

Manuscript Report Number

445

ARCHAEOLOGICAL INVESTIGATIONS AT THE HUDSON'S BAY COMPANY ROCKY MOUNTAIN HOUSE, 1835-61 by Donald N. Steer, Harvey J. Rogers and Gregory J. Lutick 1979

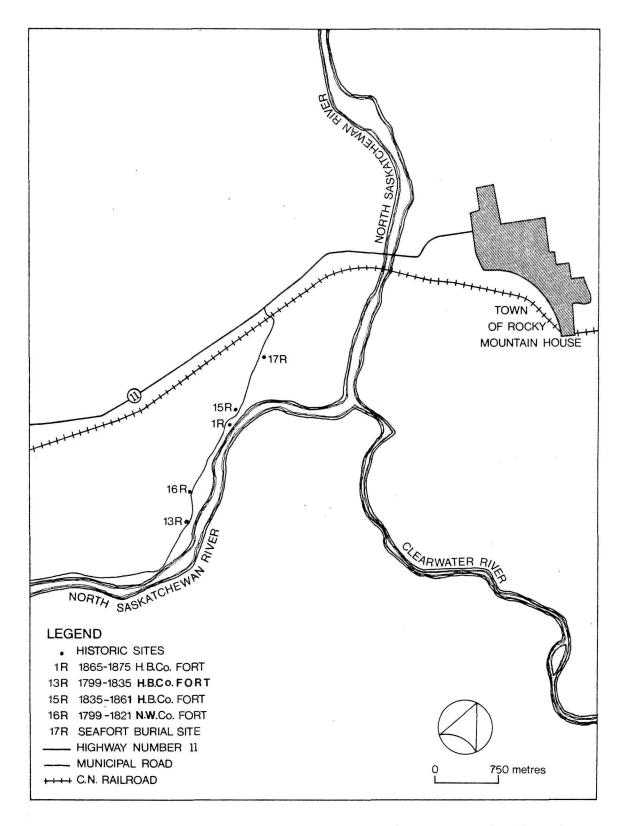
Volume II

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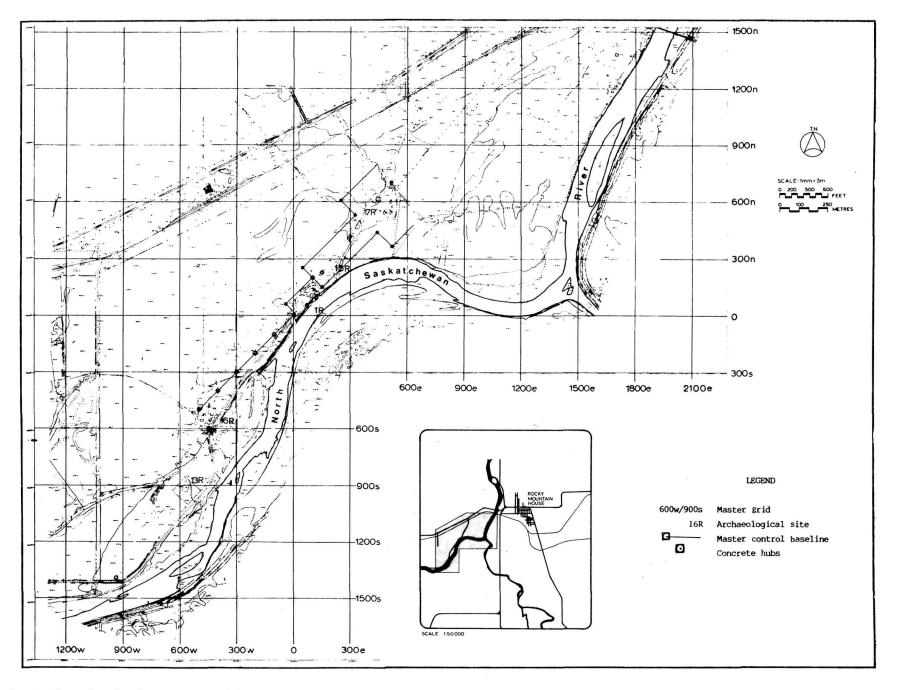
Volume II

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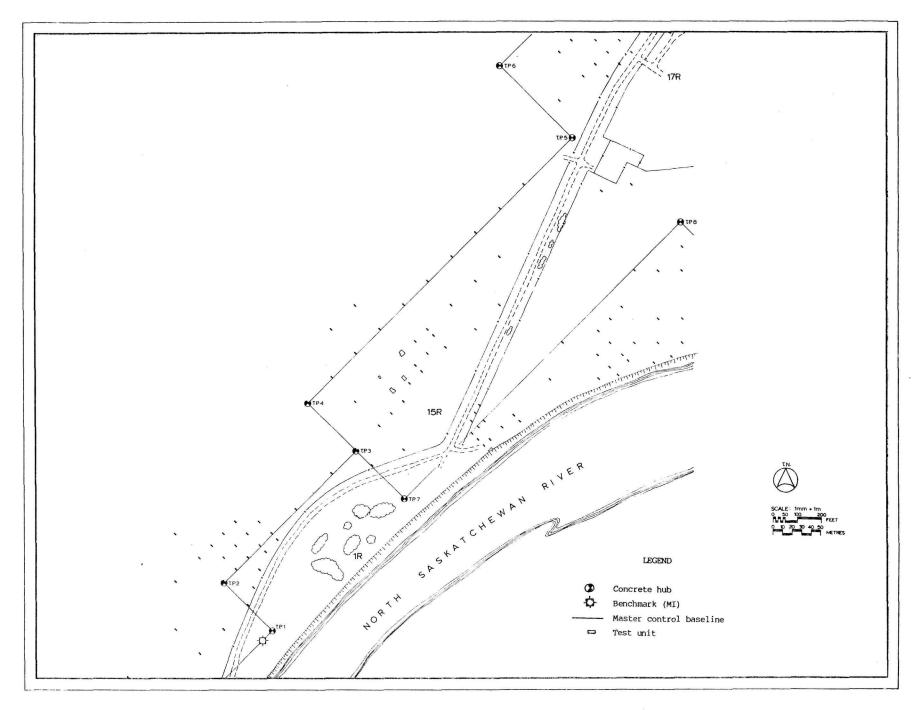
Many of these reports will be published in <u>Canadian Historic Sites</u> or <u>History and Archaeology</u> and may be altered during the publishing process by editing or by further research.



1 Historic site locations within Rocky Mountain House National Park.



2 Archaeological master grid, Rocky Mountain House National Historic Park.



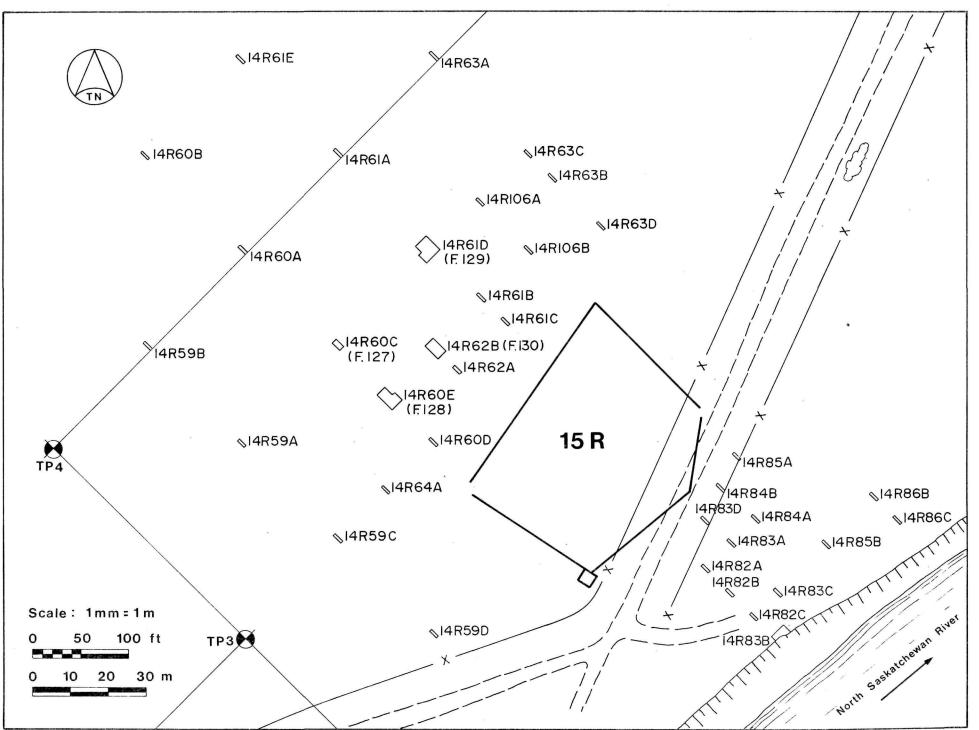
3 14R Area Survey test units located in the vicinity of sites 1R, 15R and 17R.

4 Location of site 15R-related sub-operations that were excavated as part of the 14R Area Survey.

LEGEND

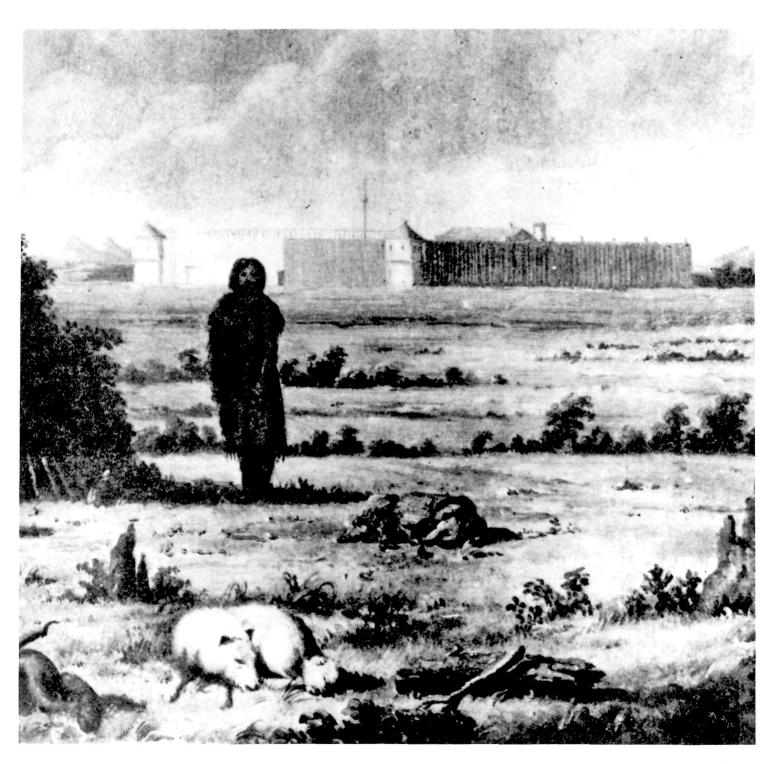
Master control baseline

Sub-operation





Paul Kane's 1848 water-colour of the Hudson's Bay Company Rocky Mountain House, 1835-61 (Peabody Museum, Harvard University, 41-72/397).

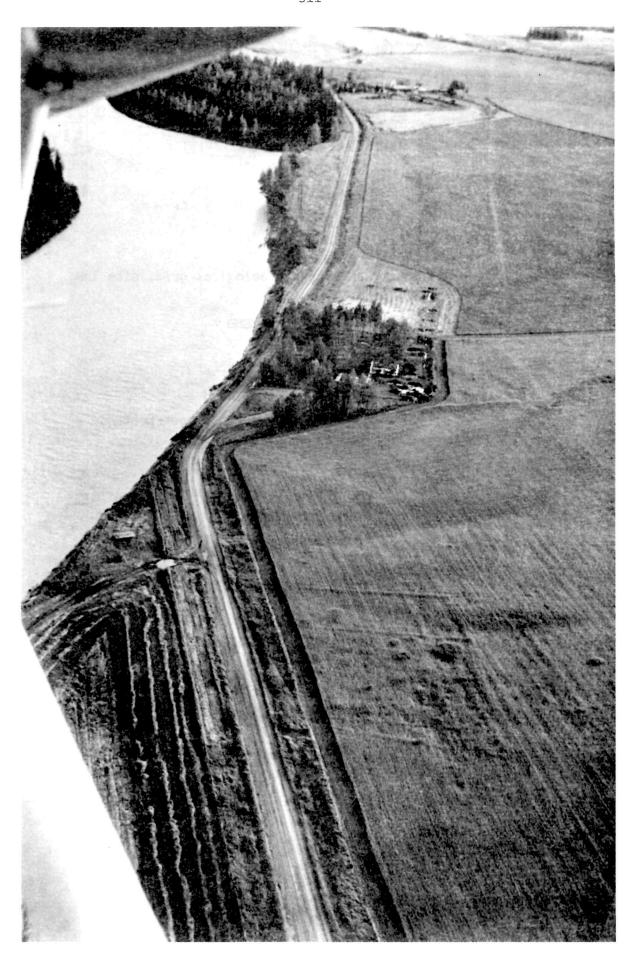


A portion of Paul Kane's 1848 oil painting of the Hudson's Bay Comapny Rocky Mountain House, 1835-61 (Royal Ontario Museum, 912.1.57).



Doctor James Hector's 1858 sketch of the Hudson's Bay Company Rocky Mountain House, 1835-61 (Hocken Library, University of Otago, 13, 126).

1966 low oblique black and white aerial photograph of sites 15R, lR and 16R: palisade lines and depressions of site 15R highlighted by crop and shadow marks (foreground); site lR during excavation (centre), and site 16R ("Old Brierley Farm" in background). View to the south (1R-241M).



9 Overall site plan with archaelogical grid, site 15R.

LEGEND

Post

Horizontal wood

Gallery support post/posthole

Edge of depression

Trench

--- Limits of excavation

14W Sub-operation

F.38 Feature number

10 Plan of structure and feature remains associated with the early period fort at site 15R.

LEGEND

Post

Horizontal wood

Gallery support post/posthole

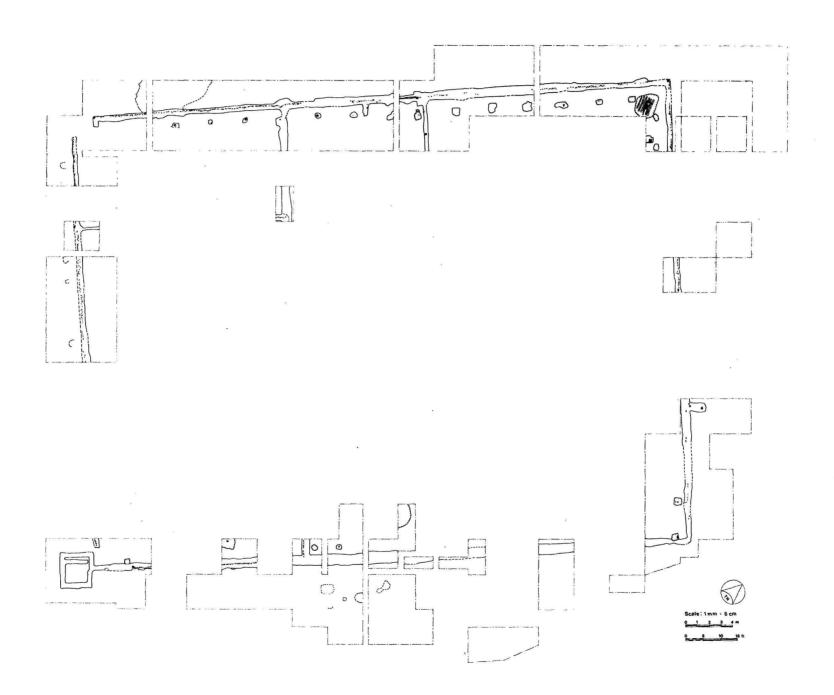
Edge of depression

Trench

Assumed edge of depression or trench

Limits of excavation

14W Sub-operation



11 Plan of structure and feature remains associated with the late period fort at site 15R.

LEGEND

Post

Horizontal wood

Gallery support post/posthole

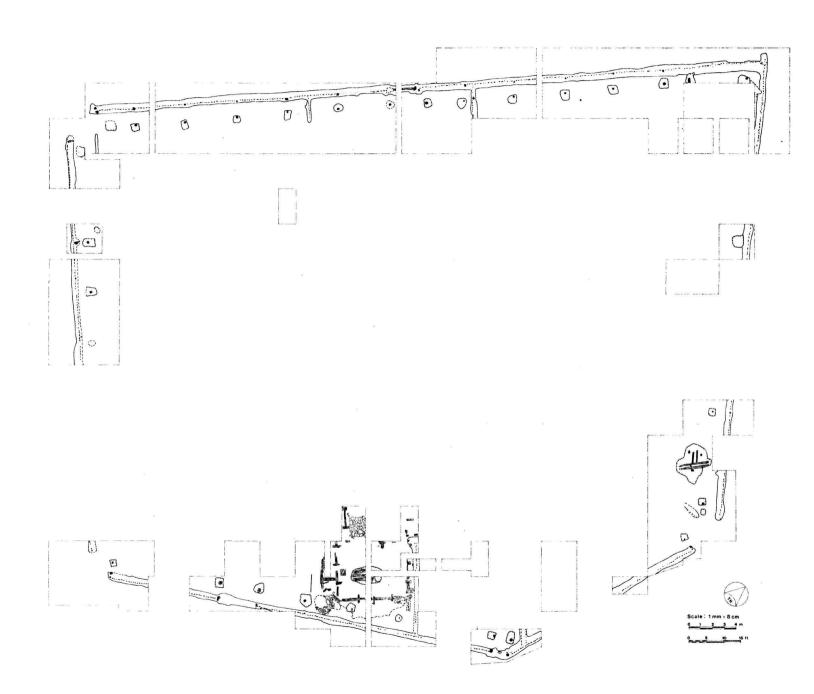
Edge of depression

Trench

Assumed edge of depression or trench

Limits of excavation

14W Sub-operation

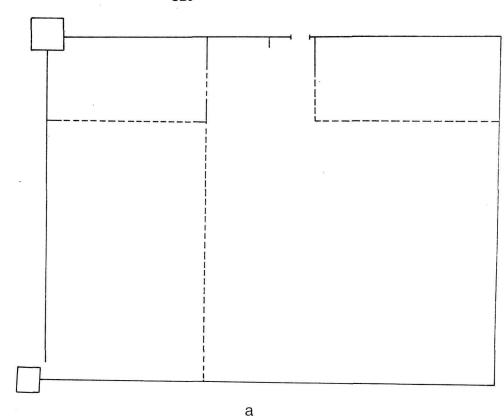


Palisade and interior separation configurations of the early and late period forts at site 15R based on excavation and a 1966 aerial photograph (See Fig. 8).

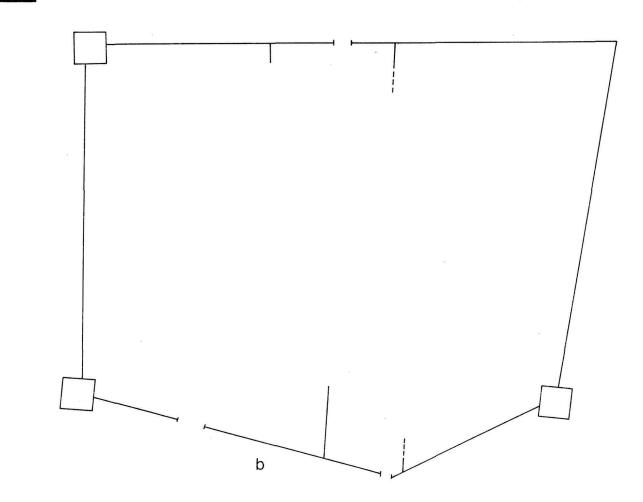
LEGEND

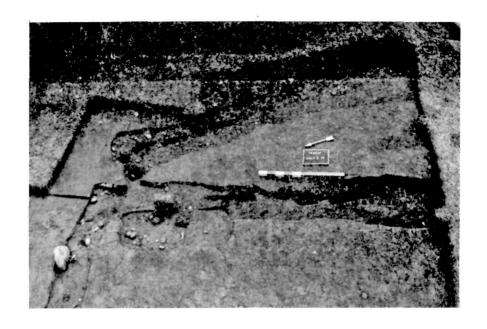
- a Early period fort
- b Late period fort
- Position of structures/features based on excavations
- ----- Position of structures/features based on aerial photography.



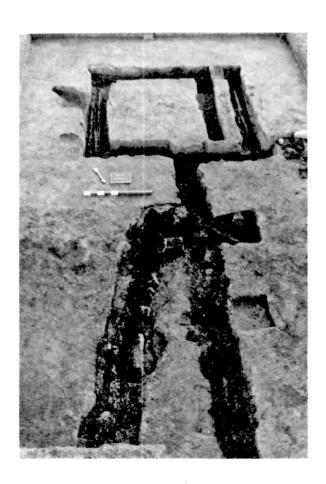




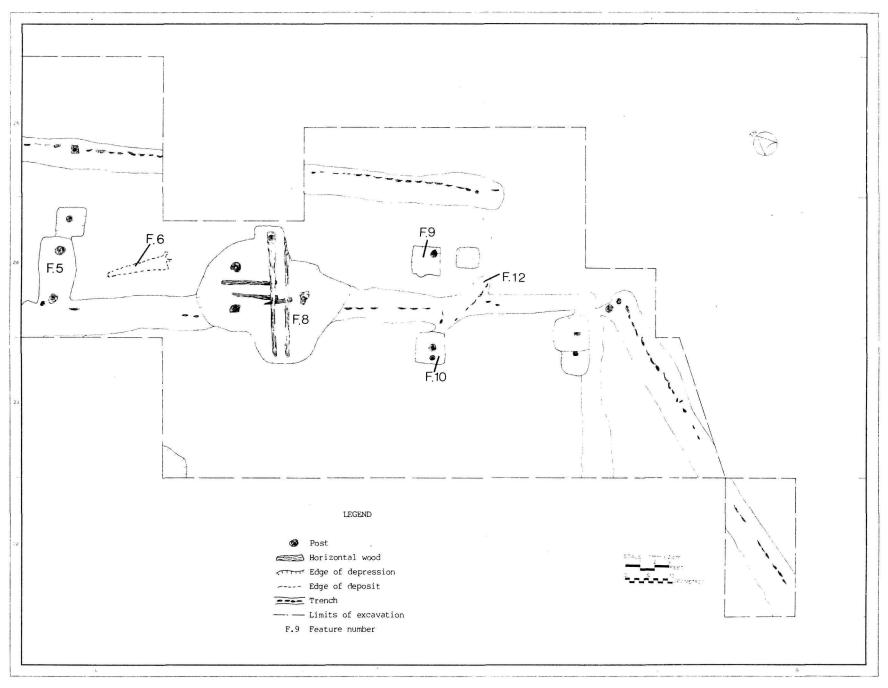




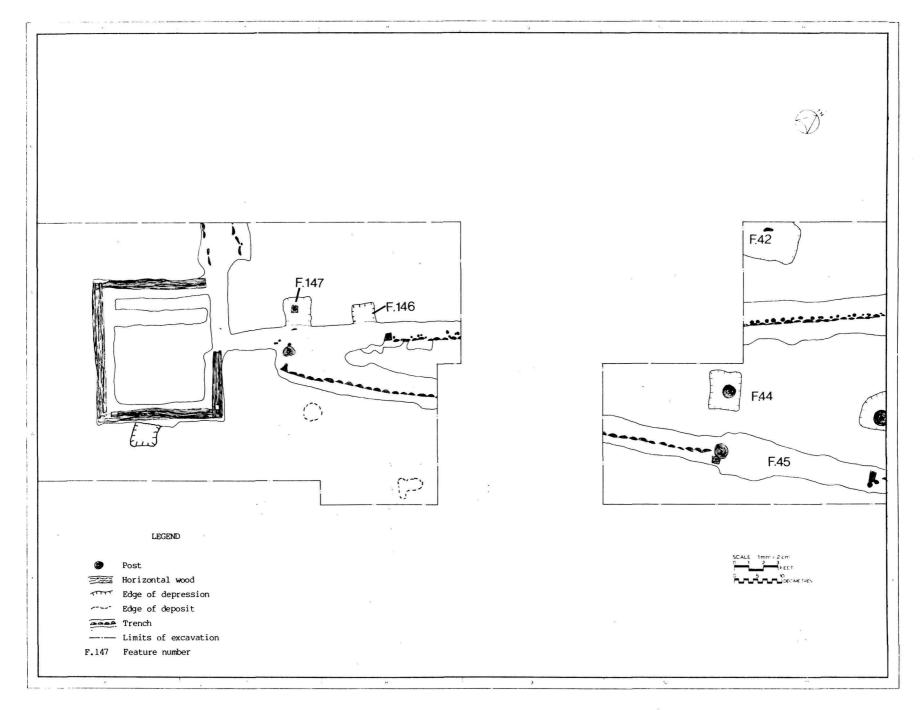
Northeast corner of fort. View of the east (15R-261 M).



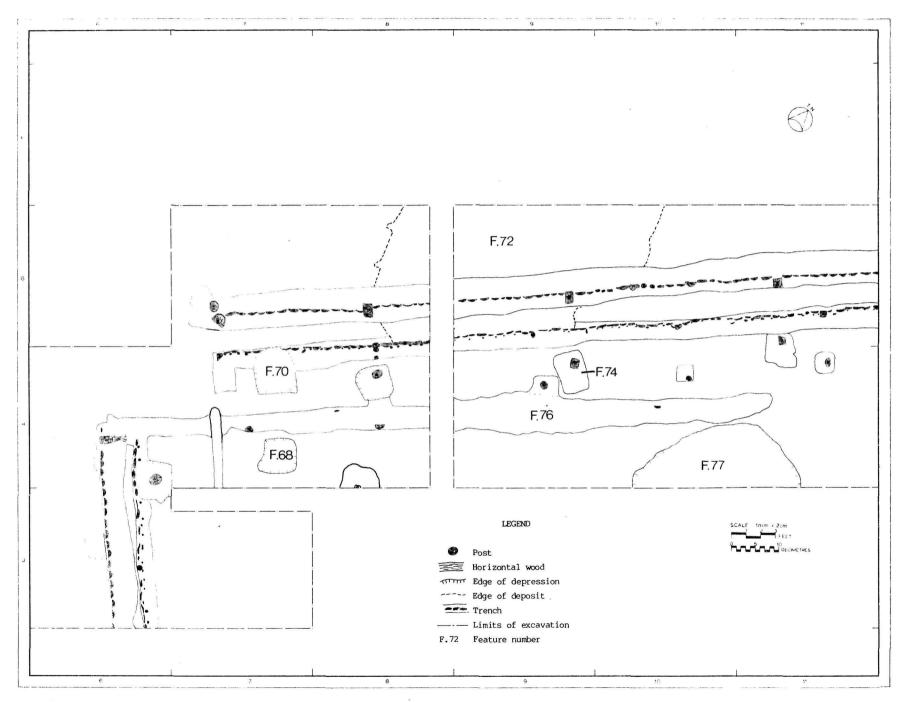
14 Southeast corner of fort. View of the south (15R-295 M).



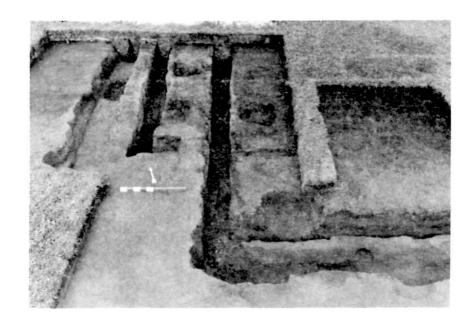
15 Plan of the northeast corners of the early and late period forts.



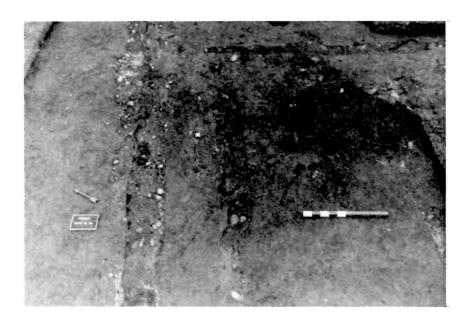
16 Plan of the southeast corners of the early and late period forts.



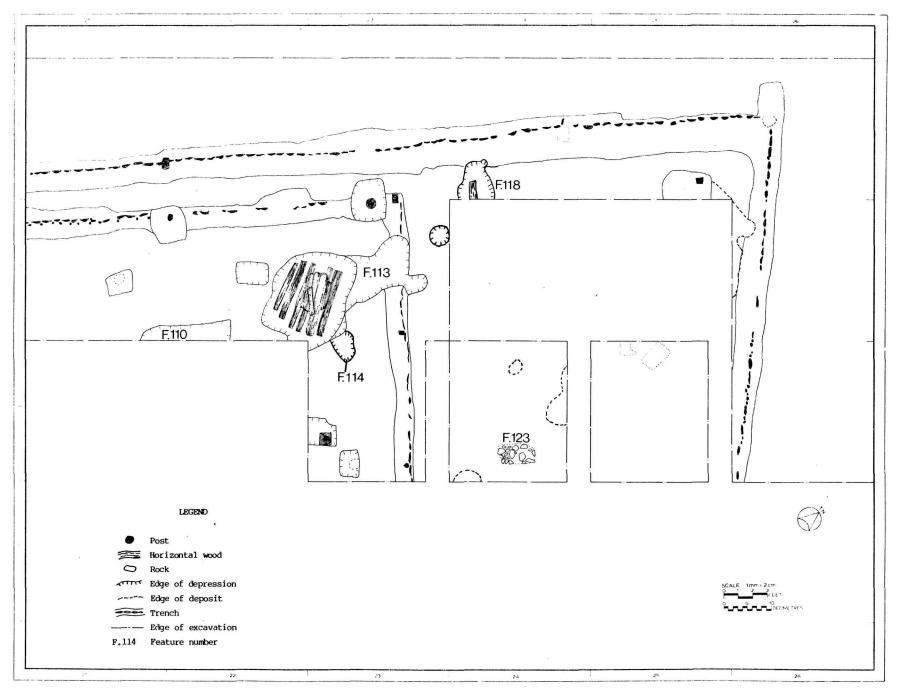
17 Plan of the southwest corners of the early and late period forts.



18 Southwest corner of fort. View of the north (15R-499 M).



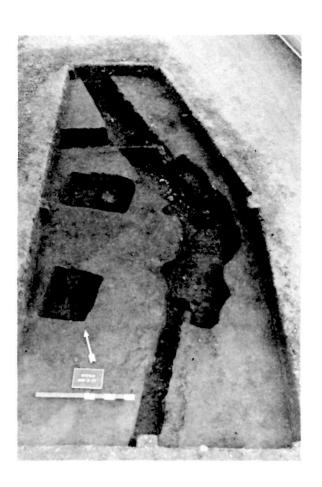
19 Northwest corner of early period fort. View to the north (15R-170M).



20 Plan of the northwest corners of the early and late period forts.

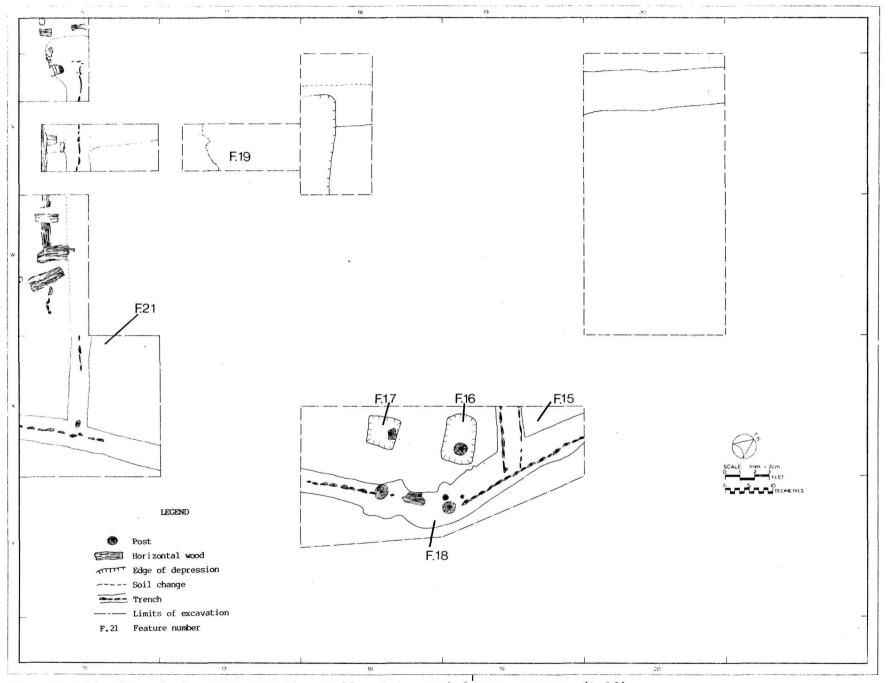


21 Apex of the late period east palisade, showing palisade posts and interior separation (F.15). View to the north (15R-311M).

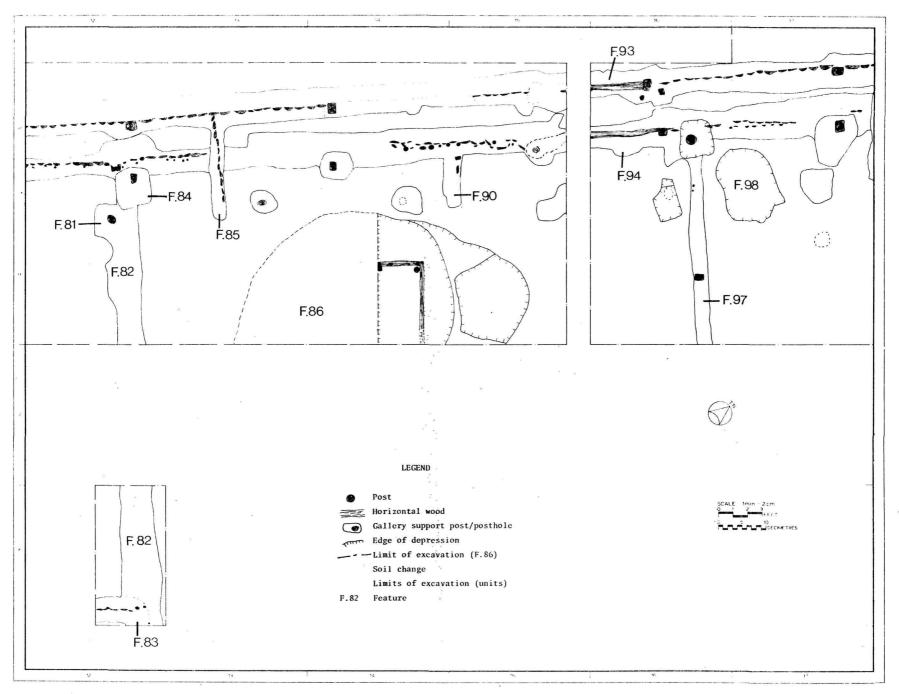


22 Apex of the late period east palisade (partially excavated), showing placement of gate-posts and gallery support posts.

View to the north (15R-382M).



Overall plan of the area near the smaller late period east gateway (F.18).



24 Plan of the area near the early and late period west gateways (F.94 and F.93).



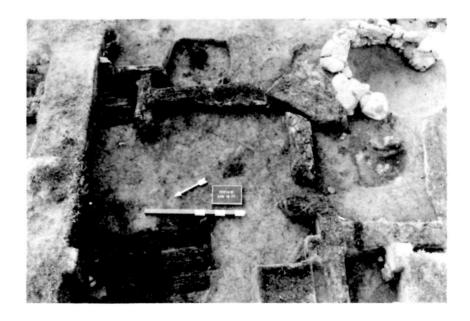
25 Late period east gateway (F.18) at apex of east palisade. View to the north (15R-398 M).



26 Late period east gateway (F.45) along southern portion of the east palisade. View to the west (15R-214 M).



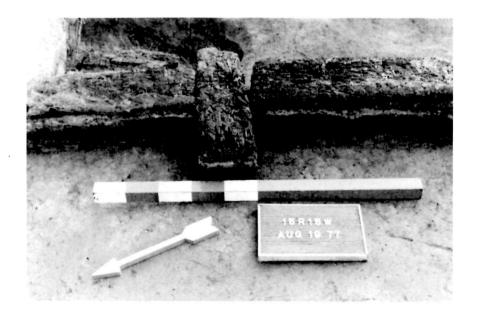
27 Overall view of late period building, Structure 1. View to the west (15R-454 M).



28 Southeast corner of late period building, Structure 1, showing shims, runner, cellar (F.26), exterior fireplace (F.38), gallery support post and posthole (F.34), wooden box (F.132) and miscellaneous pit (F.37). View to the east (15R-459 M).



29 Southeast corner of late period building, Structure 1, showing shims, runner, exterior fireplace (F.38), gallery support post and posthole (F.41), and miscellaneous pit (F.37). View to the west (15R-457 M).



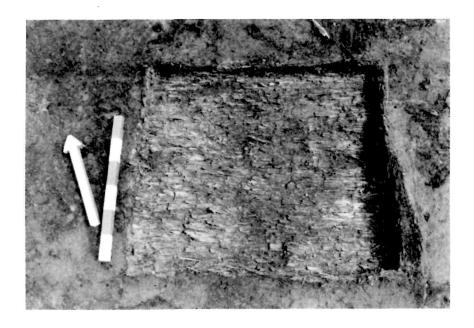
30 Detail of shims in east wall of late period building, Structure 1. View to the east (15R-466 M).



31 Detail of shims at southeast corner of late period building, Structure 1. Upright wood is modern fence post. View to the sout (15R-462 M).



32 Collapsed floorboards in cellar depression (F.26). View to the sout (15R-481 M).



33 Wooden box associated with the late period building, Structure 1. View to the north (15R-217) M).



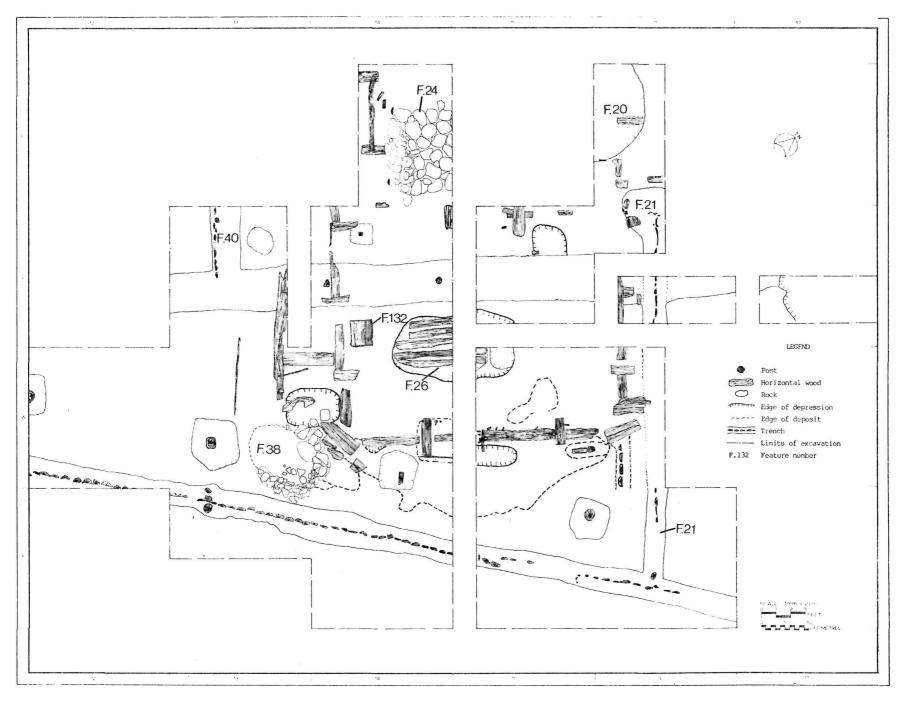
34 Interior fireplace base (F.24) of late period building, Structure 1. View to the south (15R-469 M).



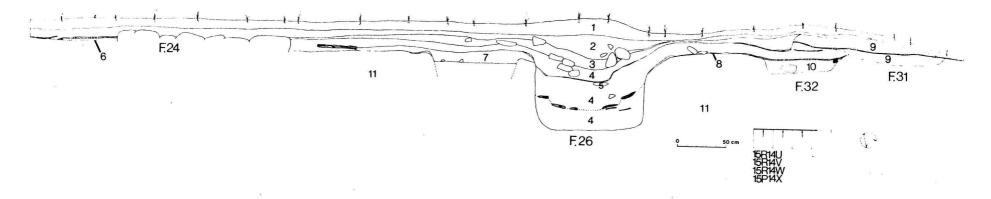
35 Soil profile associated with firepit of exterior fireplace (F.38). View to the east (15R-443 M).



36 View of exterior fireplace (F.38), showing construction of base and shape of firepit. View to the northeast (15R-464 M).



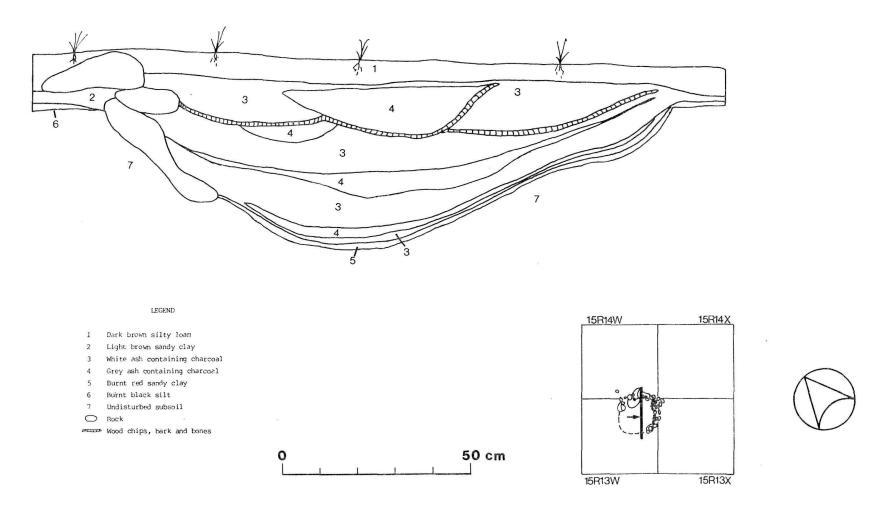
37 Plan of the late period building, Structure 1.



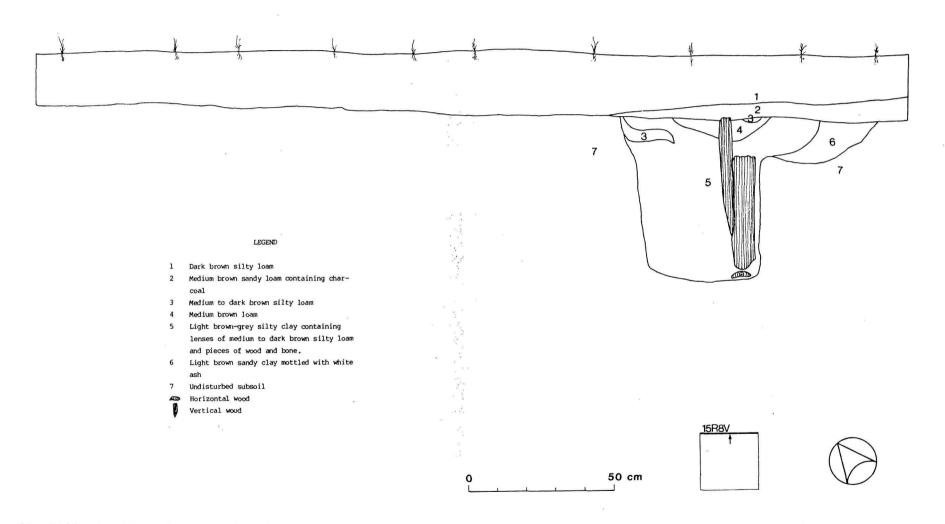
LEGEND

- l Dark brown silty loam
- Medium brown sandy silt containing charcoal, ash and chinking and dark brown-grey silty clay containing charcoal and chinking
- 3 Yellow-orange ash, charcoal and medium brown-grey silty loam
- 4 Light to dark brown silty clay containing chinking, wood chips rocks, ash and charcoal
- 5 Burnt yellow clay, grey silty clay and black silt
- 6 Light brown sandy silt containing charcoal, ash and chinking
- 7 Medium brown silty clay
- 8 Burnt black silt
- 9 Ash
- 10 Medium brown loam
- 11 Undisturbed subsoil

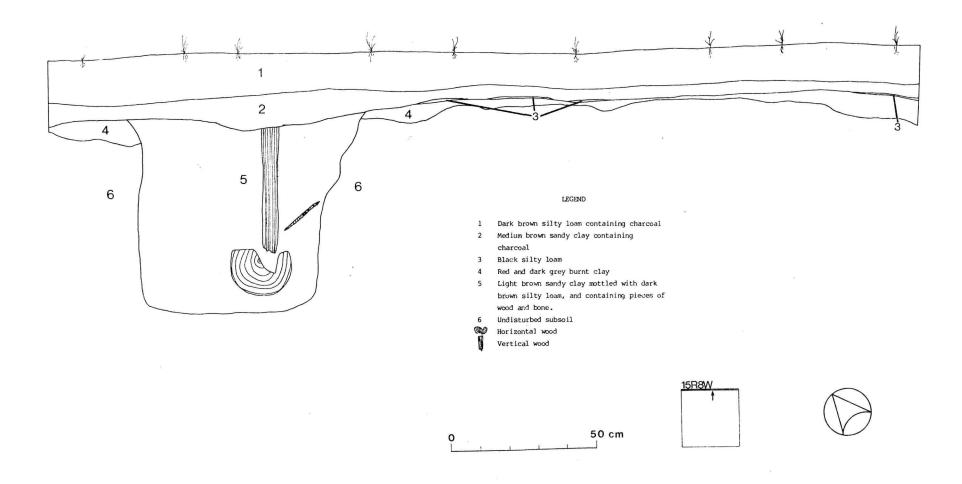
Profile through area of the late period building, Structure 1, showing inner fireplace base (F.24), early period east palisade trench, cellar depression (F.26), collapsed floorboards, building shim, miscellaneous pit (F.32) and ash deposit (F.31).



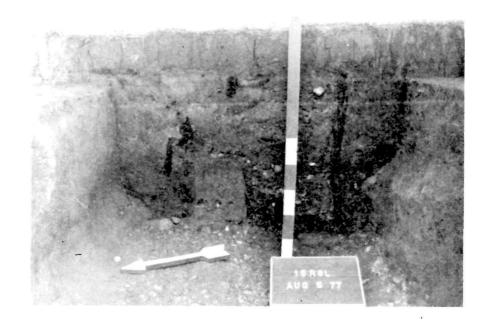
39 Soil stratigraphy associated with the firepit of the exterior fireplace, feature 38.



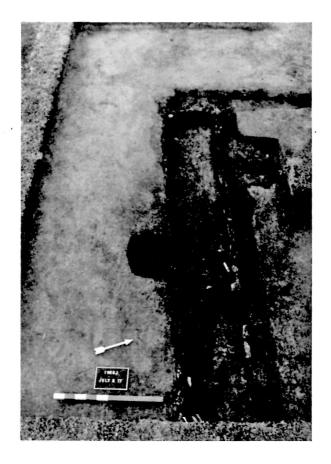
40 Soil stratigraphy associated with the early period east palisade trench, showing longitudinally sectioned palisade post, round inner filler post and horizontal shim.



41 Soil stratigraphy associated with the late period east palisade showing palisade post, grooved sill and horizontal plank.



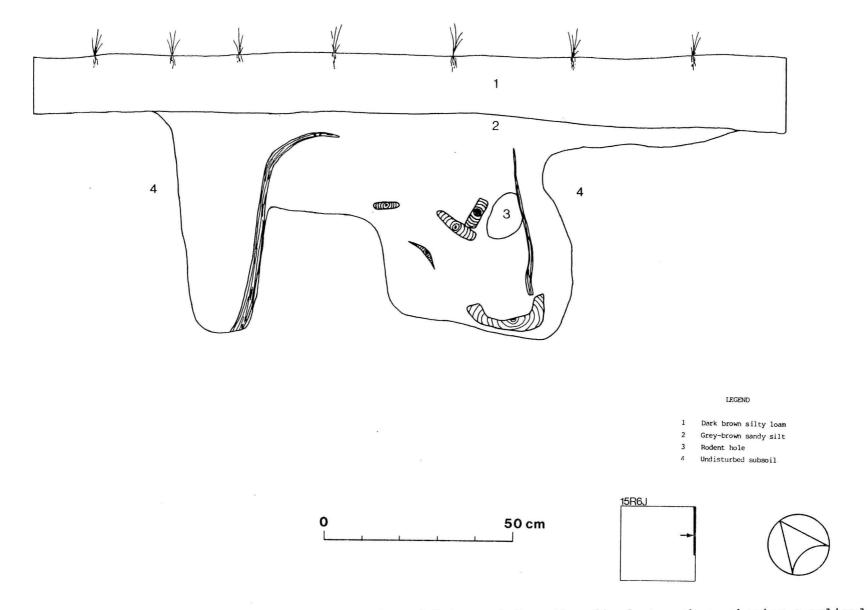
42 Profile of early and late period south palisade trenches. View to the east (15R-415 M).



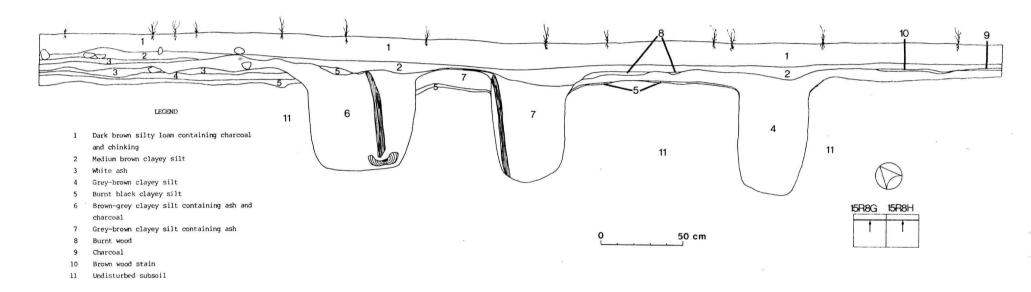
43 West end of early and late period south palisades, partially excavated. View to the west (15R-278M).



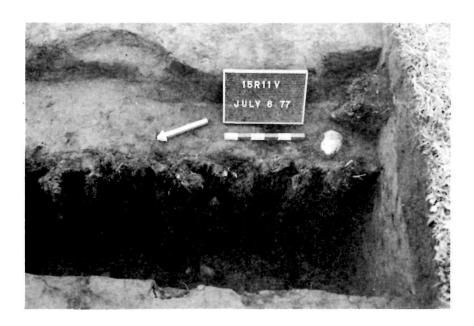
44 West end of early and late period south palisades, fully excavated. View to the west (15R-450 M).



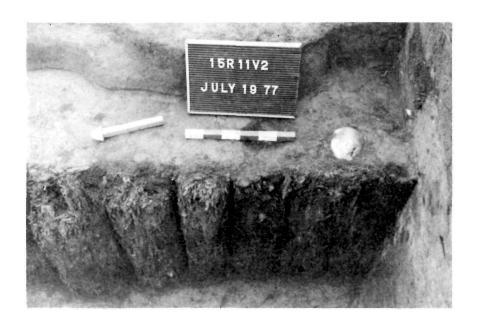
Soil stratigraphy associated with the early and late period south palisade trenches, showing a palisade post in the early period trench, and a palisade post, grooved sill and horizontal planks used as trench fill in the late period trench.



Soil stratigraphy associated with miscellaneous feature 72, the late and early period west palisade trenches and miscellaneous trench feature 76, showing palisade post and groovedsill in the late period palisade trench and a palisade post in the early period palisade trench.



47 Section of the early period east palisade, showing longitudinally sectioned palisade posts and round inner filler posts. View to the east (15R-268 M).



48 Section of the early period east palisade, showing longitudinally sectioned palisade posts (round inner filler posts removed). View to the east (15R-314 M).



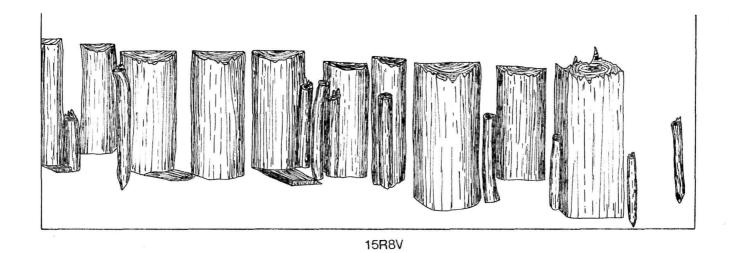
49 Section of the late period east palisade, showing longitudinally sectioned palisade posts and horizontal boards used as trench fill. View to the east (15R-309M).



50 Section of the late period east palisade, showing longitudinally sectioned palisade posts set into grooved sill. View to the east (15R-388 M).

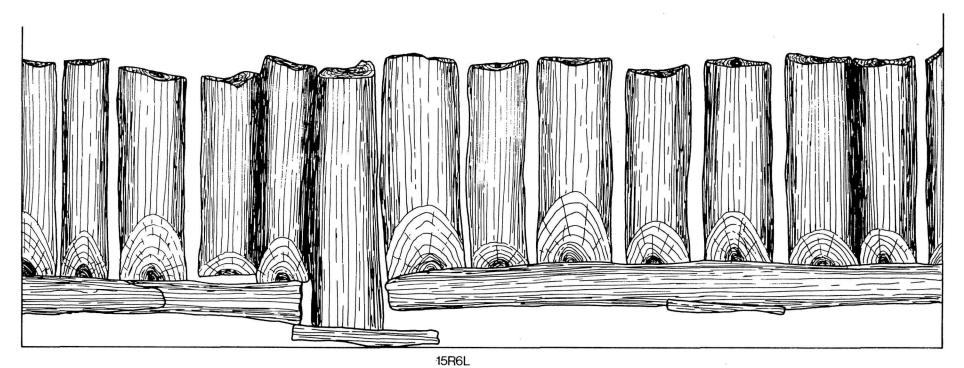


51 Section of the late period east palisade (15R10W) showing grooved sill and the south gate-post of east gateway, feature 45. View to the north (15R-313 M).



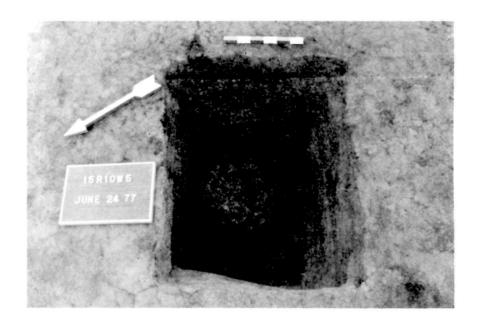
0 50 cm

52 Section of the early period east palisade showing longtudinally sectioned palisade posts, round inner filler posts, and shims.



0 50 cm

53 Section of the late period south palisade showing longitudinally sectioned posts with tapered ends set in grooved sills and king post set on a shim.



54 Late period gallery support post and posthole, feature 44. View to the east (15R-235 M).



55 Late period gallery support post and posthole, feature 41. View to the south (15R-485 M).



Profile of early and late period gallery support posts and postholes, features 13 and 14. View to the west (15R-300 M).



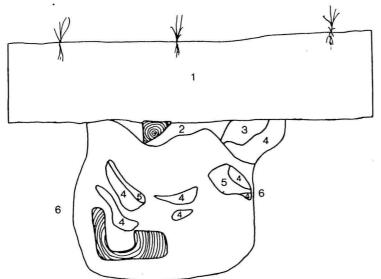
57 Detail of northeast corner of early period southeast bastion I, showing construction method used to join grooved sills. View to the west (15R-323 M).



Profile of grooved sill in the south trench of the early period southeast bastion I. View to the east (15R-356 M).



Detail of grooved sill in the south trench of the early period southeast bastion I. View to the south (25R-340 M).

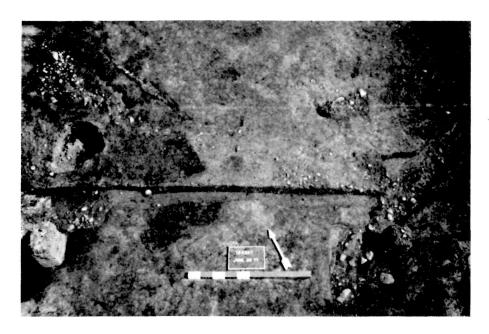


Legend

- 1 Dark brown silty loam
- 2 Medium brown silty clay
- Charcoal
- 4 Light grey silty clay
- 5 Medium to dark brown silty loam
- 6 Undisturbed subsoil



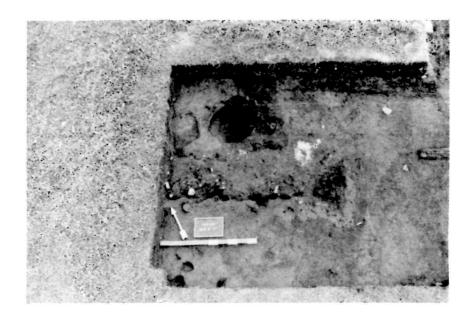
60 Soil stratigraphy associated with the south wall of the southeast bastion I, showing grooved sill.



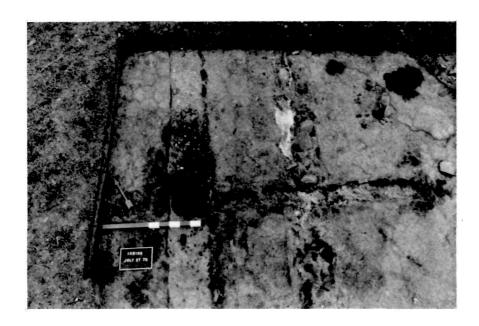
61 View of interior separation, feature 12, also showing early period gallery support posts and posthole (F.10) and early period north palisade. View to the north (15R-232 M).



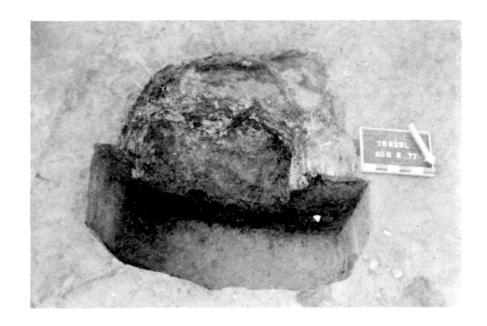
62 Juncture of late period east palisade and later period interior separation, feature 15. View to the east (15R-368 M).



63 Juncture of interior separation, feature 40 and early period east palisade trench. Also showing is miscell-aneous pit feature 40. View to the north (15R-403 M).



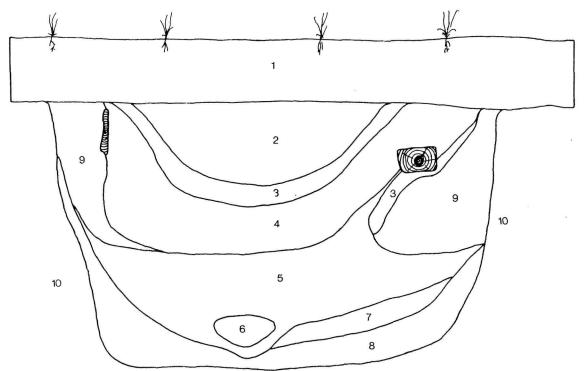
64 Juncture of interior separation, feature 85 and late period west palisade. Note that the interior separation trench had been dug through the early period west palisade. View to the north (15R-114 M).



65 Miscellaneous late period pit, feature 1. View to the south (15R-427 M).

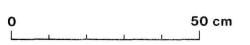


66 Miscellaneous late period pit, feature 8. View to the north (15R-252 M).



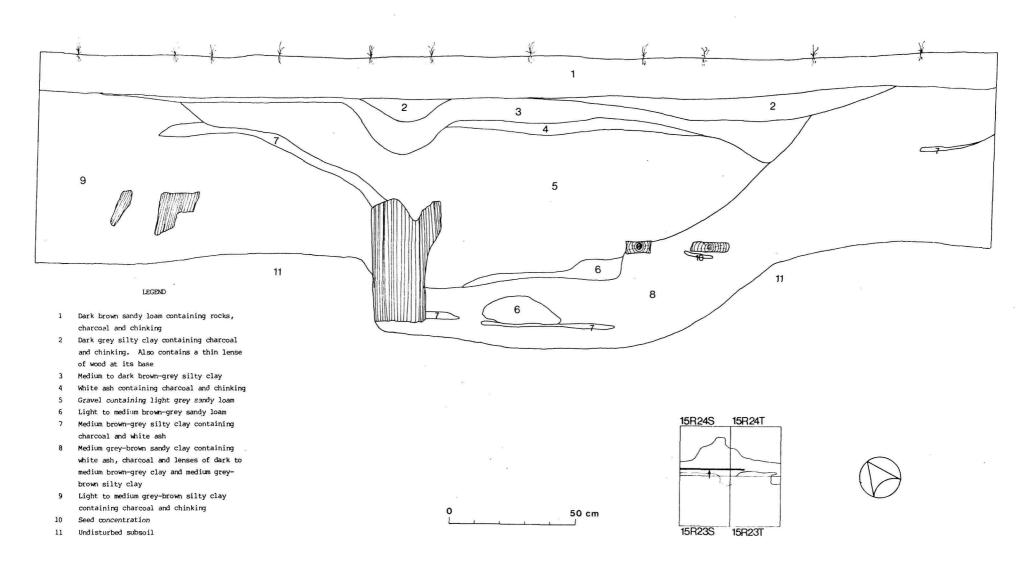
LEGEND

- 1 Dark brown silty loam
- White ash containing charcoal and chinking
- 3 Black silty loam
- 4 Light brown ash containing charcoal and chinking
- 5 Fibrous wood
- 6 Brown-grey clay
- 7 Medium brown silty sand
- 8 Medium brown clay containing fibrous wood
- 9 Medium to dark brown silty clay
- 10 Undisturbed subsoil

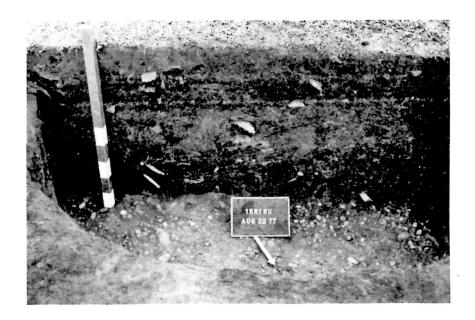








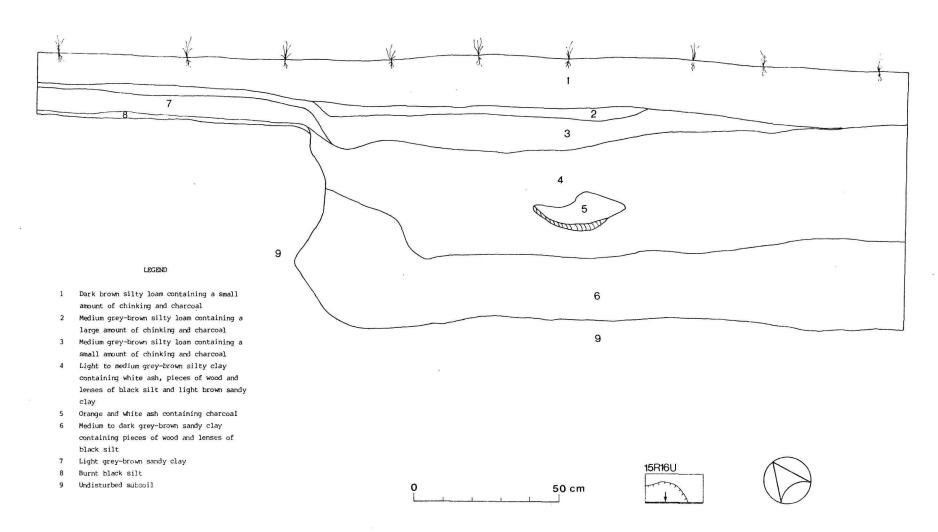
68 Soil stratigraphy associated with miscellaneous pit feature 8.



69 Profile of miscellaneous early period pit, feature 20. View to the south (15R-475 M).



70 Miscellaneous early period pit, feature 37. Note tin lid (15R14W26-1) within pit. View to the east (15R-476 M).



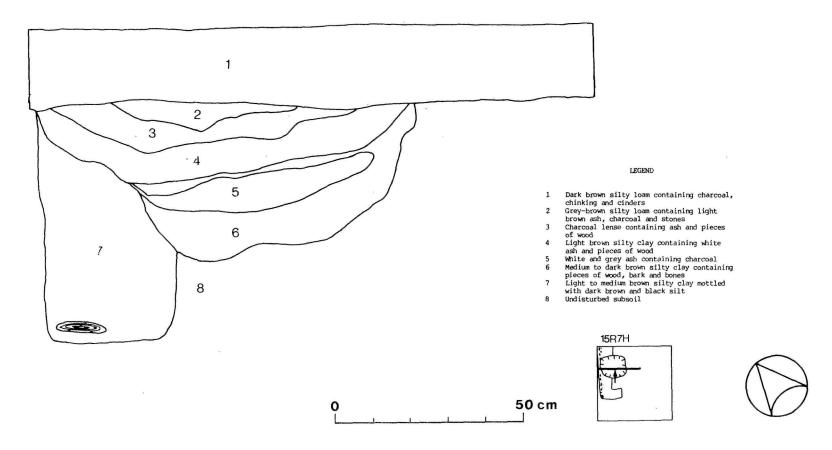
71 Soil stratigraphy associated with miscellaneous pit feature 20.



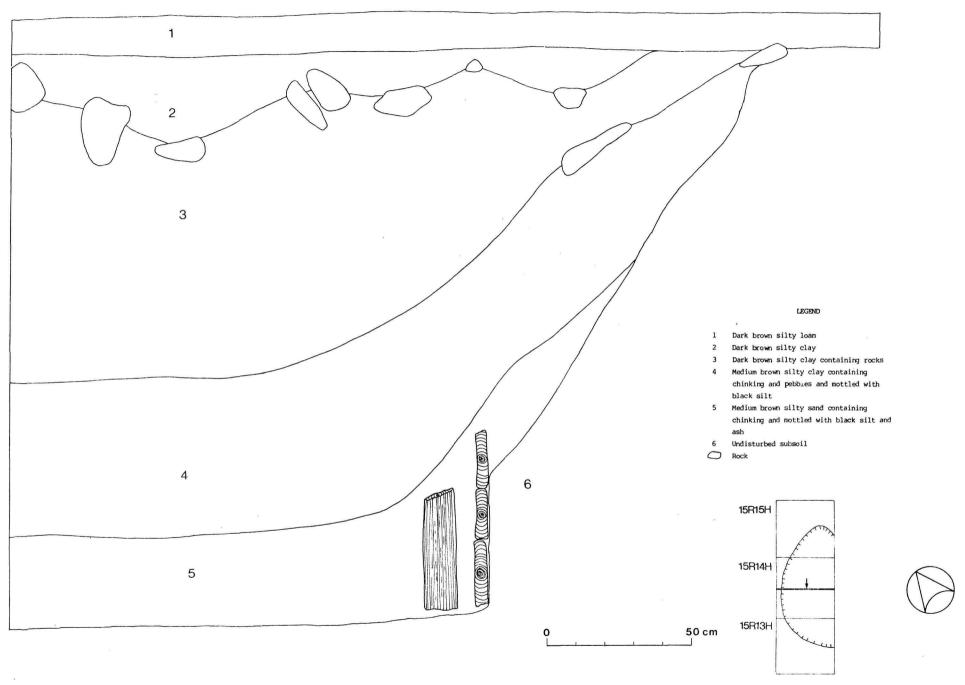
72 Miscellaneous pit, feature 68. View to the east (15R-154 M).



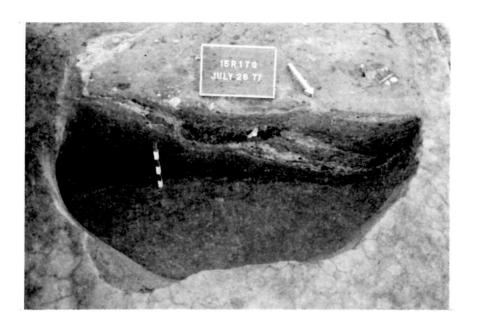
73 Profile of miscellaneous late period pit, feature 70. View to the north (15R-339 M).



74 Soil stratigraphy associated with miscellaneous pit feature 70 and the early period west palisade trench.



75 Soil stratigraphy associated with miscellaneous pit feature 86.



76 Profile of Miscellaneous pit, feature 98. View to the south (15R-348 M).



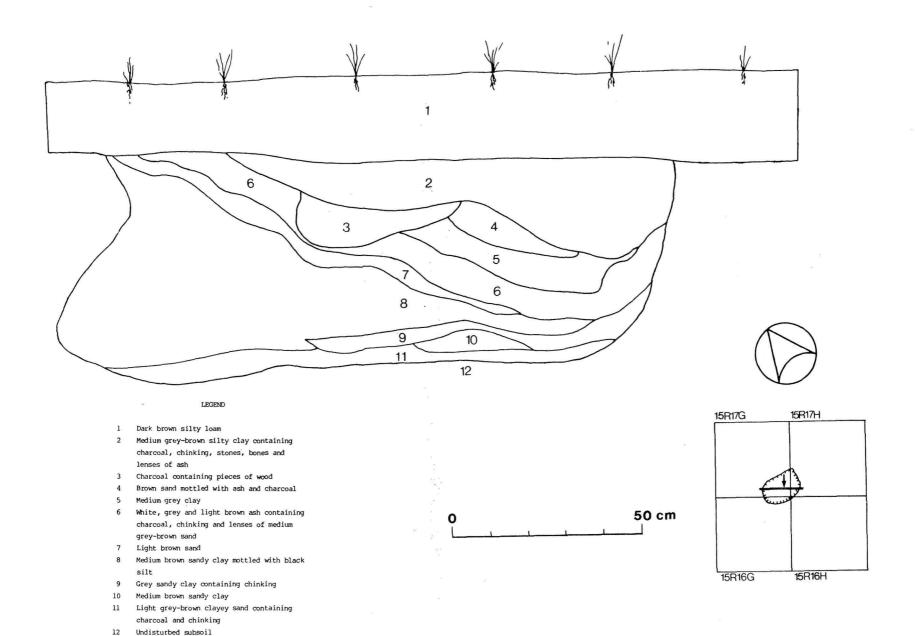
77 Miscellaneous early period pit, feature 113. Also showing is the northwest corner of the early period palisade, an early period gallery support posthole (F.111) and a late period gallery support post and posthole (F.112). View to the west (15R-441 M).

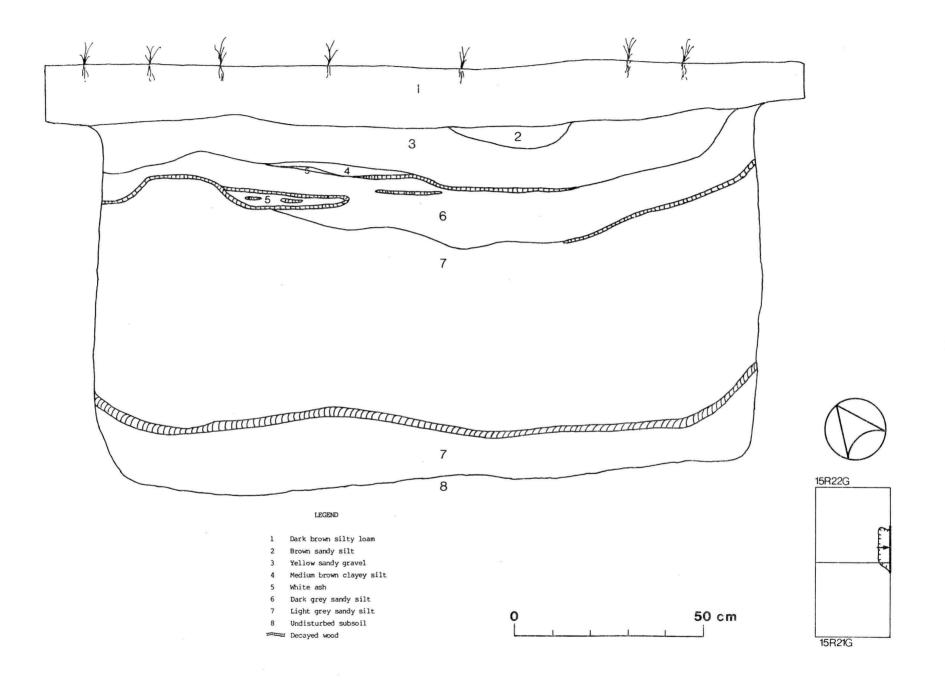


78 View of miscellaneous early period pit, feature 113, showing horizontal logs at the base of the depression. View to the southwest (15R-479 M).



79 Miscellaneous exterior pit, feature 127. View to the west (14R-32M).

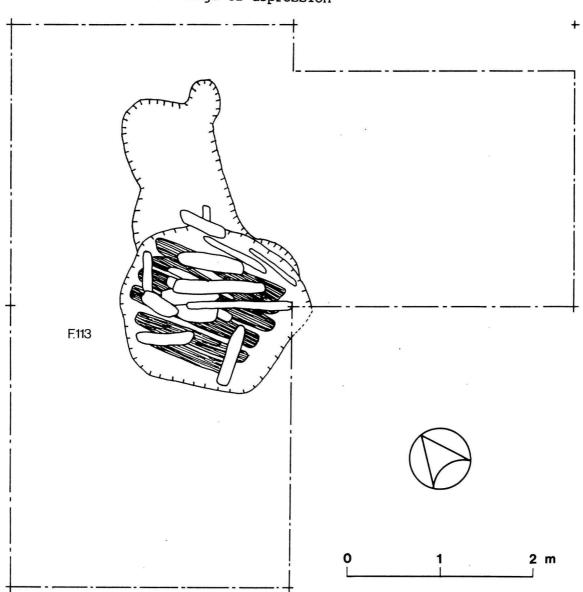




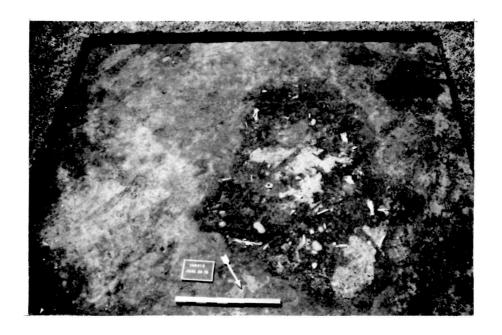
81 Soil stratigraphy associated with miscellaneous pit feature 110.

LEGEND

Horizontal wood, lower layer
Horizontal wood, upper layer
Edge of depression



82 Plan of miscellaneous pit feature 113.



83 Miscellaneous exterior pit, feature 129. View to the south (14R-31M).



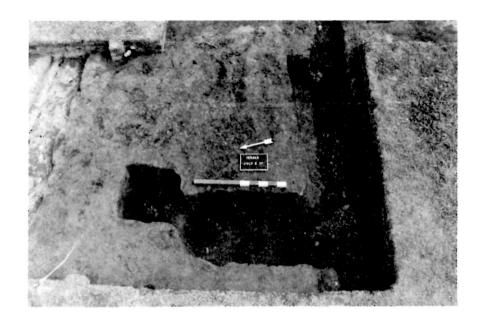
84 Miscellaneous exterior pit, feature 130. View to the east (14R-39M).



Miscellaneous late period post and posthole, feature 28. View to the north (15R-468 M).



86 Miscellaneous post and postholes, feature 42.
Note that one posthole had been dug into the other.
View to the north (15R-216 M).



87 Miscellaneous trench, feature 5. Also showing is a late period gallery support post and posthole (F.4) and the early and late period north palisades. View to the east (15R-264 M).

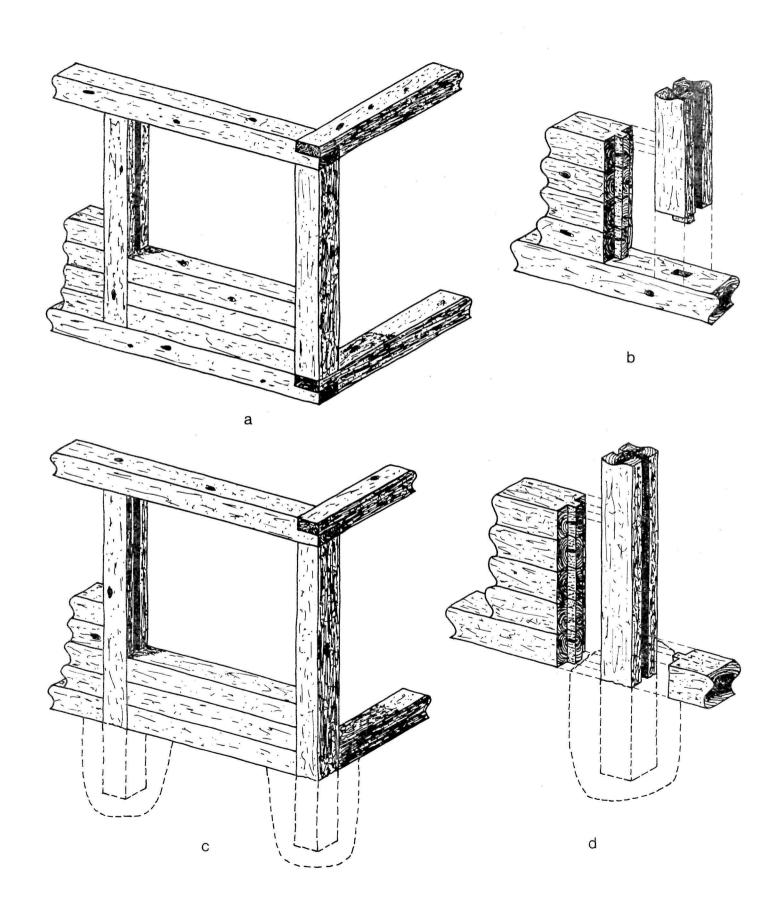


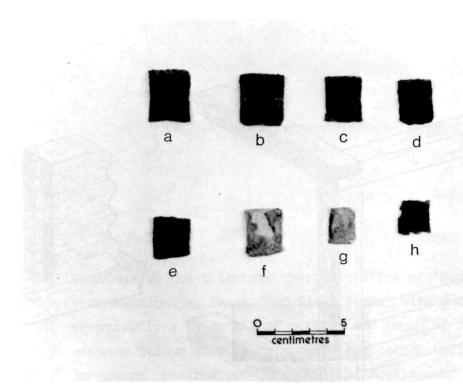
88 Miscellaneous trench, feature 76. Note soil change at centre of trench. View to the south (15R-291 M).

Drawings of the principal characteristics of 'Red River Frame' construction. a, basic 'Red River Frame' with post-on-sill construction; b, detail of mortise and tenon of post and sill, showing groove in post to receive horizontal wall logs; c, post-in-ground construction; d, detail of mortise and tenon of post and horizontal basal wall logs.

The following references are cited which present more detailed information on 'Red River Frame' construction and its development in the west: Barbeau 1945: 10-13; Garth 1947: 215-32; Mackie 1975: 46-51; Richardson 1973a: 85-86, 1973b: 77-102; and Ritchie 1971: 66-70.

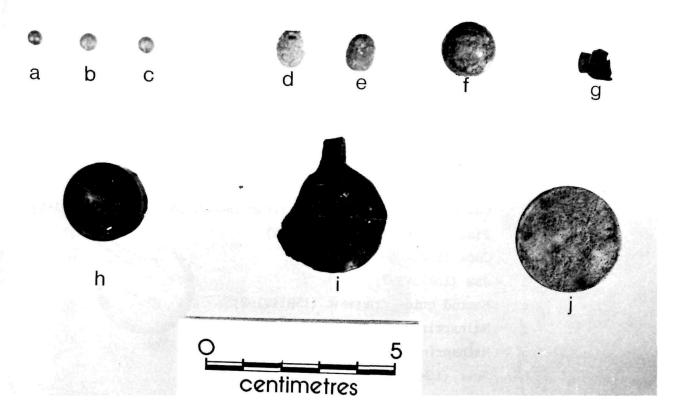
Red River Frame





90 Gunflints

- a TlVa (15R24T1-5)
- b TlVa (14R61C1-3)
- c TlVb (15R23S7-2)
- d TlVb (15R16G3-2)
- e TlVb (15R15V8-4)
- f TlVb (15R14W26-2)
- g TlVb (14R60E3-21)
- h TlVb (15R22G1-1)

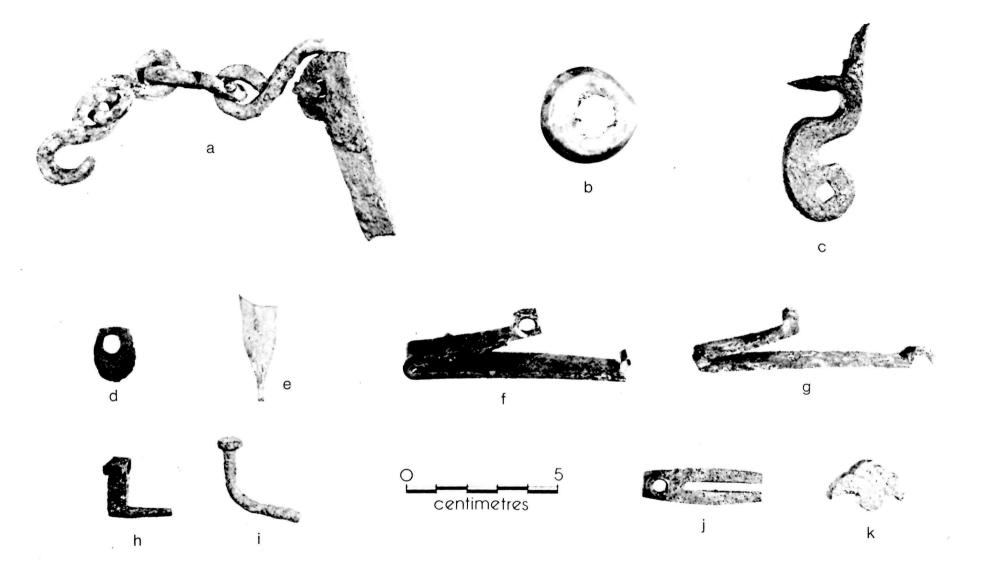


91 Ammunition and commerce-related artifacts

- a Lead shot (15R16G4-8)
- b Lead shot (15R16G4-9)
- c Lead shot (15R16G4-10)
- d Lead Ball (15R15V2-53)
- e Lead ball (15R15V2-54)
- f Lead ball (15R7V3-2)
- g Percussion cap (15R15V2-22)
- h Pinfire cartridge, 12 gauge (15R16G1-10)
- i Bale seal (15R7H12-1)
- j Coin (15Rl1H4-1)

92 Cannon and gun parts

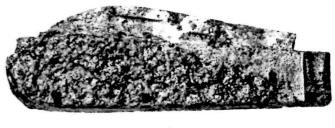
- a Cap square key with chain (from cannon carriage) (15R7H1-5)
- b Pistol butt plate (15R22F1-1)
- c Cock (15R14H5-1)
- d Jaw (15R15V3-7)
- e Ramrod guide fragment (15R14V1-2)
- f Mainspring (15R8V1-1)
- g Mainspring (15R16U5-7)
- h Sear (15R25F1-5)
- i Side screw (14R60E3-31)
- j Trigger plate (15R23M1-1)
- k Tumbler (15R14H2-4)



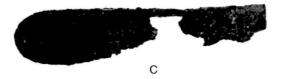
93 Folding knives and trap parts

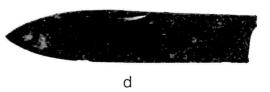
- a (15R25L7-3)
- b (15R18G3-1)
- c (15R13V1-1)
- d (15R14W2-1)
- e Trap pan (15R16U5-6)
- f Trap spring (15R22G8-1)



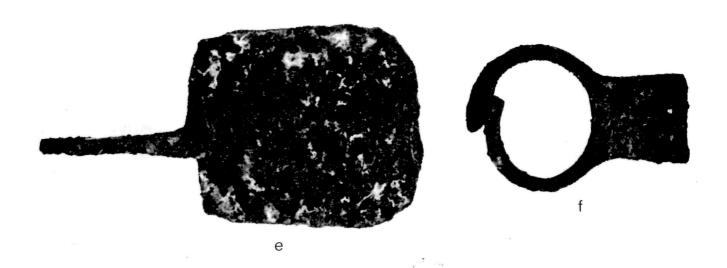


b





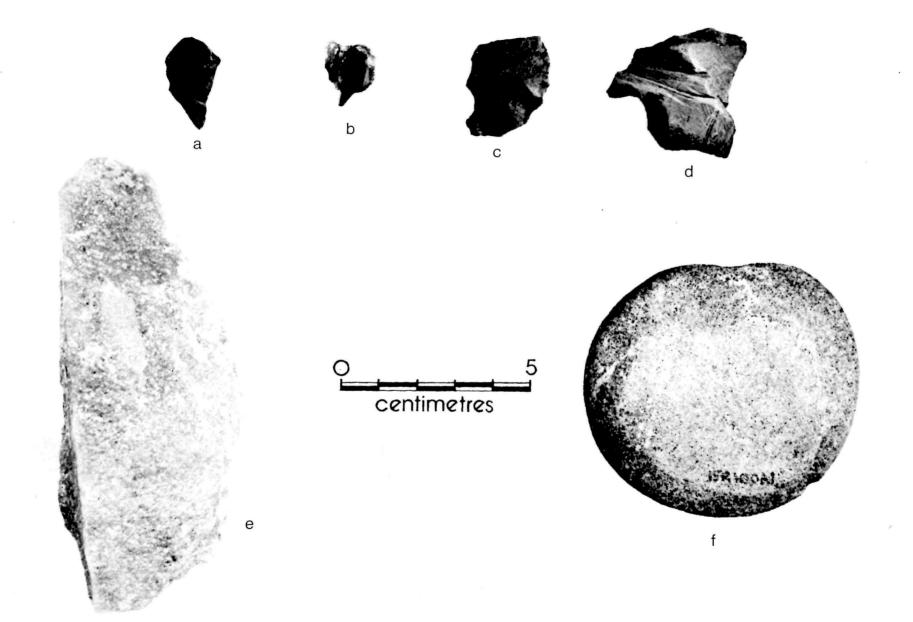
u





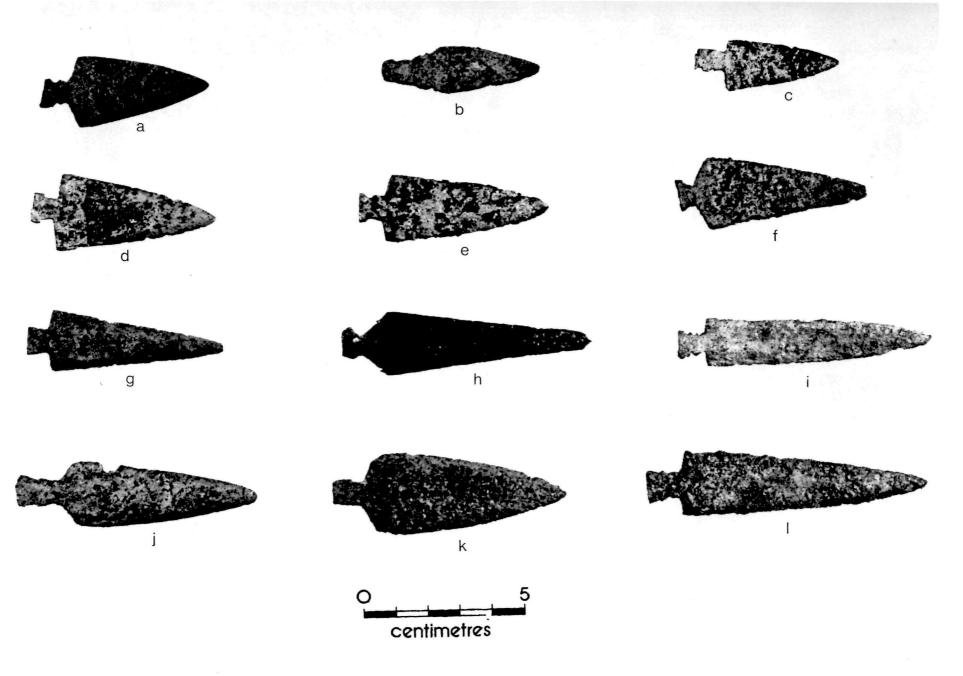
94 Lithic tools

- a Retouched flake graver (15R15W16-1)
- b Retouched flake graver (15R23F1-10)
- c Biface (15R14V3-40)
- d Tool sharpener (15R25F1-17)
- e Core (15R14W2-17)
- f Abrader (15R100A1-22)



95 Metal projectile points

- a (15R25L7-36)
- b (15R18F1-11)
- c (15R19G1-1)
- d (14R61C1-1)
- e (15R25L3-1)
- f (15R7G2-1)
- g (15R11V1-1)
- h (15R15W6-1)
- i (15R19F1-1)
- j (15R17H1-2)
- k (15R26G1-2)
- 1 (15R7M3-1)



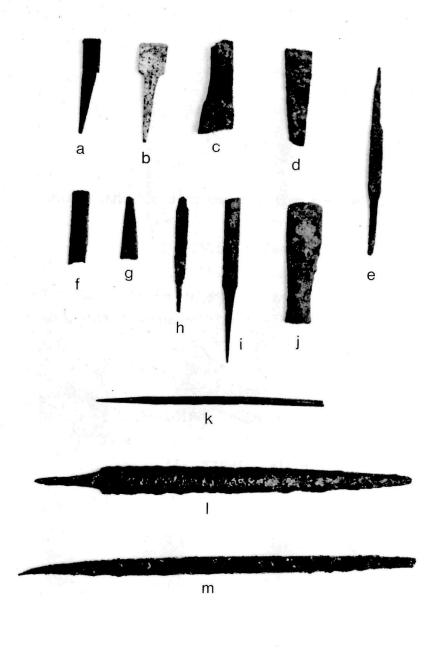
96 Weighing stone (15R16G4-1) (RA-3899B)

97 Files

m

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SA showing CAST STEEL mark (15R8W2-2)
a
    SA showing 🚱 🖰 LONLEY mark (15R7M1-1)
b
    SA (15R15G1-7)
C
d
    SA (14R60E1-8)
    SA, double-tanged (15R15G1-8)
е
f
    SB (15R16F1-9)
    SB (15R19G1-2)
g
    SC (15R100A1-25)
h
    SD showing CAST STEEL mark(15R13V2-3)
i
j
    SE (15R15G1-1)
    SF (14R60E1-2)
k
    SE (15R100A1-1)
1
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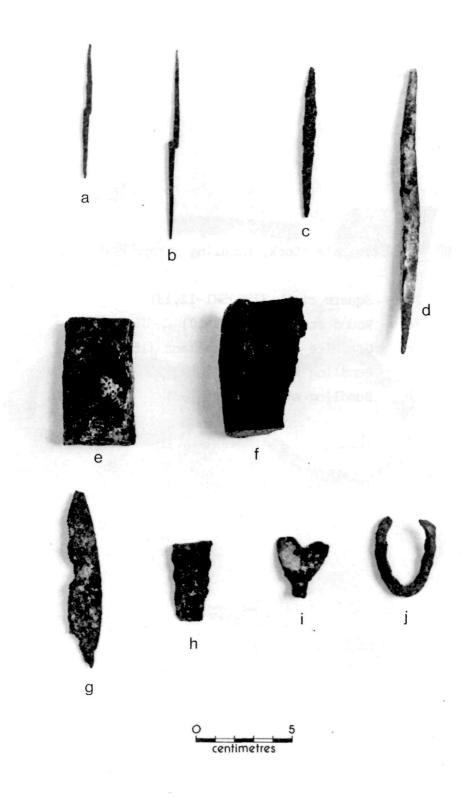
SF (15R16U5-5)



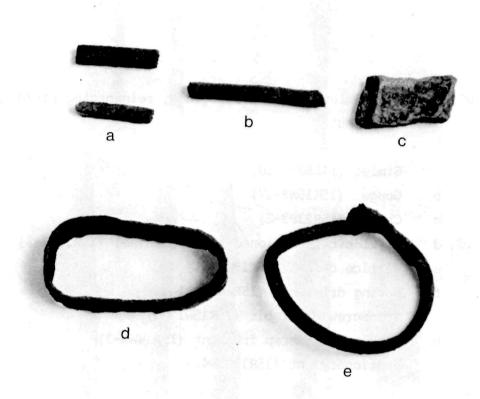
O 5

98 Awls, axe parts, thumb bolt and chain link

- a Offset awl (15R17F1-17)
- b Offset awl (15R18G1-1)
- c Awl, centre-shaft attachment (15R13W20-17)
- d Awl, centre-shaft attachment (14R83D1-3)
- e Axe poll (14R62B4-2)
- f Axe poll (15R13W3-2)
- g Axe bit (14R62B2-12)
- h Axe head wedge (15R16G1-3)
- i Thumb bolt [iron trap jaw post] (15R14H2-12)
- j Chain link (15R12G1-1)

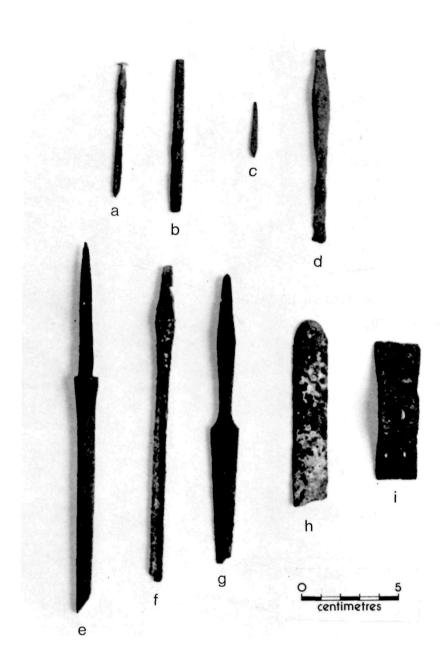


- 99 Blacksmith's stock, bundling straps and crucible
 - a Square stock (15R25H1-12,13)
 - b Round stock (15R20F1-10)
 - c Graphite crucible fragment (15R14V6-7)
 - d Bundling strap (15R14W8-9)
 - e Bundling strap (15R13W1-3)





- 100 Chisels, gimlet, drill bits, gouge, reinforcing strap and stationary nut
 - a Gimlet (14R60E3-30)
 - b Gouge (15R15W8-17)
 - c Chisel (15R23F3-2)
 - d Drill bit refashioned to form chisel (15R24F1-3)
 - e Mortice chisel (15R15W17-1)
 - f Boring drill bit (15R14W3-3)
 - g Turnscrew drill bit (15R15W17-3)
 - h Reinforcing strap fragment (15R14W9-3)
 - i Stationary nut (15R17G1-4)



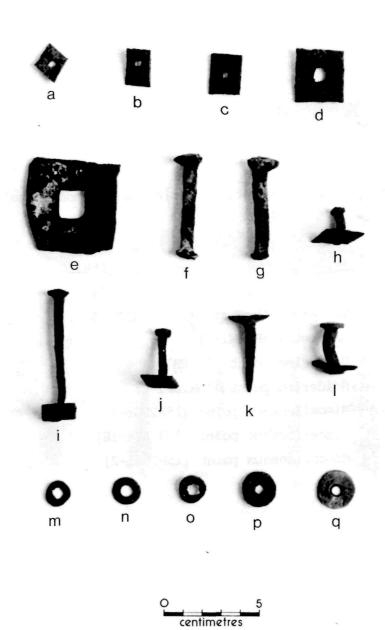
101 Grindstone (15R14W16-1) (RA-4451B)



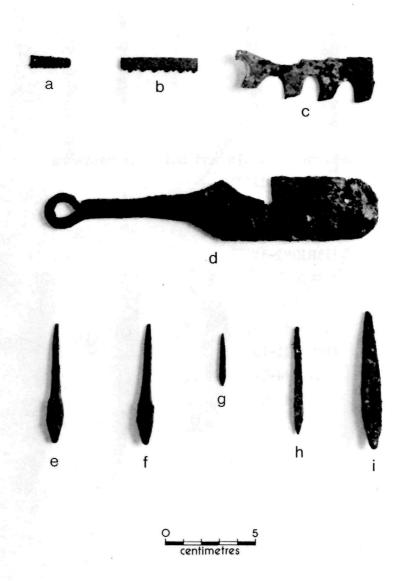
CM.

102 Roves, rivets and washers

- a Copper alloy rove (15R13W3-31)
- b Iron rove (14R83D1-5)
- c Iron rove (14R83D1-6)
- d Iron rove (15R12W5-4)
- e Iron rove (15R15W5-21)
- f Iron rivet (15R14W26-6)
- g Iron rivet (15R14W26-7)
- h Iron rove and rivet (15R7G1-5)
- i Iron rove and rivet (15R14V2-14)
- j Iron rivet and copper alloy rove (15R19F1-19)
- k Iron rivet and copper alloy rove (15R13V1-8)
- 1 Copper alloy rove and rivet (15R24M2-3)
- m Iron washer (15R8V1-5)
- n Copper alloy washer (15R7X1-4)
- o Copper alloy washer (15R14V3-39)
- p Copper alloy washer (15R15W5-22)
- q Copper alloy washer (15R20G1-1)

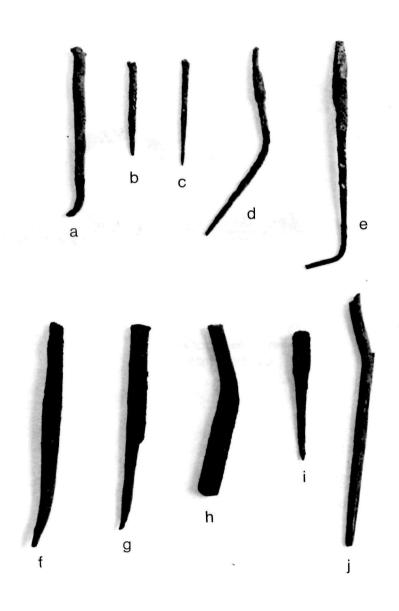


- 103 Saw blades, saw set, soldering points and miscellaneous tool points
 - a Keyhole or compass saw blade (15R18G6-1)
 - b Double-toothed saw blade (15R10W1-1)
 - c Gullet-toothed saw blade (15R9G3-1)
 - d Saw set (15R14W1-4)
 - e Soldering point (15R8H1-1)
 - f Soldering point (15R18F1-2)
 - g Miscellaneous point (15R23G6-17)
 - h Miscellaneous point (15R24S4-18)
 - i Miscellaneous point (15R16G1-2)

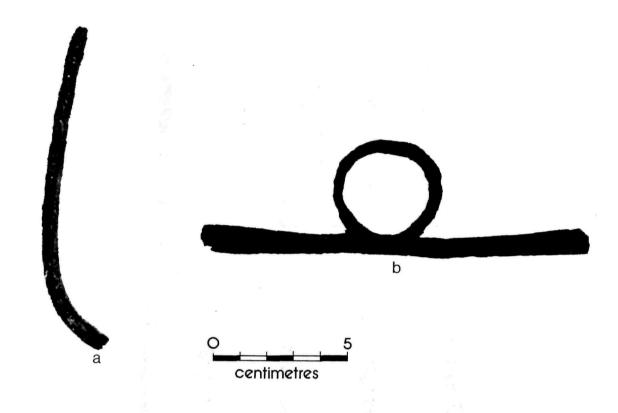


104 Miscellaneous tools and building hardware

- a (15R21F1-12)
- b (15R14H2-10)
- c (15R7V2-1)
- d (15R10H2-3)
- e (15R7H12-3)
- f (15R23F1-12)
- g (14R62B1-34)
- h (15R24S1-19)
- i (15R13V4-3)
- j (15R14H1-5)





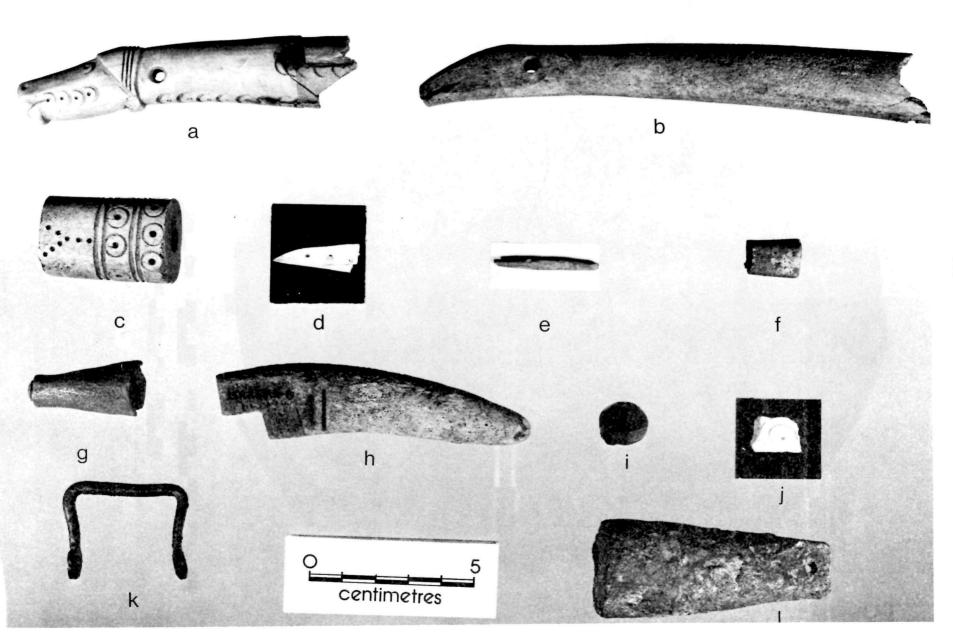


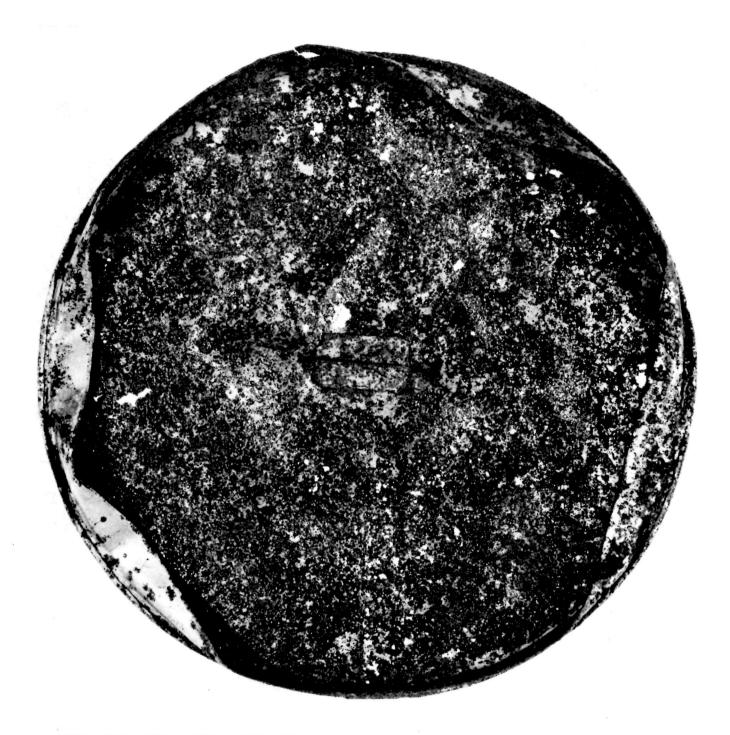
105 Spur and bridle bit

- a Spur (15R16U5-8)
- b Bridle bit (15R15V1-3)

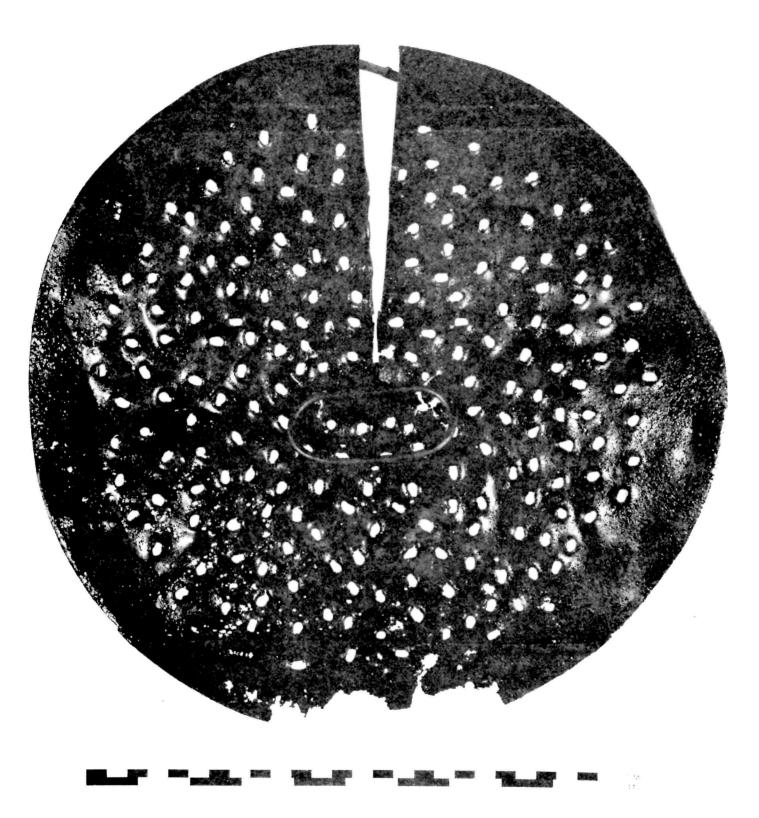
106 Carved antler and bone, swivel and lead weight

- a Carved antler (15R12G4-1)
- b Carved antler (14R62B3-8)
- c Carved antler (15R13W19-4)
- d Carved antler (15R14H6-1)
- e Carved antler (15R22F2-4)
- f Carved antler (15R24U7-1)
- g Carved antler (15R16G1-14)
- h Carved antler tine tip (15R25R1-6)
- i Carved antler time tip (15R7V1-7)
- j Carved bone (15R21F2-1)
- k Swivel (15R16F1-2)
- 1 Lead weight (15R7L1-3)





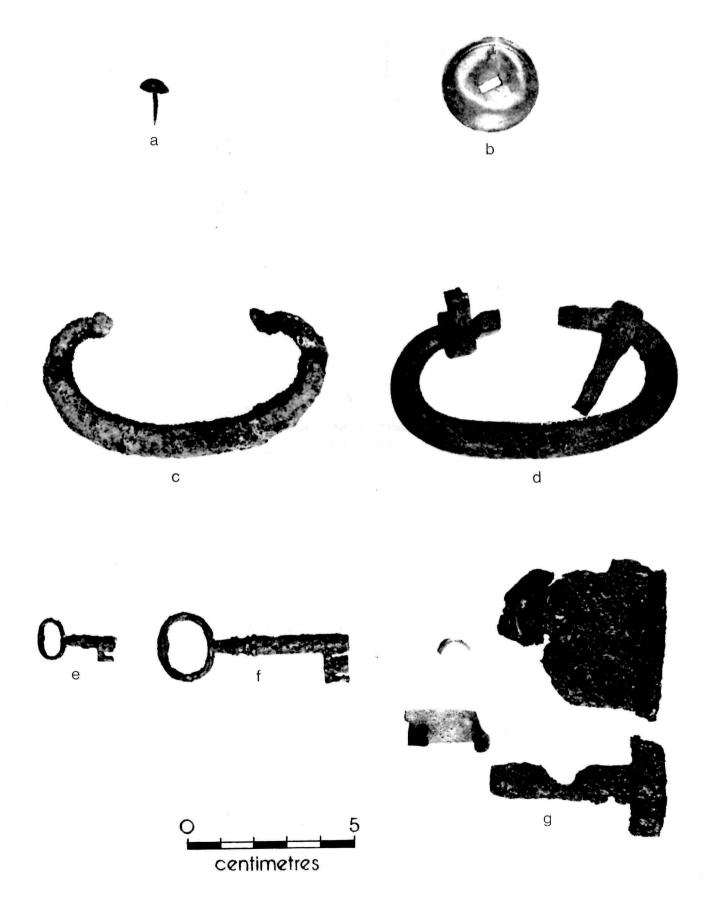
107 Tin Lid (15R14W26-1). (RA-4454B).

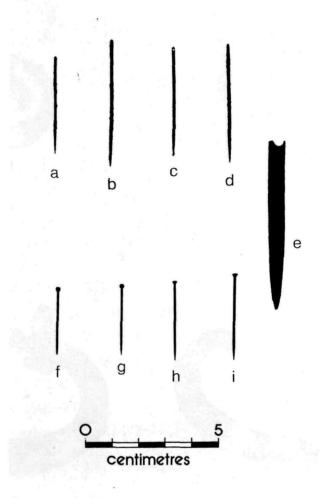


108 Modified tin lid (15R7L5-1). (RA-4453B)

109 Bail handles, brass tack, keys, lock and furniture handle plate,

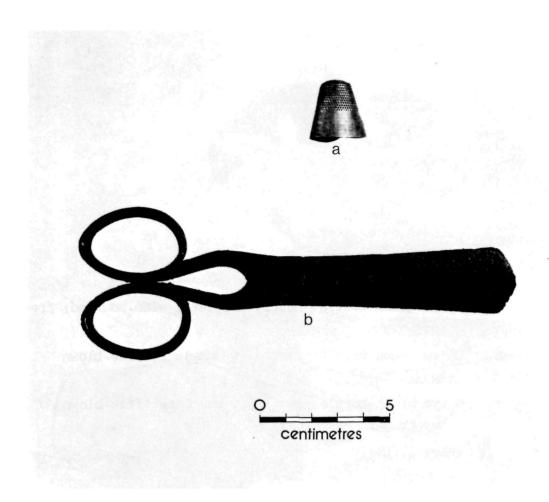
- a Brass tack (15R23G2-1)
- b Furniture handle plate (14R62B1-3)
- c Bail handle ((15R16U5-9)
- d Bail handle (15R17G1-5)
- e Key (15R16F1-3)
- f Key (15R15W6-2)
- g Lock fragments (15R14V7-1)





110 Needles and pins

- a (SAT1VA) needle (15R13W12-31)
- b (SATIVa) needle (15R19F2-2)
- c (SATIVb) needle (15R13W17-1)
- d (SAT1Vb) needle (15R8G4-1)
- e (SB) needle (15R15V5~1)
- f (T1) pin (15R15V2-66)
- g (T1) pin (15R13W3-1)
- h (T2) pin (15Rl3V3-25)
- i (T2) pin (15R23G7-1)



111 Scissors and thimble

- a Thimble (15R25H1-1)
- b Scissors (15R25L3-2)

112 Bottles

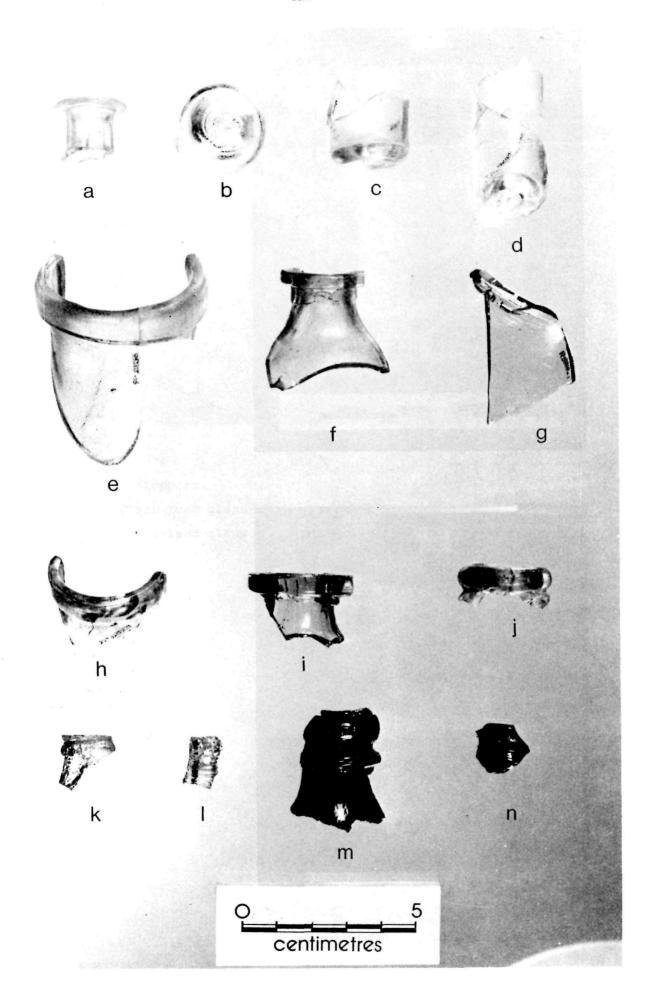
- a Olive green bottle: nearly complete; wide-mouthed; free-blown (15R25L7-23)
- b Olive green bottle: partially complete; free-blown
 (15R25L7-24)
- c Olive green bottle: partially complete; free-blown
 (15R25L7-25)
 (RA-4717B).



113 Vial and bottle finish fragments

- a Clear lead glass finish and neck vial fragment: flanged rim; cylindrical neck (15R8W1-8)
- b Clear lead glass vial base; note pontil mark (15R24U4-4)
- c Clear lead glass vial base (15R15W9-4)
- d Clear lead glass vial base and body portion (15R24U1-5)
- e Blue green glass finish fragment: folded out, hand-tooled lip; wide mouth (15R23T2-19)
- f Green glass finish fragment: flat, flanged lip; hand-tooled
 (14R6lBl-9)
- g Green glass finish fragment: flat, flanged, bent outward lip (15R8H6-1)
- h Blue green glass finish fragment: folded out, hand-tooled lip; wide mouth (15R25L6-12)
- i Green glass finish fragment: flat, flanged lip; hand-tooled (15R24S4-20)
- j Green glass finish fragment: rounded lip and string rim; handtooled (15R25L6-13)
- k Blue green glass finish fragment: rounded lip and string rim; possibly machine-tooled (15R24F1-11)
- Blue green glass finish fragment: rounded lip and string rim; possibly hand-tooled (15R23H1-14)
- m Olive green glass finish fragment: rounded lip and string rim; hand-tooled (14R62B8-3)
- n Olive green glass finish fragment: downtooled lip and string rim (15R19X1-2)

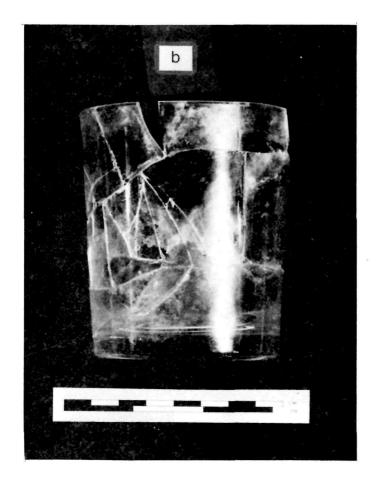
(RA-7913)





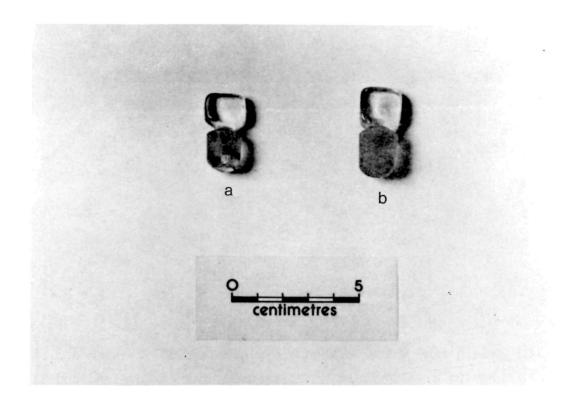
114 Tableglass.

a Clear lead glass tumbler: nearly complete; ground and polished base (15R25L7-26)



b Clear lead glass
 tumbler: partially
 complete; ground and
 polished based
 (15R25L7-27)

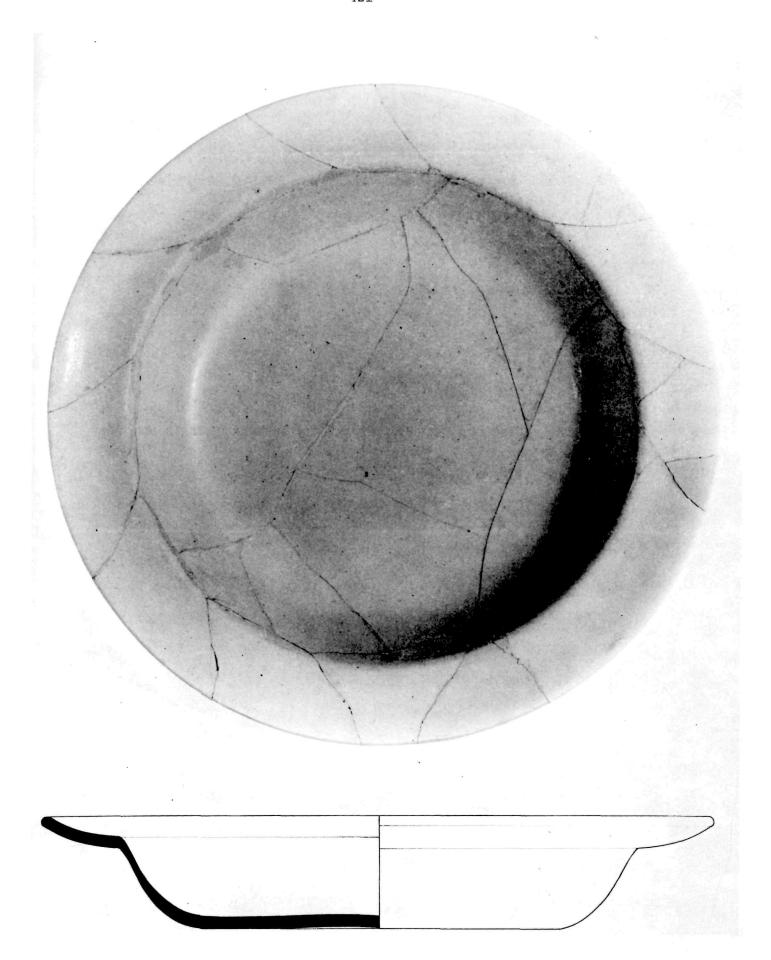
(RA-4720B)



115 Glass stoppers.

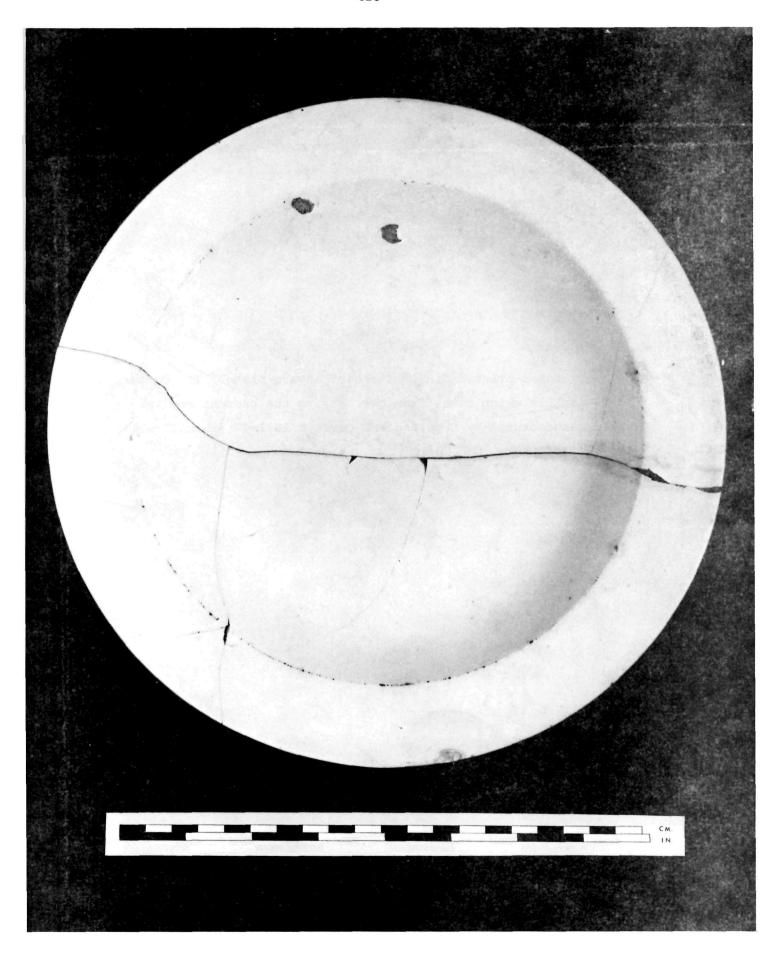
- a Clear lead glass stopper: pontil mark on base (15R24S4-2)
- b Clear lead glass stopper: ground base (15R24L7-28)

Plain fine white earthenware plate (15R23G7-2) with a clear glaze having a yellow tint. The manufacturer is Copeland and Garrett 1833-47.



Plain fine white earthenware plate with a clear glaze. The plate has a flat brim and a footrim. The manufacturer is unknown (15R25L7-22).

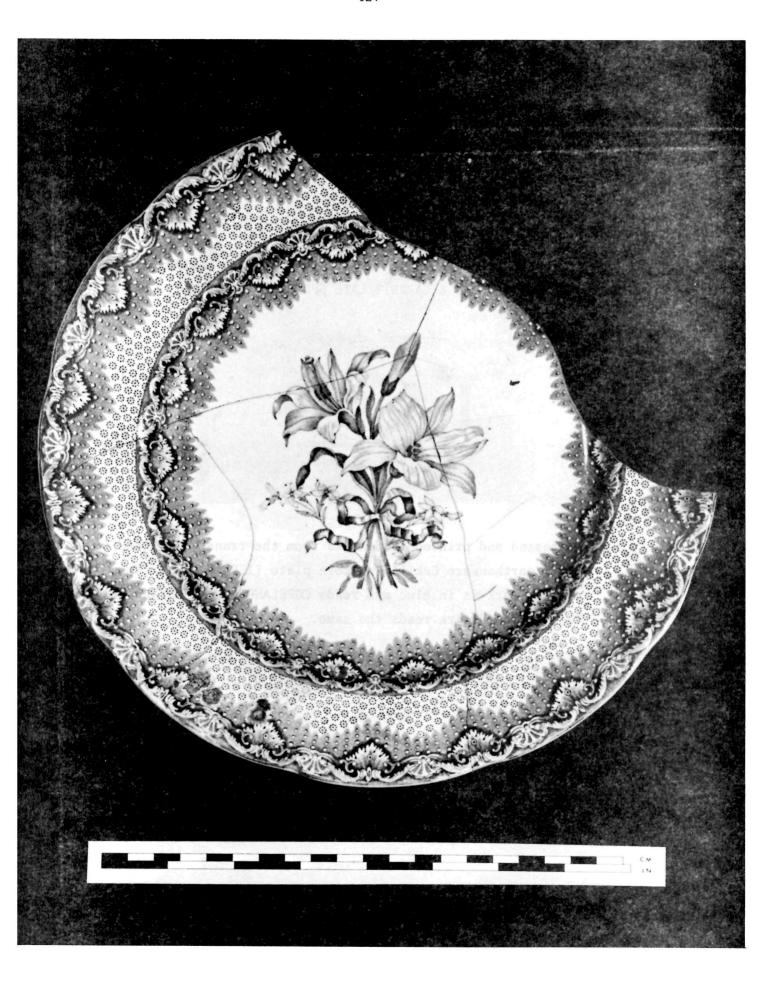
(RA-4713B).



118 Transfer-printed fine white earthenware plate. The pattern name Camilla which dates from ca. 1833 to the present and was manufactured by Copeland and Garrett 1833-47 (15R25L7-20) (RA-4709B).

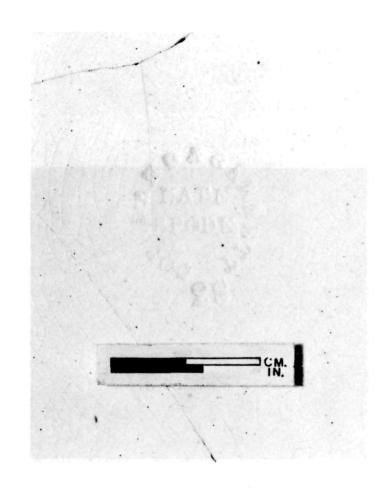


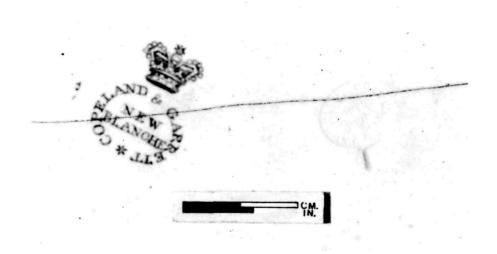
119 Transfer-printed fine white earthenware plate. The pattern name is Lily and dates from ca. 1837 to the 20th century. It was manufactured by Copeland and Garrett 1833-1847 (15R25L7-21). (RA-4711B).

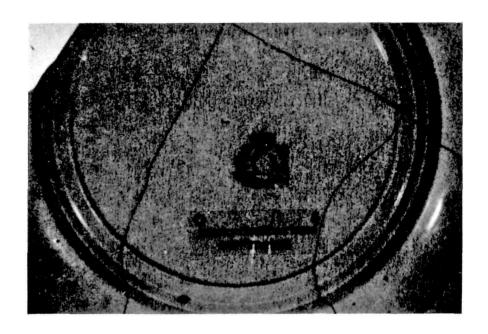


120 Impressed trademark from the plain fine white earthenware plate reading COPELAND & GARRETT/LATE SPODE/28 (15R23G7-2).

121 Impressed and printed trademarks from the transfer-printed fine white earthenware Camilla pattern plate (15R25L7-20). The printed mark is in blue and reads COPELAND & GARRETT/NEW BLANCHE. The impressed mark reads the same.

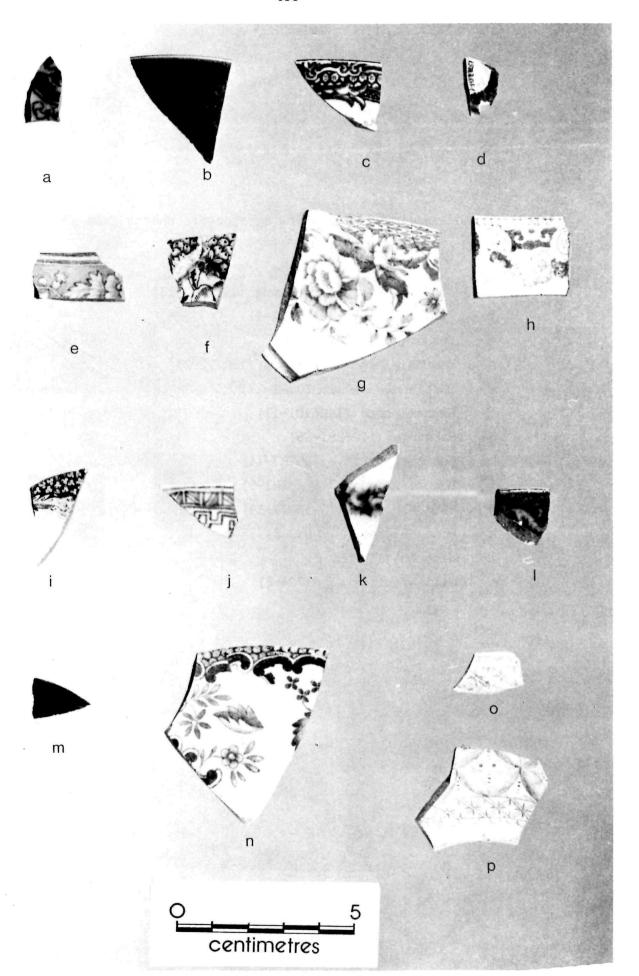




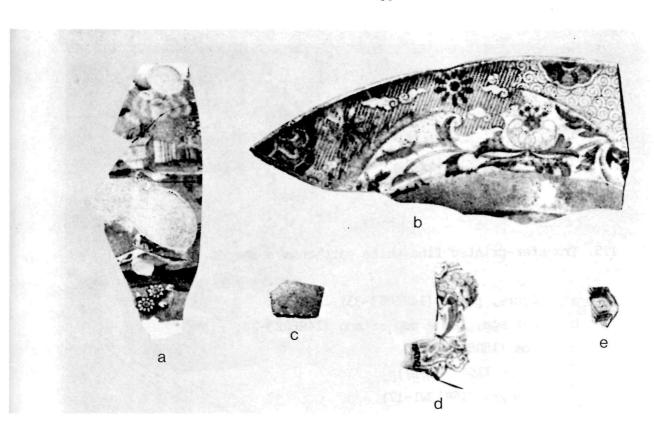


122 Trademark from the transfer-printed fine white earthenware Lily pattern plate. The mark is printed in blue and reads COPELAND AND GARRETT (15R25L7-21).

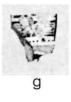
- 123 Transfer-printed fine white earthenware sherds from site 15R, Spode/Copeland patterns
 - a Alhambra (15R19G4-3)
 - b B700, large cup or mug (15R15W6-34)
 - c Watteau, large cup (15R23F1-11)
 - d B772 (15R20F1-13)
 - e Botanical, large cup or mug (14R60E2-24)
 - f Bramble (15R14W1-17)
 - g British Flowers, large cup or mug (14R61D5-6)
 - h Broseley, large cup or mug (15R6J2-5)
 - i Byron Views or Byron Groups (15R16G1-25)
 - j Chinese Gardens (15R14W7-13)
 - k Continental Views (15R20G1-10)
 - 1 Continental Views (15R25U1-1)
 - m Flower Vase (14R60E2-25)
 - n Fruit and Flowers, plate (15R23M5-2)
 - o Geranium, plate (14R62B2-15)
 - p Geranium, plate (15R17G1-25)



- 124 Transfer-printed fine white earthenware sherds from site 15R, Spode/Copeland patterns
 - a Italian, large cup or mug (15R14H2-13)
 - b Italian, plate (15R17G2-11)
 - c Lotus (15R16F1-26)
 - d Pagoda, large cup or mug (15R7V2-2)
 - e Portland Vase (15R100A1-27)
 - f Raphaelesque (14R61D1-17)
 - g Sardinia (14R62B1-36)
 - h Seasons, plate (14R62B7-14)
 - i Purple Shagreen (15R12H1-5)
 - j Blue Shagreen (15R13W12-19)
 - k Blue Shagreen (15R8W3-8)
 - 1 Watteau (15R26H1-8)
 - m Willow, plate (15R17G4-8)





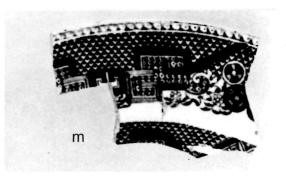


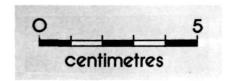






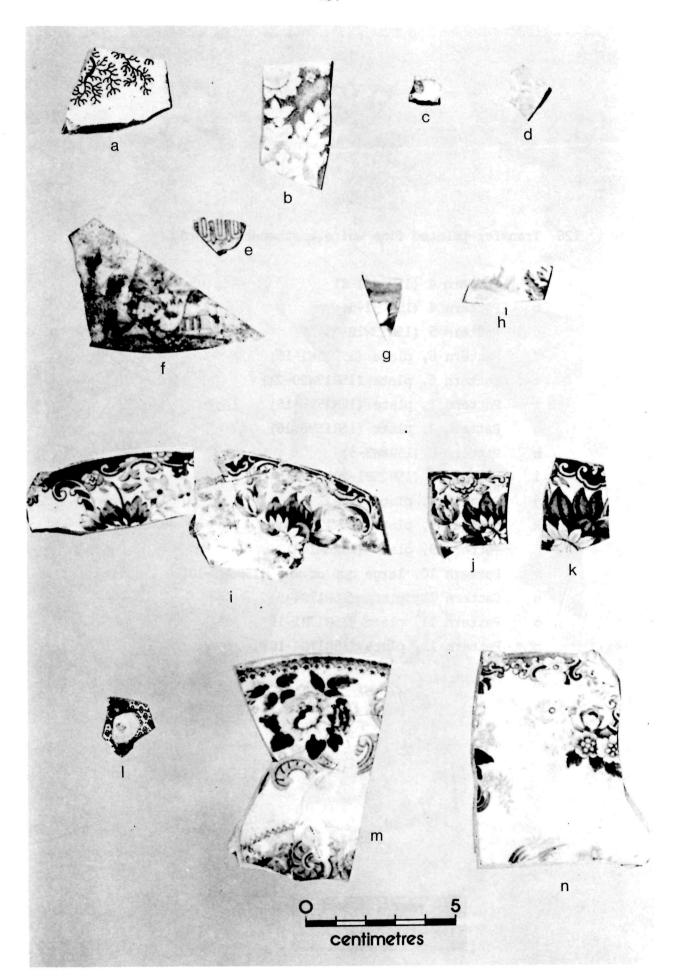






125 Transfer-printed fine white earthenware sherds.

- a Fibre, plate (14R60E3-33)
- b Foliage, large cup or mug (14R60E3-34)
- c Gem (15R8H1-7)
- d Ionic (15R18F1-17)
- e Palmyra (15R13W1-17)
- f Palmyra, plate (15R13W12-20)
- g The Seasons, large cup or mug (14R89C1-2)
- h The Seasons, large cup or mug (15R14G5-3)
- i Swiss Cottage, saucer (15R14W24-6)
- j Swiss Cottage, large cup or mug (15R16U5-24)
- k Swiss Cottage, large cup or mug (15R14V3-44)
- 1 Pattern 1 (15R21G1-7)
- m Pattern 2, deep plate or bowl (14R62B8-9)
- n Pattern 3, deep plate or bowl (14R62B3-9)



126 Transfer-printed fine white earthenware sherds.

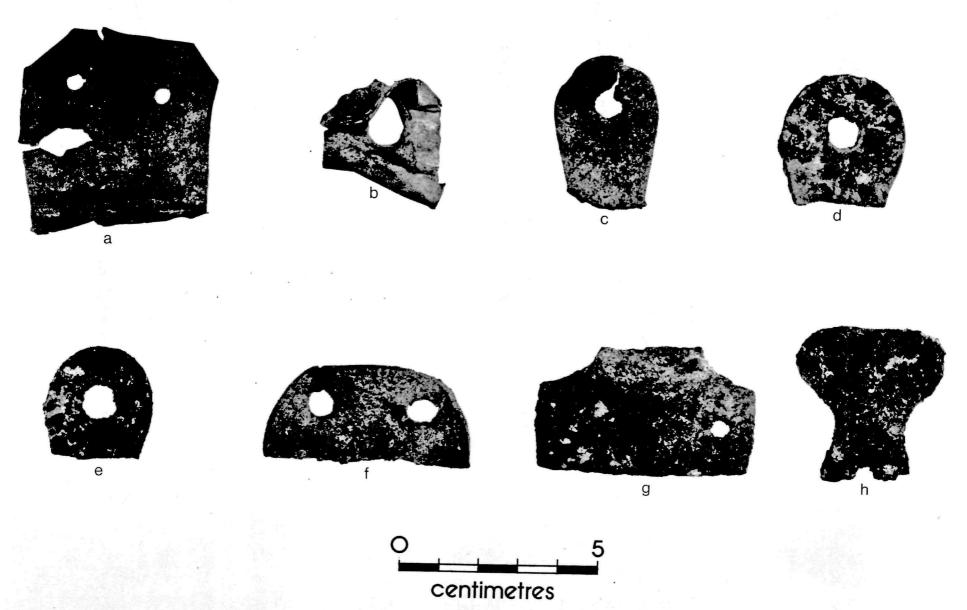
```
a Pattern 4 (15R26F1-8)
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- b Pattern 4 (15R7M1-5)
- c Pattern 5 (15R13W12-21)
- d Pattern 6, plate (15R10W1-16)
- e Pattern 6, plate (15R13W20-21)
- f Pattern 7, plate (15R15V8-15)
- g Pattern 7, plate (15R15V8-16)
- h Pattern 8 (15R8W3-9)
- i Pattern 8 (15R25F1-20)
- j Pattern 9, plate (15R22F1-16)
- k Pattern 9, plate (15R13H1-6)
- 1 Pattern 9, plate (15R6M1-3)
- m Pattern 10, large cup or mug (15R8w3-10)
- n Pattern 11, plate (15R17G4-9)
- o Pattern 11, plate (15R17H1-19)
- p Pattern 11, plate (15R17G4-10)

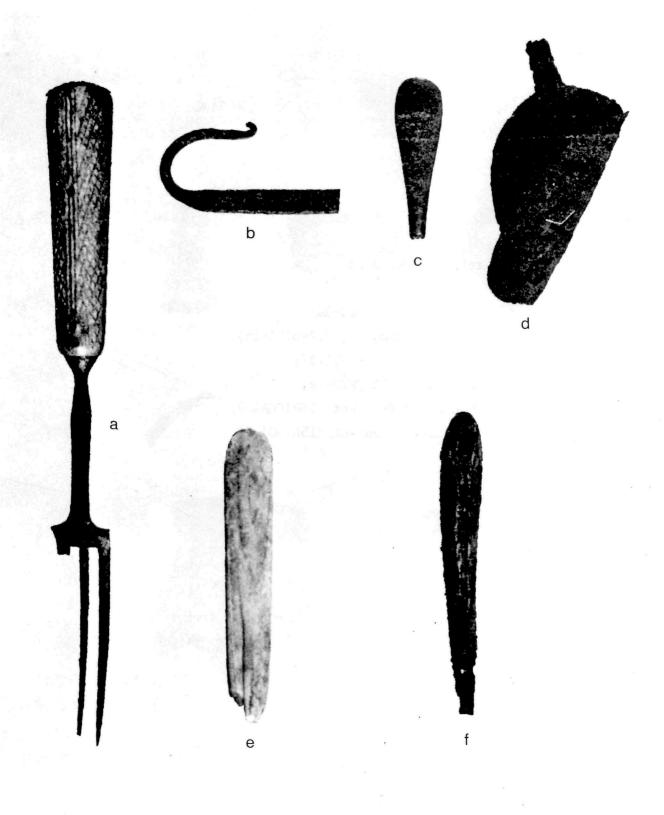


127 Kettle/pail lugs.

- a Rim lug fragment (15R15H1-4)
- b Rim lug fragment (15R24R1-3)
- c Side lug fragment (15R9H1-14)
- d Side lug fragment (15R15V3-10)
- e Side lug fragment (15R13W14-8)
- f Side lug fragment (15R14H1-6)
- g Side lug fragment (15R14W8-10)
- h Side lug fragment (15R14W7-3)



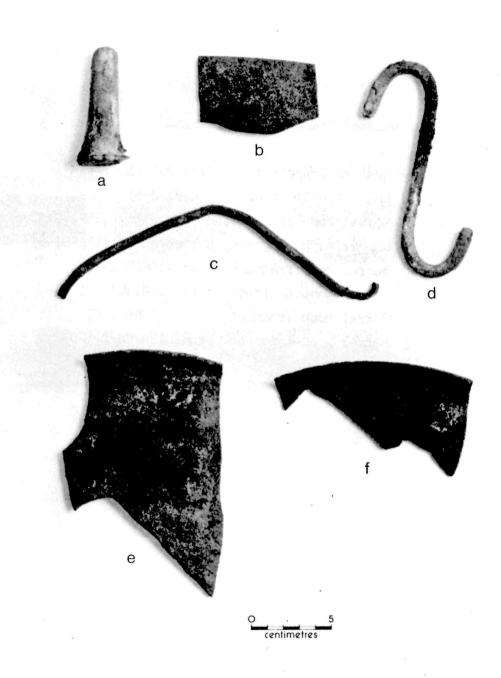
- 128 Fork, spoons, utensil handles and strike-a-light.
 - a Fork (15R23G3-1)
 - b Strike-a-light (15R13W14-1)
 - c Britannia metal spoon handle with ASHBERRY trademark (15R26F2-1)
 - d Iron spoon bowl (15R23S2-3)
 - e Antler utensil handle (15R23G6-16)
 - f Composite iron/antler utensil handle (15R10G2-1)





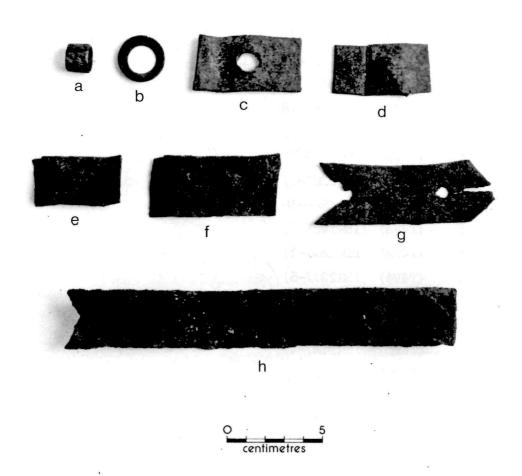
129 Pot-related artifacts.

- a Pot leg (15R12W20-20)
- b Pot body fragment (14R61D1-15)
- c Pot handle (14R6lD1-14)
- d Pot hook (15R13W20-18)
- e Pot cover fragment (15R100A1-7)
- f Pot cover fragment (15R15G1-2)



130 Barrel hoop fragments and bushing.

- a Bushing, copper alloy (15R20G3-1)
- b Bushing, copper alloy (14R83B2-5)
- c Barrel hoop fragment, copper alloy (15R16G1-20)
- d Barrel hoop fragment, copper alloy (15R8H1-6)
- e Barrel hoop fragment, iron (15R17G1-18)
- f Barrel hoop fragment, iron (15R14W2-16)
- g Barrel hoop fragment, iron (15R6H1-6)
- h Barrel hoop fragment, iron (15R7V6-2)



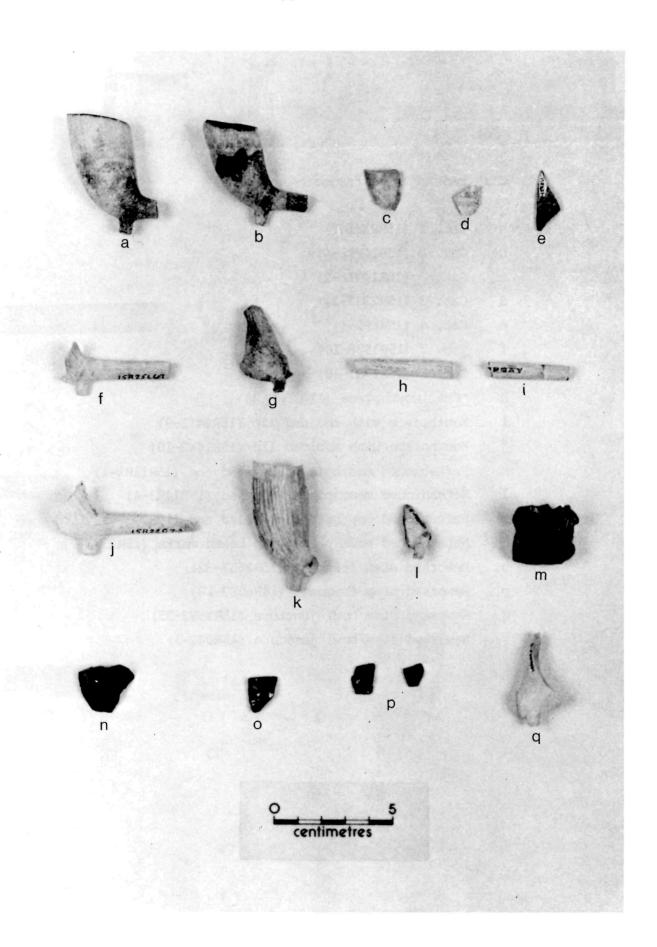
131 Clay smoking pipe types.

(T7)

q

```
(T1Va) large bowl (14R62B3-1)
a
b
     (TlVa) small bowl (15R15W11-1)
     (T1Vb) (15R8H2-2)
C
d
     (TlVc) (15R16F1-18)
     (T1Vd) (15R16X1-2)
e
f
     (T2Va) (15R25L6-7)
     (T2Va) (15R12W5-1)
g
    (T3Va) (15R15W6-30)
h
i
     (T3Va) (15R14W1-7)
j
     (T4Va) (15R22G7-3)
k
     (T4V4) (15R22G7-5)
1
     (T5Va) (15R17G1-13)
     (T6Va) (15R14H5-2)
m
     (T6Vb) (15R14W7-4)
n
     (T6Vc) (15R13W3-21)
0
     (T6Vc) (15R14W9-4)
p
```

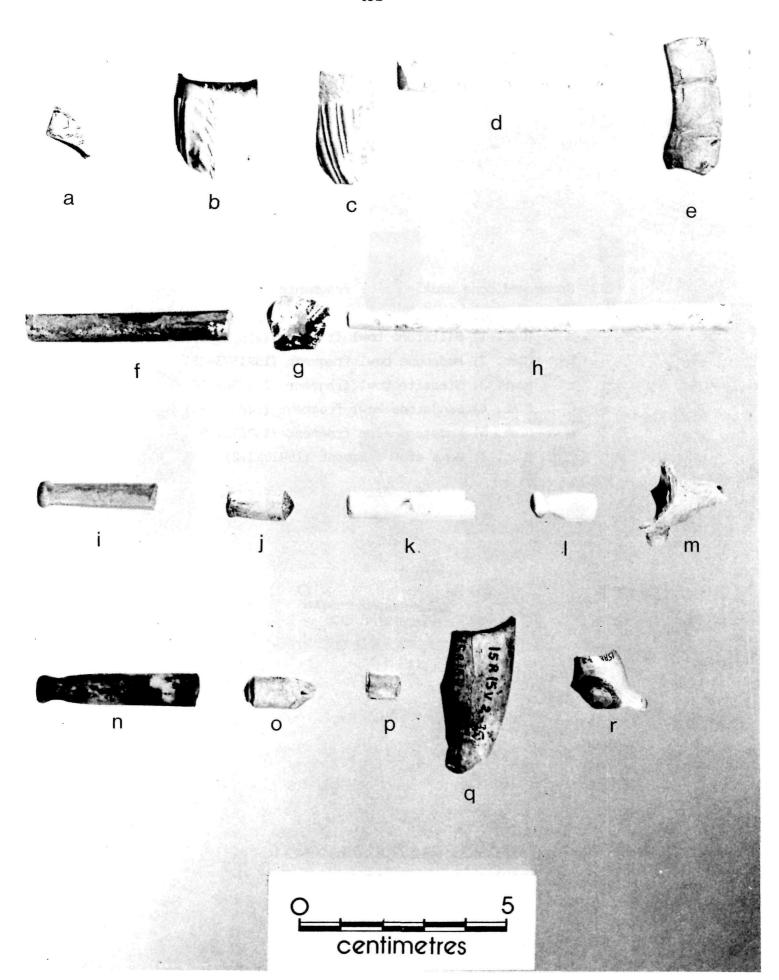
(14R60E3-8)



132 Clay smoking pipe fragments.

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a Cat. 1 (15R23T1-7)
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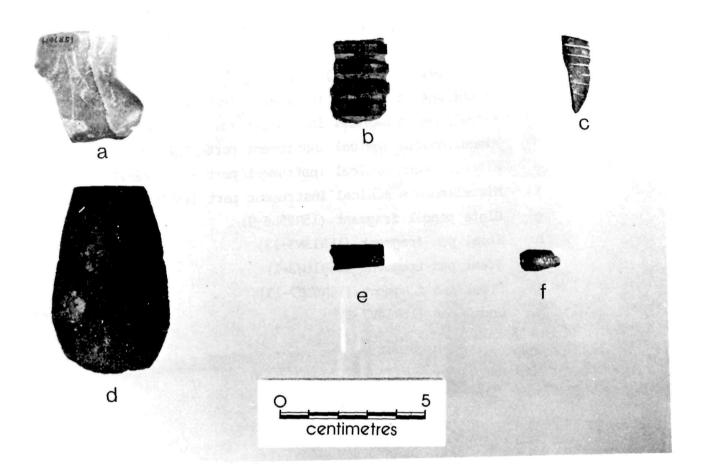
- b Cat. 2 (15R14V12-4)
- c Cat. 2 (15R14W16-2)
- d Cat. 3 (15R22G7-2)
- e Cat. 4 (15R7P1-1)
- f Cat. 7 (15R15V8-10)
- g Cat. 8 (15R17G1-10)
- h 'Cut' mouthpiece (15R15W6-28)
- i Mouthpiece with moulded lip (15R24T1-9)
- j Mouthpiece with moulded lip (15R14W2-10)
- k Refashioned mouthpiece; beveled end (15R11H1-1)
- Refashioned mouthpiece; notched (15R14V3-4)
- m Refashioned mouthpiece, beveled end (15R9G3-4)
- n Refashioned mouthpiece with teeth marks (15R25H1-7)
- o Reworked stem fragment (15R25L7-32)
- p Reworked stem fragment (14R60E3-18)
- q Reworked stem/bowl juncture (15R15V2-35)
- r Reworked stem/bowl juncture (15R8H2-3)



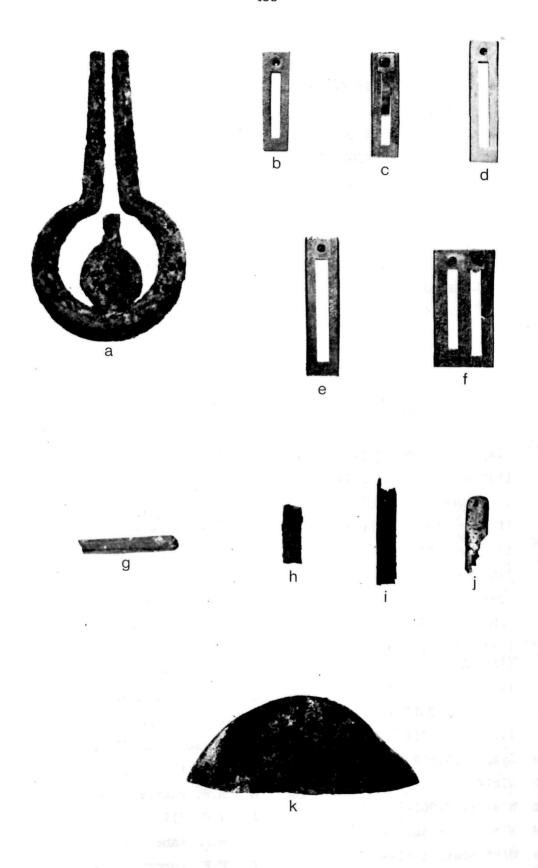
133 Stone and bone smoking pipe fragments.

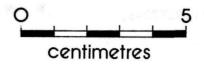
```
a (Cat. 1) Siltstone bowl fragment (15R7G1-4)
```

- b (Cat. 2) Mudstone bowl fragment (15R15V3-28)
- c (Cat. 3) Steatite bowl fragment (15R25L6-10)
- d (Cat. 4) Sandstone bowl fragment (14R60C3-4)
- e (Cat. 5) Mudstone stem fragment (14R6lD1-9)
- f (Cat. 1) Bone stem fragment (15R10H1-2)



- 134 Musical instruments, writing implements and snuff box.
 - a Jew's harp (15R15W3-1)
 - b Miscellaneous musical instrument part (15R25F1-4)
 - c Miscellaneous musical instrument part (15R23F2-2)
 - d Miscellaneous musical instrument part (15R25F1-2)
 - e Miscellaneous musical instrument part (15R23F2-1)
 - f Miscellaneous musical instrument part (15R19G2-1)
 - g Slate pencil fragment (15R25L6-9)
 - h Steel pen fragment (15R13W3-13)
 - i Steel pen fragment (15R16W2-1)
 - j Steel pen fragment (14R62B7-13)
 - k Snuff box (15R14V7-2)





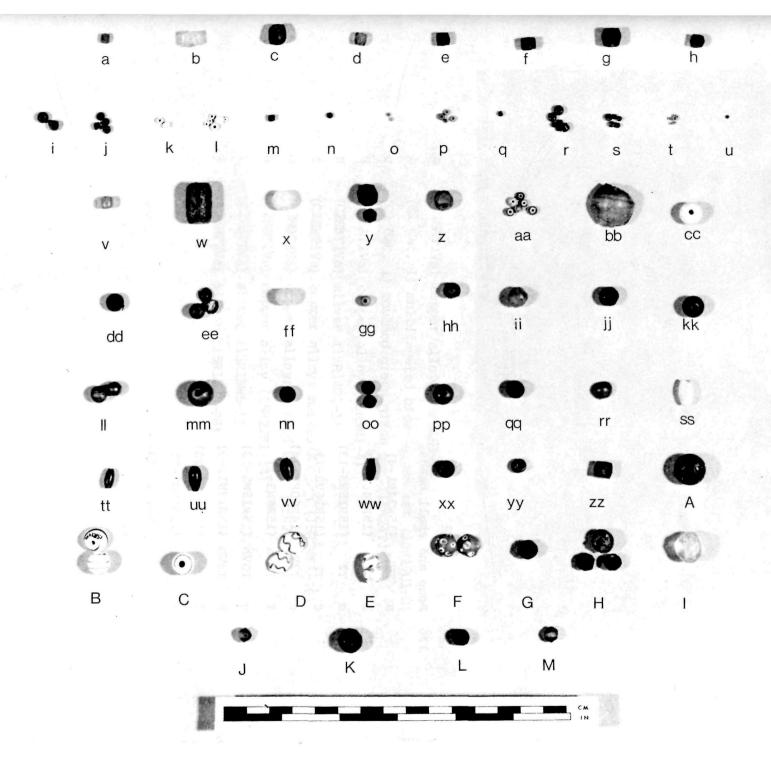
135 Glass Beads

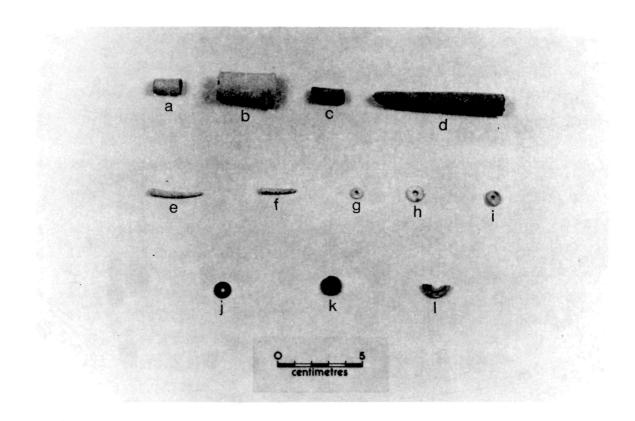
la* bright teal (15R23U4-1) a hh W1b* orange (15R7H6-1) b 1f2 (15R6H2-1) ii W1b* dusty orange (15R9H2-1) 1f* amber (15R14W2-2) C W1b* deep turquoise green faceted jj (15R21G1-1)d 1f* aquagreen (15R5H1-1) Wlb* vivid cerulean blue kk lf* deep turquoise green e (15R25L7-13) (15R15W5-3)W1b* turquoise (14R62B1-5) 11 1f* bright navy (15R25L7-7) f W1b* copen blue (15R13W1-1) mm 1f* rose wine (15R25L7-8) g Wlb* bright teal (15R15V1-1) nn 1f* bright fuschia purple W1b* brilliant blue (15R24S1-2) (15R10W6-1)00 i 11a2 (15R24S1-1) W1b* medium blue (15R15W8-1) pp Wlb* bright navy, ridged j 11a7 (15R15V2-7) (15R15W8-2)k 11a12 (15R23T2-4) W1b* rose (15R7X2-2) rr 1 11a14 (15R15V2-8) W1c1 (15R14V2-4) SS 11a27 (15R26G1-3) m Wlc* scarlet (15R16H2-1) t.t. 11a53 (15R25L7-9) n uu W1c* black (15R23S1-2) 11a* light grey (15R14V12-1) 0 Wlc* vivid cerulean blue 11a* mustard gold (15R25L7-10) p (15R17H1-3)lla* amber (15R25L7-11) q Wlc* bright navy, faceted WW 11a* bright teal (15R23S2-2) r (15R25T2-1)Wld* black (14R60E3-3) 11a* deep blue (15R24S4-1) S xxWld* strong blue (14R61D1-2) t 11a* geranium pink (15R15W6-4) уу W11c5 (14R62B4-1) lla* scarlet (15R10W3-2) ZZ 11 11b18 (15R25F2-2) A W111b* (15R18Y1-1) V lla* scarlet and yellow B W111b* (15R14V6-3) W (15R14V2-3)C W111b* (15R14V6-4) 111f1 (15R15W5-4) X D W111b* (15R23G6-2) 111f2 (15R25L7-12) y W111b* (15R13H1-1) Ε 111f* (15R17G1-1) Z F W111b* (14R62B8-2) 1Va9 (15R15V2-10) G M.P. tile red (15R17H1-4) bb · W1b14 (14R60E1-3) M.P. scarlet (15R25L7-15) H W1b1 (15R19G1-1) Ι M.P. (15R12G5-1) W1b16 (15R25L7-14) dd M.P. amber (15R25L7-16) J Wlb* scarlet (15R8G1-1) K M.P. turquoise green (15R23F1-1) ff Wlb* light grey faceted L M.P. bright navy (15R16F1-6) (15R15W5-5)

M

gg Wlb* yellow (15R23T2-5)

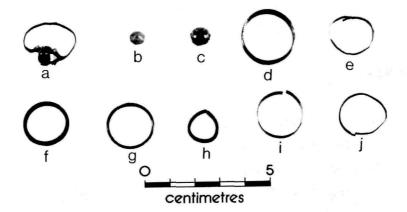
M.P. bright rose (14R60E3-4)





136 Bone and shell beads.

- a T2 (15R24R1-4)
- b T2 (15R14U2-7)
- c T2 (15R15W3-13)
- d T2 (15R16V2-1)
- e T3Va (14R60E3-24)
- f T3Va (15R6N3-1)
- g T3Vb (15R15W5-13)
- h T3Vb (15Rl3Wl2-9)
- i T3Vb (15R14V6-20)
- j T3Vb (15R15W2-7)
- k T3Bb (15R15V2-43)
- 1 T3Vb (15R22G8-15)

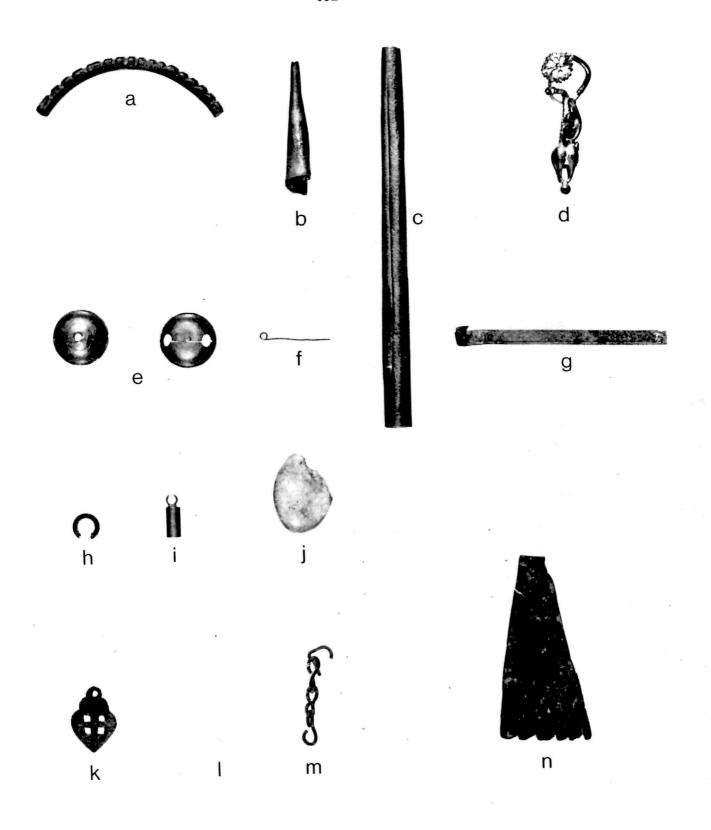


137 Finger rings.

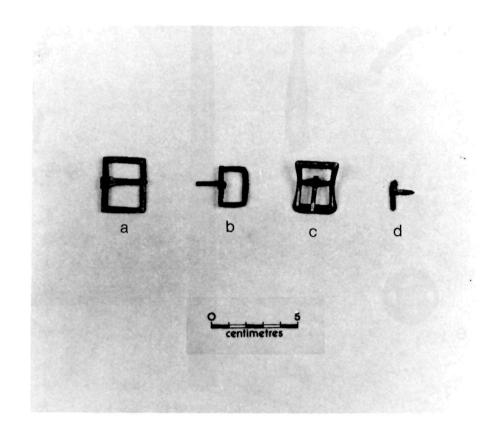
- a (ClSATlVa) copper alloy (15R26H1-1)
- b (C1 Cat. 1) multifaceted blue glass set (15R17G1-2)
- c (C1 Cat. 1) moulded green glass set (15R24T1-4)
- d (C2SAT1Va) copper alloy (15R9H1-4)
- e (C2SBTlVa) silver (15R14G2-1)
- f (C2SBT1Va) copper alloy: marked X (15R24S1-16)
- g (C2SBTlVa) copper alloy; marked GOLD (15R24S5-1)
- h (C2SBT1Va) copper alloy (15R22F1-14)
- i (C2SBT2Va) silver (15R15W5-1)
- j (C2SBT2Va) silver (15R15V3-26)

138 Jewelry.

- a Bracelet fragment (15R14H2-3)
- b Tinkle cone (14R6lD2-1)
- c Dangler (14R62B8-1)
- d Earring (14R62B1-4)
- e Hawk bell (14R62B2-2)
- f Cross-pin (15R25L3-4)
- g Cross-pin (15R100A1-23)
- h Fastener (15R4H1-1)
- i Fastener (15R14G1-1)
- j Bone pendant (14R60C3-6)
- k Iron pendant (15R16G4-3)
- 1 Shell pendant (15R16F1-25)
- m Jewelry chain (15R16G3-1)
- n Copper pendant (15R13X1-2)





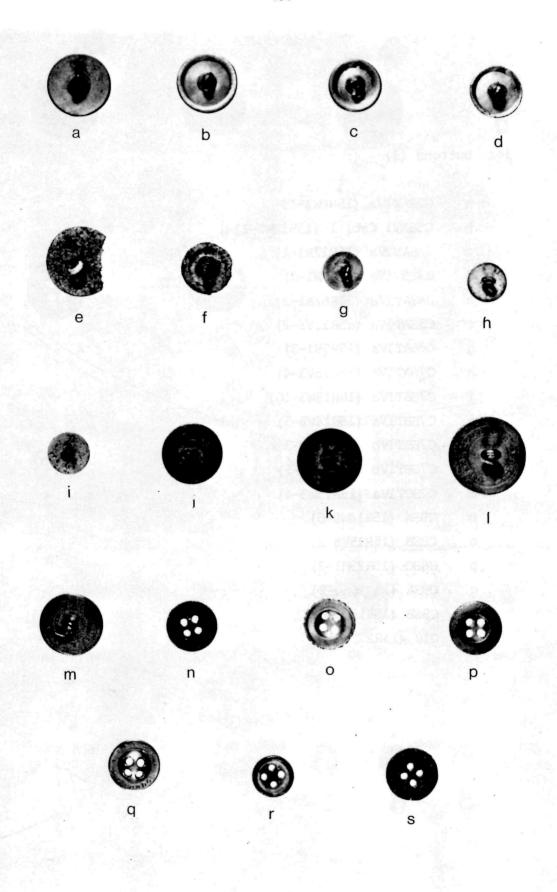


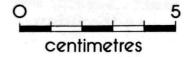
139 Buckles.

- a (TlVa) copper (15R14W3-2)
- b (51Va) iron (15R6W1-4)
- c (T2Va) brass (15R23S1-1)
- d (Cat. 1) iron (15R15X2-1)

140 Buttons (1)

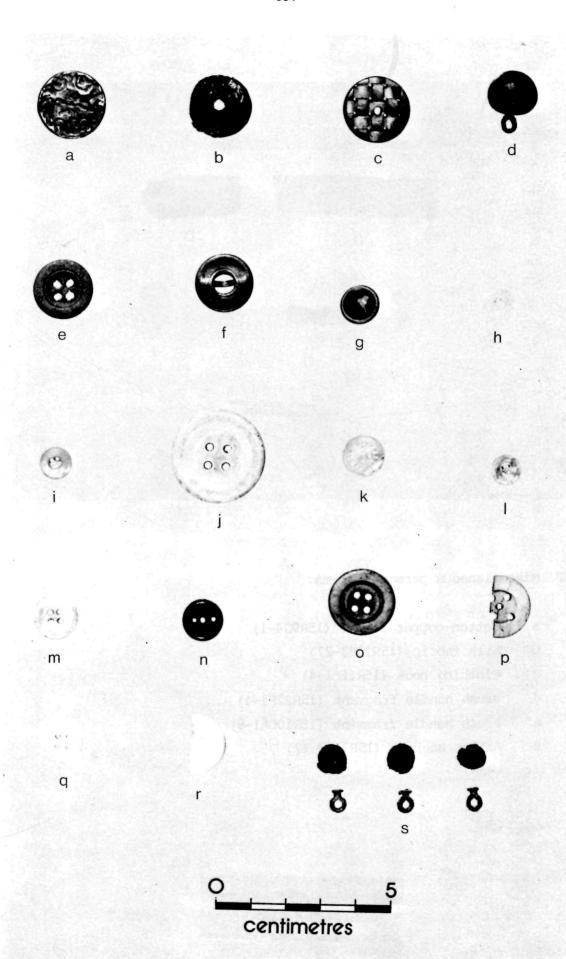
- a ClSATlVa (15R10W1-3)
- b ClSATlVb (15R15V2-2)
- c ClSATlVb (15R26H1-2)
- d ClSATlVb (15R9H1-1)
- e ClSAT2Va (15R14V6-6)
- f ClSAT3Va (15R7Y1-1)
- g ClSBTlVa (15R15V3-1)
- h ClSBTlVb (15R13W12-3)
- i C1SBT1Vb (15R14V2-1)
- j ClSBTlVb (15R15V2-20)
- k C1SBT1Vb (15R15V3-6)
- 1 C1SBT1Vb (15R15W6-3)
- m C1SBT1Vb (15R24T1-1)
- n C2SAT1Va (15R15W17-2)
- o C2SAT2Va (15R11W1-1)
- p C2SAT3Va (15R15W3-1)
- q C2SAT3Vb (15R14V2-2)
- r C2SBT1Va (15R15W8-3)
- s C2SCTlVa (14R6lDl-1)

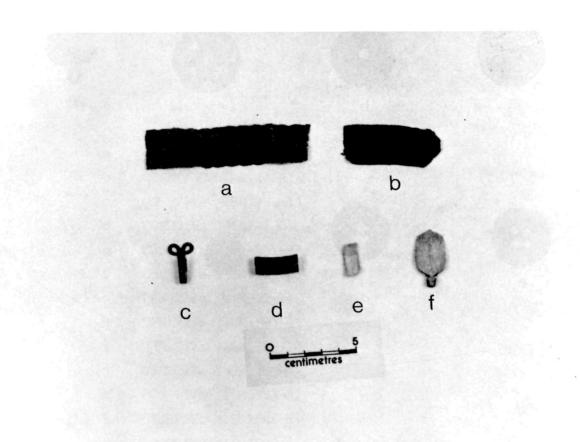




141 Buttons (2)

- a C3SAT1Va (15R6W1-1)
- b C3SAT1 Cat. 1 (15R14W1-1)
- c C3SAT2Va (15R17H1-1)
- d C3SBT1Va (15R6W1-3)
- e C4SAT1Va (14R62B1-2)
- f C5SAT1Va (15R11V1-2)
- g C6SAT1Va (15R9H1-3)
- h C7SAT1Va (15R15V3-4)
- i C7SBTlVa (15R13W3-10)
- j C7SBT1Va (15R14V6-5)
- k C7SBT1Vb (14R60E2-3)
- 1 C7SBT1Vb (15R15W6-5)
- m C7SCT1Va (15R15W3-4)
- n C8SA (15R14W8-6)
- o C8SB (15R15V8-2)
- p C8SC (15R25H1-2)
- q C9SA (15R25H1-3)
- r C9SB (15R14W3-4)
- s C10 (15R25L7-18)





142 Miscellaneous personal items,

- a Cotton-copper fabric (15R9G4-1)
- b Silk fabric (15R15V3-27)
- c Clothing hook (15R16F1-4)
- d Brush handle fragment (15R22F1-4)
- e Brush handle fragment (15R100A1-8)
- f Antler stopper (15R14W8-12)

143 Nails

```
а
     ClSAT1Va (15R14W1-15)
     Clsativb (15R6V1-7)
b
     ClSAT1Vc (15R23S7-6)
С
d
     ClSAT2Va (15R22G1-6)
     ClSAT2Vb (15R19F2-3)
e
f
     ClSAT3Va (15R7H1-8)
     ClSAT4Va (15R14V3-42)
g
     ClsAT4Vb (15R16G1-18)
h
i
     C1SAT5Va (15R7V1-9)
j
     Clsat5Vb (15R27H1-2)
     ClSAT6Va (15R6V1-8)
k
     Clsat6Vb (15R24R1-5)
1
     ClSBTlVa (15R15W3-21)
m
     ClSBT2Va (15R24T1-14)
n
     ClSBT3Va (15R13W3-33)
0
     C1SBT4Va (14R60E1-25)
p
     ClSBT5Va (15R14W7-11)
q
     ClSBT6Va (15R100A1-24)
r
     Cl Cat. 1 (15R23M1-4)
S
     Cl Cat. 2 (15R17G2-4)
t
     C2SAT1Va (15R15W3-22)
u
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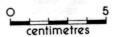
C2SAT2Va (15R17G3-4)

C2SBT1 (15R14V2-17)

V

W





144 Miscellaneous building hardware (1)

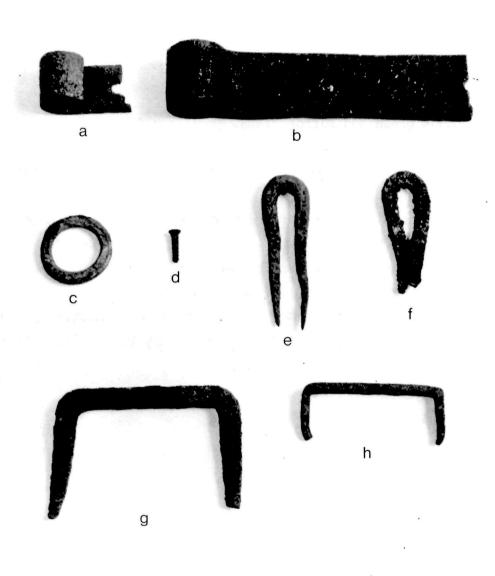
- a Bolt (15R16F1-25)
- b Bolt (15R23S1-5)
- c Eye-spike (15R25L1-2)
- d Hasp fragment (15R24T1-3)
- e Miscellaneous hook and/or eye (15R13V2-20)
- f Miscellaneous hook and/or eye (15R12H1-1)
- g Miscellaneous hook and/or eye (15R14W7-12)
- h Miscellaneous hook and/or eye (15R8V2-1)
- i Miscellaneous hook and/or eye (15R15W3-23)
- j Latch guide (15R23S1-4)
- k Latch guide (15R12G1-4)





145 Miscellaneous building hardware (2)

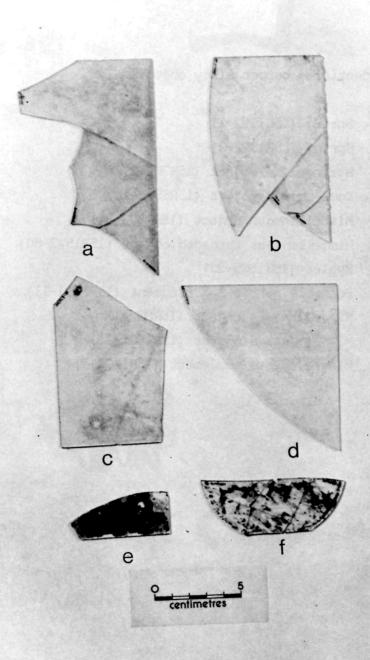
- a Strap hinge fragment (15R22F1-3)
- b Strap hinge fragment (15R13W3-4)
- c Ring (15R15V3-30)
- d Screw (15R7X2-11)
- e Staple, round (15R20F1-9)
- f Staple, round (15R13V5-1)
- g Staple, square (15R7W5-1)
- h Staple, square (15R12G1-2)



centimetres

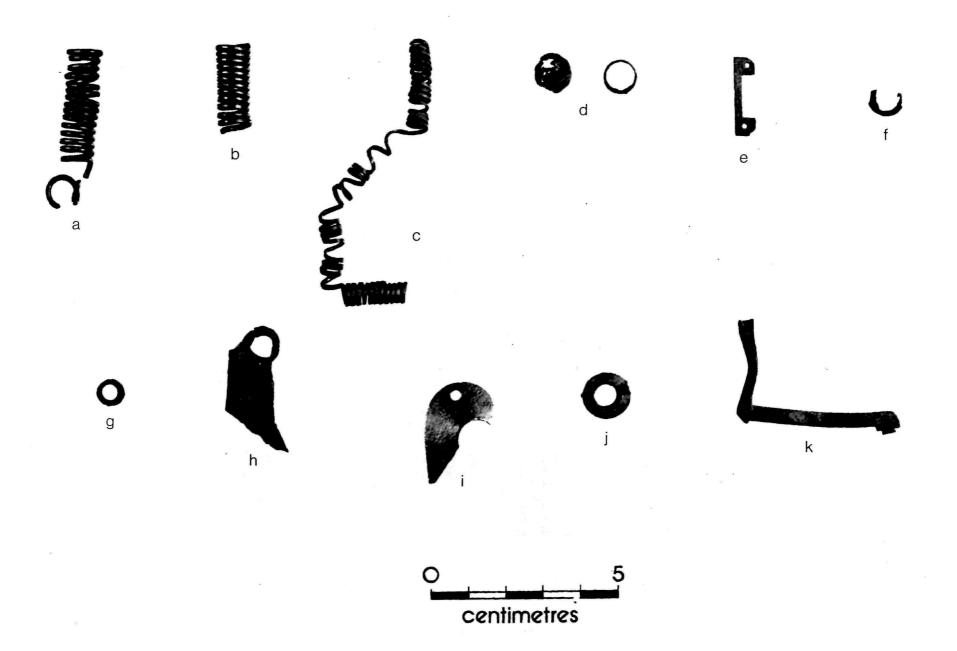
146 Window glass and mirror glass.

- a Window glass corner fragment; note sealer marks along edge (15R25L3-9)
- b Window glass corner fragment; note the chipped edge (15R25L7-69)
- c Window glass corner fragment (15R25L7-70)
- d Window glass corner fragment (15R25L7-71)
- e Mirror glass, former silvered backing (15R23T1-13)
- f Mirrow glass, former tin and mercury back (15R13W14-9)



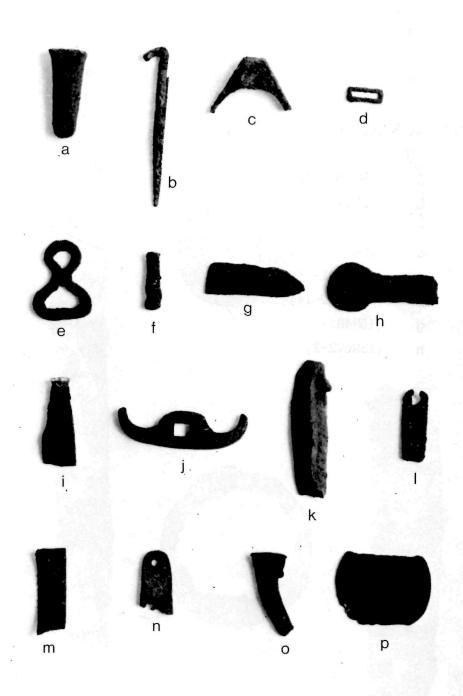
147 Unidentified copper alloy objects.

- a Spring (15R13V2-1)
- b Spring (15R13V2-2)
- c Spring-like object (15R7W2-1)
- d Dome-shaped object (15R15W2-10)
- e Miscellaneous object (15R15V3-31)
- f Miscellaneous threaded object (15R15V2-80)
- g Eyelet (15R15W5-25)
- h Possible kettle lug fragment (15R23T1-11)
- i Miscellaneous object (15R8W2-1)
- j Miscellaneous object (15R16G1-21)
- k Miscellaneous implement (15R11G2-1)



148 Unidentified ferrous objects (1)

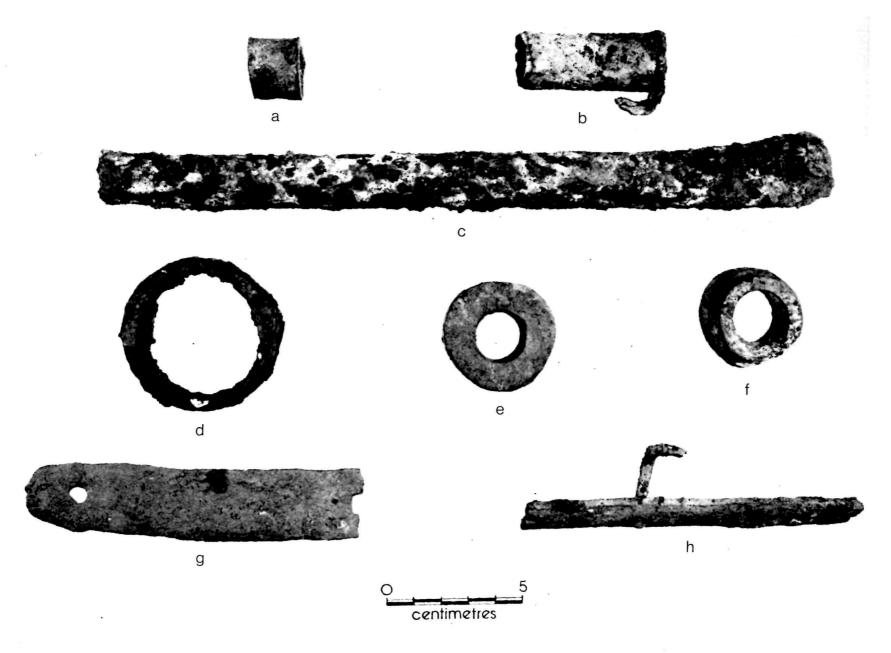
- a (15R20F2-3)
- b (15R25R1-8)
- c (15R26F2-2)
- d (15R23H1-13)
- e (15R25F1-19)
- f (14R61B1-8)
- g (15R14H1-7)
- h (15R14W8-57)
- i (15R25L3-5)
- j (14R60E1-9)
- k (15R7X1-6)
- 1 (15R6H1-7)
- m (15R22G8-17)
- n (15R25R1-9)
- o (15R25L1-10)
- p (15R10G1-4)





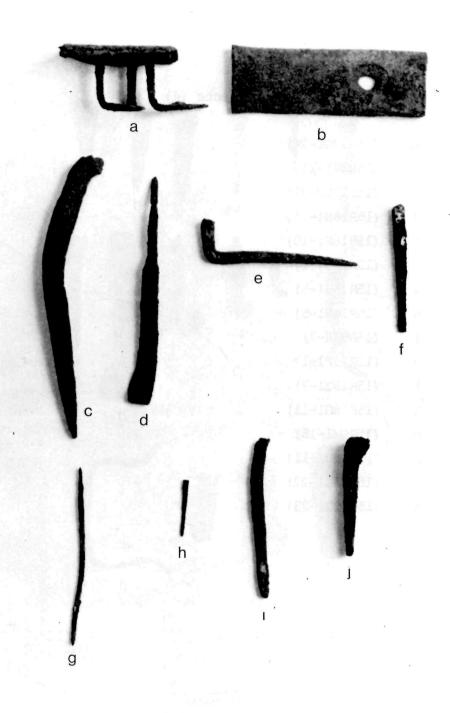
149 Unidentified ferrous objects (2)

- a (15R10H1-2)
- b (15R14W26-8)
- c (15R16U5-21)
- d (15R16H1-13)
- e (15R17F1-19)
- f (15R23S2-14)
- g (15R4H1-3)
- h (15R6V2-2)



150 Unidentified ferrous objects (3)

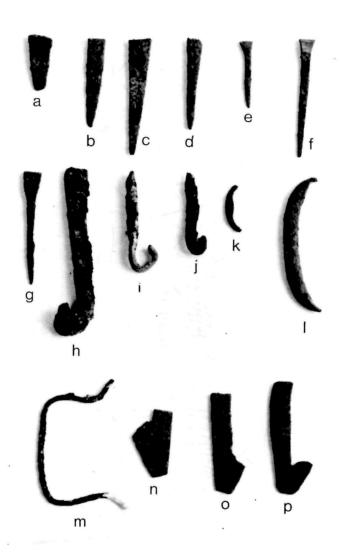
- a (15R6J2-4)
- b (15R23S2-15)
- c (15R15V1-13)
- d (15R15V1-14)
- e (15R13H1-5)
- f (15R100A1-26)
- g (15R8G2-3)
- h (15R8G2-4)
- i (15R16V1-2)
- j (15R14W8-58)



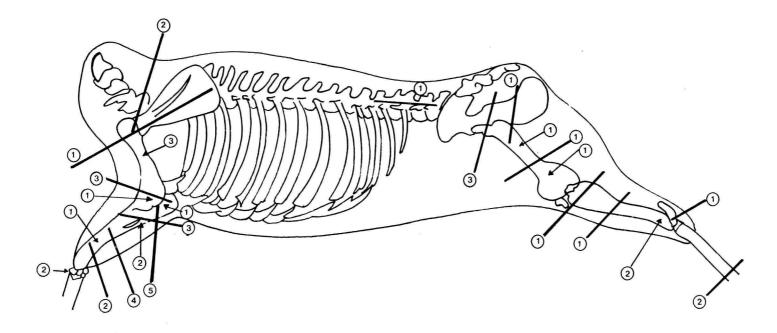


151 Unidentified ferrous objects (4)

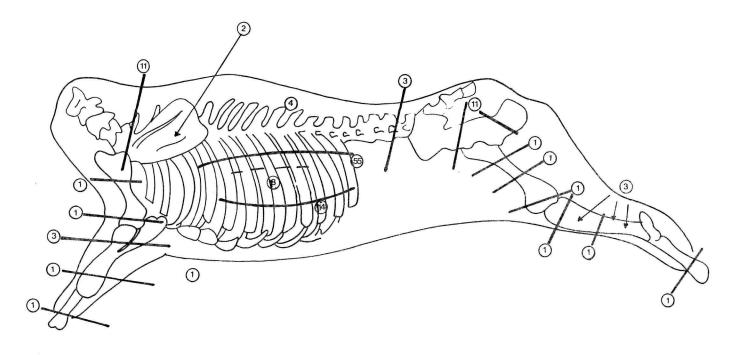
- a (15R17G1-24)
- b (15R8V1-2)
- c (15R15V2-81)
- d (15R16H1-14)
- e (15R16F1-10)
- f (15R12U7-1)
- g (15R15H1-5)
- h (15R14G1-5)
- i (15R9G4-7)
- j (15R20F1-1)
- k (15R18Y1-7)
- 1 (15R18G1-11)
- m (15R6W1-18)
- n (15R14H2-11)
- o (15R16G1-22)
- p (15R16G1-23)



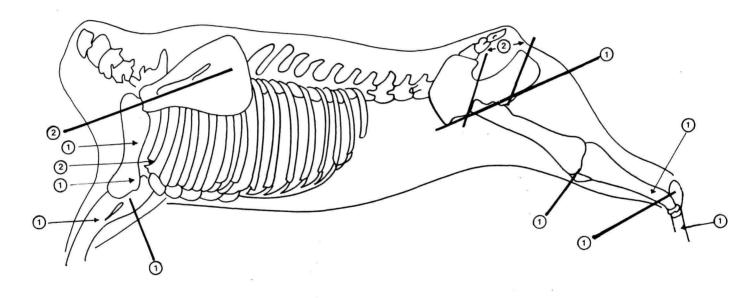




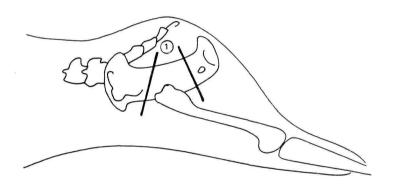
152 Location and number of cuts on elk bone



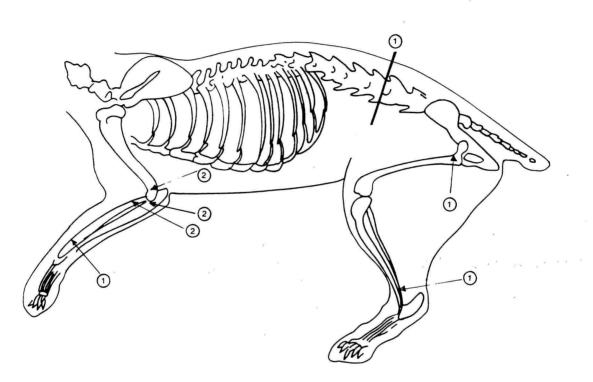
153 Location and number of cuts on bison, $\underline{\text{Bos-Bison}}$ and domestic cow bones



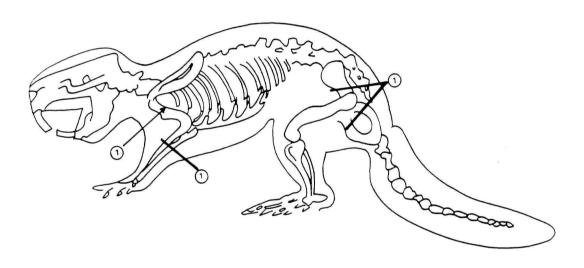
154 Location and number of cuts on moose bone



155 Location and number of cuts on mule deer bone



156 Location and number of cuts on Lynx bone



157 Location and number of cuts on beaver bone

