

Article

Excavations at Sabratha, 1948–1951: the small finds

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Abstract

The small finds discovered during the 1948–1951 excavations by Katherine M. Kenyon and John B. Ward-Perkins at Sabratha were scattered after the 1950s and have taken some time to be re-assembled. The following report on the small objects includes material in silver, copper alloy, iron, lead, glass, semiprecious stones, clay and stone, with a separate report on the substantial bone artefact assemblage. As well as providing the basic data on the objects, some of which are unique to Roman Libya, efforts have been made to put them into their Empire-wide context.

حفریات صبراتة ، 1948–1951: اللقی الصغیرة
لیندسی آلسون جونز وستیفن جریب

إن اللقی الصغیرة المکتشفة خلال أعمال التنقیب فی صبراتة بین الأعوام 1948–1951 و التي قامت بها کاترین م . کینیون وجون ب . وارد - بیرکنز، كانت متناثرة بعد خمسینیات القرن الماضي و قد استغرق تجمیعها بعض الوقت . التقرير التالي عن اللقی الصغیرة یتضمن مواد من الفضة، وسبائك النحاس، والحديد، والرصاص، و الزجاج، والأحجار شبه الکریمة، والطين والحجر، مع تقرير منفصل عن مجموعة کبیرة عن اللقی الأثریة من العظام . إلى جانب توفير البیانات الأساسية عن اللقی والتي بعضها فريد للیبیا الرومانية، تم بذل الجهد لوضع اللقی فی السیاق الاوسع للإمبراطوریة.

Key words: Roman artefacts, silver, copper alloy, iron, lead, glass, bone, Libya

The small finds included in this report were discovered during the excavations at Sabratha by Katherine M. Kenyon and John B. Ward-Perkins between 1948 and 1951. The main structural and stratigraphic report was published by Philip M. Kenrick in 1986 whilst the assemblages of pottery and building material were published by John Dore and Nina Keay in 1989. The smaller artefacts had been dispersed and it has taken some time to pull together the assemblage. The material is currently in the care of BILNAS (British Institute for Libyan & Northern African Studies). Thanks are due to Ahmed Buzaian for his assistance in scanning the finds register; sadly, the register suggests that some objects have failed to be gathered in, despite all efforts. Those objects which were recorded in the register but have not been seen since are catalogued separately in an online appendix, available as supplementary material (the supplementary material for this article can be found at <https://doi.org/10.1017/lis.2023.3>); the identifications have been made from very small, rather vague drawings, so should not be relied upon.

The main areas excavated included the Forum and East Forum Temple complex; Regio II, Insulae 5, 6 and 7 to the north of the forum complex; and a section of Regio II, Insula 10 (otherwise known as Casa Brogan), which is to the east of the East Forum Temple. Some small-scale interventions also took place around the Antonine Temple, the Severan Monument and an area near the re-entrant angle of the Byzantine wall to the south-east of the forum complex.

Following Kenyon and Ward-Perkins' work, a chronological construction of the site was created which was based on the coin evidence and the dating of the finewares. Unfortunately, as

Dore and Keay describe, 'For subsequent researchers, one of the main problems in using this chronology lay in the fact that it was extremely difficult, if not at times impossible, to trace material (particularly pottery) back to its original stratified context' (Dore and Keay 1989, 3). The reason for this lies in the method Kenyon used to relate her interpretive framework to the excavations, which involved the identifiers given to the layers of each trench being given a new set of identifiers after the series of phases had been 'rationalised' (indicated in the following catalogue as 'new ID'). In the case of the pottery, the new markings sometimes obscured the old markings. In the case of the small finds, some of the items were given new bags without the old identifiers being retained; other items were kept in their old bags with sometimes the new identifiers being added, but not always. Sadly, the bone objects were separated from the rest of the assemblage and, at an early stage, became completely divorced from their site or context identifiers; as a consequence, John Dore allocated a new number to each bone object, indicated here by JND numbers.

Given all this confusion, it was decided that the small-finds report would need to be presented in the old-fashioned way, by material rather than by site or context. Each catalogue entry thus includes all identifiers still on the bags, in the order they appear on the bags. Some of the bag markings have suffered in the intervening years and, when it has been possible to check back, the numbers given in the Registration Book have been used. Often only the Finds Register number has survived, which is here called the SF (small find) number to distinguish it from the Region number (Reg.), but, more often than not, all that survives is a site identifier which cannot be traced back to the Registration Book. The final Kenyon identification system for Sabratha used Y to indicate North Africa, followed by 1 to indicate the site of Sabratha. The Roman numerals denote an area on the site or, occasionally, a chronological time-frame within an area. Where

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Table 1. The sites with their S.p number, their Y.I. number and reference to Kenrick 1986.

S.p. No.	Site	Y.I. No.	Vol. 1, p.
A–F	Forum and EFT	i–viii	7
G	Byzantine Wall	xv	227
H	Reg. II, Ins. 10, House G: Casa Brogan	xiv	141
J	Reg. II, Ins. 5	xvi	119
K (and some C)	Forum basilica/Church 1		68
M	Road section in Reg. II, Ins. 1	xvii	233
N	Antonine Temple	xviii	199
S	Peristyle House/Theatre		221
T, V	Reg. II, Ins. 6	xxi–xxiv	124
W	Reg. II, Ins. 7	xxii	135
X	NE corner of EFT; Reg. II, Ins. 6		296
Y1	Reg. II, Ins. 10	140	
Y2	Unknown		
Y3–4	Street S. of Antonine Temple	xxv	169
Z	Reg. II, Ins. 10 + ?		141, 296

the Y.I number is an Arabic numeral, this indicates a specific excavated context or group of contexts. The S.p. numbers are earlier site-area identifiers. Table 1 links the sites with their S.p number, their Y.I. number and reference to Kenrick 1986.

Measurements are given in millimetres throughout: Length (L), Surviving Length (Surv. L.), Width (W), Diameter (D), Height (H). The measurements are followed by a number from the site's small-finds register, where that is recoverable, denoted by SF xx. This is followed by the site information as it survives on the object packaging. The number in brackets can be seen on the packaging, but its significance is not clear. Kenyon's new identifiers are given as the final group in each entry.

Throughout, those objects which could be illustrated by Mark Hoyle are indicated (*). Sadly, many objects survived only enough to be identified, but not to be illustrated.

Silver

*1. Fragment of a finger-ring with a semi-oval-sectioned, penannular shank. The high rectangular centre plate has a circular dimple on two faces that may have held insets; the top has a moulded impression, possibly intended as a stylised representation of a plant.

Int. D:15 mm, panel: 6 x 8.5 x 6 mm. SF 584; K.66.1 (402).

Copper alloy

2. Incomplete bow brooch with a very pronounced curve to the circular-sectioned bow, which also has a return wrapped around the shank just below the waist. Unusually, the return is cast in one with the bow. Traces of iron at the tubular head suggest an iron spring pin, although the spring and pin are both missing. A separate collar is wrapped around the neck. The catch plate has a side opening, a flat front and a short kick to the side instead of a forward-projecting foot. This latter feature may be a casting flaw rather than deliberately designed.

The return bow is an early feature of bow brooches and is usually accompanied by the head and spring being cast in one. In this example, the return is cast with the bow, but the head and spring are separate, suggesting that this brooch is a development of the usual first-century BC group and may be dateable to the first century AD. It was probably made in one of the north-west

provinces, as parallels are more commonly to be found there; see, for example: Ettlinger 1973, Taf. 3, no. 7: Type 8 *Knotenfibel* = Almgren 1923, Type 65.

Total L: 74 mm, W across head: 18 mm, W of bow: 5.5 mm. EFT.2.3. SP2.3.8b.

3. Oval-sectioned bow from a brooch. Probably of first-century AD date.

Surv. L: 53 mm, Max. W: 5 mm. Reg. II. Ins.7. Rm.12.13.14.15. SPW.7.176.

*4. Large spring from a brooch, made from circular-sectioned wire. W: 15 mm, W of pin: 3mm. B.19.8.232.

5. Twisted length of circular-sectioned wire; possibly the knot fastening from an expanding bracelet. See Allason-Jones and Miket 1984, Type 8.

L: 29 mm. Reg. II.1.7a. Rm.1.2.7. SPW.10.5a.

6. Small tube or barrel bead.

L: 6 mm, D: 5 mm. SF 461; Casa Brogan: H.21. N3 (331); new ID: H21.E.

*7. D-shaped buckle with a flat shank which narrows and thickens to the hinge loops, only one of which survives. The separate hinge bar is missing.

L: 32 mm, W across arms: 28 mm, hinge ring: 6 x 3 mm. Reg. II. Ins.7. Rm.12.13.14.15. SPW.9.90.

8. Incomplete box hasp consisting of a tapering strip which ends in a semi-oval projection, under which part of the catch loop survives. Cf. Richter 1915, nos 1234, 1235.

L: 35 mm, Max. W: 8 mm. Reg. II. Ins.10. SPY1.136.

*9. Circular, hollow statuette base with sloping sides and a flanged base. The flat top has an oval spigot hole, placed off-centre.

D. of base: 38 mm, D. of top: 24 mm, H: 14 mm, L of hole: 9 mm. SF 465; Casa Brogan: H.28.2 (344).

*10. Small pin with a circular-sectioned tapering shank and a cylindrical head, the top of which has been cut into a swirling cross motif.

Surv. L: 28 mm, T of shank: 1.25 mm, D. of head: 5 mm. SF 27; E.3.1(258).

11. Circular-sectioned pin or needle shank.

L: 90 mm, T: 2 mm. SF 91; D.2.1 (245).

12. Stud or pin with a circular-sectioned shank and a thick disc head.

Surv. L: 20 mm, head: 17 x 15 mm, T of shank: 3 mm. Reg. II. Ins.6. Rm.V.33.41.42.43. SPX.6.15.

13. Circular-sectioned needle shank which has broken across the eye.

Surv. L: 112 mm, T: 4 mm. SF 440; G.3.1 (304).

14. Incomplete instrument of which only the elongated, bud-shaped probe terminal survives. Such probes are commonly found across the Roman Empire, but it is rarely possible to state whether an individual probe was used as a surgical implement or was intended to apply salves or cosmetics (Milne 1907, 62; Crummy 1983, 60; Jackson 1988, 116).

Surv. L: 47 mm. Casa Brogan: H.36.4S.368.

*15. Very corroded, tapering rod of oval section which curves slightly at the tip. The other end is broken across a wide oval loop. Key handle?

Surv. L: 51 mm. SF 482; Casa Brogan: H.29.3b (346).

*16. Fragment of a very corroded circular mirror. Disc mirrors with diameters of 11–23 cm and a thickness of around 1.5 cm

were in use in the Hellenistic period and into the early first century AD (Lloyd-Morgan 1981, 21ff; Simonett 1941, 130–37); lighter, smaller mirrors then became popular in the Western Empire (Lloyd-Morgan 1981, Type F). This example appears to be from Lloyd-Morgan's Type B on the evidence of its thickness, as does No. 17.

D: 127 mm, T: 2.75 mm. E.30.5 (267).

17. Incomplete circular mirror with a narrow, bevelled edge. No trace of a pattern on the back can be discerned through the corrosion. Lloyd-Morgan 1981, Type B.

D: 106 mm, T: 3 mm. SF 88; H.1.1–3 (308).

*18. Large, barbed fish-hook with a circular-sectioned shank and a flat barb. The terminal is wedge-shaped with a circular hole. Traces of fibre remain *in situ*. Cf. Yassi Ada: Kuninkholm 1982, 296–310; Sidi Khrebish: Lloyd and Kenrick 20014, 132, fig. 2, no. H34.

L: 72 mm, W across hook: 51 mm, L of barb: 22 mm. SF 510; Ciii. Casa Brogan: H.32.7 (360); new ID H32.

*19. Large, barbed fish-hook of circular section with a flat barb. Fibres remain attached around the terminal.

L: 57 mm, W across hook: 24 mm, T: 5 mm. SF 522; Cii.4b (239).

20. Small, barbed fish-hook.

L: 22 mm, T: 4 mm. Street east of East Forum Temple. SPX.1.15c.

21. Small angular hook made from circular-sectioned wire. Fish-hook?

L: 14 mm. Reg. II. Ins.7a.Rm.1.2.7. SPW.10.2.

22. Small barbless hook, possibly a fish-hook.

L: 15 mm. EFT. NE Corner. SPV.1.2.1273.

*23. Circular-sectioned hook which ends in globular terminal. The shank is wrapped in fibres which have become incorporated into the corrosion products.

L: 34 mm, T: 3 mm. SF 542; G.4.4.2 (303).

24. Rectangular strip folded in half to form a strap-end which has held leather of 3 mm thickness by means of two circular-sectioned rivets.

L: 13 mm, W: 13 mm. SF 135a; Casa Brogan: H.1.1–3 (309).

*25. Fragment of vine-leaf harness pendant with a knobbed terminal. First century AD. See Bishop 1988, fig. 45, no. 4c/4d for a list of parallels from the Western Empire.

Surv. L: 32 mm, Max. W: 22 mm. SF 229; N.1.3 (403).

*26. Lower terminal from a scabbard slide, which has a flared rather than tapering end. Cf. Oldenstein 1976, 100; Bishop and Coulston 2006, fig. 99.

L: 25 mm. SF 592; Casa Brogan: H.30.6 (350); new ID H30.E.

*27. Small, peltate mount. This is a common stud form, although this example has no sign of a shank and may have been used as inlay. For peltate studs from Morocco, see Boube-Picot 1975, fig. 26, no. 238, and fig. 31, no. 457.

H: 8 mm, W: 17 mm, T: 3 mm. J.4.4.399.

*28. Conical arrowhead with three thin, ribbed vanes. This type of arrowhead, often referred to as the 'Scythian type', was widely used in the Near East and Greece from the fifth century BC and later throughout the Roman Empire. See Erdmann 1976; Davies 1977; Coulston 1985, 264, fn. 3, for references to the type across the Empire.

L: 24 mm, D: 6.5 mm. SF 235; C7.4d (238).

*29. Elongated arrowhead of lentoid section with a median rib and a pronounced hump on both faces just before the circular-sectioned tang. There are vestigial barbs. See Davies 1977, fig. 1.

Surv. L: 43 mm, Max. W: 14 mm, Max.T: 8mm. Reg. II. Ins. 6. Rm.1.2.3.4. Tr.2a. SPV.3.15b.1141.

*30. Flat strip with one rounded end which has a wide notch cut into one edge and is pierced by a circular hole. A second hole is pierced near one edge at the squared terminal. This is reminiscent of a bow lath, although it is rather small; see Coulston 1985.

L: 47 mm, W: 10 mm, T: 1 mm. Casa Brogan: H.35.2.365.

31. Twisted leaf-shaped strip. Inlay?

L: 37 mm, W: 7 mm, T: 1 mm. C.19.1.240.

*32. Square-sectioned rod with a bulging, spiked terminal and a curved, T-shaped head.

L: 38 mm, W of head: 14.5 mm. Casa Brogan: H.105.7.385.

*33. Square-sectioned rod with a bulging, spiked terminal and a curved, T-shaped head, similar to No. 32.

L: 38 mm, W of head: 14.5 mm. Casa Brogan: H.103.2.381.

34. Rod of rectangular section with a bulbous terminal and a crescentic head.

L: 40 mm, W of head: 16 mm, T of head: 5.5 mm. Casa Brogan: H.103.2.381.

*35. Incomplete, oval-sectioned rod with a broken ring at the head. Possibly part of a steelyard. See Crummy 1983, 99–101.

L: 98 mm, T of shank: 7 mm. Reg. II. Ins.7a. Rm.1.2.7. SPW.10.5b.

36. Circular-sectioned rod with one end bent and coiled around the shank to form a loop. Possibly from a steelyard, as No. 35.

L: 57 mm, T: 3 mm, W across loop: 6 mm. Casa Brogan: H.125.14/15.323.

37. Rectangular strip with an oval terminal, pierced by a rivet hole.

L: 34 mm, W of terminal: 14 mm, W of shank: 8 mm. B.100.3c.233.

*38. Plate with large arcs cut into the edges. Probably waste from disc production.

L: 40 mm, W: 45 mm, T: 3 mm. Reg. II. Ins.7. Rm.12.13.14.15. SPW. 9.13.

39. Single S-shaped chain link made from circular-sectioned wire.

L: 20 mm, W: 8.5 mm, T: 3 mm. Reg. II. Ins.7. Rm.5.14. SP8.5.11.1229.

40. Six fragments of thick, curving sheet. Possibly pieces from a hollow statue.

T: 3.75 mm. SF 668; F.21.2 (278).

41. Triangular fragment of sheet. Possibly pieces from a hollow statue.

L: 54 mm, T: 8 mm. B.4.2.222.

42. Fragments of thick, curving sheet from a statue with pieces of the clay infill surviving.

T: 3 mm. D.3.3 (249).

43. Fragment of tube.

Surv. L: 34 mm, D: 11 mm. F.21.2A.279.

44. Incomplete, circular washer with a raised, beaded rim. The plate rises to enclose the central rivet hole. Possibly from *lorica segmentata*. See Bishop 2002.
D: 18 mm. SF10; F.1.6.a (269).
45. Incomplete, square washer with a central, circular hole.
L: 15 mm, W: 17 mm, T: 1.5 mm, hole: 3.5 mm. SF 700; A.10.10 (205).
46. Fragmentary disc washer with a convex face.
D: 18 mm. F.1.6A.269.
47. Large, hollow, domed stud head with a very high lead content. Presumably caulked into position with lead/tin alloy.
D: 82 mm, H: 20 mm. Casa Brogan: H.33.4.362.
48. Large, hollow, domed stud head similar to No. 47.
No measurements possible. Casa Brogan: H.33.4.362b.
49. Large, hollow, domed stud head, similar to No. 47.
No measurements possible. Casa Brogan: H.30W.3.353.
50. Fragment of a disc.
D: 21 mm. Reg. II. Ins.6. Rm.V.26.28.29. T16. SPT.4.27.
51. Oval disc in two pieces.
D: 15 x 13 mm, T: 3 mm. No details.
52. Trapezoidal plate broken across an oval hole at the wider end.
L: 38 mm, W: 18–20 mm, T: 5.5 mm. SF 463; Casa Brogan: H.30.Vat 5.2.(349).
53. Rectangular sheet with parallel sides but of uneven thickness, broken across curved edges.
L: 78 mm, Max. W: 48 mm, T: 2–4 mm. EFT. NE Corner.2.3. SPZ.3.8a.
54. Curved strip, possibly from a ring.
Int. D: 14 mm, W: 9 mm, T: 3 mm. Reg. II. Ins.6. Rm.7.8.9.10. SPX.3.7.1228.
55. Fragment of sheet, one end of which is broken across a circular rivet hole.
T: 1.5 mm, D of hole: 4 mm. D.3.3 (250).
56. Fragment of sheet with one curved edge and a single rivet hole.
T: 1 mm, hole: 4 mm. SF 694; D.11.3 (256).
57. Thick strip of rectangular section tapering from the rounded end to a point. Scriber?
L: 97 mm. E.30.16.266.
58. Circular-sectioned rod coiled to a loop.
Surv. L: 26 mm, W across loop: 16 mm, T: 5 mm. SF 99; Casa Brogan: H.1.Wall 4 (311).
59. Length of circular-sectioned wire.
L: 96 mm. SF 103; G.1.4B (296).
60. Length of circular-sectioned wire curled at both ends.
L: 29 mm, T: 2 mm. SF 73; J.1.1ed (391).
61. Fragment of curved circular-sectioned wire.
L: 19 mm. Reg. II. Ins.6. Rm.26.27.28.29.30. Tr3.SPV.5.2a.2.
62. Several lengths of coiled, circular-sectioned wire.
Est. D. of coil: 16 mm, T: 1.5 mm. A.10.15.210.
63. Tapering, square-sectioned rod.
L: 28 mm, T: 5–7 mm. G.1.5B.298.
64. S-shaped rod of oval section.
L: 26 mm, W: 6 mm, T: 3 mm. SF 102; E.9–6b.26.
65. Circular-sectioned rod with a hammered disc head and an expanded broken end. Possibly a swivel bar.
L: 40 mm, T of rod: 6 mm. SF 435; Casa Brogan: H.23.8 (334).
66. Incomplete, circular-sectioned rod with one rounded end. The section squares as it curves to the broken end.
L: 188 mm, W: 12 mm. SF 565; F.13.3.A (275).
67. Double-spiked loop.
L: 37 mm. SF 672; Casa Brogan: H.12.2 g (313).
68. Circular-sectioned rod, broken at both curved ends.
L: 38 mm, T: 7 mm. SF 104; D.2.11 (244).
69. Curved, circular-sectioned rod.
L: 106 mm, T: 6 mm. E.30.10.268.
70. Hexagonal-sectioned rod.
L: 72 mm, W: 5 mm. SF 31; E.4.1 (257).
71. Stud with a deep, hollow, domed head and a short, circular-sectioned shank.
L: 22 mm, D. of head: 20 mm. SF 589; Cii. Casa Brogan: H.31.15W (354); new ID H31.
72. Stud with a disc head and a square-sectioned shank.
L: 12 mm, D. of head: 16 mm. SF 457; Casa Brogan; H.2.1.N7 (333); new ID H21.6.
73. Nail with a short, oval-sectioned, copper-alloy shank. The globular head is also of copper alloy, but with an iron cap held in place by lead/tin alloy.
L: 18 mm, D. of head: 21 x 16 mm. Reg. II. Ins. 6.SPV.4.5.1133.
74. Nail with a T-shaped head and rectangular-sectioned shank.
W across head: 10 mm, L: 45 mm. SF 666; Casa Brogan: H.12.3 g (314).
75. Nail with a disc head which is undercut around a circular-sectioned shank.
D of head: 17 mm, L: 86 mm. SF 87; B.3.7 (221).
76. Nail with a flat, circular head. The square-sectioned shank expands to meet the rim of the head.
D of head: 11 mm, L: 32.5 mm. SF 29; J.1.1 (389).
77. Nail with short, square-sectioned shank. The disc head has a series of small circular bosses arranged around the underside of the rim.
D. of head: 18 mm, L: 25 mm. Reg. II. SPT.4.2. Rm.V26.28.29.T16. 1227.
78. Nail with long, tapering, circular-sectioned shank bent through two right-angles. Incomplete disc head.
L: 162 mm. Reg. II. SPX.6.17. Rm.V33.41.42.43. 1274.
79. Nail similar to above with an oval-sectioned shank bent through two right angles and changing to square section for the final length.
Disc head. D. of head: 20 mm, L: 160 mm. Reg. II. SPX.6.17. Rm.V33.41.42.43.

80. Nail with square-sectioned shank and a conical head.
D. of head: 13 mm, L: 55 mm. SF 460; Vat 4.348; Casa Brogan: new ID H30.N.

81. Nail with square-sectioned shank and a conical head.
D. of head: 12 mm, L: 33 mm. SF 26; J.1.1 (394).

82. Fragment of bronze waste which retains the imprint of its crucible.
T: 18 mm. Reg. II. Casa Brogan: H.30.W3.353.

Iron objects

*83. Lever lock key with three circular-sectioned teeth of stepped length. The shank expands towards the broken terminal from square section to rectangular. Cf. Manning 1985, 94.
L: 155 mm, Max. Depth of ward: 29 mm, Max T of shank: 12 x 5 mm. Reg. II. Ins.10. Tr.21. Sp.2.1.3–8c. 1148.

84. Slide key with a sinuous ward with three teeth. The shank is rectangular in section. See Manning 1985, 92.
L: 71 mm, Depth of ward: 28 mm. Reg. II. Ins.6. Rm.V.14.26.21. SP1.9.3a.

*85. Hollow pyramid ending in a globular terminal at the apex; probably a ferrule.
H: 92 mm. EFT. NE Corner. Sp.VI.18.2.1149.

86. Fragment of a conical ferrule.
L: 63 mm. Reg. II. Ins.7. Rm.12.13.14.15. SPW 7.5.

87. Several fragments of a sickle or curved knife blade of triangular section. See Manning 1985, 50–51.
L: 120 mm, Depth of blade: 22–4 mm. Reg. II. Ins.6. Rm.V.33.41.42.43. SPX 61.5c.

*88. Knife with a circular-sectioned tang. The blade has a straight cutting edge and a curved back. See Manning 1985, Type 8, 113.
Surv. L: 105 mm, Max depth of blade: 25 mm, T of tang: 10 x 7 mm. Reg. II. Ins.10. SP.17.1150.

89. Incomplete knife with an oval-sectioned handle which tapers to the hooked end. The back of the blade continues the line of the tang; the cutting edge is curved.
L: 98 mm, T of handle: 6 mm. U/P.

*90. Incomplete knife or razor with a circular-sectioned tang which meets the blade at an angle. The back of the blade continues the line of the tang; the cutting edge is missing.
L: 62 mm, T of tang: 7 mm. Reg. II. Ins.10. SPY 1.11a. 1222.

*91. Strip tang from a possible knife with two circular-sectioned bronze rivets which have held the two-piece wooden handle in place.
L: 52 mm, W: 20 mm. SF 412. Reg. II. Ins. 10. Casa Brogan: H.25.8 (338).

92. Curved strip of tapering rectangular section with slightly thickened edges. Collar?
D: 40 mm, W: 8–10 mm, T: 3 mm. Reg. II. Ins.10.SPY 1+. 1125.

93. Incomplete ring, possibly a finger ring, with a lentoid section which thickens to oval section.
Int. D: 18 mm, W: 12 mm, T: 3–8 mm. Reg. II. Ins.6. Rm.V.14.26.T1.6. SPV 9.2c.

94. Large, incomplete nail with a globular head. A disc of copper alloy is visible at the circumference of the head, which is an unusual decorative feature for such an object. Oval-sectioned shank.
L: 57 mm, D. of head: 23 mm. Reg. II. Ins.10. SPY. 1.11b.1138.

95. Complete nail with a domed head and an oval-sectioned shank, clinched at the end.
L: 89 mm, D. of head: 24 mm. Enclosure temple walls. SPX.2.10.1140.

96. Nail with a tapering, circular-sectioned shank and a globular head.
L: 53 mm, D. of head: 16 mm. Reg. II. 66.1234.

97. Disc-headed masonry nail with plaster still on the head.
L: 22 mm; D. of head: 16 mm. A.10.8.204.

98. Square-sectioned nail, missing the head.
L: 28 mm. SF 146; D.2.1c (246).

99. Square-sectioned nail missing its head.
L: 24 mm. SF 694; D.11.3(256).

100. Nail with a disc head and an oval-sectioned shank.
L: 62 mm, D. of head: 17 mm. Reg. II. Ins.10. 7.1239.

101. Circular-sectioned nail, missing its head.
L: 41 mm. SF 586; Casa Brogan: H.25.7s (337).

102. Rod of oval section.
L: 51 mm, W: 6 mm. Casa Brogan: H.105.2.383. H.105.2.383.

103. Oval-sectioned rod with a rectangular hollow at the end. Part of a socket.
L: 56 mm, W: 16 mm, T: 14 mm. Reg. II. Ins.6. RH.T7.15.14.V2. SPT.3.6.

104. Circular-sectioned tapering rod.
L: 54 mm, T: 3–4 mm. Reg. II. Enclosure temple walls. X5.X6. SPX.2.12.1122.

105. Disc with bevelled edges and a depression in the centre of one face.
D: 49 mm. SPY2.12.

106. Bar of oval section narrowing sharply at one end.
Max. T: 14.5 mm, T: 9 mm. EFT. NE Corner 23.SP2.3.8.

107. Incomplete rectangular block with a bevelled end.
L: 26 mm, W: 32 mm, T: 8 mm. SF 521; Casa Brogan: H.32. (359).

Lead objects

108. Thick strip of lead curled to form an oval collar.
D: 31 x 26 mm, L: 24 mm, T: 5 mm. SF 75; A.8.8.(533).

*109. Incomplete fragments of rectangular sheet, one with a lead rivet pierced through.
L: 78 mm, W: 63 mm, T: 2 mm. SF 85; D.2.2 (540).

110. Thick sheet of irregular shape.
T: 5 mm. Casa Brogan: H.37.4.369.

111. Unidentifiable, possibly waste.
C.22.3.538.

Glass objects

*112. Large globular bead of black, opaque glass with a marvered, yellow, opaque-glass spiral around the body and four

deep, vertical grooves, similar to a simplified melon bead (see Nos 123–26).

D: 23 mm, L: 21 mm, hole: 10.5 mm. D.1.W.7.7 (524).

*113. Segmented bead of grey glass, apparently copying the gold-in-glass beads common from the Hellenistic period. Such beads have been found throughout the Roman Empire but particularly in the African provinces, as the main centre of manufacture was in Egypt. See Boon 1977; Weinberg, 1969, 143–51.

L: 11 mm, D: 7.5 mm. Area J. SP. J.1.1b (516).

*114. Incomplete, dark-blue, opaque-glass, twisted cylinder bead.

D: 5 mm, L: 9 mm, hole: 2 mm. SF 159; J.1.1f (520).

115. Hexagonal-sectioned cylinder bead of green, opaque glass. Such beads were intended to imitate emerald crystals, but this example has been badly made and shows yellow swirls and air bubbles.

D: 5.5 mm, L: 11 mm, hole: 1.5 mm. SF 153; E.13–15 (511).

*116. Curved cylinder bead of black, opaque glass. The circular section has a continuous spiral around the face.

L: 25 mm, D: 3.5 mm, hole: 1.75 mm. SF 126; J.1.1ed (518).

*117. Black, opaque-glass, barrel bead.

D: 10 mm, L: 15 mm, hole: 3 mm W.7.17.D2 (525).

*118. Globular, pale-blue, opaque-glass bead, similar to a melon bead (see Nos 123–26).

D: 9 mm, L: 7 mm, hole: 4.5 mm. SF 1252; 10b. D.1 (530).

*119. Small globular bead of pale-turquoise, opaque glass, similar to a melon bead. (see Nos 123–26)

D: 8.5 mm, L: 7 mm, hole: 3 mm. Y.1. 7b.529. A5.

*120. Fragment of a very pale-turquoise, opaque-glass cylinder bead.

L: 11.25 mm. W.4.3.521. D2.

*121. Biconical bead of transparent, white glass.

D: 13 mm, L: 7 mm, hole: 2 mm. SF 1251; Y.2.10.531.D1.

*122. Transparent, white-glass cylinder bead which is curved and tapered.

D: 2.5–3 mm, L: 9.5 mm, hole: 2 mm. SF 255; E.23.3a (512).

Melon beads

This form of bead starts as early as the third–second centuries BC, was particularly popular in the western provinces in the Antonine period, then continued to be manufactured until the tenth–eleventh centuries AD in either glass or faience (Guido 1978, 100). Evidence from across the Roman Empire suggests that melon beads are more often found in a military milieu (Birley and Greene 2006, 17) and, while they can be found worn as jewellery – for example, a group of 35, apparently from a necklace, was found in a second-century AD building in Southwark, London (Marshall and Wardle *in prep.*), with another group from a female cremation at Wederath in Germany (Haffner 1989, 109–11) – evidence is beginning to grow to suggest that they were more often associated with horse harness, rather than worn as human jewellery, and may have had an amuletic purpose. It was Ritterling who first pointed out that a string of beads round the neck of the horse ridden by T. Flavius Bassus on his tombstone at Cologne, appeared to be melon beads (Ritterling 1912–13, 179–80), an identification supported by the melon beads later found in a horse burial at Krefeld-Gellep, Germany (Pirling 1997, 58–59, grave 3960). More

recently, several such beads were found in composite ‘harness groups’ at the Bloomberg site in London (pers. comm. Michael Marshall at MOLA [Museum of London Archaeology], to whom thanks are due for discussing the recent discoveries of melon beads). Their apotropaic symbolism may also be seen in their association with a bone hand-and-phallus amulet at the Bloomberg site (Michael Marshall pers. comm.). Melon beads found in clearly ritual contexts are also known from Scole, Norfolk (Ashwin and Tester 2014, 347, 354, nos 104–106) and Colchester in England, Rouen in France and Augst in Germany (Marshall and Wardle *in prep.*), and an example can be seen attached to a *dolabra* sheath from Bonn in Germany (Allason-Jones 1995, 27). As none of the Sabratha examples can be attributed to specific contexts, their use on the site must remain conjectural.

*123. Very pale-turquoise, opaque-glass melon bead with a very worn surface.

D: 16 mm, L: 19.5 mm, hole: 6 mm. SF 67; Casa Brogan: H.12.8a (513).

124. Fragment of a pale-turquoise, opaque-glass melon bead.

L: 9.5 mm. W.6.2.523. D2.

125. Fragment of a pale-turquoise, opaque-glass melon bead.

L: 9.5 mm. W.4.3.D2.531.

126. Fragment of a pale-turquoise, opaque-glass melon bead.

L: 14 mm. W.8.5c.526. D2.

*127. Pin of yellow, opaque glass with a flat disc head and a circular-sectioned shank. This is an unusual object – it would have been too short and fragile to be used to fasten clothing and it is more likely it was worn in the hair, either as decoration or to fasten a veil.

L: 27 mm, D. of head: 9 mm, T of shank: 4 mm. SF 1254; W.8.6a (537).

*128. Fragment of a bun-shaped, black, opaque-glass counter or inset.

D: 15 mm, T: 6 mm. SF 162; G.1.5d (547).

*129. Ball of royal-blue glass, with no original surfaces remaining.

D: 12.5 mm. W.10.5b (522). D2.

130. Tessera of red, opaque glass. For other tesserae and mosaic fragments from the site, see Dodge, H., in Dore and Keay 1989, 253–54.

L: 8 mm, W: 6 mm, T: 6 mm. SF 694; D.11.3 (256).

131. Fragments of decayed blue glass, possibly inlay.

T: 4 mm. W.10.6c (527). D2.

Objects of semi-precious stone

*132. Pear-shaped, amethyst bead of lentoid section with one face considerably more convex than the other. A circular hole has been drilled from both ends to meet at an angle.

Pliny listed the sources of amethyst in his time as being India, Jordan, Armenia, Egypt, Cyprus and Thasos, although other writers indicate it was also to be found throughout Europe (*Nat. Hist.* XXXVII, 121–24). It was most commonly used in this pear-shaped form, either in necklaces or as ear-ring pendants. Amethyst was considered to be efficacious in warding off drunkenness, largely due to its colour reflecting the colour of wine, but when used with magic charms was also thought to have the power to prevent hailstorms and locusts and to generally guard against evil.

L: 16 mm, Max. W: 11 mm, Max. T: 7 mm. SF 119; J.1.1b.(519). D4.

*133. Drum bead of carnelian. Pliny referred to carnelian as *carbunculi* and indicated it was to be found in the Saharan desert (*Nat. Hist.* V, 37). Recent work has pinpointed a source in the Fezzan (Gliozzo, Mattingly, Cole and Artioli 2014).

D.: 7.5 mm, L: 4 mm, hole: 1.5 mm. SF 68; J.1-1 (514).

*134. Globular, slightly pear-shaped bead of translucent, orange carnelian.

D: 8 mm, L: 7.75 mm, hole: 1.5 mm. SF 70; J.1.1 (515).

*135. Pale-orange, coral cylinder bead of circular section with natural longitudinal lines on the surface.

D: 4 mm, L: 4 mm, hole: 1 mm. SF 118; J.1-1ed (517) D4.

*136. Rectangular bead of oval section with shallow, convex faces, made from a very pale, green stone with darker-green veins, possibly jadeite.

L: 11 mm, W: 10 mm, T: 5.5 mm, hole: 2 mm. SF 1253; W.10.10 (534) D1.

137. Conical pin-head, lathe-turned from pale-greenish marble, with a circular hole drilled into the base.

H: 10 mm, D: 8 mm, hole: 3 mm. SF 158; J.1.1far (555) D3.

*138. Small disc of cream/grey marble with bevelled edges.

D: 12 mm, T: 3 mm. SF 120; J.1.1ed (554).

Stone objects

*139. Rectangular stone wedge.

L: 35 mm, W: 27.5 mm, Max. T: 14 mm. SF 769; A.26.39 (534).

140. Cylindrical sandstone pestle.

H: 68 mm, D: 58 mm. Casa Brogan: H.26.10 (550).

*141. Oval disc cut from a very coarse, gritty sandstone with a small, central, circular hole.

D: 50 x 42 mm, T: 9–13 mm, hole: 6 mm. Reg. II, ins.6; SPV1.85c.1345.

142. Granite cube with a large dimple in each face and rounded corners and edges.

L: 51 mm, W: 45 mm, T: 49 mm. SF 92. Casa Brogan: 12.8A (627).

143. Oval thumb-scraper of banded grey/brown flint with nibbled retouch around the cutting edge.

L: 51 mm. XIV.143 (633).

144. Fragment of the lower stone of a rotary quern of coarse lava with a raised lip.

Max. T: 80 mm, Min. T: 35 mm. EFT. Tr.2.4 (624).

145. Three fragments of an upper stone of a rotary quern of a very coarse lava. One piece appears to have experienced intense heat whilst another has traces of mortar, suggesting that these had been reused.

T: 40 mm. A.140.3b (625).

Clay objects

*146. Fragment of a circular clay mould decorated with a central ring of fish and an outer register of dolphins, all swimming in a clockwise direction, enclosed in a wide marginal groove. Some traces of burning. Possibly a bread-mould.

Original D: 80 mm, T: 9 mm. C.28.2 (539).

*147. Fragment of a cream, clay disc with a central swirled design. The outer edge has a marginal groove with a ring of stamped, radiating grooves. This is too roughly made to be efficient as a bread-mould, the design having been smeared when the clay was still plastic. It may have been part of a lamp, although somewhat larger and thicker than most clay lamps. A number of clay lamps were discovered during the excavation and are referred to in Kenrick 1986. Alternatively, it may have been intended as inset architectural decoration.

D: 120 mm, T: 11 mm. SF 493; E.14.3 (543).

*148. Incomplete disc of tile fabric. Both faces have deeply incised motifs: on one face concentric circles with alternating registers of dots and pellets with a central, stylised, floral motif. The other face has a similar arrangement of three concentric circles, but these enclose a swirling, vegetal motif around the central, floral motif. This may be part of a bread-mould, although the design is very detailed and too shallow to have been effective.

D: 80 mm, T: 15 mm. A.7.T.3.14 (556).

*149. Bun-shaped block of red pottery with a circular dimple in the centre of the irregular convex face. The flat face has a counter-sunk base, set off-centre. The section through this object resembles that of a *pugillum*, a tool for polishing pottery (Mackensen 2009, 21–28; see in particular fig. 2.3). Clay *pugilla*, however, are more commonly oval in shape and exhibit more obvious signs of wear; if this is indeed a *pugillum*, it is an example that has been little used. An alternative identification might be a lid for a vessel.

D: 47 mm, H: 19 mm. D.12.18 (542).

*150. Disc of cream amphora ware with one convex face. The flatter face is undercut from a raised edge with four ribs leading to a central boss. Possibly a lid.

D: 88 mm, T: 27 mm. SF 1297; W.8.10b (558).

Terracotta figurines

None of the fragments of terracotta figurines described below suggest high quality workmanship compared with those found in the Northern Necropolis of Cyrene (Santucci and Uhlenbrock 2013, 31–32, fig. 21). Sadly, with the possible exception of No. 152, none of the fragments find parallels in the Cyrene assemblage. It is also only No. 152 at Sabratha that has a context, in that it was found in Casa Brogan; this contrasts with the Cyrene figurines which are all from funerary contexts.

*151. Fragment of a hollow, terracotta figurine of which only the drapery survives. The surface has a slip of white onto which pink pigment has been applied.

L: 48 mm. SF 798. H. 103.2 (532).

*152. Fragment of a terracotta figurine consisting of the naked torso of a man. The back is roughly figured suggesting that it was not intended to be seen. The fabric is red with traces of white slip, probably the basecoat for painted details. Cf Cyrene: Santucci and Uhlenbrock 2013, fig. 21, no. 8.

L: 59 mm. SF 795; 104.4; Reg. II. Ins.10. Casa Brogan: IR18.

*153. Fragment of a terracotta figure consisting of a single life-sized fingertip. The nail has been indicated by incised lines. The slightly squashed shape may suggest this was an *ex voto*, rather than part of a statue.

L: 26 mm, W: 16 mm. SF 1402; E.23.7 (544).

*154. Fragment of a female head of red terracotta with a cream slip. All that survives is the top of her head, with lentoid eyes

under stylised prominent eyebrows. The hair is parted in the centre and arranged in curls around the brow. The back of the head is ill-defined and merges with a flange.

W across face: 43 mm. SF 866; D.7.2 (541).

*155. Fragment of a statuette of a military figure, possibly an emperor, made from a very hard red clay with a grey core. The surface has a cream slip. All that survives is the lower part of his tunic with incised, vertical lines indicating the folds and part of the ribbon tie and the top of his splayed legs; this part shows an indication of red paint. The back is roughly finished, showing where the craftsman's finger smoothed the clay, so may not have been intended to be seen from behind. The stance may suggest that the statuette was originally placed on a separate horse figure.

H: 67 mm, W: 85 mm, T: 40 mm. B.65. Found amongst the pottery fragments.

Clay weights

Whilst the following have been identified as weights, their exact function is open to speculation. Sabratha's coastal position might imply that they were net weights, but in the case of No. 156, the fabric is so poor it would not have survived in salt water for long enough to have served such a purpose; the others are made from hard-fired clay, with No. 159 having been carefully cut from the rim of a narrow-necked vessel. Fishing weights of the period are characteristically of a pyramid or cylindrical shape so, of the weights described below, only No. 158 might have been used for fishing.

*156. Poorly baked, clay discoid weight with two circular holes pierced through near one edge. Clay loom weights with twin holes set off-centre have also been found at Sidi Khrebish in Hellenistic contexts (Lloyd and Kenrick 2014, 108–109, fig. 4, nos H83–5).

D: 69 mm, T: 21 mm, holes: 6 mm. A.2.99 (532).

*157. Ovoid weight made from very hard, fired clay with a carefully pierced central hole. A channel runs from the hole to the edge on one side.

L: 57 mm, D. of hole: 15 mm. Reg. I. Rm.1.2.7.1054.

158. Drum-shaped clay weight with sloping sides. A small circular hole, set off-centre, has been pierced from both sides.

D: 49 mm, T: 21 mm, hole: 5.5 mm, weight: 60 gm. SF 770; Casa Brogan: H.21.N4 (549).

*159. Large discoid weight with a deep wide groove running from the hole to the edge on both sides. The fabric suggests this has been cut from the rim of a narrow-necked, cream-slipped vessel.

D: 71 mm, T: 24 mm, hole: 18 mm. A.120.59 (535).

160. Pottery counter.

D: 27 mm, T: 6 mm. SF 473; B.9.3b(536).

161. Counter of North African redware.

D: 24.5 mm, T: 5.5 mm. SF 61; Casa Brogan: H.12.2–8 (548).

162. Two fragments of imbrex.

T: 19 mm. B12.2.A (634). A16.

*163. Rectangular clay cube with the numbers of a die indicated by stabbed dots on each face. Only two faces add up to seven in the time-honoured fashion. The three is indicated by arranging the dots in a straight line rather than obliquely.

L: 17 mm, W: 16 mm, T: 11.5 mm. Casa Brogan: H.103.2 (553).

Bone objects (Stephen J. Greep)

Although the excavations produced a relatively small collection of bone objects, they are of importance because of the lack of comparable, published, material from the province. The opportunity has therefore been taken to illustrate a slightly wider range of material than would otherwise have been necessary. Although there is no reason to doubt that the present material forms other than a typical assemblage for Sabratha, no attempt has been made to establish a type series of finds, although reference has been made to the slightly larger, published selection of finds from Carthage (Hutchinson and Reese 1988). Typologically most of the finds, particularly the hairpins, are of Antonine or later date, although in the absence of secure site dating it has not been possible to refine this further. A smaller number of the finds, however, would appear to date, by analogy with material from elsewhere, to the earlier Roman period. Where possible, an attempt has been made to refer to dated finds from outside the province, although the validity of this approach is uncertain and must await further, dated finds.

Hairpins

As with most sites throughout the Roman Empire, hairpins make up the bulk of the bone finds. In view of the lack of a good, published, comparative sequence from North Africa, the various forms follow the normal convention for finds from the western part of the Empire. For a discussion of the use and typology of bone and antler hairpins, see Greep 1995; Greep 1986, 197–98; Greep 2022; Crummy 1979). Hutchinson and Reese (1988) have published the widest selection of comparable North-African material, from Carthage, and list the few examples of other hairpins so far published from North Africa (ibid. 583–84). In general, exhaustive parallels have not been listed for all the types (which run to many thousands for some forms) as there is insufficient evidence from North Africa to determine whether the frequency of those present at Sabratha is reflected elsewhere.

*B1. Pin with a conical-shaped head, trellis decorated in the shape of a 'pinecone'. The form of the head is well represented at Carthage (Hutchinson and Reese 1988, fig. 12, 19–21), although the present example has a tapering stem, usually suggestive of an earlier Roman date. Whilst the tapering stem type is rare, there are widespread parallels from throughout the Roman world (see Vienne: Beal 1984, fig. 52; Northchurch: Neal 1974/6, fig. 12; Linz: Ruprechtsberger 1978, Taf. V). The stem of this example is quite weathered.

L: 84.5 mm long. JND 123

B2–4. Pins with simple, flat heads and tapering stems. These are of Greep's Type A1 (1986, 197), although they are excluded from Crummy's typology and their identification as hairpins remains insecure:

B2. L: 80 mm, broken. JND 130

*B3. L: 64 mm long. JND 172

*B4. L: 62.5 mm long. JND 173

B5–24 Pins with globular or ovoid-shaped heads, usually with a swelling stem. These are Greep's Type B1 (1986, 198; 1995; Crummy 1979, Type 3) and date from c. AD 160–400+ in the north-western provinces. This is the most-common, later-Roman type of bone hairpin recovered throughout the Roman world. The form was amongst those produced at Carthage in the late fourth–early fifth centuries (Hutchinson and Reese 1988, figs 12.16, 13.4–16 and p. 583, with further parallels and discussion):

B5. L: 77.5 mm, complete. JND 171
 B6. L: 64.5 mm, complete. JND 166
 B7. L: 33 mm, broken. JND 170

*B8. This is a particularly short example and rather thinner than is usual for pins of this form. The tip of the pin shows slight signs of reddening, possibly through use. Group 1.

L: 43mm, complete. JND 113

*B 9. Small, slender example as No. B8. L: 35.5 mm, broken. Group 1. JND 191

*B10. L: 75.5 mm, complete. JND 188

B11. L: 56 mm, complete. Group 1. JND 167

B12. L: 74 mm, broken. JND 118

B13. L: 13.5 mm, head only. JND 120

*B14. Reddened tip as B8. L: 70 mm, complete. JND 185

B15. L: 73 mm, broken (tip only). JND 112

B16. L: 38 mm, broken. JND 107

B17. L: 43 mm, broken. JND 182

B18. L: 58 mm, broken (tip only). Group 1. JND 130

B19. L: 50 mm, broken. JND 192

B20. L: 81 mm, broken (tip only). JND 165

B21. L: 57 mm, broken. JND 141

B22. L: 22 mm, complete. JND 184

B23. L: 47 mm, broken. JND 183

B24. L: 38 mm, broken. JND 169

B25–27. Pins with conical or flame-shaped heads and swelling stems. The shape of the head is similar to that of No. B1, but the type is differentiated from it by the stem. The form was well represented in the workshop at Carthage (Hutchinson and Reese 1988, figs 12.19 and 14.17–19) and is well known from late-Roman contexts elsewhere (see Ruprechtsberger 1978, 32–33, Type f; Greep 1995, Type B1.6):

B25. L: 39.5mm, broken. JND 114

*B26. L: 71mm, broken. JND 180

B27. L: 102.5mm, complete. JND 115

B28–30. Pins with flat, disc or ‘nail-shaped’ heads and a swelling stem. Although the type was not represented in the workshop group at Carthage, they are common forms, particularly in the north-western Empire during the late-Roman period (see Crummy 1983, fig. 22, 423: her type 6):

B28. L: 36.5 mm, broken. JND 190

*B29. The very small head seen on this example can also be seen on a pin from Sidi Khrebish (Lloyd and Kenrick 2014, fig. 1, no. H17). L: 75mm, complete. JND 168

B30. L: 56.5 mm, broken (tip only). JND 186

*B31. Pin with a trellis-decorated ball head, two collars below, six-cut collar above. Slightly swollen stem. Reddening on the tip.

L: 97.5 mm, broken tip. JND 119

In addition to the hairpins listed above, the following contexts contained stems from hairpins or possibly needles or spoons: JND 117, 121, 133, 140, 141 (two examples), 150 (with a reddened tip), 152 (two examples), 160 (two examples including one with a reddened tip), 175, 176, 189 and two others unstratified:

Needles

Next to hairpins, bone needles are invariably the most common type of bone artefact recovered. The range of types is relatively restricted, and it is rarely possible to date individual forms without independent site evidence. The function, typology and dating has

been discussed in Greep 1995. In broad terms, and on evidence from the north-western provinces, bone needles are rarer in the fourth century AD than earlier. No bone needles were represented in the late assemblage at Carthage (Hutchinson and Reese 1988):

B32. Needle with a single, round eye, squared head and sturdy stem.
 L: 108 mm, broken (tip only). JND 132

*B33. Needle with a pointed head and a ‘figure-of-eight’ eye.
 L: 82 mm, broken. JND 147

B34. Needle with a rectangular eye, and a pared, flattened head. Broken across the eye, which originally would have been ‘squared’. This is a common type elsewhere.
 L: 64 mm, broken head and stem. JND 161

*B35. Needle with a flattened, rounded head and an unusual composite eye.
 L: 64 mm, broken. JND 146

Spoons

B36–39. Spoons with a simple round bowl and a straight tapering handle or ‘tail’. This is the most common type of bone spoon throughout the Empire (see Riha and Stern 1983) and may be equated with the classical *cochlearia*. Where dated, the bone form seems most common in the earlier Roman period, ie the first to second centuries AD (see Hassall and Rhodes 1974, fig. 28, 16), a chronology confirmed by its metal counterparts (Strong 1966, 155 and 177). Examples have been found at Sidi Khrebish, of which one was in a Flavian context (Lloyd and Kenrick 2014, 125, fig. 11, nos H202–3).

*B36. L: 75mm, broken tip and bowl. JND 153

*B37. L: 98mm. JND 143

*B38. L: 97mm. JND 131

*B39. L: 85mm, broken stem and bowl. JND 179.

*B40. Oval-bowled spoon, broken at the base of the handle. The interior of the shallow bowl has only partly been cleared out and this example may well be unfinished, although the remaining parts seem well polished. Spoons of this type are occasionally called ‘lyre-shaped’. They are rare in bone (see Kenyon 1957, fig. 114, 5; Greep 1983a, fig. 6, no. 3), but the shape of the bowl would appear to last throughout the Roman period to judge from their metal counterparts (see Strong 1966, figs 32, 36 and 40). Unfortunately, the comparable examples from Sidi Khrebish were both surface finds (Lloyd and Kenrick 2014).
 L: 52 mm. JND 139

*B41. Spoon with an oval-shaped bowl, below which is a squared, decorative element and a long, round ‘rat-tailed’ stem. The type is not common in bone (see Bauman 1979, fig. 7, 3; Behrens and Brenner 1911, Abb. 26, 45), but the decoration is presumably reminiscent of the form’s metal counterparts (see Strong 1966, fig. 36).
 L: 142 mm, complete, except for a chipped bowl. JND 187

B42. Stem, tapering in length and decorated with three crudely-cut grooves. Possibly the stem of a spoon.
 L: 86.5 mm long. JND 174

Cosmetic spoon

*B43. ‘Cosmetic spoon’ with a small, flat bowl carved at an angle to the swelling stem of the handle. These forms are commonly found in both bone and bronze. They have been variously described in the literature as ‘ear-picks’ or *ligulae* and they probably served a wide

variety of functions. They are best identified with the *ligulae* of classical literature where they are ascribed a variety of functions, such as for cleaning out small narrow vessels (Pliny *NH* xxi, 145, 49; Cato, *De re rustica* 84; Columella, *Rust.* ix, 5). Davidson (1952, 181) called them ear and unguent spoons, used for cleaning the ear and removing cosmetics from deep vessels. They could also have had a variety of medical functions and occur as one end of combination implements (Milne 1907, 63–68). Although in the north-western provinces dated examples invariably belong to the first two centuries, four examples were recovered from late deposits at Carthage (Hutchinson and Reese 1988, fig. 15. 35–38 and p. 584).

L: 84 mm, broken tip. JND 162

Discs

A number of objects of uncertain function have been grouped together here, although this does not necessarily presuppose a similar function. Such items are often referred to simply as buttons or whorls, but their true identification is difficult to discern unless their shape is characteristic, or they are found in association with other objects.

B44. Disc with flattened sides and perforated in the centre. Function uncertain.

D: 23. 5 mm. JND 109

*B45. Small, turned bone ‘ring’. Function uncertain.

D: 15 mm. JND 142

*B46. Turned and perforated disc. Similar objects are known to have functioned as parts of *pyxides*, although a number of other uses would be possible.

D: 28 mm. JND 136

B47. Small oval perforated disc.

D: 21 mm (max). JND 108

Other bone objects

*B48. Lathe-turned, bone rod with decorated baluster mouldings as terminals. Complete except for some damage to one of the terminals. The function of this, and similar pieces (see Maniere 1966, pl. II, 52; Vives y Escudero 1917, Lamina XXX, 2 and XXVII, 21–22), is uncertain though one possibility is that they functioned as spindles (see Boehmer 1972, no. 2090, with a whorl *in situ*). Although there are few close parallels, similar pieces would appear to concentrate in the earlier Roman period (for example, at the northern cemetery at Emona: Plesnicar-Gec 1972, Tafn. VIII, 32; XXV, 101; CVII, 396). Rods with single turned and decorated terminals are more common in the earlier Roman period and probably served a similar purpose (see Petru and Petru 1972, Graves 29, 239, 622, 831 and 908).

L: 205 mm. JND 128

*B49. Small, turned bone ring with an internal seating. Function uncertain.

Approx. D: 30 mm. JND 155

*B50. Lathe-turned rod, probably a stylus. The use of similar pieces has been variously described, despite them being found throughout the Empire, principally in earlier Roman contexts. The type is extensively discussed by Gostenčnik, 2005, 41–71 with further references).

L: 80 mm, complete. JND 181

B51. Small plate of bone, polished on all surfaces but otherwise undecorated. Function uncertain.

L: 59 mm. JND 106

*B52. Decorated fragment of bone, probably part of a pendant. The shape of the surviving terminal suggests that this may be a part of a hand and phallus, or similar, pendant (Greep 1983b, 139–40) of early Roman date.

L: 31 mm, broken. JND 105

*B53. Irregularly-shaped, single-piece bone die (see Hutchinson and Reese 1988, fig. 19.61–62). As is usual on dice of the Roman period, the pips on opposite sides add up to seven. This is a rather unusual example, however, in that there is evidence of an earlier arrangement on the ‘five face’ where traces of two ‘triple ring’ pips survive. It would appear that the present die, with its single-ring pips, is the result of cutting down a rather larger example. That two of the sides have curved corners and two flat ones would support this suggestion. For Roman dice in general, see Schmid, 1980. Traces of a decorative, black inlay survive in a number of the ‘pips’. Such ‘decoration’, in association with a yellow wax finish, was common on bone objects of the Roman period (Schmid 1968), but rarely survives. For a recent discussion identifying the inlaid material as birch pitch, see Rodet-Belarbi *et al.* 2020.

Sides 14 x 12.5 x 11 mm. JND 157

*B54. A rather worn example of a bone hinge with a single perforation and a series of three turned grooves. While Fremersdorf (1937–40) discussed the function of these forms in some detail, more recent, and more accessible, accounts have been published by Frere (1972, 149–50), Schmid (1968) and Frere-Sautot and Béal (1980). These forms are now well recorded from throughout the Roman world, although the single perforation type is more usually undecorated; most from dated contexts belong to the earlier Empire. Two examples were, however, found in late deposits at Carthage (Hutchinson and Reese 1988, fig. 19, 59–60). For a more recent discussion of the form and function of hinges, see Friendship-Taylor and Greep 2012. For parallels from Sidi Khrebish, from contexts ranging from Hellenistic to early second century, see Lloyd and Kenrick 2014, 126, fig. 11, nos H211–13.

L: 45 mm, broken but complete in length. JND 110

B55. Lathe-turned rim from the top of a small *pyxis*. For the form, see Béal and Feugère 1983, fig. 3, Type 2). The type would appear to date to the earlier Roman period (see Petru and Petru 1972, Graves 86, 863), although some examples have been recovered at later dates (Petru and Petru *ibid.* Grave 920, found with a coin of Claudius II).

Rim approx. D: 25 mm. JND 129

B56. Small, thin, rectangular plate of ivory, finished on both sides and at one end. Function uncertain.

L: 30 mm, broken, W: 3 mm. JND 509

B57. Well-polished tapering rod of bone. Possibly the stem from a bone pin or needle, although the thickness of the stem suggests it is more likely a spoon or ‘spindle’, such as Nos B48 or B50.

L: 77 mm, broken. JND 158.

B58. Tip of a well-polished tapering stem of bone. This is too thick to be from a hairpin or needle and is probably from a ‘rod’ or ‘spindle’ as B57.

L: 45 mm, broken. JND 164.

B59. Tapering stem of a well-polished bone object, similar to No. B57.

L: 46 mm. JND 162.

*B60. Ring of bone, as Nos B61–2, except for a single perforation which has been drilled through from one surface only. Function uncertain, but possibly product waste.

D: 32 mm. JND 178.

Bone waste material

B61. Ring of bone, from a *bos* metacarpal. Both ends have been lathe-turned.

D: 27 mm, W: 10 mm. JND 125.

B62. Ring of bone, lathe-turned and sawn at one end. Product waste.

D: 39 mm. JND 126.

B63. Ring of bone, as 61–2.

D: 41 mm. JND 127.

*B64. Sawn section of bone cut from a *bos* metacarpal.

L: 45 mm. JND 159.

B65. Ring of bone, sawn at either end.

L: 21 mm, D: 28 mm. JND 124.

B66. Bone rod with a spatulate terminal. This piece shows strong knife-cuts throughout and is clearly unfinished, although what the end product was intended to be is uncertain; it may have been intended as a cosmetic spoon as No. B43.

L: 74 mm, broken. JND 111

B67. Sawn tine terminal from a deer antler.

L: 93 mm. JND 145

Readers will find additional material in an online appendix (<https://doi.org/10.1017/lis.2023.3>), formed of two lists, the first, with catalogue numbers, are objects that were identifiable from the descriptions in the Registration Book, to the extent that another researcher might wish to refer to them. The second list, without catalogue numbers, are objects with so little information that they are not particularly useful individually but might be useful more generally for researchers re-assessing an area of the site or a context.

Discussion

Sabratha is an unusual site in Roman Libya in the range of the finds it has produced, a range covering the decorative, the religious, the industrial and the domestic sides of life. It is to be regretted that so many have gone missing or have suffered corrosion damage since excavation, and how few of the finds can be attributed to a securely-dated context.

Jewellery in general is sparsely represented, but fragments of three brooches were found (Nos 2–4). In comparison, a domestic dwelling at Lepcis Magna produced only one copper-alloy brooch, while the people of Ghirza also do not appear to have favoured brooches: no brooches were found in the excavations of the settlement or the cemetery, both of which sites have been dated to the late third to early sixth century AD (Brogan and Smith 1984; Allason-Jones 2013). This lack of brooches, or artefacts that could be worn as brooches, implies that the inhabitants of Sabratha, like the rest of the area in the Roman period, had little need for such fastenings, either because the clothing worn by the residents did not require them or because brooches were worn only by a subsection of society, a subsection not represented in the areas so far excavated.

The rest of the jewellery includes a silver finger-ring (No. 1), a possible iron finger-ring (No. 93), a copper-alloy ear-ring (No. 164), a copper-alloy bracelet (Appendix No. 165) and three glass armband fragments (Appendix Nos 179–81), although there is a selection of beads of both glass and semi-precious stones (18 plus 5 melon beads). This can be compared with the excavated house at Lepcis Magna mentioned above,

which produced seven ear-rings, eight finger rings, two intaglios from finger-rings, 38 beads of glass and semiprecious stone, four bracelets and two pendants for ear-rings, plus a fragment of a pennisular brooch of Fowler's (1961) Type E, which had been adapted by cutting and curling to form a finger-ring or possibly an ear-ring (Allason-Jones 2013). This variation between the work at Sabratha and the Lepcis Magna excavations, however, may be explained by the areas covered – the seasons at Lepcis Magna concentrated solely on a domestic dwelling (Walda *in prep.*), whilst Kenyon's attention at Sabratha was mostly concentrated on public-realm areas, with the exception of 'Casa Brogan', which produced only two beads (Nos 6 and 123).

The semiprecious stones, particularly the beads of amethyst and jadeite, point to the import of luxury goods and a population able to afford such items. However, given that only a few examples were found on the site and from scattered findspots, they suggest casual losses and it is possible that they were brought to the site by travellers. The objects may have had amuletic purposes, rather than being simply decorative, and Cosyns' comment that glass beads could be worn sewn onto cloth to decorate dress, rather than strung on jewellery, should be recalled here (2011, 285; note also the discussion on the use of melon beads above). The jewellery, taken as a whole, does not point to a particular group of people living on the site.

Other items related to personal use include a single buckle (No. 7), although this could have fastened a harness strap or a satchel. There is also one decorative copper-alloy pin (No. 10) and a number of bone pins (B1–31), which are presumed to have been used for hairstyling, but could equally have been used as fasteners or to fix veils. Two fragments of copper-alloy mirrors (Nos 16 and 17) indicate an interest in personal appearance, even if the sizes would provide only a limited view. The probe (No. 14) may have been a surgical instrument, used to probe wounds and expose areas during operations, but was more probably a domestic item used to apply cosmetics, scents or salves. The bone spoon (No. B42) is also ambiguous as to its context and use.

The domestic items include two keys, one for a lever lock (No. 83) and the other for a sliding mechanism (No. 84); both could be used for doors, cupboards or boxes and both suggest their owners had items they wished to protect against depredation by others. Work with textiles is indicated by the examples of copper-alloy and bone sewing needles (No. 11, No. 13, Nos B32–35), as also by the clay and pottery loom weights (Nos 155–56, No. 157). The quality of the lathe-turned bone object, if a spindle, hints that this was used for pastime spinning rather than work on a large scale (B48).

Objects with a possible military attribution are few and far between, but a vine-leaf harness pendant (No. 25) is of a type popular with the Roman cavalry in the first century AD; the scabbard slide from a military belt (No. 26) is also of an early date. The small, peltate mount could be military or civilian, as could the arrowheads (Nos 28–29), which would have been just as efficient for hunting as for combat. The presence of the arrowheads may reinforce the identification of No. 30 as a possible bow lath. There are also two iron ferrules (Nos 85–86), but it is not possible to say if these came from spear butts or civilian tools.

Religious material includes five clay figurines (Nos 151–54; Appendix No. 187), none of which can be clearly identified as a specific deity and may have been ancestor figures or representations of emperors; the life-sized finger-tip is very possibly from an emperor statue but may be an *ex voto* (No. 153). There is also a statuette base (No. 9), which would have supported a metal figurine, and three fragments of copper-alloy sheet which may have come from copper-alloy statues (Nos 40–42); the contexts of these pieces, however, may indicate they were being used

for metal recycling. It is also possible that some of the glass/semi-precious beads may have been regarded as amulets by their owners.

The only suggestion of agriculture or horticulture is the possible sickle (No. 86) but, given the urban nature of the site, this is not unexpected. The two fragments of rotary querns (Nos 144–45) suggest the domestic grinding of cereals – they are too small to have been used commercially.

As might be expected from a port site, there are three, possibly five, copper-alloy fish-hooks indicating that line-fishing was being carried out, with the different sizes of hook suggesting different species were being caught. No iron fish-hooks were identified but, given that fish-hooks are made from fine wire, this may not be unexpected in a salt-laden environment. Fish-hooks are surprisingly rare on Roman sites in Africa and are, as might be expected, confined to coastal sites: one large example and a bundle of seven small fish-hooks wrapped in a scrap of material, for example, were found at Lepcis Magna (Allason-Jones in Walda, [in prep.](#)).

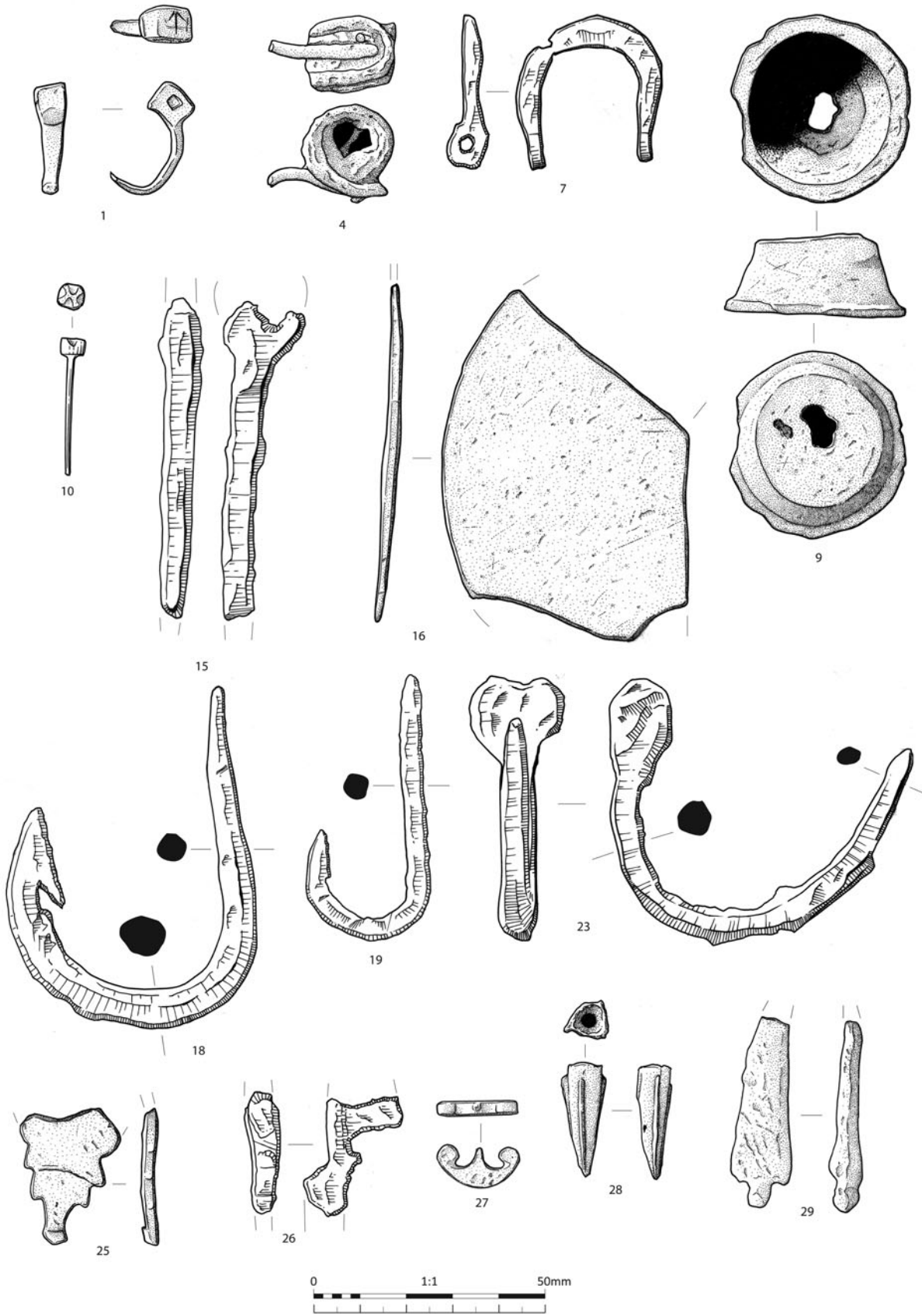
The site dates suggested by the various site excavators and supported by the pottery evidence is very wide, covering most of the period of Roman activity in North Africa. This wide range can also be seen in the small finds – when it has proved possible to assign a date – with the earliest being around the first century BC and the latest being around the fourth century AD. However, many of the objects described above could have been used by their owners for many years, and without precise context data it is impossible to provide firm dates for most of the items. It is hoped that future work in Libya and the other Roman provinces of North Africa will provide parallels and dating evidence to help throw more light on the small artefacts used by the people of Sabratha in the Roman period.

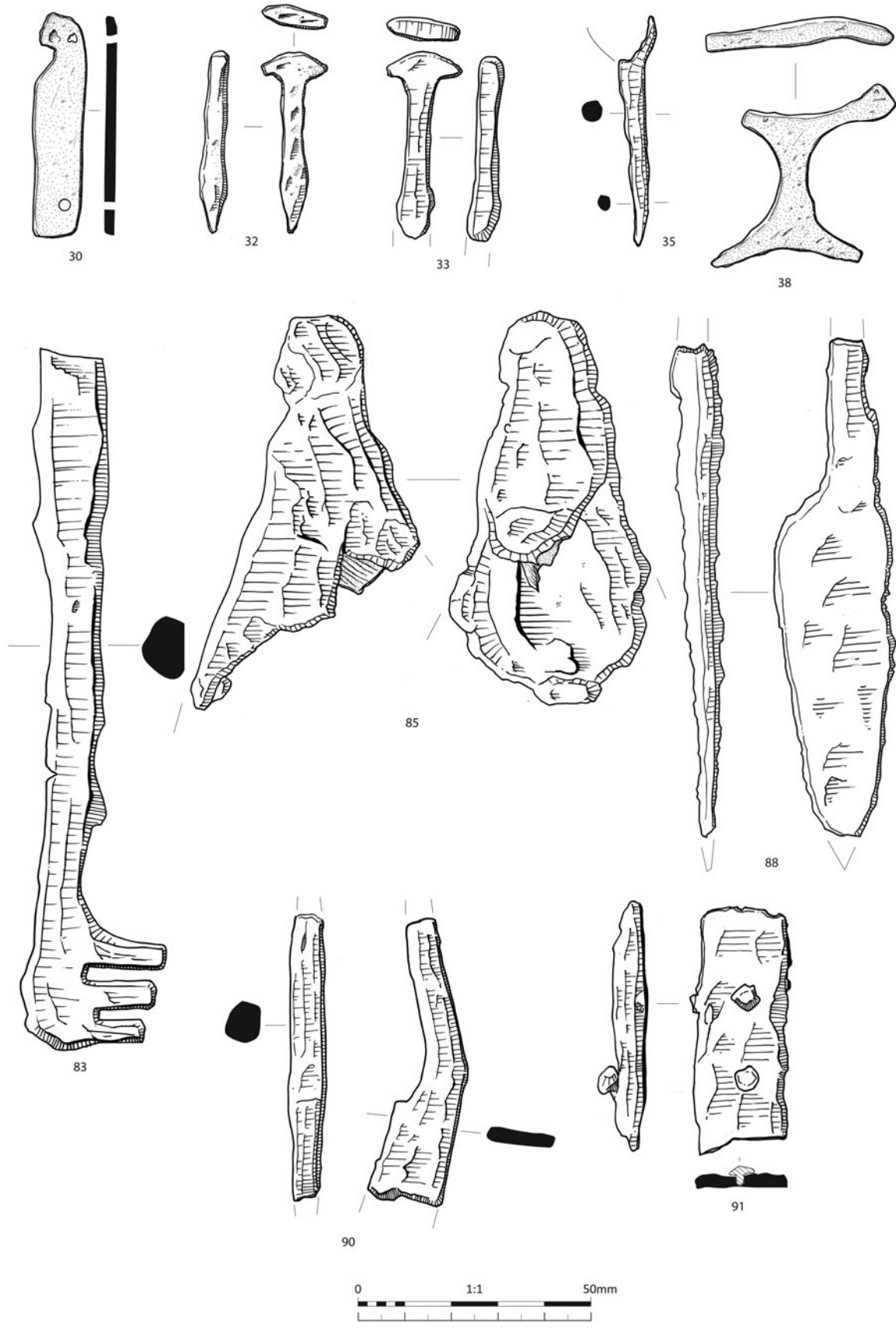
Supplementary material. The supplementary material (Epigraphic Appendix) for this article can be found at <https://doi.org/10.1017/lis.2023.3>

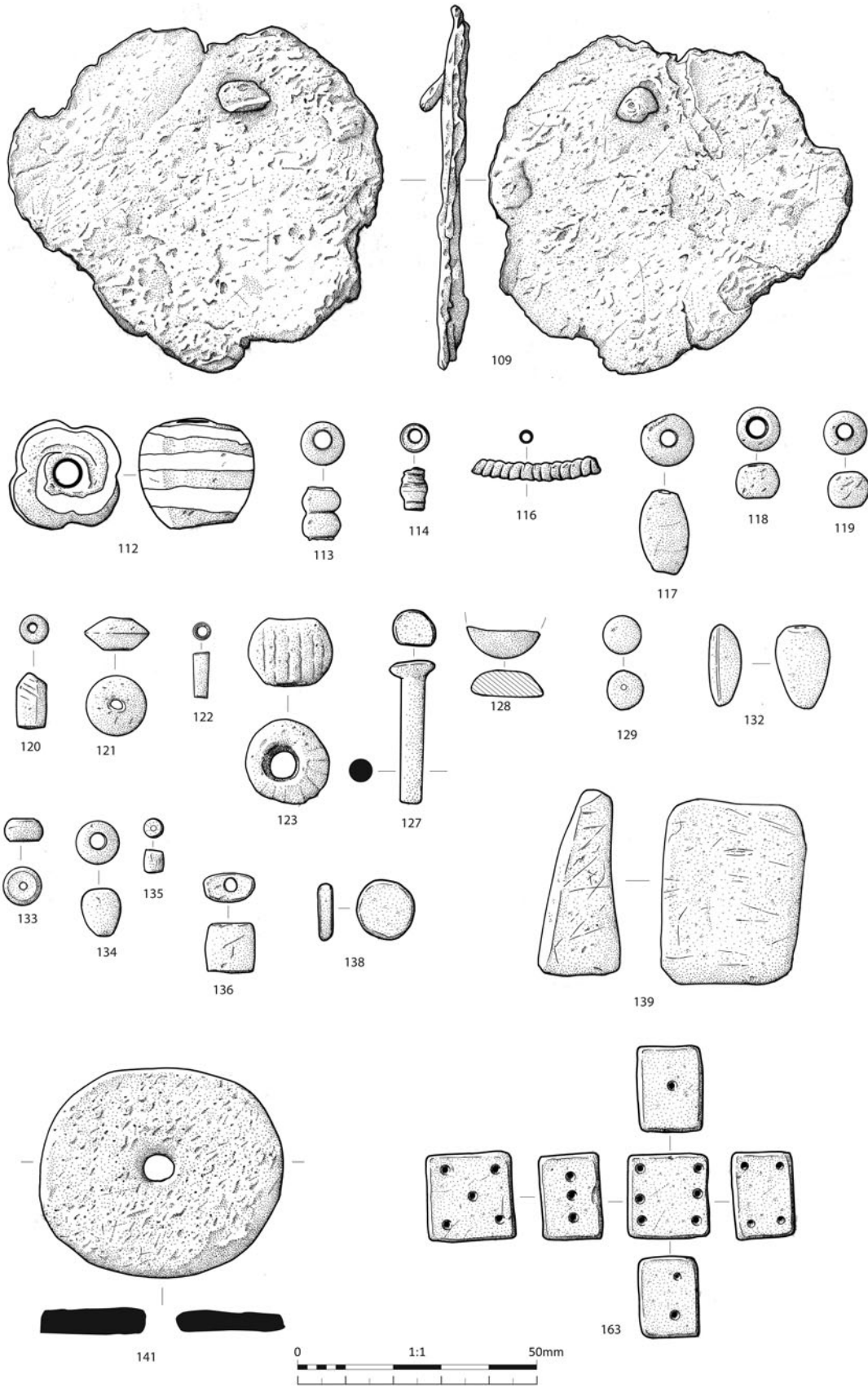
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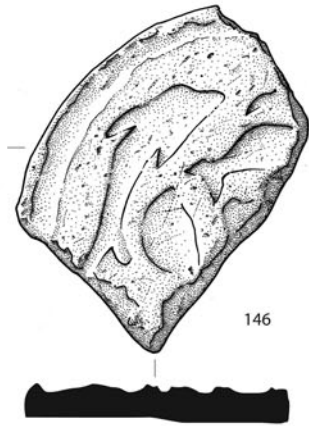
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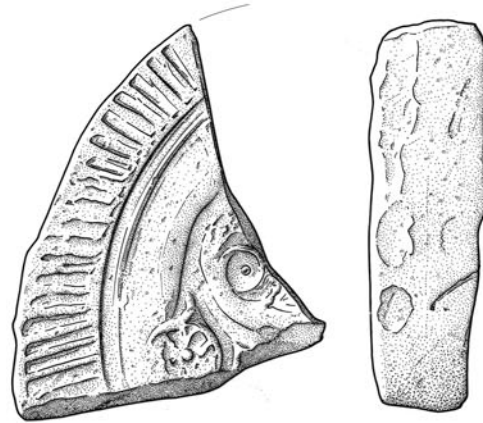




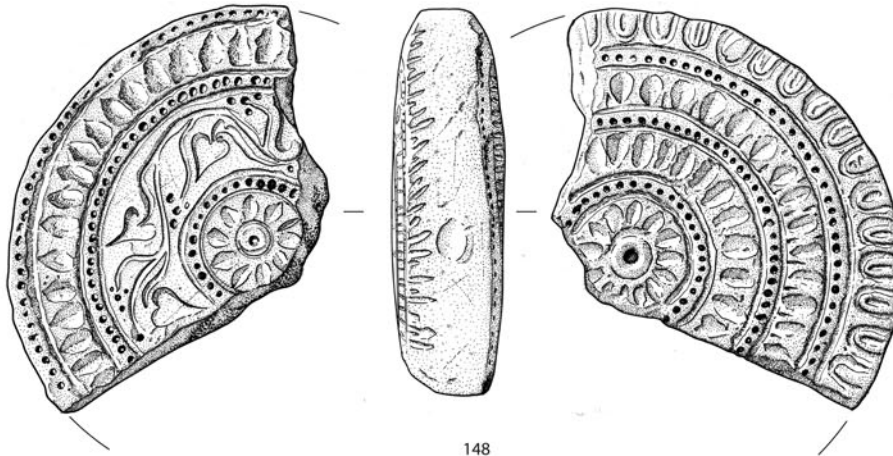




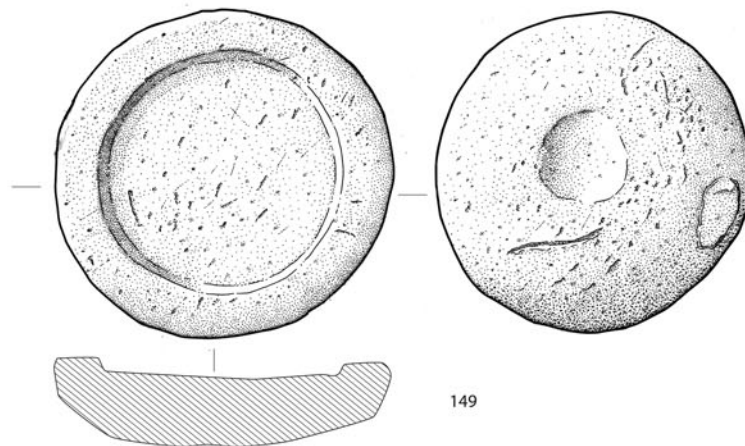
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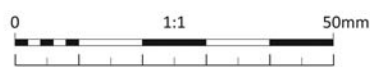
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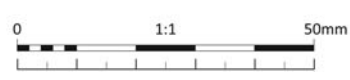
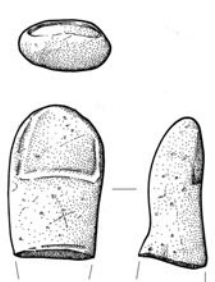
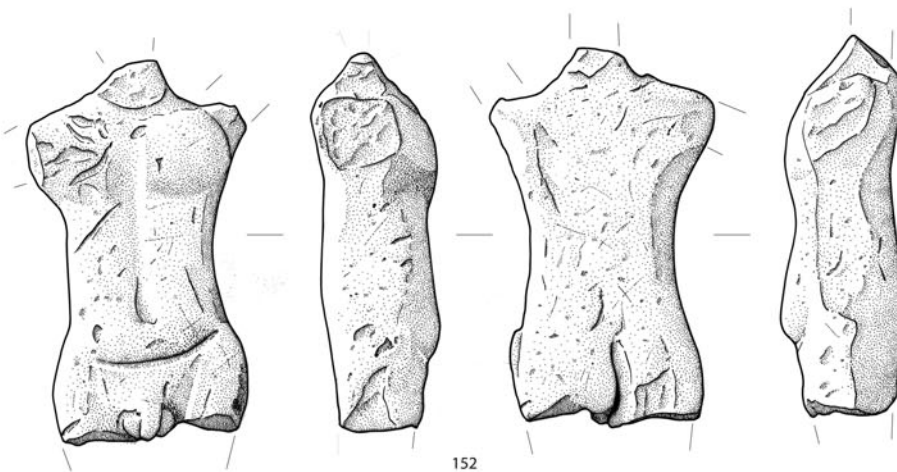
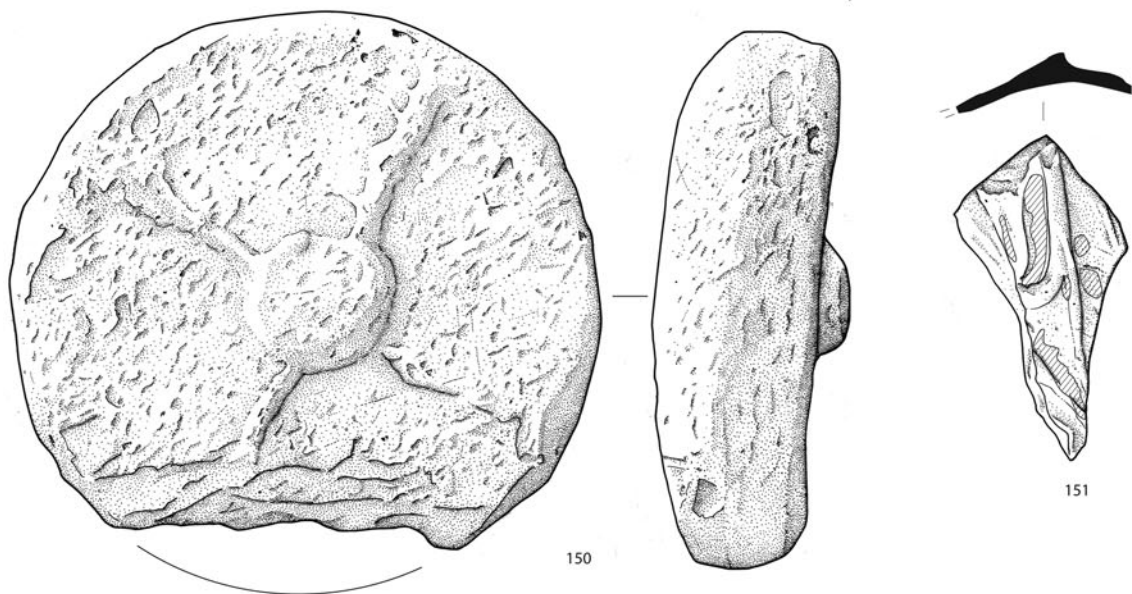


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