N/A	0	12	16	1	61	90
	Total	89	1289	792	172	1141	3483
		2.50 %	37%	22.70%	5%	32.80%	100 %