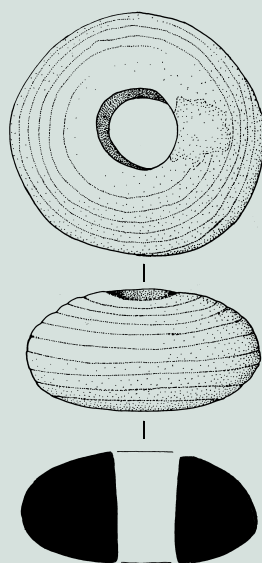


# WINCHESTER

## A CITY IN THE MAKING

Archaeological excavations between 2002 – 2007

on the sites of Northgate House, Staple Gardens and the former Winchester Library, Jewry St



### Section 8

Worked Stone  
by Ruth Shaffrey



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The artefactual worked stone assemblage includes 34 whetstones, 25 querns, rotating whetstones, spindle whorls, loom weights and processors (Table 1).

Most of the whetstones are hand held non-rotating types from Saxo-Norman and medieval contexts, including purpose-made primary whetstones, modified stone used as secondary hones and natural hones (unmodified stone pieces). Secondary and natural whetstones are referred to as hones following Ellis and Moore (1990, 279).

The querns include examples of Niedermendig lava, Lodsworth Greensand and Millstone Grit. A single millstone fragment was also found.

Phase	1.1	2.1	2.3	2.4	4	4.1	4.2	5	6	8	Grand Total
<b>Whetstone</b>			1		2	1	8	12	8	1	<b>34</b>
<b>Quern</b>	1	1	3	2	2	1	5	8	2		<b>25</b>
<b>Industrial</b>				1	1			5	1		<b>8</b>
<b>Vessel</b>			1				1	3			<b>5</b>
<b>Jewellery</b>				1							<b>1</b>
<b>Processor</b>			2								<b>2</b>
<b>Other</b>	1			1		1		2	3		<b>8</b>
<b>Grand Total</b>	<b>2</b>	<b>1</b>	<b>7</b>	<b>5</b>	<b>5</b>	<b>3</b>	<b>14</b>	<b>30</b>	<b>14</b>	<b>1</b>	<b>83</b>

***Table 1: artefactual worked stone by phase***

#### Phase 1

A large Lodsworth Greensand saddle quern was recovered from early Iron Age pit fill NH6183 (Phase 1.1, group NH6183). Its one surviving original edge is quite worn. Early Lodsworth saddle querns are relatively uncommon, although a late Bronze Age example was found at New Buildings, Longstock in Hampshire (Cunliffe and Poole 2000, 69). The only other stone item from a prehistoric context is an unworked but possibly utilised flint sphere (NH6211).

## **Phase 2: Roman**

A whetstone made from a typical slab of probable Pennant sandstone was recovered from Roman phase 2.3 context (NH2608).

Five querns were recovered from Roman contexts, three of Lodsworth Greensand and numerous small weathered Lava quern fragments from floor make-up CC2186 and dark earth deposit NH4412. The Lodsworth Greensand rotary querns were found in early and mid Roman road and floor surfaces CC3452 (SF 337) and CC2186 (SF 284) and layer NH2580. The latter is a small fragment but the other two pieces are substantial fragments of flat-topped style querns measuring 380 and 410 mm diameter. A probable millstone fragment of Lodsworth Greensand was found in an Anglo-Norman context but is probably evidence of Roman milling, as the main focus of Lodsworth Greensand quern production is early Roman (Peacock 1987). A number of quern fragments deposited in Saxon contexts may also be residual Roman material.

Lodsworth Greensand rotary querns consistently measure between 300 and 450 mm diameter and millstones are rare, with only four known examples, including this one. Winchester lies towards the western edge of the Lodsworth Greensand distribution and is the only known millstone in that area (Peacock 1987). Both Lava and Lodsworth Greensand rotary querns are typical of Roman assemblages in this region.

Roman contexts produced an assortment of other worked stone including an undecorated shale bracelet fragment and a small flint sphere, both from dark earth CC1579. Many of the artefacts relate to industrial or domestic processes, including a small fragment of Purbeck marble mortar from levelling layer NH2562. A small Cornish Greenstone object (SF 1341; Fig. 2, no. 7) from dark earth NH4718 resembles a mace head but has been much altered; the edges are faceted and the item well used. It is similar to but smaller than known cushion stones (eg Butler and van der Waals 1966) but may have been used in metal smithing (Roe pers. comm.).

Processors include a pebble with excessive wear on one side, probably used as a rubber (SF 505), and an extremely well used mixing slab/mortar (NH2619, fill of NH2299, Fig. 4, no.13) with very smooth and concave faces

#### **Phase 4: late Saxon**

Eleven whetstones were recovered from late Saxon contexts in properties BE1, BE2, BE4, BW1, BW2, BW4 and BW6. Four are primary whetstones, three are rotating and four are hones. The primary whetstones utilise the greatest variety of lithologies including quartzite, possible Kentish Rag and sandstone. The rotating whetstones are all of Pennant sandstone while the hones utilise Pennant and other sandstones. The rotating whetstones came from properties BW4 (2) and BW2 (1). One has been variously and extensively used (NH3221, Fig. 2, no. 6) as a rotating whetstone, evidenced by wear round the circumference, as mortars, both faces worn into shallow basins, and there are two extremely worn sockets, one right through to the following side. The rotating whetstones are discussed in more detail below.

The non-rotating whetstones and hones are varied, some being small neat hand held items, occasionally with extensive use wear. These small varieties include SF 230, which is unusually tapered and heavily worn on all sides and on the end (Fig. 3, no.10). Both faces of one Pennant sandstone slab-shaped hone are concave through extensive wear and encrusted with iron deposits (NH7571). A suspension hole on one edge suggests the stone was originally a Roman roof slab.

Late Saxon contexts produced single examples of Lodsworth Greensand, Millstone Grit (a few fragments with partially surviving worked surfaces) and sandstone quern fragments, and five contexts contained lava quern fragments. No significant spatial patterning was obvious in the quern distribution. Single fragments derived from inside the boundaries of properties BE2, BE4, BE5, BW2 and SE1 and two inside property BE1. The lack of patterning suggests residual occurrence from Roman deposits rather than Late Saxon activity.

Saxon pit NH1319 (NH1323, SF 114, Fig. 1, no. 5) produced a bun shaped chalk spindle whorl and a chalk vessel, probably a lamp, came from pit CC2125 (CC2354). The lamp is flat bottomed with near vertical, curved sides and is crudely levelled inside. Both of these simple items are indicative of domestic activity.

#### **Phase 5: Anglo-Norman**

Twelve whetstones came from Anglo-Norman contexts in properties BE1-3, BW3-5 and SE1. Four are primary whetstones, two rotating and the remainder hones. One of

two fragments of Norwegian Ragstone (micaceous schist) is a primary whetstone (NH6053, Fig. 2, no. 8), the other an unfashioned, utilised piece (CC1028, SF102, not illustrated). The rotating whetstones and other primary whetstones are sandstone, probably Pennant, and Kentish Rag. One rotating whetstone has wear on both circumferences and main faces, indicating multi-purpose use (NH4604, SF 1302). The whetstones are discussed in more detail below.

Several quern fragments were recovered from Anglo-Norman contexts but no significant patterning of fragment was observed. Five contexts produced small, weathered lava quern fragments. Two sandstone quern fragments were also recovered and a millstone fragment of Lodsworth Greensand came from Property BE3 (NH1150, SF 58). The millstone fragment in pit NH1149 suggests the presence of a mill in the vicinity, probably not on the actual site, almost certainly of Roman date (see above).

Ten other items recovered from Anglo-Norman contexts represent either industrial or domestic activity. A mudstone counter from pit NH1168 (NH1175, SF 165) in property SE1 is a recreational object. This property also produced a crudely made chalk lamp from a fill of rubbish pit NH6034 (NH6039, Fig. 1, no. 1). It is similar to others Winchester examples (Barclay and Biddle 1990, 991 and fig 308a/3541). Stone lamps are not common and, although its presence is notable, the fact that it is crudely manufactured from a locally available material suggests domestic use.

Spindle whorls are common objects found in excavated domestic dwellings in Winchester (Keene 1985, 300). Four stone whorls from properties BW3, BW 4 and SE1 probably represent domestic spinning. All are made of chalk, the most commonly used material in Winchester, but they vary in design. A spindle whorl from BW3 is plain, two from BW4 and SE1 are incised with rings around the circumference (NH2577, SF976 and NH5161, SF 1470, Fig. 1, no. 3) and the fourth is incised with short vertical lines around the circumference (property BW3, NH4593, SF1297; Fig. 1, no. 4). The spindle whorls from property BW3 were recovered from floor surface group NH8549 (NH4593/4). As with earlier excavations, more spindle whorls derive from Anglo-Norman contexts than medieval, a decline probably reflecting the introduction of the spinning wheel (Keene 1985, 300). A chalk loom weight (NH3528, SF1097), broken in two and deposited in pit NH3523 provides evidence for weaving, but not necessarily within this tenement.

## **Phase 6: medieval**

Eight whetstones were recovered from medieval contexts in properties BE3-5, BW2 and BW3. Three are primary types, one a rotating whetstone and four hones. The primary whetstones are made of Norwegian Ragstone, Kentish Ragstone and quartzite, the others of sandstone, including Pennant. They vary in shape but most probably represent personal and domestic use and continue the trend of tools being well used (eg SF 1060 is worn on all sides and quite bulbous; Fig. 3, no.11).

No significant quern fragments were recovered from medieval contexts, but trample layer NH5022 and pit fill NH3286 in property BW3 both produced weathered lava quern fragments. Also recovered from medieval contexts were a chalk spindle whorl, a possible marble and a disc fragment, perhaps a floor stone (NH8009). The spindle whorl, as those from Anglo-Norman contexts, is made of chalk and has linear decoration around the circumference (CC1072, SF 113).

## **Discussion**

The Pennant sandstone, Kentish Rag and other sandstones used for the non-rotating whetstones and hones are typical of Roman-medieval urban assemblages. Twelve properties produced whetstones or hones but none produced numbers high enough to indicate it was a workshop.

The small numbers of Norwegian Ragstone whetstones reflects the generally early date of the excavated archaeology as this material became popular only from the later 13th century and was not common during the Saxon period (Moore 1978, 70, Ellis and Moore 1990, 283). Two of the three Norwegian Ragstone whetstones were crudely shaped but show evidence of extensive use. They may have been broken or been off-cuts from production of larger items (Ellis and Moore 1990, 280). They support the idea that the raw material was brought to Winchester and finished items made within the town (Ellis and Moore 1990, 280, quoting Falck-Muus 1922). The site evidence also indicates that, despite the apparent commonness of the material, it was highly valued as a resource, perhaps not readily available or cheap, and so used in any condition and continuously reused.

Although some Norwegian Ragstone may have been brought into Winchester from London (Ellis and Moore 1990, 280), a large rod 550 mm long recently found at

Southampton, albeit of 13th-14th century date (Shaffrey in prep.), suggests this port as a closer and more likely source. Whetstones could have accompanied large loads of wine brought to Winchester from Southampton during the medieval period, the port being the main source for Winchester's wine (Keene 1985, 272).

In contrast to other whetstones and hones, rotating whetstones were found only in small numbers in Saxon and Anglo-Norman phases of properties BW2-4. The four fragments with measurable diameters resemble those from early medieval Dorestad, which were 210 and 400 mm in diameter (Kars 1983, 4). Two are of comparable thickness to the Dorestad examples at around 70 mm thick but the remainder are only 20-30 mm thick. All were too fragmentary to prove that they were perforated. The thinner examples seem likely to have been used for sharpening small blades. The limited distribution indicates the presence of a smith's workshop within the boundaries of one of these properties, possibly BW3, which has five whetstone fragments, the highest number of any single property, or BW4, which has the most rotating whetstone fragments. How these whetstones were powered is not clear, although it is known that water-driven whetstones were operating outside East Gate on the bridge (Keene, 1985, 279).

Quern numbers are relatively low and many are likely to be residual, probably reflecting the city's large number of water powered mills (Keene 1985, 254). This supports the documentary evidence that few people would have owned and used their own rotary quern (*ibid*).

The other pieces of worked stone include a broad range of items representing domestic or small scale industrial activity. No clear distribution patterns of particular artefact types were observed apart from whetstones, and most items, notably the spindle whorls, made use of locally available materials such as chalk.



## Catalogue of illustrated stone objects (Figs 1-4)

1 **Lamp.** Chalk. Crudely made with hole in centre perhaps for fixing ceramic lamp. Has slight rim around base. Blackened by burning along one internal top edge. Ctx NH 6039. Ph 5

2 **Spindle whorl.** Chalk. Broken almost exactly in half. Burnt and blackened with prominent white circles near the base and top and fainter ones in between. Perforation measures 11 mm diameter. Measures 33 mm diameter x 17 mm high. Ctx NH 2577. Ph 5. SF 976

3 **Spindle whorl.** Chalk. With wide perforation, 11-13 mm diameter. Decorated with nine evenly spaced rings around the circumference 1.5 mm apart. Burnt. Measures 31.5-32 mm diameter x 15.5 mm high. Ctx NH 5161. Ph 5. SF 1470

4 **Spindle whorl.** Chalk. Bun shaped with flat base but which curves up slightly to the edges. Perforation is 10 mm diameter. Dark with four paler rings. Measures 34 mm diameter x 19 mm high. Ctx NH 4593. Ph 5. SF 1297

5 **Spindle whorl, complete.** Small complete. Flattened bun shaped whorl. Not decorated and with slightly biconical perforation. Ctx NH 1323. Ph 4. SF 114

6 **Pivot stone and secondary whetstone, including rotating.** Pennant sandstone. Thick and flat with circular edge worn very smooth and with smoothed dips on both faces. On one face there are two extremely worn sockets caused either through tertiary use as pivot sockets or as deep shallow mortars. Measures 290 mm diameter x 68 mm thick. Ctx NH 3221. Ph 4.1

7 **Metal smithing tool.** Cornish Greenstone. Heavily reused as the profile has been changed on two sides. One side has been broken and then partly worn smooth. Measures >40 x max 44 x max 24. Ctx NH 4718. Ph 2.4. SF 1341

8 **Whetstone.** Grey schist, Norwegian Rag. Elongate with flattened oval cross section. Unevenly utilised and heavily worn on both major faces including one large groove and polish. Measures 85 x 42 x 14 mm. Ctx NH 6053. Ph 5

9 **Whetstone, probably primary.** Probable Kentish Rag. Very well used cigar shaped whetstone with rectilinear cross section. There are also two straight narrow fairly deep grooves suggesting the sharpening of fine points on one of the main faces. Measures > 55 mm long x 27-31 mm wide x 11-16 mm thick. Ctx NH 1222. Ph 5

10 **Whetstone, primary.** Fine grained micaceous dark grey sandstone. Heavily tapered so is almost pointed at one end. Heavily used so all the faces (and the wide end) are smooth, flat and polished. Measures 92 mm long x 15 x 21 at the wide end. Ctx CC 2126. Ph 4.2. SF 230

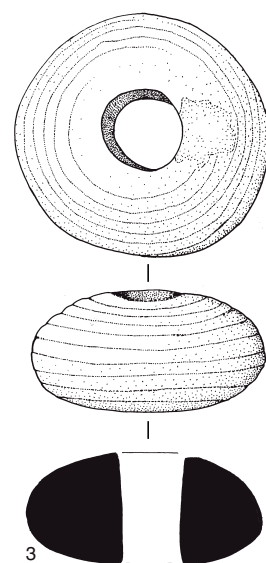
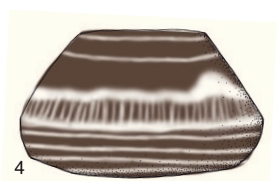
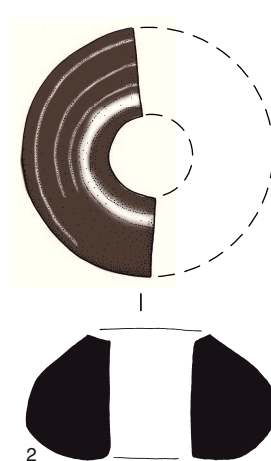
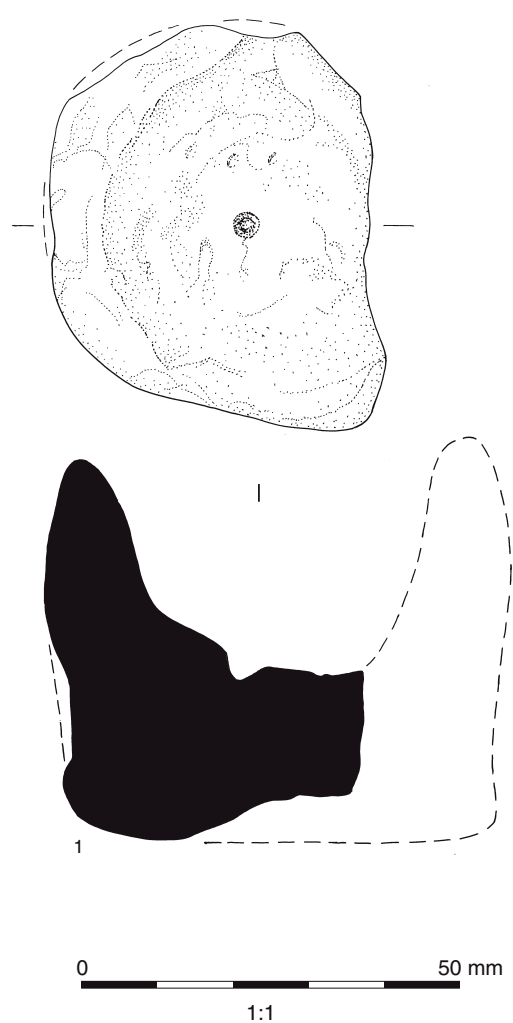
11 **Elongate, rounded primary whetstone.** Fine-grained grey sandstone, possible Kentish Rag. Incomplete with sub-square section. Is slightly bulbous at the complete end. Appears to have been generally used over all the surfaces and possibly across the end as well. Measures >90 mm length x 24-27 mm x 23-26 mm. Ctx NH 3286. Ph 6. SF 1060

12 **Saddle quern.** Lodsworth Greensand. Large saddle quern with three broken edges. Worn and concave grinding surface. The one surviving edge is curved. Measures 310 x 270 mm diameter x 100 mm thick. Ctx NH 6184. Ph 1.1. SF 1685

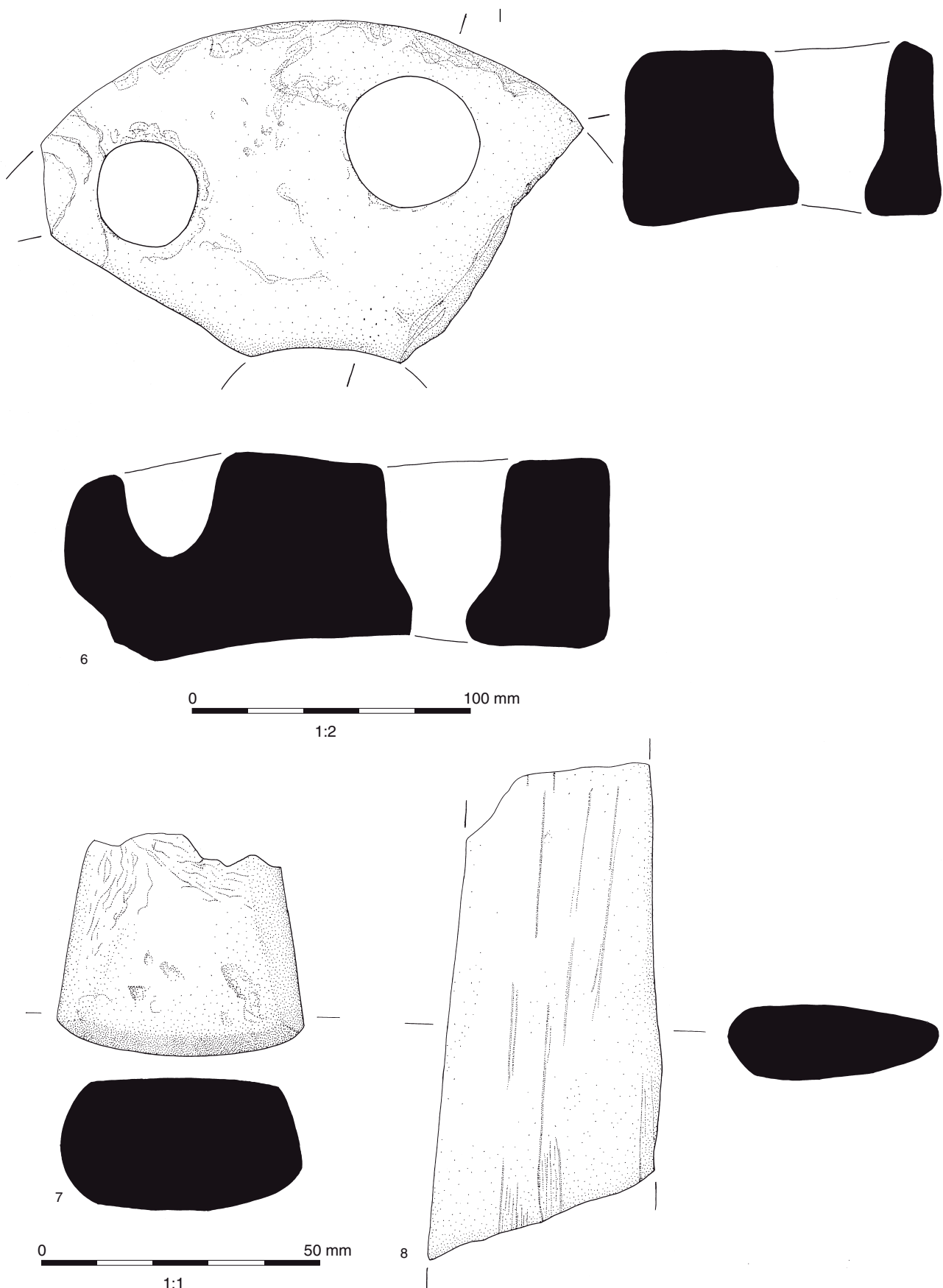
13 **Possible grinding or mixing slab.** Slab with no original edges but worn very smooth and concave on both faces so that very thin in the centre. Measures 180 x 130 x 8 mm. Ctx NH 2619. Ph 2.3

## References

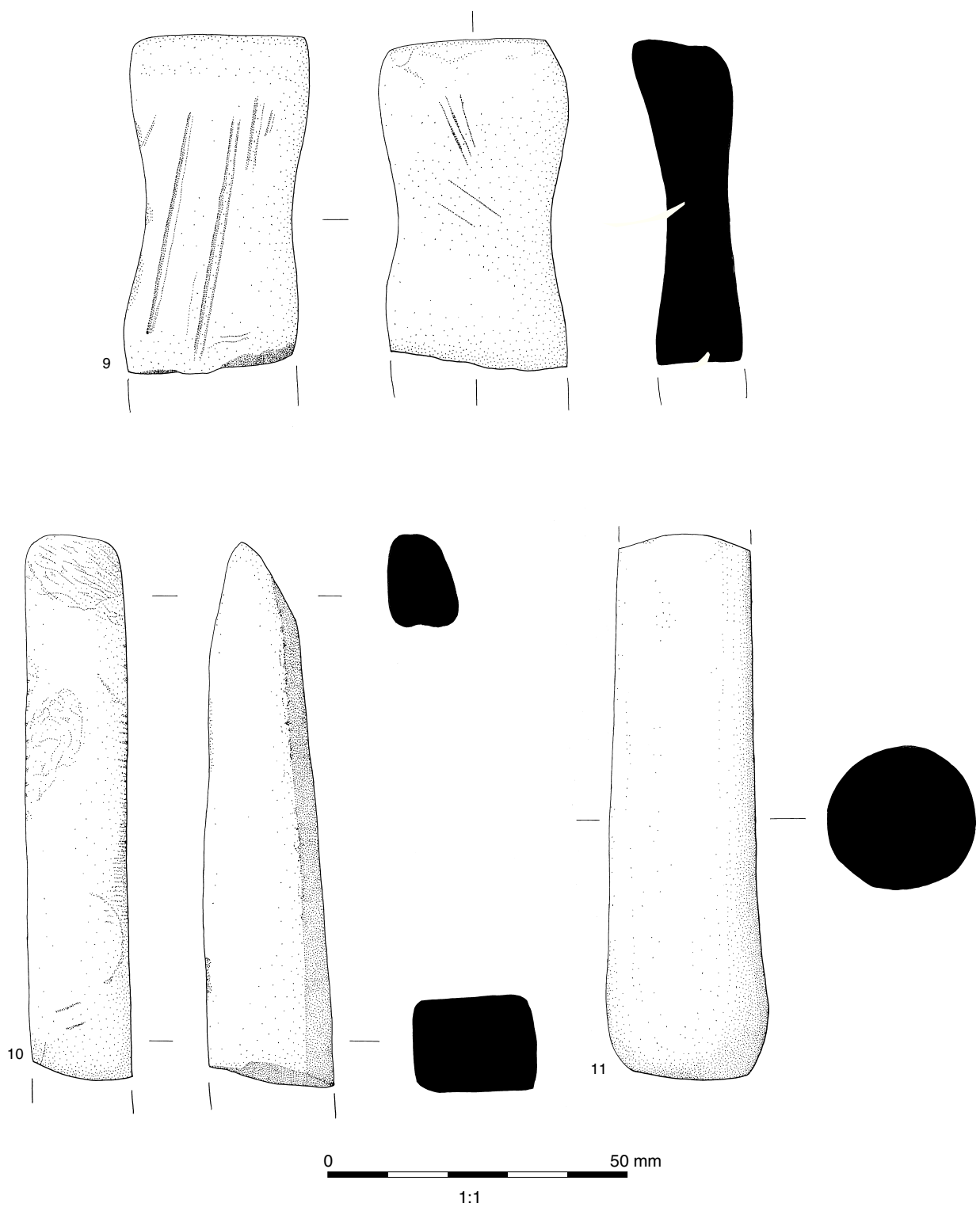
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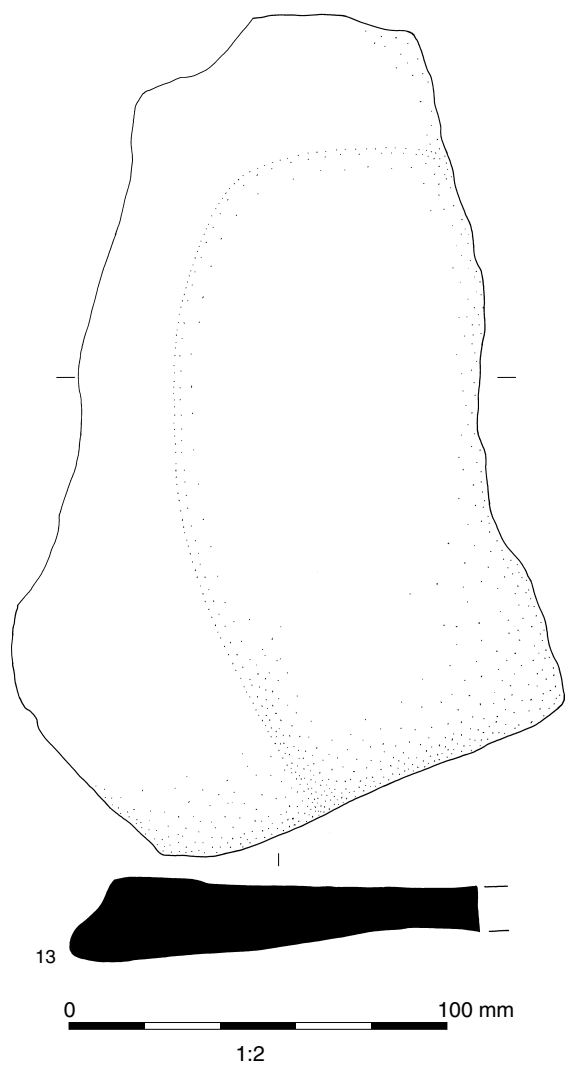
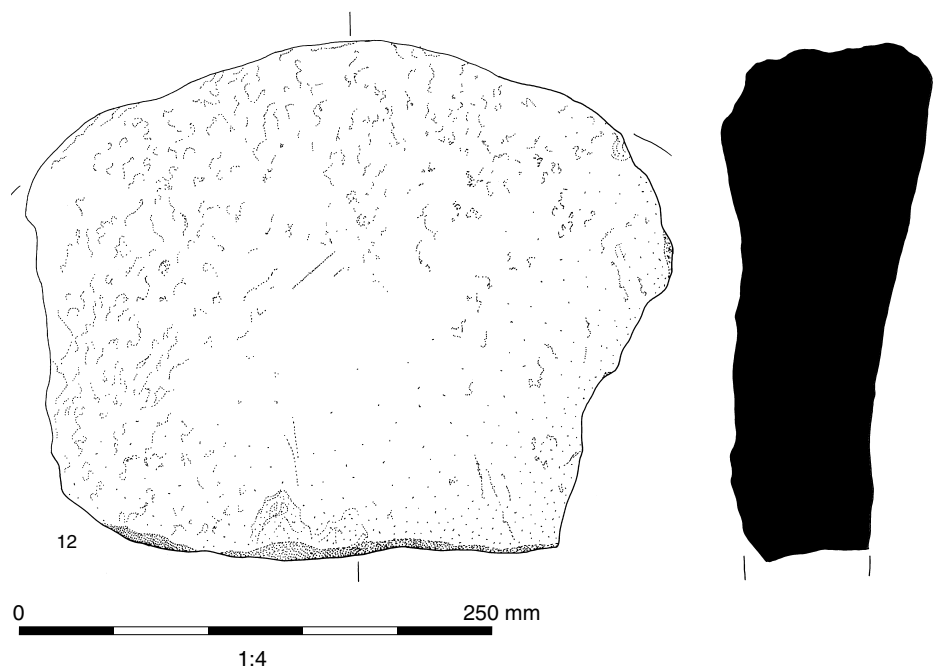
Section 8 Figure 1: Worked stone (1–5)



Section 8 Figure 2: Worked stone (6–8)



Section 8 Figure 3: Worked stone (9–11)



Section 8 Figure 4: Worked stone (12–13)



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