4. FINDS AND ENVIRONMENTAL EVIDENCE

The limited finds assemblage and the environmental evidence provide both some chronological resolution and an indication of activities taking place on site. The majority of the finds date to the Neolithic and were concentrated within a small number of features. The earlier prehistoric finds include a ceramic assemblage containing both Early and Late Neolithic vessels which have been analysed in detail. Alongside the environmental assemblage, which indicated the presence of spelt in the Neolithic period, this evidence enables a fuller picture of the earlier prehistoric activity to emerge.

4.1 Prehistoric finds

The finds assemblage from the site included prehistoric pottery, lithics, coarse stone tools and a small quantity of industrial waste (Table 2). The lithic assemblage, totalling 67 pieces, was composed primarily of red-brown, yellow-brown, grey and cream flint. The majority of the pieces were small undiagnostic chips, and only four tools could be identified. Two scrapers, a piece with an edge retouch and a denticulate piece were recovered. Only the denticulate piece, recovered from Pit 1478 along with sherds of Grooved Ware, is chronologically distinctive, dating to the Neolithic (Koonce & Lochrie 2020: 12). In addition to debitage, three stone tools were also recovered from the site. The distinctive polished stone axe from Pit 504 is discussed in more detail below (see 4.3 'Polished stone axehead'); a possible stone rubber was also recovered from this context. The grey fine-grain sandstone or mudstone rubber had a rectangular section and possible traces of wear on one face. The third stone tool was a sub-triangular piece of coarse stone which was recovered from Post Hole 1365 of Roundhouse 3. This has been interpreted as a possible fragment of saddle quern, but there are no traces of wear, and it was clearly used as packing in this context (ibid: 14). The most significant find was a small fragment of bangle made from a black organic-rich stone recovered from Pit 1058 (Illus 13). The curving fragment has a probable lentoid section and was too small to accurately measure the diameter. This type of

Illus 13 Pit 1058. (© Headland Archaeology (UK) Ltd)

bangle is typical of the Late Bronze Age to Iron Age (ibid). Other than the bangle, the assemblage lacks any chronologically distinct later prehistoric finds, and there is only very limited evidence for nearby metalworking in the form of possible hammerscale and slag spheres retrieved from magnetic residues. This material, created through iron smithing, was found in such low concentrations that it cannot be viewed as indicative of metalworking on the site. Several pieces of modern pottery and glass were found across the site, with some likely to be intrusive (ibid: 15).

4.2 Prehistoric pottery

Owain Scholma-Mason

The ceramic assemblage weighed 2.361kg and included 361 sherds and 230 fragments (under 10mm). Three different pottery traditions and four broad periods of activity were represented (Table 3).

The earliest pottery from the site was recovered from Pit 504, which contained sherds of a 'modified' Carinated Bowl (Vessel 1). A total of five later Neolithic Grooved Ware vessels (Vessels 3–7) were recovered from Pit 1478, located to the north-west of Pit 504, alongside a sherd from a middle-late Neolithic Impressed Ware vessel (Vessel 2). A single possible Grooved Ware rim sherd (Vessel 8) was recovered from a section of the palisade enclosure (Palisade 1722). Finally, a small probable crucible sherd dating to the Bronze Age or later, associated with the fragment of black stone bangle, was recorded from Pit 1058.

Table 2 Summary of finds by feature

Feature	Context	Pottery	Lithics/Stone	Industrial waste	Other finds
Prehistoric pits	Pit 504	Carinated Bowl	Polished stone axehead. Stone rubber.	<0.5g fuel ash slag	
	Pit 1478	Impressed Ware Grooved Ware	46 pieces of debitage including a possible denticulate.	<0.5g fuel ash slag & possible hammerscale	
	Pit 1058	Crucible Fragment	1 piece of debitage.		1 bangle fragment
Palisade	1559 (E)	1 sherd modern Whiteware		<0.5g fuel ash slag	
	1677 (E)			<0.5g fuel ash slag	
	1722 (SE)	Grooved Ware and fragments	2 pieces of debitage.	<0.5g fuel ash slag & possible slag sphere	
	1795 (W)	1 sherd modern Red Earthenware	1 piece of debitage.	<0.5g fuel ash slag	2 small fragments green glass. 1 black glass bead. Both modern.
Features within the palisade	Pit 1529		2 pieces of debitage. Burnt.		
	Gully 1543		1 piece of debitage.	<0.5g fuel ash slag	
	Pit 1575		2 pieces of debitage. Burnt.	1g fuel ash slag & possible hammerscale.	1 light blue glass sherd. Modern.
	Pit 1627		1 piece of debitage. Burnt.	<0.5g fuel ash slag	1 very small light blue glass fragment. Modern.
	Post Hole 1652		1small sub-circular scraper.		
	Pit 1705		1 piece of debitage. Burnt.	<0.5g fuel ash slag	

Feature	Context	Pottery	Lithics/Stone	Industrial waste	Other finds
Roundhouse 1	Ring Groove 1043			<0.5g fuel ash slag & possible hammerscale	
	Ring Groove 1143			<0.5g fuel ash slag & possible hammerscale	
	Post Hole 1114			<0.5g fuel ash slag & possible hammerscale	1 degraded fragment of possible brick/ tile
Roundhouse 2	Entrance Deposit 1234			<0.5g slag. Undiagnostic.	
	Post Hole 1279		1 piece of debitage.	<0.5g fuel ash slag	
	Post Hole 1287	1 sherd (body) prehistoric coarseware.		<0.5g fuel ash slag	
	Post Hole 1329			<0.5g possible hammerscale	
Roundhouse 3	Interior Layer 1231			<0.5g fuel ash slag	
	Pit 1277	4 body sherds prehistoric coarseware. Fragment modern Whiteware.	1 piece of debitage.	<0.5g fuel ash slag	
	Post Hole 1365				Possible fragment of saddle quern
Roundhouse 4	Post Hole 1707		2 pieces of debitage.	<0.5g fuel ash slag	
	Post Hole 1740			<0.5g possible hammerscale	
	Wall Slot 1742		2 pieces of debitage.		
Roundhouse 6	Interior Pit 1502		A small scraper and flake.	<0.5g possible slag sphere	

Feature	Context	Pottery	Lithics/Stone	Industrial waste	Other finds
Roundhouse 7	Central Pit 1133			1g fuel ash slag & possible hammerscale	
	Central Pit 1135		1 piece of debitage.	3g fuel ash slag & possible hammerscale	Small fragment of green glass. Modern.
Four-Post Structure	Post Hole 1049				1 very small fragment of colourless glass
Rectangular Structure 1	Pit 1408	1 sherd prehistoric coarseware			
Pits	Pit 1070				Iron nail.
	Pit 1167	1 sherd modern Whiteware		<0.5g fuel ash slag	
	Pit 1422			<0.5g fuel ash slag	
Other	Unstratified.				Victorian type A3 shilling
	Subsoil 1001				Iron strap

Table 3 Summary of the prehistoric pottery assemblage by vessel

Vessel	Context	Feature	Type
V1	Fill 503	Pit 504	Carinated Bowl
V2	Fill 1480	Pit 1478	Impressed Ware
V3	Fill 1480	Pit 1478	Grooved Ware
V4	Fill 1480	Pit 1478	Grooved Ware
V5	Fill 1480	Pit 1478	Grooved Ware
V6	Fill 1479, 1482	Pit 1478	Grooved Ware
V7	Fill 1480	Pit 1478	Grooved Ware
V8	Fill 1723	Palisade 1722	Rounded rim? Grooved Ware?
V9	Fill 1059	Pit 1058	Crucible

4.2.1 Methodology

The pottery analysis was carried out using a hand lens and was recorded according to standards set out by specialist bodies (PCRG 2010). Vessel numbers have been used to indicate when multiple sherds belong, or may belong, to the same pot. Given the highly fragmentary state of the assemblage, it has not been possible to assign all sherds to a vessel number. Measurements are in millimetres (mm) and grams (g) unless stated otherwise with estimated rim diameter abbreviated to ERD.

4.2.2 Early-middle Neolithic pottery

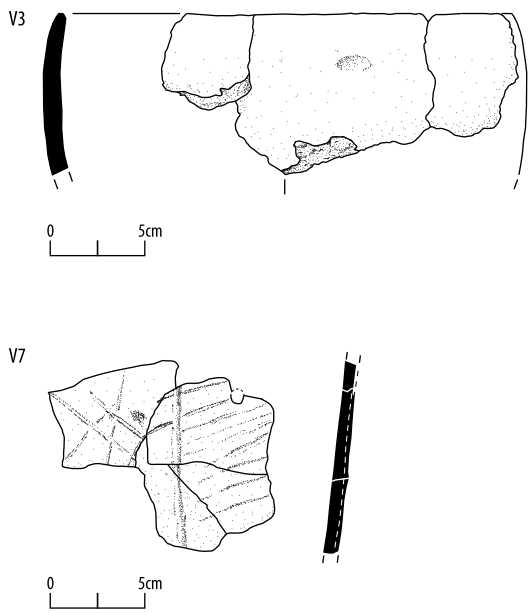
Vessel 1, from Pit 504, comprised 11 sherds and around 50 further crumbs, all from the body of a 'modified' Carinated Bowl. The exterior of the vessel had been burnished and decorated with multiple incised lines. The vessel was thin walled, *c* 4mm, with a generally fine fabric. Carinated Bowls date to the Early Neolithic, with 'modified' Carinated Bowls, emerging during the second quarter of the 4th millennium (Sheridan 2007, 2016). The lack of diagnostic sherds prohibits close comparison with other examples within the tradition. Concentrations of Carinated Bowl pottery have been recorded in recent years through the commercial work around Culduthel, 1.3km to the south-west of this site (Hatherley & Murray 2021; Peteranna 2011; Murray 2008). Radiocarbon dating of birch and cereal charcoal from the pit gave a range of 3520–3100 cal BC (SUERC-95766 & SUERC-95767; Table 1), which is in line with the general currency of Carinated Bowls (Sheridan 2016: 193).

Three sherds from the rim of an Impressed Ware vessel with an ERD of 140mm, Vessel 2, were recovered from the central fill (C1480) of Pit 1478. The rim was formed by applying a second piece of clay to the exterior to create a thickened exterior bevel. Comparable rims are known among the Impressed Ware tradition and are generally dated to 3300–2900 BC (MacSween 2008: 181). The term Impressed Ware itself encompasses a range of distinct regional variations (MacSween 2007; Sheridan 2016). Examples of Impressed Ware, while rare, are known from the region, including at Kinbeachie on the Black Isle (Barclay et al 2001) and Culduthel, 1.3km to the south-west of this site (van Wessel 2012).

4.2.3 Middle-late Neolithic pottery

Sherds from a minimum of five Grooved Ware vessels (Vessels 3–7) were recorded from Pit 1478. The vessels were recovered from the central fill (C1480), where the description of the context noted that the sherds appeared to be laid horizontally within the deposit. Vessel 3, represented by 19 sherds (and four further crumbs) constituting the rim and part of the body, had been a large, tub-shaped thick-walled vessel (up to 12mm thick) with an ERD of *c* 240mm (Illus 14). It had a rounded rim, and the exterior of the sherds was plain. Vessel 4, represented by five sherds, was similar in form to Vessel 3 but had a pointed rim, with an ERD of 240mm and an average wall thickness of 12mm. As with Vessel 3, no signs of decoration were noted on the exterior, though traces of wiping marks, where the surface had been wiped with grass or straw prior to firing, were found. The surfaces may have been covered in a thin slip through which fragments of rock temper protrude. Thin slips were noted among sherds of Grooved Ware from Culduthel (Peteranna 2011: 38). Vessel 5, represented by nine sherds, comprised the upper body and part of the rim of a bucket-shaped vessel with a gently squared-off rim that had an ERD of 260mm. Below the rim are two shallow horizontal grooves. Vessel 6 was highly fragmentary, with three sherds from a probable pointed rim and a single body sherd decorated with a pinched-up cordon. The rim was too fragmentary to measure. The final vessel, Vessel 7, comprised eight sherds with traces of a pinched-up cordon and incised diagonal lines, forming a probable lattice, recorded from the same pit (Illus 14). Given the fragmentary nature of the assemblage for Vessel 7, it is possible that the sherds could belong to one of the other Grooved Ware vessels from the pit. There is a post-firing perforation just below the cordon; this feature would have been one of a pair of holes through which a cord would have passed to prevent a crack widening.

Another possible Grooved Ware vessel, Vessel 8, was recovered from the fill of the palisade ditch and is represented by a thick rounded rim fragment.



Illus 14 Vessel 3 and Vessel 7. (© Headland Archaeology (UK) Ltd)

The fabric of the sherd is similar to those recorded from Pit 1478 but is otherwise undiagnostic.

Grooved Ware typically dates to the later 4th and early 3rd millennium BC and generally comprises a range of decorated and undecorated bucket- and tub-shaped vessels. Grooved Ware is well represented within the Inverness region (see Scholma-Mason 2018: 131–6 for an overview). A number of examples have been excavated from across the region, including at Culduthel (Peteranna 2011; Hatherley & Murray 2021); Raigmore (Simpson 1999), 3.4km to the north-east of the site; and Milton of Leys (Conolly & MacSween 2003) 2.6km to the east.

4.2.4 Other pottery

Vessel 9 recorded from Pit 1058 comprised a small rounded rim sherd. Given the association between Vessel 9 and the fragment of black stone bangle, it is probable that this vessel dates to the Bronze Age or later and may be from a small crucible. Small fragments of crucibles and evidence of metalworking were recorded at Culduthel (Hatherley & Murray 2021) and Seafield West (Cressey & Anderson 2011). Six sherds of undiagnostic pottery, with an average weight of 1g, were also recovered from features associated with the roundhouses (Table 2).

4.2.5 Discussion of prehistoric pottery

The pottery assemblage from Lower Slackbuie demonstrates that the site was in use during the late 4th to early 3rd millennium BC. The earliest pottery found on site are the sherds of 'modified' Carinated Bowl from Pit 504. The abraded and fragmentary nature of these sherds suggests that they had been moved around or were open to elements before slumping or being placed in the pit along with fuel ash slag and a polished stone axe. The sherds of Impressed Ware indicate activity in the middle-late Neolithic, although it is unclear if this reflects continuous occupation or if there was a hiatus in activity following the Early Neolithic.

The final ceramic phase is represented by sherds of Grooved Ware vessels from Pit 1478. Grooved Ware is found in a variety of contexts, often associated with timber and stone circles as well as large-scale gatherings and feasts (MacSween 1995; Sheridan 2004; Thomas 2010). The spread of Grooved Ware in the early 3rd millennium BC, alongside other distinct forms of material culture, reflects the broad interregional networks across Britain and Ireland (Edmonds 1995: 29; see also Copper 2020). Current radiocarbon dates suggest that Grooved Ware was in use after 3000 BC with Grooved Ware from Culduthel dated to 2910–2670 BC (Murray 2008; Copper 2020).

Grooved Ware has traditionally been split into four sub-styles: Woodlands, Clacton, Rinyo and Durrington Walls (Wainwright & Longworth 1971), although the veracity of this classification has been called into question in recent years (Garwood 1999; MacSween 2007: 371, 2016: 248–9; Copper 2020). The decorated sherds from Pit 1478 are reminiscent of the Durrington Walls style, which is characterised by the use of incised decoration and vertical or horizontal cordons (Gibson 2002: 86). Similar motifs were noted among the Grooved Ware from Milton of Leys, which includes examples of vessels decorated with vertical lines and twisted cord (MacSween 2003). At least two of the recorded vessels from Lower Slackbuie appear to be undecorated, although given the high degree of fragmentation, the possibility that these sherds derive from decorated vessels cannot be wholly ruled out. The occurrence of undecorated Grooved Ware alongside decorated Grooved Ware, though,

is not unusual, with other examples of mixed assemblages recorded across Inverness (Scholma-Mason 2018: 180–88). This includes the occurrence of undecorated Grooved Ware at Raigmore. There, as at Lower Slackbuie, sherds of undecorated Grooved Ware were found alongside examples of decorated vessels (Simpson 1999).

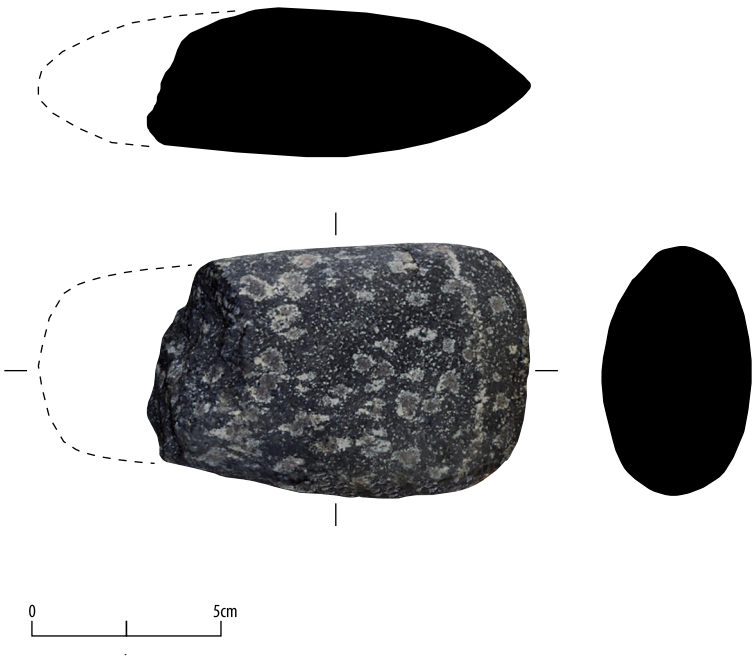
No Early Bronze Age pottery was recorded from the site, although finds of Beaker pottery have been noted from around Culduthel, including probable domestic examples (Hatherley & Murray 2021; see also Scholma-Mason 2018: 369–442). The only evidence for later prehistoric activity comes in the form of a small sherd, possibly from a crucible, which could indicate small-scale metalworking on site.

4.3 Polished stone axehead

Hugo Anderson-Whymark

The excavation of a small pit, Pit 504, revealed a polished stone axehead (Illus 15) positioned at the base of the pit, and sherds of modified Carinated Bowl were recovered from the surrounding fill (Illus 15). Charred material from the fill provided an earlier Neolithic radiocarbon date for the feature (Table 1). The axehead is manufactured from a visually striking, high temperature (granulite facies) mafic rock with retrograde symplectic textures around the garnet porphyroblasts (Rachel Walcott pers comm). This rock outcrops in north-west Scotland, with exposures at Ness, Lewis and around Scourie on the mainland. Bedrock exposures extend intermittently from Scourie to the south of Ullapool, and cobbles of this rock are more widely spread in glacial deposits. However, glacial movement in the region went towards the west, indicating that the raw material must have been obtained from the north-west coast, some 75–115km to the north-west of Lower Slackbuie, or perhaps further afield in Lewis.

The axehead is broken at its butt-end, but the surviving fragment represents approximately two-thirds of the original artefact; it measures over 81.3mm long by 61.9mm wide at blade edge, tapering to 50.5mm wide at break, by 35.3mm thick, and it weighs 359.5g. The axehead has an ovoid cross-section with slight edge facets. The surface is finely ground to a moderately bright polish, removing all trace of earlier manufacturing techniques; however, the blank must have been formed by pecking, as this rock is not suitable for flaking. The facets are more coarsely ground than the rest of the surface, particularly toward the break, probably reflecting adjustments for hafting during the artefact's life.



Illus 15 Polished stone axehead. (© Headland Archaeology (UK) Ltd)

The fracture is preserved in exceptionally fresh condition, indicating that it is likely to have occurred shortly before deposition. The angle of the break indicates the break resulted from an impact to the side of the artefact, but it is not possible to determine if this was deliberate damage or an accidental break against the haft caused by a misdirected blow during use.

4.3.1 Discussion

This axehead is not manufactured from one of the common rocks that have been classified by the Implement Petrology Group, and no other axeheads of this distinctive rock are known to the author (Clough & Cummins 1979, 1989; Davis & Edmonds 2011). Contemporary parallels for the use of this rock type are not known, but five Late Neolithic maceheads from Orkney of various forms are manufactured from an identical granulite (Anderson-Whymark et al 2017). Two of these maceheads are only broadly provenanced to Orkney (Thames Pestle form, Stromness Museum A286; Ovoid 'B' form from James Walls Cursiter's Collection), and one is a topsoil find that was located to the north-west of the Stones of Stenness (Orkney Pestle). The two remaining examples were found on archaeological excavations of Late Neolithic occupation sites. A fragmentary Ovoid 'C' macehead was recovered from the later Neolithic Phase 1 deposits at Tofts Ness (Clarke 2007: 311), while an unfinished cushion macehead was found in Late Neolithic midden at the Ness of Brodgar (Trench X, SF 39562 in Anderson-Whymark 2020a, 2020b). As with the axehead under consideration, the direction of glacial movement indicates that the maceheads in Orkney were transported by people, either as finished maceheads or raw material. However, we should be wary of drawing a straight line between the source of this granulite on the north-west coast and Inverness or Orkney. The movement of these tools from source to place of deposition is unlikely to have been direct and undertaken in a single event.

The use of such a visually striking rock sourced from a distant location is an indication that axeheads and maceheads were not just functional tools. Aesthetics mattered and the biography of each object – its journey and the hands it passed through – was no doubt passed on as oral history through the artefact's life. It is unclear if the breakage of this axehead was accidental or deliberate, but the freshness of the break indicates that it occurred shortly before deposition of the axehead at the base of a pit or post hole. Such deposits, including complete and fragmentary axeheads, are a common feature of Neolithic pits across Britain and Ireland, and they reflect the intimate relationship of daily practice and beliefs among Neolithic communities (Anderson-Whymark & Thomas 2012).

4.4 Landscape and environment

Laura Bailey

The archaeological site of Lower Slackbuie is located on the outskirts of Inverness. It sits at the foot of the north-west facing slopes of Drummossie Muir along the prominent sand and gravel Culduthel ridge. The terrace is formed by the edge of the Great Glen fault and is a continuation of the bank of Loch Ness (Hatherley & Murray 2021). This area enjoys fertile soils and a microclimate that belies its northerly latitude. Mountains to the south and the west take the worst of the prevailing weather (ibid) and provide conditions favourable for agriculture (Richards 1999: 9–10). The samples taken from the site at Lower Slackbuie contained cereal grain, weed seeds, hazelnut shell fragments and wood charcoal.

The Neolithic environmental assemblage from Lower Slackbuie was dominated by naked barley (*Hordeum vulgare* var. *nudum*) and hazelnut (*Corylus avellana*) shell (Table 4), which fits in well with the common subsistence strategy observed in the Neolithic economy of Scotland (Bishop et al 2010). Naked barley was the dominant cereal crop cultivated in Neolithic Scotland, and it has been recorded on a large number of sites across Scotland (ibid). The archaeological investigation undertaken at the neighbouring Asda supermarket development site (Garry 2015) provided a similar archaeobotanical assemblage, where high concentrations of hazelnut shell, carbonised cereal grain and evidence for possible burnt grain stores were recorded. In addition to barley and hazelnut shell, four flax (*Linum usitatissimum*) seeds were recovered from Neolithic Pit 504 at Lower Slackbuie. A further feature, Fill 1168 of Pit 1167, also yielded flax seeds. The presence of modern pottery from this feature, however, suggests that it was disturbed during later

Table 4 Summary of the environmental assemblage from the prehistoric pits

Context	Fill	Sample	Cereals	Weeds	Other	Charcoal
Pit 504	503	42	Barley (*Hordeum vulgare*) & Naked Barley (*c.f. Hordeum vulgare* var. *nudum*)	Sedge (*Carex sp.),* Common hemp nettle (*Galeopsis tetrahit*) & Flax (*Linum usitatissimum*)	Hazelnut shell (*Corylus avellana*)	Oak & Non-oak
Pit 1478	1479 1480 1482	32 30 31	Barley (*Hordeum vulgare*) & Bread/ club wheat (*Triticum aestivum* subsp. *compactum*)	Goosefoots/Oraches (*Chenopodium sp./ Atriplex sp.*) & Common hemp nettle (*Galeopsis tetrahit)*	Hazelnut shell (*Corylus avellana*)	Oak & Non-oak
Pit 1058	1059	5	-	-	-	Oak & Non-oak

agricultural activity, and the date of these flax seed remains is therefore uncertain. Nevertheless, we can be confident that flax was present at Neolithic Lower Slackbuie.

Flax occurs rarely on Neolithic sites, but instances have been occasionally recorded, such as in the timber halls at Balbridie (Fairweather & Ralston 1993), at Lockerbie (Hastie 2011) and at Achnasavil in Kintyre (Carter et al 1991). In the local area, 14 flax seeds were recovered from Early Neolithic pits at the Fortrose and Rosemarkie Waste Water Works (Fraser 2014). The presence of flax in Neolithic assemblages is very rare, so its recovery at Lower Slackbuie, albeit in small quantities, is of great importance. Flax was one of the first domesticated plants, being part of the first 'wave' of crops that spread out from Southwest Asia as part of the expansion of a Neolithic way of living (Harris 2015). Often overlooked in discussions of early crop agriculture owing to its rarity in the archaeological record, flax is a testament to the versatility of Neolithic crops – it provides oil and fibre suitable for a range of uses (Bond & Hunter 1987: 181; Dickson & Dickson 2000; Hastie 2011; Zohary et al 2012: 100).

The cultivation and processing of flax is time consuming and laborious (Andrews 1872; Hastie 2011: 23) requiring greater levels of management than other crops and thus indicating a considerable level of agricultural sophistication (Bishop et al 2010: 82). Flax was harvested by pulling the entire stem, it was then stooked in the fields or hung to dry. The seed boles were then removed and could be dried and stored as needed (Bond & Hunter 1987: 179). Fibre is obtained by submerging and weighing down the stems in water, or retting, for two to three weeks, to partially rot the stem and loosen the outer bark from the bast (the inner bark). This was commonly done using retting pits, but flax could also be soaked in ponds and rivers or laid out on fields to utilise the moisture from the morning dew. Bast fibres are the part of the plant used for linen production, and their preparation required several operations of 'scutching', or beating (Dickson & Dickson 2000: 253). Flax does not need to be dried by direct heat (Bond & Hunter 1987: 176). Indeed, fire drying flax has been described as a 'pernicious practice' that is very detrimental to the quality of the flax, by robbing it of its oily nature and producing a dry, harsh fibre (Andrews 1872: 20). A consequence of this lack of exposure to fire is that there is a low chance of flax seeds being preserved by charring, which in turn may partially explain the rarity of flax in the archaeological record. Flax seeds also have a narrower range of heating conditions under which they will be preserved when compared to some other common seeds, such as cereal grains, further reducing the likelihood they will survive intact on archaeological sites (Märkle & Rösch 2008).

Only a small number of flax seeds were recovered from Lower Slackbuie, and it is therefore difficult to

ascertain their intended use. It is possible that flax seeds may have become charred after falling from flax stems hung up to dry after the retting process (Dickson & Dickson 2000: 254). No direct evidence for linen production was found on site and such evidence is extremely rare in the archaeological record of Neolithic Scotland. Although stem fragments have been recovered from retting pits, flax fibres do not preserve well in the archaeological record (ibid: 253). No tools associated with linen production, spinning or weaving, such as spindle whorls for example, survive within the excavated area. Therefore, other explanations for the presence of flax might be considered. Finds of flax seeds around hearths have been interpreted as representing domestic use (ibid: 254). Although the flax seeds were not found around any hearths at Lower Slackbuie, it is possible that they may have been accidentally charred on a domestic hearth during pressing and processing of linseed oil and that they became incidentally or perhaps deliberately incorporated into the pit (Bishop et al 2010: 80) .

The Neolithic features at Lower Slackbuie appear to be an extension of the Neolithic activity in the wider landscape. The scale and importance of local flax production during the Neolithic is impossible to ascertain from the meagre remains, but the fact any flax remains were found at all may indicate that flax had some degree of significance at Lower Slackbuie. The incidence of flax, with the later possible cereal grain stores seen at a neighbouring site (Garry 2015), suggests a sophisticated and diverse economy at Lower Slackbuie.

The environmental assemblage associated with later contexts contained small quantities of a variety of cereals, including barley and oat grains along with oak and non-oak charcoal. Cereal was particularly abundant in both Pit 1133 and Pit 1135, located at the centre of Roundhouse 7, with both hulled (*Hordeum vulgare*) and naked barley (*Hordeum* var. *nudum*) identified. Occasional bread/club wheat (*Triticum aestivum* subsp. *compactum*), oats (*Avena sp*.) and emmer wheat (*Triticum dicoccum*) were also present. Animal bone preservation was poor across the site, with unburnt bone recovered from only four contexts. Heavily fragmented and indeterminate bone was recovered from both Pit 1408 and Post Hole 1418 of Rectangular Structure 1 and Post Hole 1740 of Roundhouse 4. A deer tooth was recovered from the fill of Pit 1058, from which the bangle and the crucible sherd were also recovered. Heavily fragmented and unidentifiable burnt bone, ranging from partially charred to fully calcined, was recovered in varying quantities from features across the site. A pig molar was recovered from Pit 1066, immediately south of Pit 1058, and a rib fragment was hand collected from Pit 1449 (Illus 2). The prehistoric communities at Lower Slackbuie appear to have made use of the fertile, well-drained soils, which may have provided excellent conditions for arable farming, including early flax production (Bond & Hunter 1987: 177).