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Four intact rotary quernstones (SF 01-04; Illus 22), a lightly used saddle quern or grinding stone (SF 12), and a roughout for a large rotary quern or millstone (SF 13; Illus 22E) were recovered from contexts associated with two post-built roundhouse structures. Although the recovery of querns, particularly quernstone fragments, is not uncommon in association with later prehistoric roundhouse settlements in the north and northeast Scottish mainland, the pattern of distribution recognised at Craggan is worthy of note, as is the recovery of a very large quern or millstone roughout. The group of completed and worn rotary quernstones comprise a very neatly placed arrangement of three intact rotary quernstones (SF 01-03; Illus 22A, B and C) which had been deposited at the base of the ring ditch of a Late Iron Age roundhouse (Structure C) and a fourth intact quernstone (SF 04; Illus 22D), which was recovered from the ring ditch of a Late Iron Age roundhouse (Structure A), with an early medieval date from the ring ditch. The close but evenly spaced arrangement of the quernstones within Structure C, was found to follow the curvature of the feature and the stones had clearly been intentionally deposited with care. Whether the decision made by the Iron Age occupants of the roundhouse to lay down these quernstones in this position had a pragmatic motivation - perhaps to re-surface the ring ditch and use the quernstones as paving stones - or was undertaken for more symbolic reasons is impossible to prove with absolute certainty but there is strong evidence from elsewhere in Scotland, and across Britain more broadly, of the purposeful positioning of both saddle and rotary querns within Iron Age structures. The positioning of the Craggan quernstones certainly is suggestive of purposeful deposition, perhaps at the end of the life of the roundhouse. This report aims to describe the form, function, and condition of the quernstones and present some context for their unusual deposition and placement.

# **7.1 Form**

Several forms of rotary quern are known to be in use in Scotland during the Iron Age, including

beehive-, bun-, and disc-shaped stones, which previous studies have demonstrated display regional distributions (MacKie 1971: fig 5), with disc querns predominantly being used in the north and west, and buns or beehives to the south and east (McLaren & Hunter 2009: 105). Disc querns continued in use from the early medieval period and into the early 20th century in some areas of Scotland (Fenton 1978: 387).

Disc-shaped querns are thin, wide stones with flat upper surfaces and three examples from Craggan (SF 01–03) conform to this type. They were intact, although one displays damage to the edge of the stone, and are recognised as basal stones due to their lack of handle sockets and the profile of the grinding surfaces. The lower quernstones have a central spindle socket which fully perforates the thickness of the stone. The spindle was an upright rod, typically of iron or wood, which would have connected the upper and lower stones during use and acted as the pivot around which or with which the upper stone would rotate. In most instances, the lower stone's spindle socket is conical and often shallow in depth, lacking evidence of wear to the interior of the socket, and thus indicating that the spindle was fixed into it. At Craggan, however, all three lower stones' spindle sockets fully perforate the disc, suggesting that these may have been adjustable, meaning that the distance between the upper and lower stones could be easily narrowed or widened by adjusting the height of the spindle from below using a simple mechanism (Mackie 1987: 5-8; 2007: 498), in a fashion very similar to more recent hand-mills used in the Northern Isles (Mitchell 1880; Fenton 1978: 389-90, 392-3).

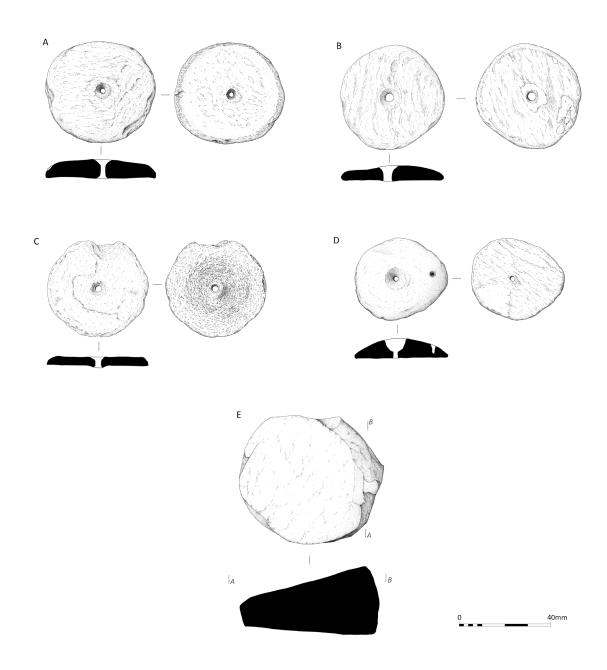
In contrast, the fourth worn quernstone from Craggan (SF 04) is an upper stone and can be classified as a low bun-shaped quern. Bun-shaped stones are typically smaller in diameter than disc querns, are much thicker in proportion to their diameter, and have distinct rounded upper surfaces. This upper stone is distinctly oval in plan, likely reflecting the original shape of the large waterrounded or glacial erratic small boulder it was cleaved from, and displays a well-worn vertical handle socket positioned towards the apex of one end on the longitudinal axis of the stone. This quern

is described here as a 'low' bun-shaped quern as it is very shallow and thin. It was probably never as thick as the more typical bun-quern examples but the stone has undoubtedly become thinner due to the loss of material from the grinding surface resulting from wear.

# 7.2 Wear

The four quernstones are worn from use, each displaying varying levels of wear and in one case, damage. This wear is observed in the form of

concentric abrasions and areas of polish which have built up on the smoother areas of the grinding faces as the result of rubbing against the cereal grains and the opposing stones' grinding surfaces during use. Lower stone SF 03 is particularly well-used as evidenced by the thinness of the stone, the build-up of polish, and abrasion from use, the distinct dished profile of the wide ring-shaped grinding facet and the subsequent creation of a raised lip around the perimeter of the face and central socket as a result of the loss of surface material from the grinding facet



Illus 22 Illustration of quernstones A: SF 01; B: SF 02; C: SF 03; D: SF 04, and rotary quern or millstone E: SF 13 (Orlene McIlfatrick)

through wear. This quernstone displays damage to one edge of the basal surface which has resulted in the loss of a large spall from the base and edge. Although the damage encroaches on the lip of the grinding face, it would not have been sufficient in practical terms to prevent the use of the quern. In contrast SF 02 has less pronounced signs of wear but the presence of rubbed and abraded areas of the grinding face demonstrate that it saw use prior to deposition.

The upper quernstone (SF 04) displays two notable aspects of wear. The first point of note is that the stone is a fairly dense mica-rich schist, which is not the best lithology to use for a quern as the stone tends to be friable and abrasion of the surfaces frequently causes the shedding of clasts and minerals during use. What can be seen on SF 04, however, is that the grinding face encompasses patches of a denser layer of quartzite. It appears that the stone was deliberately cleaved across a transverse vein of quartzite and it was this denser lithology that was utilised as the grinding surface, a selection choice also noted at Culduthel, Inverness (McGibbon 2021: 141). As so little of this valuable dense layer survives, it may well have been decided that the quernstone had come to the end of its use, resulting in its deposition.

#### 7.3 Decoration

The upper quernstone (SF 04) is the only one amongst the group to display any form of decoration. Although very shallow, a narrow pecked groove encircles the central hopper of the upper surface. This creates a very slight collar which stands proud of the surface around the hopper and feeder pipe, into which the grain would be poured during use. Although decoration on rotary quernstones is not typical, a study of examples in Scotland (McLaren & Hunter 2009) found them to be more common amongst the corpus than originally thought and enabled them to be classified into four main types (Types 1 to 4), whilst Types 1 and 2 could be further broken down into seven sub-categories. The Craggan upper stone conforms to Type 1a of this classification (ibid: 115) which represents the most common and long-lived type of decoration noted amongst this group.

## 7.4 Roughout

A very large and thick disc-shaped roughout for a rotary quern or millstone (SF 13; Illus 22E) was recovered from pit [037] which contained numerous fractured stones and cobbles. The roughout had been placed, flat-face upwards, towards the centre of the pit, sitting on top of and surrounded by various natural slabs and large water-rounded cobbles. It had been produced from a thick slab or split fragment of a large ovoid glacial erratic boulder which displayed crude fracturing around the circumference of one face and adjacent edge to create a roughly discshaped thick slab. Little further working is in evidence and the stone is unperforated. Although a number of these stones (eg SF 09, SF 12b) were initially thought to be further broken quernstone fragments only one, SF 12a, displayed any sign of use or wear. These stones were all different lithologies to the roughout. No evidence of in situ working within the feature was determined. Although rotary quernstones are common finds on Iron Age and later sites in Scotland, roughouts, partially worked or unfinished examples remain rare (McLaren & Hunter 2009: 106) due in part to issues of recognition. The substantial size of this example is unusual for a household rotary quern and is more likely to be a millstone although its unfinished condition means that this cannot be stated with confidence. An oat caryopses recovered from the fill of the same pit [037] the roughout was found in has been radiocarbon dated, providing the date range of the late 8th to late 10th century AD (cal AD 772-979 at 95%; SUERC-104044) offering rare and valuable evidence of quern or millstone production during the early medieval period.

## 7.5 Other items of worked stone

Deriving from the same pit, [037], as the roughout was a very lightly used small saddle quern or grinding stone (SF 12a) which displays a small poorly defined area of abrasion towards the centre of one flat face.

Although not worked in terms of evidence of wear or modified for use, a mica-rich schist cobble (SF 19) from posthole [082] (Structure D) was severely heat-affected across one face.

## 7.6 Context and deposition

At Craggan, the intact bun-shaped upper quernstone (SF 04) came from the infill (39022) of a ring ditch [39021] of post-built roundhouse Structure A. The three intact lower stones (SF 01–03) similarly came from the infill (3002) of the ring ditch [3001] of roundhouse Structure C. Both roundhouses are Late Iron Age in date. The even spacing and careful placement of the three lower stones following the curvature of the ring ditch in Structure C was clearly intentional. Two (SF 01 and 03) were discovered with grinding faces obscured and lying downwards, whilst one (SF 02) was found grinding face up. The upper quernstone (SF 04) associated with the ring ditch in Structure A, was found with the grinding face down.

Although the position of the entrances to these two roundhouse structures was not well defined, it is likely that the ring ditches were located towards the rear of the structure. The recovery of quernstones from this area of the interior space of later prehistoric roundhouses is a pattern seen elsewhere such as at Aldclune, Perth and Kinross, where rotary querns were found in the rear of the roundhouse interior spaces during the later phases of use (Hingley et al 1998: 452) whilst in earlier phases, querns were typically deposited nearer the entranceways. At Birnie, near Elgin in Moray, quernstones and quern fragments were found in association with various roundhouse and hearth features across the site, with examples of similar disc-shaped schist querns noted in association with the ring ditch of at least one of the roundhouse structures (F Hunter, pers comm).

Even into the early modern period in Scotland, historical documentary evidence attests to quernstones being household tools of value (Fenton 1978: 389) and it can certainly be argued from archaeological evidence that the significance of

querns (both saddle and rotary types) during the Iron Age went beyond their practical function as grinding stones for producing flour. This is demonstrated by recurring patterns of re-use, apparent purposeful or symbolic deposition, and even evidence of deliberate destruction, all three of which are in evidence in Scotland at sites such as Broxmouth Hillfort, East Lothian (McLaren 2013), inter alia. During the Iron Age, querns would have been everyday items with a vital functional role linked to the agricultural cycle, food production, and consumption, and in turn, the quern could have assumed a role as a symbol of agricultural fertility, as well as an important part of the household, becoming metaphors for key stages in the life course of individuals and the household more broadly (Williams 2003). This perceived symbolic role would thus require special treatment at the end of the use of the implement, either due to damage or breakage, extensive wear, or even the death of the user, owner, or maker (Heslop 2006; Peacock 2013: 162-78). This is hinted at by the deposition of certain examples in unusual or particular locations (Armit 2000: 584; Hingley 1993: 41; Heslop 2006: 73-80) or the need to break or damage or injure the quern. Not all quernstones appear to have been subjected to special treatment at the end of their useful life but the frequent placement in association with hearths, thresholds, metalworking features, as well as being built into particular areas of the floor or walls of structures suggests the incorporation of quernstones was often not simply pragmatic re-use as building stones (McLaren 2013: 317). The mechanisms and choices behind these apparent symbolic acts, in particular why some querns were treated in this way and why some were not, is not well understood but the special treatment of Iron Age quernstones is a re-occurring pattern that can be traced throughout Britain.