

17. THE LITHIC ASSEMBLAGE

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The lithic assemblage from the excavations at Croy Hill comprises 19 pieces of chipped stone.

17.1 Methodology

The methodology, type and attribute terminologies employed for the analysis of the lithics from Croy Hill follows the format devised and adopted for the *Southern Hebrides Mesolithic Project* (Finlayson et al 1996; 2000). References to specific artefacts below refer to the catalogue numbers in Table 17.1.

17.2 Raw materials

Flint dominates the assemblage: 15 lithics representing 78.95%. The other raw materials present are chert (15.79%) and tuff (5.26%).

There are no known flint sources at Croy. The nearest sources of drift flint are recorded at Kilwinning in Ayrshire, Wormit in Fife and Lammerlaw in Berwickshire. Blue-grey flint is noted at Wormit and grey and black flint at Lammerlaw (Wickham-Jones & Collins 1977: 11). There are nine fresh flint artefacts, of which eight are grey and one is blackish grey. As flint nodules eroding out of the offshore cretaceous sediments are generally of grey hues (Hall 1991: fig 3) this may indicate the use of beach pebble resources. However, caution needs to be taken when assigning the source of flint on the basis of colour alone. Five flint artefacts present with a cortex. One has a pitted cortex which may indicate the use of beach pebbles (cf Wright 2012). The remainder have a smooth and chalky cortex that has been rolled smooth and hard, suggesting that these pieces may have derived from local fluvio-glacial sources, although the movement of raw materials from elsewhere cannot be entirely discounted.

17.3 Condition and character

Thirteen (68.42%) of the lithics are fresh; 31.58% are burnt. The frequency of burnt pieces is probably understated (Finlayson 1990: 53).

The character of the assemblage and the percentage frequencies of artefact types are shown in Table 17.2.

17.4 Primary technology

The unmodified artefacts comprise one flint core fragment, six flakes, one flint blade and one chert-tested split pebble.

The only products of a bipolar reduction strategy are the chert-tested split pebble (7) (Illus 17.1), and a secondary, irregular flint flake (11). Generally, bipolar blanks will be under-represented because not all debitage products will present with attributes associated with a bipolar reduction strategy (Kuijt et al 1995: 117).

The blanks produced by platform reduction comprise two flint flakes (12 and 14), one flint flake fragment (15), one chert flake fragment (1) (Illus 17.1), one tuff flake fragment (6) (Illus 17.1), and one flint blade (16). The blade is regular and all of the flakes are irregular. Blanks with a straight edge of less than 10mm are classified as irregular (Wickham-Jones 2004: 71).

There are five blanks where it is possible to determine the classification of the bulb of percussion. The use of a soft hammer is suggested for four of them based on the attributes of the bulb: one diffuse, one flat and two with lips. The tuff flake fragment (6) has a pronounced bulb of percussion with a rippled ventral surface indicating the use of a hard hammer. It has been struck from a Group VI Great Langdale polished stone axe. All five of the blanks, where it is possible to determine the striking platform, have a simple or plain platform.

17.5 Secondary technology

All of the modified artefacts are flint and may be summarised as two composite tool forms (5 and 9), two denticulates (3 and 8), two scrapers (4 and 10), a bifacial 'knife' (2) and a barbed and tanged arrowhead (13).

► 2. Bifacial 'knife' (Illus 17.1)

The artefact has been modified from a secondary, irregular, bipolar flake. There is bifacial (ie direct and inverse), semi-invasive retouch to the left-hand side from the lower proximal to the medial. Below this, from the medial to the distal end, is inverse, short, scalar retouch. The quality of retouch is poor and may be described as perfunctory to create a cutting edge.

Table 17.1 Catalogue of the lithic assemblage

Catalogue	Context	Material	Reduction	Condition	Type
1	AAA topsoil over pre-fort enclosure	chert	platform	fresh	flake
2	BBB topsoil over pre-fort enclosure	flint	bipolar	fresh	bifacial 'knife'
3	CCC topsoil over pre-fort enclosure	flint	bipolar	fresh	denticulate
4	CCC topsoil over pre-fort enclosure	flint	platform	fresh	scraper
5	LAL early linear gully, <i>vicus</i>	flint	bipolar	fresh	composite – 'knife' and scraper
6	CCH pre-fort enclosure ditch	tuff	platform	fresh	flake fragment
7	CCC topsoil over pre-fort enclosure	chert	bipolar	fresh	tested split pebble
8	LAA topsoil over <i>vicus</i>	flint	platform	fresh	denticulate
9	LBD trackway drainage ditch, <i>vicus</i>	flint	bipolar	fresh	composite – scraper
10	LBD trackway drainage ditch, <i>vicus</i>	flint	platform	burnt	scraper
11	LAA topsoil over <i>vicus</i>	flint	bipolar	burnt	flake
12	LBT trackway drainage ditch, <i>vicus</i>	flint	platform	burnt	flake
13	LAA topsoil over <i>vicus</i>	flint	platform	fresh	barbed and tanged arrowhead
14	LBW junction of bypass road/trackway drainage ditch, <i>vicus</i>	flint	platform	burnt	flake
15	LCR early linear gully, <i>vicus</i>	flint	platform	burnt	flake fragment
16	RAA/RAE topsoil, <i>vicus</i> , Area R	flint	platform	burnt	blade fragment
17	QAT upper level of fortlet rampart	flint	platform	fresh	flake with edge damage
18	LBT trackway drainage ditch, <i>vicus</i>	flint	platform	fresh	core fragment
19	QAO topsoil over fortlet	chert	platform	fresh	blade fragment with edge damage

Table 17.2 Character of the lithic assemblage

	Total	Flint	Chert	Tuff
Tested split pebbles	1		1	
Core fragment	1	1		
Flakes	7	5	1	1
<i>Secondary</i>	2	2		
<i>Tertiary</i>	5	3	1	1
Blades	2	1	1	
<i>Tertiary</i>	2	1	1	
Modified	8	8		
Total	19	15	3	1

► **3. Denticulate (Illus 17.1)**

A medial fragment of a bipolar flake has fine, short, abrupt trimming/blunting retouch to the right-hand side to create a denticulated edge. There is no evidence of edge damage.

► **4. Scraper (Illus 17.1)**

A short convex scraper with direct, semi-invasive, stepped scalar retouch across the greater part of the dorsal surface.

► **5. Composite (Illus 17.1)**

An irregular cutting edge has been crafted on the left-hand side of a bipolar flake. This was achieved with bifacial, semi-abrupt retouch, which may be said to be expedient and of poor quality.

Abrupt, scalar retouch to the right side of the flake has created two separate concave scraping edges. One is from the proximal to the lower proximal and the other from the lower proximal to the upper distal. There is a relatively straight scraping edge from the upper distal to the distal end, which is the result of semi-abrupt, scalar retouch.

► **8. Denticulate (Illus 17.1)**

The denticulate has been modified from a tertiary, irregular flake fragment. The proximal end is missing. At the left-hand side from the break to the distal end is a denticulated edge, which has been created by bifacial, abrupt, scalar retouch.

► **9. Composite**

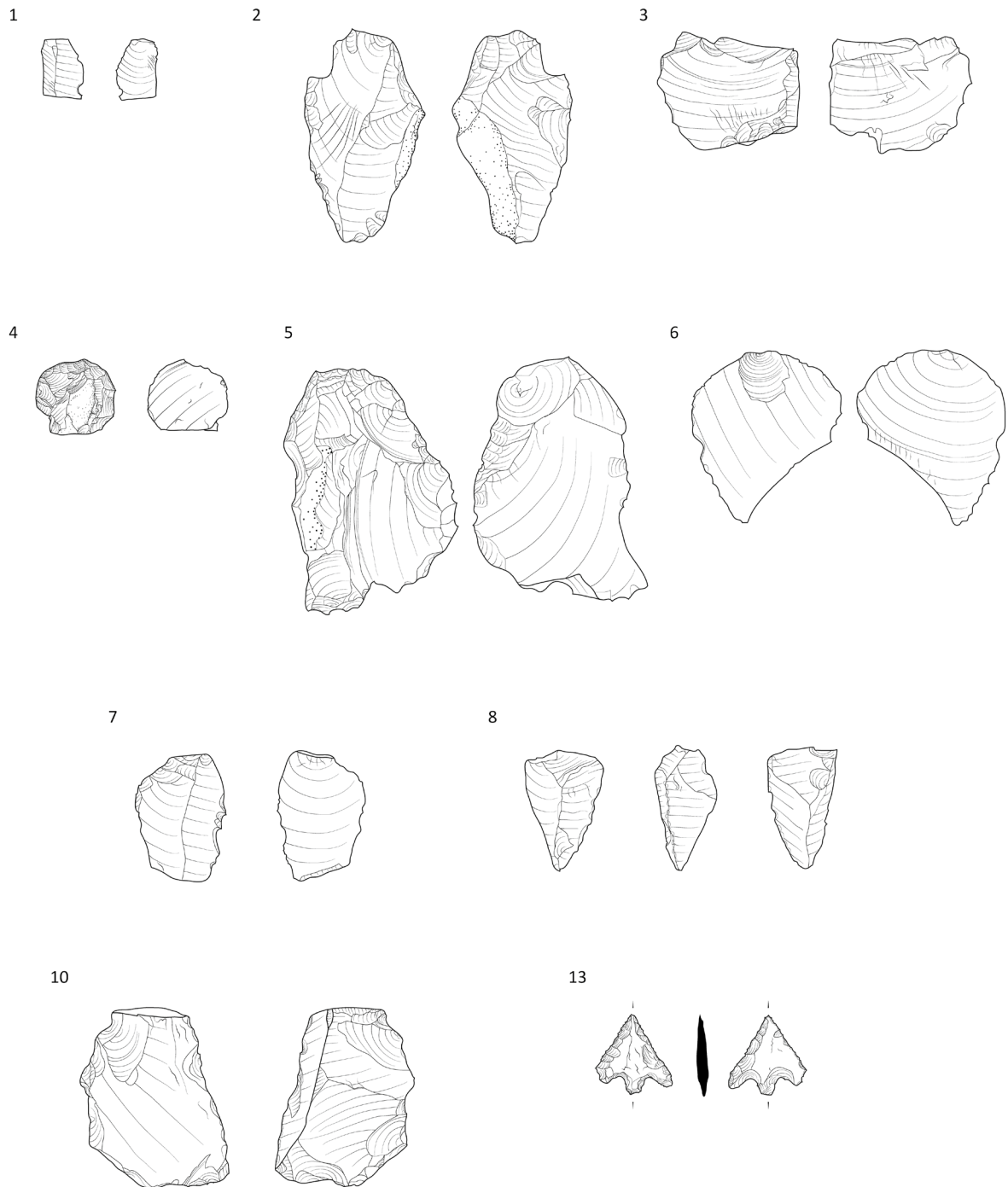
The left-hand side of a secondary, irregular, bipolar flake has a direct, semi-invasive, scalar retouch to create a cutting edge from the lower proximal to the distal end. There is direct, semi-invasive, scalar retouch which has produced a scraping edge from the proximal to the lower proximal.

There are two shallow concave scraping edges on the left-hand side of the artefact. There were two flake-shaping removals from the ventral surface prior to the application of direct, semi-invasive, scalar retouch to create the scraping edges which are located from the lower proximal to the upper distal.

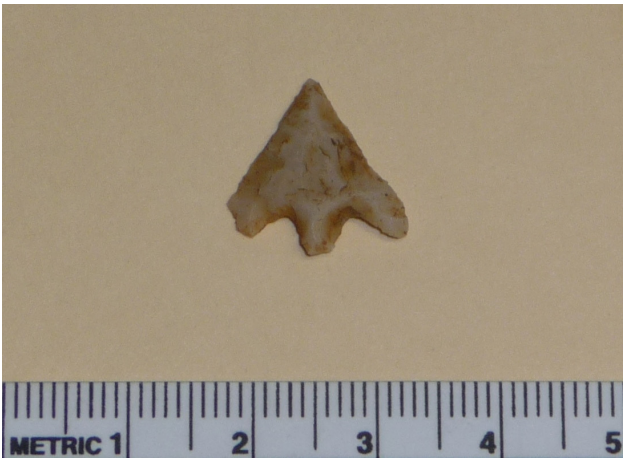
► **10. Scraper (Illus 17.1)**

This artefact is a modified tertiary, burnt flake. On the right side is alternate, bifacial, semi-invasive, scalar retouch at the medial. The edge has been trimmed/blunted from the medial to the distal end. There is inverse, semi-invasive, scalar retouch creating an irregular scraping edge from the lower proximal to the upper distal of the left-hand side. The retouch to sides of the artefacts is generally of poor quality and may be described as expedient.

An angled scraping edge has been created at the distal end by direct, semi-abrupt, scalar retouch.



Illus 17.1 Lithics



Illus 17.2 Barbed and tanged arrowhead (013)

► **13. Barbed and tanged arrowhead (Illus 17.1 and 17.2)**

One of the barbs is broken. According to Green's (1980) typology the barbed and tanged arrowhead is classified as small and Kilmarnock by type.

17.6 Edge damage

► **17. Flint flake fragment**

The flake is tertiary, irregular and fresh. It was struck from a platform core with a simple platform and using a soft hammer. There is an irregular denticulated edge to the right-hand side. A macroscopic examination cannot ascertain if this has been caused by use or as a result of its detachment from the core.

► **19. Chert blade**

The blade is tertiary, regular and fresh, and removed from a platform core using a soft hammer. The striking platform was simple. There is edge damage to the left-hand side that may be as a result of irregular proximal spalling when detached from the core.

17.7 Discussion and summary

The stratigraphic context of the artefacts recovered from Croy Hill may be said to derive from unknown taphonomic processes and events.

The Kilmarnock-type barbed and tanged arrowhead (13) (Illus 17.1 and 17.2) can be ascribed

to the Bronze Age period (Edmonds 1995; Green 1980). Six sherds of beaker pottery were also recovered during the excavations at Croy Hill (see 16.1, above) and it is possible that, together with the arrowhead, these may have come from a disturbed beaker burial. Typology may also assign the rounded convex scraper (4) to the Bronze Age (Edmonds 1995: 159).

The tuff flake fragment (6) (Illus 17.1) was struck from a Neolithic Group VI Great Langdale polished stone axe. The structured disposal of fragments of a Group VI polished stone axe in a pit has been noted at Carzield, Dumfriesshire (Maynard 1993: 27). Single Group VI fragments have been recovered from a number of Early Neolithic pits at Maybole, Ayrshire (3780–3650 BC [SUERC-18866]) (Becket & MacGregor 2012: 54–6); Snabe Quarry, Drumclog, South Lanarkshire (3766–3632 BC [SUERC-50160]) (Kilpatrick 2015: 11); and the Strathearn and Environs Royal Forteviot excavations at Wellhill in 2015, where carbonised residue was dated to 3766–3652 BC [SUERC-66247] (Wright & Brophy in prep). A flake from a Graig Lwyd, Penmaenmawr Group VII polished stone axe and a scraper made from a flake from a Group VI axe were recovered from the surface at Cairnpapple, West Lothian (Piggott 1948: 102–3).

The tuff flake raises a number of interesting questions whose answers are elusive. For example, was the flake struck from the axe as part of its ritual decommissioning prior to a structured disposal and, if so, why was the flake not part of the fragments for that disposal? Conversely, is the flake residual from a disturbed pit feature? Secondly, was there a utilitarian transformation of the axe into a core to produce blanks either for modification or use without modification? Thirdly, when was the flake struck from the axe? The evidence from Maybole and elsewhere would indicate a Neolithic event.

The larger artefacts, such as the composite tools (5 and 9), scraper (10) and bifacial 'knife' (2), generally display poor-quality retouch and can be described as perfunctory. Apart from the bifacial, they could be classified as irregular, which tentatively may suggest a Late Neolithic provenance (Edmonds 1995).