

## Glasgow Museums Project: Burials at Holm Park, near Ballantrae, Ayrshire

### Archive report: the lithic assemblage (A.1955.96.83)

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The lithic assemblage comprises of 21 flint cores (Figure 1). It is not clear whether any of these artefacts were recovered from the grave fills. They may have been either wholly, or in part collected from secondary locations in the vicinity of the grave cuts. It is possible that the artefacts represent a bias in recovery strategies or the failure to recognise pieces of chipped stone other than cores (after Gardiner 1987; Schofield 1995a, 1995b).

The methodology, type and attribute terminologies employed for the analysis of the cores follows the format devised and adopted for primary technology by the *Southern Hebrides Mesolithic Project* (Finlayson *et al.* 2000).



Figure 1: The flint cores from the vicinity of the burials at Holm Park.

### Raw material and condition

The original surface, i.e. cortex is present on 18 of the flint cores, of those 61.10% have a pitted/heavily pitted cortical surface which suggests that flint pebbles may have been collected from the beach at Downan. 33.33% of the cores have a smooth/chalky cortex subsequently rolled smooth, and only one core has a smooth/hard cortical surface. These variants may indicate the collection of flint

pebbles from riverine sources such as the River Stinchar or secondary water courses. Where sphericity can be established it is noted that 15 cores are fashioned from medium sized flint pebbles; 14 were sub-rounded.

The majority of the cores are fresh (71.43%). Six of the cores are patinated, three of which are mottled grey in colour which could indicate a primary stage in the process of patination (see also Lacaille 1945, 86). This evidence suggests that the cores may originate from a minimum of three different locations with differential soil matrices, effecting the rate of patination from the loss of water from the internal crystallite structure of the flint (after Shepherd 1972, 36, 116-117).

## **Technology and attribute analysis**

The attribute analysis of the cores can be found at Table 1; metric data Table 2.

There are 18 platform cores comprising of 12 with a dominant platform with an opposed subordinate platform used for shaping the core, four with single platforms, one with opposable platforms and one with opposable platforms and a subsequent transverse platform. There are seven each blade and flake cores and four non-specific cores, which signifies the presence of blade industries (after Bordes and Gausson 1970).

The three bipolar cores were originally platform cores. The two single and one with opposable platforms have later bipolar transverse removals. There is evidence of anvil supporting to one of the platform cores suggesting that platform and bipolar reduction strategies were contemporaneous.

All of the cores present with simple platforms and diffuse negative bulbs of percussion indicating the use of a soft hammerstone. The broad common differences suggest that 80.95% were abandoned because of stepping and hinging to the flaking surface, and 85.72% have a utilised percentage of platform area for detaching blanks of more than 75%. The average number of scars is 12 for each core indicating that the majority of cores were intensively worked.

		%		%
<b>Raw Material</b>			<b>Number of Scars</b>	
Flint	21	100.00%	Average	12
			4-6	2 9.52%
<b>Bulb</b>			7-9	3 14.29%
Diffuse	21	100.00%	10-12	4 19.05%
			13-15	8 38.09%
<b>Percentage of Platform Area</b>			16-18	4 19.05%
< or 25%	1	4.76%		21
c.50%	2	9.52%	<b>Original Pebble Size</b>	
c.75%	12	57.15%	Indeterminate	6 28.57%
100%	6	28.57%	Medium	15
	21			21
<b>Reasons for Abandonment</b>			<b>Angularity/Sphericity</b>	
Indeterminate	3	14.29%	Indeterminate	6 28.57%
Stepping & hinging	17	80.95%	Sub-angular	1 4.76%
Angle	1	4.76%	Sub-rounded	14 66.67%
	21			21
<b>Average Angle</b>			<b>Cortex Type</b>	
55-59°	1	4.76%	Absent	3 14.29%
60-69°	2	9.52%	Smooth/chalky	6 28.57%
70-79°	10	47.63%	Smooth/hard	1 4.76%
80-89°	7	33.33%	Pitted/heavily pitted	11 52.38%
90°	1	4.76%		21
	21		<b>Platform Type</b>	
<b>Number of Visible Platforms</b>			Unprepared	2 9.52%
1	4	19.05%	Simple	19 90.48%
2	15	71.43%		21
3	2	9.52%	<b>Condition</b>	
	21		Patinated	6 28.57%
<b>Platform Stage Analysis</b>			Fresh	15 71.43%
1	4	19.05%		21
2	14	66.67%	<b>Colour</b>	
3	2	9.52%	Greys	12 80.00%
4	1	4.76%	Browns	3 20.00%
	21			15
<b>Core Platform Type</b>			<b>Anvil supported</b>	1 4.76%
Bipolar	3	14.29%		
Blade	7	33.33%		
Flake	7	33.33%		
Non-specific	4	19.05%		
	21			
<b>Predominant Removal</b>				
Flake	9	42.86%		
Blade	7	33.33%		
Mixed	5	23.81%		
	21			

Table 1: Attribute analysis of the cores.

	L mm	B mm	Th mm
Maximum	34	27	26
Average	23.33	20.00	15.43
Minimum	15	13	10
STDEV	4.80	4.32	3.94
Mode	24	24	13
Coefficient variation	0.21%	0.22%	0.26%

**Table 2: Metric data from the analysis of the cores.**

## **Discussion**

The technological and attribute analysis of the Holm Park assemblage highlights broad common differences to the cores from other Mesolithic surface collections from Ballantrae (cf. Wright 2012), namely those by Edgar and Muirfield (Edgar 1939; Lacaille 1945), Gray (1956) and MacNeill (1965). Minor variances are noted with the increased incidence of flake platform cores and a corresponding reduction in non-specific platform cores, an increase in the utilisation of medium sized flint pebbles, and a higher percentage frequency in the exploitation of beach pebble resources.

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