

ARCHAEOLOGICAL SITE TESTING
AT BIG CREEK (10VY31/PY-114)
KRASSEL RANGER DISTRICT
FRANK CHURCH-RIVER OF NO RETURN
WILDERNESS
PAYETTE NATIONAL FOREST, IDAHO

IN MEMORY OF
FRANK C. LEONHARDY, Ph.D.

with technical assistance from
JILL FRYE



IRON ARROWPOINT

Heritage Program
Payette National Forest
U.S. Department of Agriculture
Intermountain Region
February 2000

ARCHAEOLOGICAL SITE TESTING
AT BIG CREEK (10VY31/PY-114)
KRASSEL RANGER DISTRICT
FRANK CHURCH-RIVER OF NO RETURN
WILDERNESS
PAYETTE NATIONAL FOREST, IDAHO

IN MEMORY OF
FRANK C. LEONHARDY, Ph.D.

with technical assistance from
JILL FRYE



IRON ARROWPOINT

Heritage Program
Payette National Forest
U.S. Department of Agriculture
Intermountain Region
February 2000

TABLE OF CONTENTS

	Page
PREFACE.....	i-ii
ACKNOWLEDGEMENTS.....	iii
ARCHAEOLOGICAL SITE TESTING.....	1
PREHISTORIC TIME LINE CHRONOLOGY TABLE.....	4
FIGURES	
1 Map of the Frank Church-River Of No Return Wilderness.....	5
2 Topographic map of Big Creek Housepit Site.....	6
3 Map of 1983 and 1984 excavations.....	7
4 Area 1, 1983 excavation.....	8
5 Area 2, 1983 excavation.....	9
6 Area 3, 1984 excavation.....	10
7 Cascade dart points.....	11
8 Large dart points.....	12
9 Stemmed dart point fragments.....	13
10 Dart base fragments.....	14
11 Possible Elko series dart points.....	15
12 Elko series and possible Northern Side-notched dart points.....	16
13 Pinto-like dart bases.....	17
14 Side-notched arrowpoints.....	18
15 Eastgate arrowpoints.....	19
16 Rose Springs arrowpoints.....	20
17 Desert Side-notched arrowpoints.....	21
18 Cottonwood Triangular projectile points.....	22
19 Arrowpoint fragments.....	23
20 Iron point.....	24
21 Utilized flake tools.....	25
22 Perforators.....	26
23 Bone awls.....	27
24 Possible bone gaming pieces.....	28
25 Teshoa/spall knife.....	29
26 Hammerstone.....	30
27 Mano/pestle.....	31
28 Pestle.....	32

PREFACE

On June 14, 1983, the United States Department of Agriculture, Payette National Forest, issued a Special Use Permit to Frank C. Leonhardy, Professor of Anthropology at the University of Idaho, Moscow. This permit granted permission to conduct a cultural resource inventory and subsurface archaeological excavations at selected cultural resource properties within the Frank Church-River Of No Return Wilderness, which is managed by the Payette National Forest, Idaho.

During the summer of 1983, Frank Leonhardy selected a large prehistoric archaeological site consisting of approximately 33 housepit features identified at site 10-VY-31/PY-114. Archaeological site testing began in June of 1983. One of the reasons for focusing attention on this site was the close proximity to the Taylor Ranch, University of Idaho's Field Research Station where personnel were lodged. Also, this site was selected for its potential to yield prehistoric archaeological information for answering Leonhardy's research design. Results of the 1983 archaeological excavations are presented in a draft report titled:

1983 EXCAVATIONS AT 10-VY-31
RIVER OF NO RETURN WILDERNESS AREA, IDAHO
By Frank Leonhardy and Fred Thomas
Laboratory of Anthropology, University of Idaho
June 15, 1984

To my knowledge, this draft was never finished and made into a final report. The draft copy is missing illustrations and editorial comments are written throughout the text. Some information was to be added, deleted or changed. However, the draft provides good descriptions, and is still useable for understanding what the archaeologists found during the 1983 field season. During the 1984 field season, they returned to the same archaeological site to continue their investigations.

Results of the archaeological excavations in 1984 at 10-VY-31 were never written up into a draft report. All that was written consisted of three typed, single spaced pages produced as a paper to be presented at a professional meeting, probably for archaeologists. Authorship of this paper is unknown. Frank Leonhardy died before a draft and final report were ever produced for site 10-VY-31. The artifact collections and field notes have been stored at the University of Idaho, Laboratory of Anthropology, at Moscow, Idaho since 1983/84.

On October 16, 1999, I acquired from the Laboratory of Anthropology the collections, field notes, and maps, and transferred these materials to the Payette National Forest, Supervisor's Office, Heritage Program, McCall, Idaho. During six weeks in January and February 2000, the artifact collections were inventoried and repackaged. Some of the specialized prehistoric tools were studied, measured, and illustrated in pen and ink. The colored slides were organized into a carousel and reviewed several times. The field notes, photographs, and maps were studied, read and re-read in an attempt to understand the content of the archaeological site. Some of the people involved in the archaeological excavation in 1984 were interviewed.

What follows is an attempt to express the archaeological results of the 1983 and 1984 field season at 10-VY-31. The majority of the text in this report is derived from the authorless, three-page paper prepared for a professional meeting presentation. Throughout the text, information important to the understanding of the site area was added, and nothing has been deleted. About 200 hours of work has gone into this effort.

This was the first and largest excavation of prehistoric housepit features that has ever taken place in the Frank Church-River Of No Return Wilderness. What is clearly apparent is the importance and significance of this archaeological site, as far as to what it has yielded, and the kinds of scientific information that this site can still yield.

LAWRENCE A. KINGSBURY
Heritage Program Manager
USDA Payette National Forest
McCall, Idaho

February 15, 2000

ACKNOWLEDGEMENTS

Jill Frye would like to posthumously thank Dr. Frank Leonhardy and his students for their excavation efforts. They worked in rain and blistering heat to expose for all of us this splendid site which was occupied over thousands of years.

I'd also like to thank Payette National Forest archaeologist, Lawrence A. Kingsbury, and Steve Stoddard, for their help with projectile point identification, proofreading, and their unlimited patience.

Additional thanks go to Kathy Prouty who helped type the report, and Gayle Dixon who helped proofread.

All pen and ink illustrations were produced by Jill Frye.

Archaeological Site Testing at Big Creek (10-VY-31/PY-114)
Krassel Ranger District
Frank Church-River Of No Return Wilderness
Payette National Forest, Idaho
Laboratory of Anthropology-University of Idaho

During the summer of 1984, the Laboratory of Anthropology at the University of Idaho, Moscow, Idaho conducted excavations at a site in the Salmon River Mountains of central Idaho. 10-VY-31 is a collection of housepit depressions on Big Creek, which is a major tributary of the Middle Fork of the Salmon River. (see Figures 1 and 2 on pages 5 and 6). The purpose of this paper is to briefly report on the results of these excavations and to discuss how they affect our thoughts on the settlement and subsistence pattern for the region.

10-VY-31 is a collection of (33) housepit depressions scattered across a river terrace 1 meter above the high water line. The site is located at the base of a south-facing slope, and is vegetated with blue bunch wheat grass, rye grass, and sagebrush, and located at an elevation of 3,760 feet above sea level. There are at least 13 similarly situated sites in the 12 river miles from the confluence of Big Creek and the Middle Fork of the Salmon River, up to Cabin Creek on Big Creek.

Excavations in 1983 concentrated at 10-VY-31 on the western portion of the terrace, referred to as "Area 1" and "Area 2." (see Figures 3, 4, and 5). The excavations reported in this paper (1984) were on the open eastern terrace, referred to as, "Area 3." (see Figure 6).

Four housepit depressions were excavated (#7, 14, 16, 30) as well as an inter-house area; the area between housepits. Two of the housepits (#7 and 16) were very hard to distinguish, often relying on textural differences, such as, compact vs. loose sand, rather than color variations to differentiate them. In addition, they contain very small artifact assemblages that will be discussed later in this paper. Housepits #14 and 30 had large assemblages.

A third housepit (#14) when tested showed up as well defined black stain flecked with charcoal. When the feature was uncovered, it was obvious that it had been burned. Fill was removed to reveal charred structural supports, converged irregularly toward the center. It appeared that a larger number of smaller poles (10-12 cm in diameter) were the main supports, and a number of smaller poles (5-8 cm in diameter) leaned up against them. In a few areas, patches of burned twigs lying perpendicular to the support indicated that the structure was covered with tree branches. This structure covered a depression 4.4 meters in diameter and had a living area of approximately 57.6 meters squared. There is no sign of an internal hearth. It appeared to be a post-occupational dump.

The final housepit (#30) excavated was isolated from the other three and located at the base of the 3 meter terrace (3 meters high above Big Creek). Before excavation, this housepit appeared as an irregular living floor surrounded by three piles of fire-cracked rock. The floor was made up of gray, ashy soil with an orange stain in the southern portion that represents a hearth.

When this floor (#30) was excavated, it was discovered that there was an earlier floor underlying it. Partially charred beams marked this floor. The rim of this floor did not coincide to the rim of the floor above it. Subsequent excavation revealed at least two more floors and one more rim, giving a total of four floors and three rims. Partially charred beams marked two of the floors. The beams from the lower floor have a radiocarbon date of 860+/-50 years before the present (BP). Because of time limitations, the housepit floors were not excavated, but certain comparisons can be made with the other structures. The construction techniques appear to be very similar. Note the non-radial layout of the beams. In addition, there were the presence of rock features on the edge of the depression.

The piles of fire-cracked rock from housepit #30 were excavated and were full of cultural material. The three piles contained 73 artifacts, what appear to be 6, rectangularly-shaped, bone gaming pieces, (see Figure 24, page 28), and over 3,400 pieces of bone. This housepit included 945 pieces of all of the identified bone for the site. These piles, as well as the one in housepit #14, are interpreted as being refuse dumps (middens), perhaps from the cleaning of house floors before reoccupation. Other artifacts found in housepit #30 were a Cascade dart point (see Figure 7, page 11), a Pinto series dart base (see Figure 13, page 17), and an iron point (see Figure 20, page 24), to name just a few.

The area surrounding the three grouped housepits (#7, 14, and 16) was also excavated, revealing features possibly associated with the house and a pre-house occupation. These features originated at the same surface as the houses, but their exact relationship is unclear. Three of these features are large, oval depressions, averaging 1.3x.80 meters that were filled with large chunks of fire-cracked rock and charcoal. These features contained very few artifacts. They are interpreted as the remains of earth ovens. The other features were smaller, averaging 45 cm in diameter, circular, and contained river cobbles. This type of feature also included few of no artifacts. Its function is unknown.

The pre-house occupations appeared as rock-strewn surfaces containing artifacts. No structural remains were recovered from these layers, but several areas of charcoal and burned soil may represent hearths.

Even though the rock features were smaller than the house floors, they contained a larger assemblage. In make-up, these assemblages are very similar to the house floors, with projectile points, utilized flake tools, and bifaces being the most

common tool types, at about 20%. Large side-notched points predominate. (see Figures 7-28, pages 11-32 for the collection's stone and bone tools).

The assemblage from the pre-house occupation appeared very different. Most obviously, projectile point form is different with large corner notched points (tentatively Elko series) predominating. The make-up of the collection is also different with projectile points making up 30% of the assemblage as opposed to 20% in the house floor. Utilized flakes and bifaces are less common, only 10% opposed to 20% on the floors.

In regards to faunal remains, over 5,200 pieces of bone were recovered, with about 70% of them coming from the rock features around the house floors. The bone was heavily processed, most being smashed into pieces smaller than 2 cm in diameter. Only 4% of the bone was identifiable to the genus level; 835 specimens are mountain sheep, 7% are deer, and 10% other, primarily rabbit, marmot, and bear.

From the data, a number of conclusions can be drawn. Each of the projectile point assemblages from the house floors is slightly different morphologically. This is interpreted as temporal differences rather than functional factors. This is supported by stratigraphic data, which shows deposition of a small amount of backfill from one pit to another. After two summers of excavations, nine house floors (in 1983, #6, 5, Area 2, 7, 8, and 9. In 1984, #7, 14, 16, and 30) had been completely or partially excavated, and none of them were contemporaneous. While there are approximately 27 unexcavated depressions at the site, it is strongly suggested that this is not the result of a large population aggregation, but of frequent reoccupation by a small group, possibly even a single family unit.

Several salmon vertebrae were found, suggesting spring, summer, and fall occupations coinciding with the salmon runs. Large numbers of grain and bone smashing rocks (28) were found, (see Figures 26, 27, and 28, pages 30-32), suggesting on site processing of foods and bone marrow. Marrow is a high-calorie food source used as the "glue" to hold dried meat and berries together, among other things. Cooking ovens were located, suggesting long-term occupation. Eight bone awls and 24 perforators (see Figures 22 and 23, pages 26-27) were found, suggesting clothing and ornamentation production. Identifiable arrow points dominate the entire site, totaling 68. Dart points number 54 for the whole site. Numerous point fragments were also collected. Given all of this evidence, it appears that these peoples weren't just passing through. The plan was to stay for an extended period of time and use the resources.

TABLE

Prehistoric Time Line Chronology for the Payette National Forest, Idaho
Based Upon Projectile Point Change and Radiometric Dating Through Time

Relative Age Before Present (BP)	Phase and/or Tradition
11,500 - 10,000 years BP	Llano Tradition Clovis
11,000 - 8,000 years BP	Plano Tradition Alberta (Cody Complex) Eden (Cody Complex) Haskett
10,000 - 8,000 BP 9,000 - 6,000 BP	Windust Cascade (Cold Springs subphase)
8,400 - 650 BP	Elko Series Side Notch Corner Notch Eared
7,845 - 2,250 BP	Humboldt Series Basal Notch
7,400 - 1,000 BP	Northern Side Notch
5,700 - 2,650 BP	Pinto Series
4,500 - 2,500 BP	Tucannon
2,500 - 700 BP	Harder
1,500 - 100 BP	Wallula
1,500 - 100 BP	Middle Columbia Basal Notch
1,500 - 500 BP	Rose Spring (Rosegate)
1,500 - 500 BP	Eastgate Expanding Stem
1,500 - 800 BP	Piqunin
700 - 100 BP	Desert Side Notch (Sierra Type)
500 - 100 BP	Cottonwood Triangular

Payette National Forest

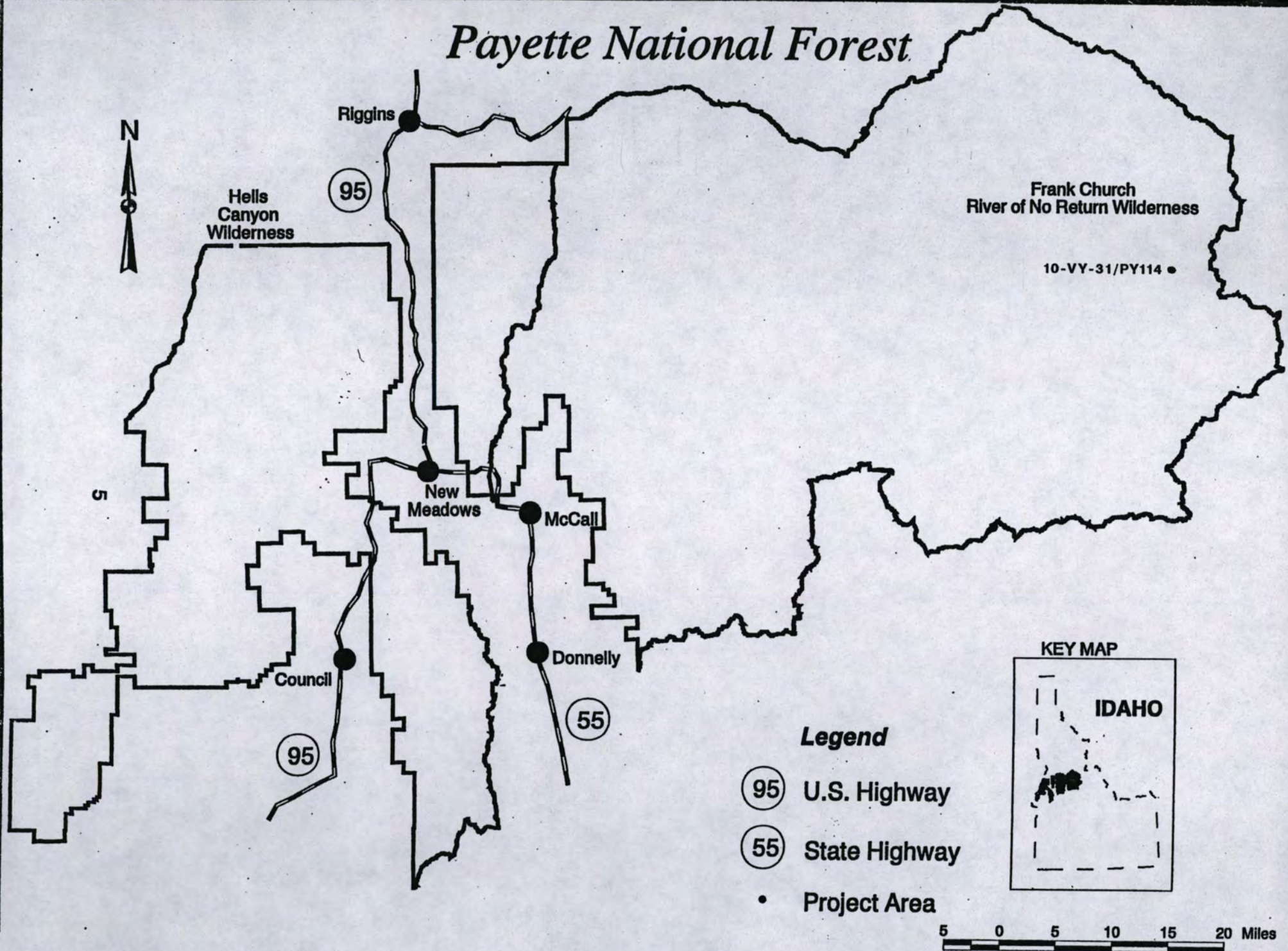


FIGURE 1. MAP OF THE FRANK CHURCH-RIVER OF NO RETURN WILDERNESS.

Payette National Forest Cultural Resource Map
Site #'s :10- VY-31
: PY-114



Site Name: House Pit Village
Location: NW 1/4 of NW1/4 of SW1/4 of Sec. 2, T.20N, R.13E
Map: Dave Lewis Peak Quad, 7.5 Minute Series, 1966, 322-4
Payette National Forest, Krassel District
Date: July 1982

FIGURE 2. TOPO. MAP OF BIG CREEK HOUSEPIT VILLAGE SITE.

AREA 1 1983 EXCAVATION

10
9
8
7
6
5
4
3
2
1
↑
N

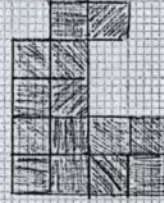
12
11
10
9
8
7
6
5
4
3
2
1
↑
N

PIT 5

2 OCCUPATIONS:
OVEN / HOUSE

FCR, CHARCOAL

HEARTH



6 5 4 3 2 1 | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

← W

E →

PIT 6



STERILE

FCR
CHARCOAL
NO CULTURE



10
9
8
7
6
5
4
3
2
1
↑
N

12
11
10
9
8
7
6
5
4
3
2
1
↑
N

FIGURE 4. HOUSEPIT #5, FUNCTIONED ON SEPARATE OCCASIONS AS AN OVEN AND HOUSE.

HOUSEPIT #6, YIELDED NO CULTURAL MATERIAL.

AREA 2 1983 EXCAVATION

STRATUM 1 FCR
 FOUND: 12 IMPLEMENTS
 161 PIECES OF DEBITAGE
 27 PIECES OF BONE

HOUSE DEPRESSION:

23 IMPLEMENTS
 5 BONE TOOLS
 282 PIECES OF DEBITAGE
 1,898 BONE FRAGS.

STRATUM 2 FCR
 FOUND: 78 IMPLEMENTS
 27 PROJECTILE POINTS
 20 GRINDING STONE FRAGS.
 1,095 PIECES OF DEBITAGE
 2,532 BONE FRAGS.

STRATUM 3 FCR
 FOUND: 37 IMPLEMENTS
 773 PIECES OF DEBITAGE
 2,879 BONE FRAGS.

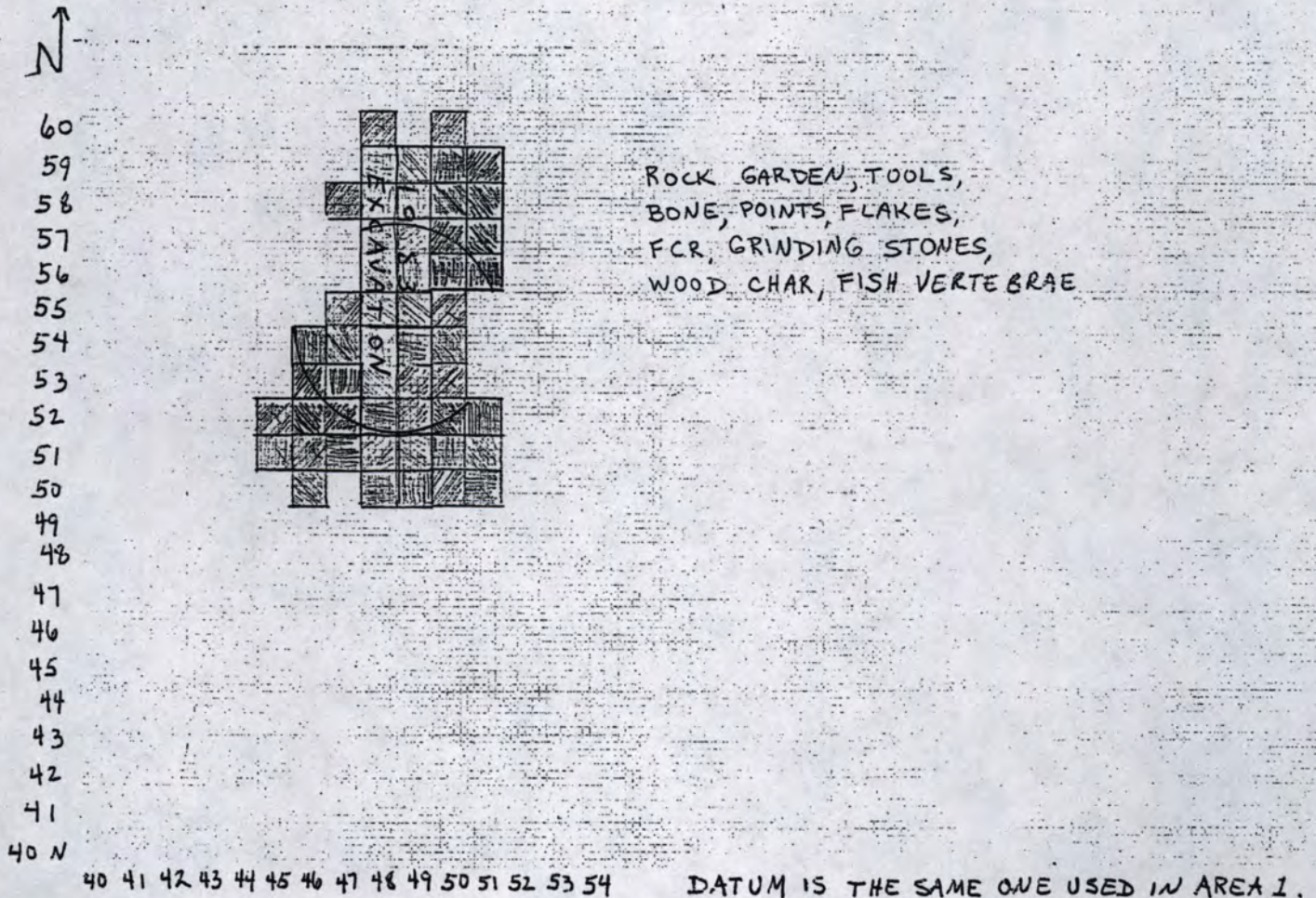


FIGURE 5. THIS HOUSEPIT, REFERED TO AS "AREA 2,"

PRODUCED A LARGE QUANTITY OF CULTURAL MATERIAL.

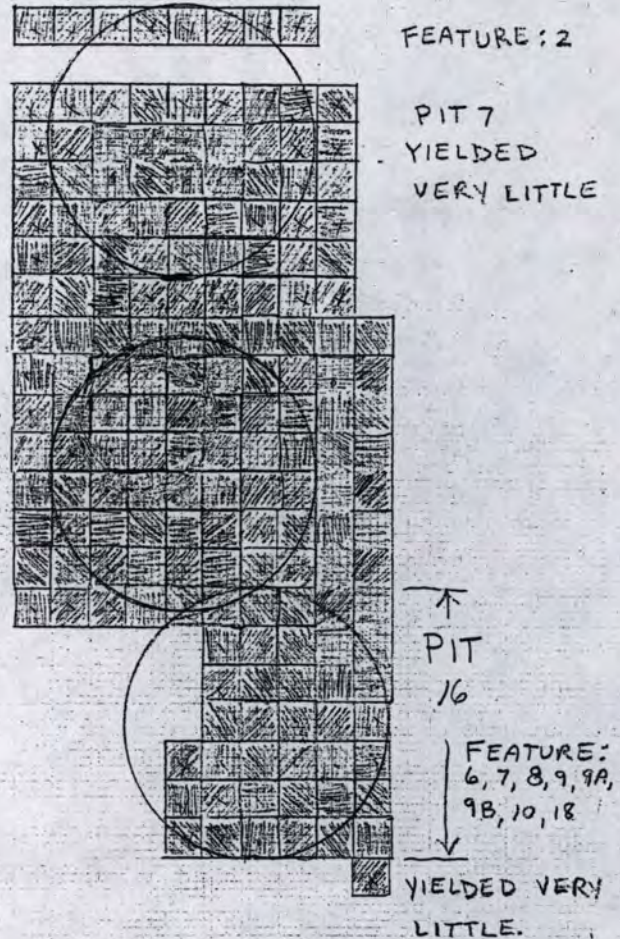
AREA 3 1984 EXCAVATION

169
168
167
166
165
164
163
162
161
160
159
158
157
156
155
154
153
152
151
150
149
148
147
146
145
144
143
142
141
140
139
138
137
136
135
134
133
132
131
130
129
128
127
126
125
124
123N
122N
121N
120N

3 POSSIBLE EARTH OVENS NEAR THESE 3 HOUSEPITS.

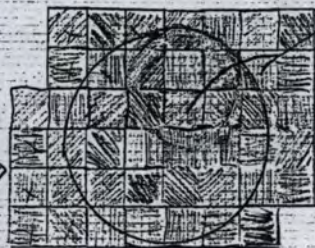
PIT 14
POST OCCUPATION
MIDDEN.
THIS PIT YIELDED
THE MOST TOOLS.
3 OCCUPATIONS

PIT 14
BURNT HOUSE PIT
WOOD BEAMS,
POSSIBLE HEARTH.
FEATURES: 1, 3, 4, 5, 11,
12, 13, 14, 15, 31, 32



DATUM USED 100N/100E

PIT 30 NOT COMPLETED



6 BONE GAMING PIECES

PIT 30
POST OCCUPATION MIDDEN
73 ARTIFACTS, 3400+ BONES
WOOD BEAMS
4 OCCUPATIONS - HOUSE PITS, 2 CHARRED.
CASCADE, PINTO BASE, IRON POINT. (FOUND ON SURFACE), N.S.N.
C-14 SAMPLE = 860 ± 50 BP FROM BOTTOM FLOOR.
HEARTH

FEATURES: 16, 17, 19, 20, 21, 22, 23, 24
25, 26, 27, 28, 29, 30.

90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125

E →

↑
N

FIGURE 6. FOUR HOUSEPIT EXCAVATIONS.

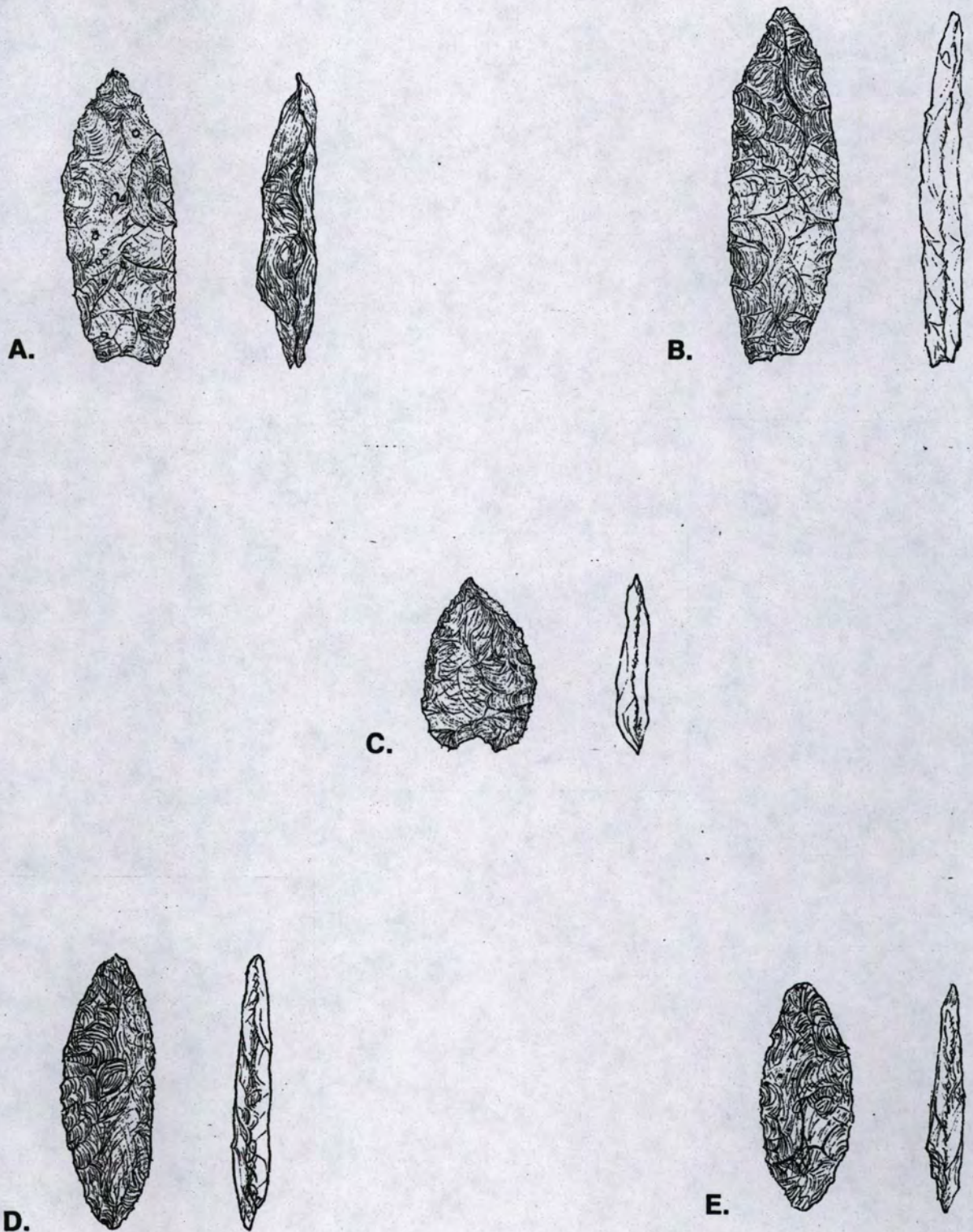
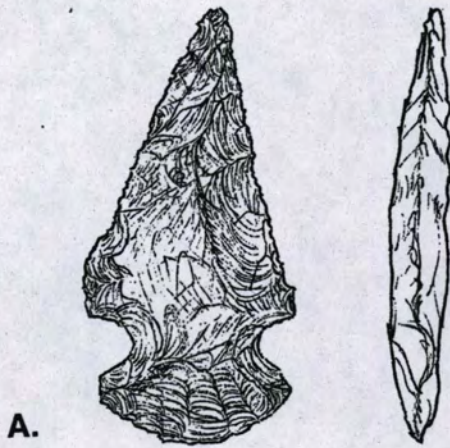
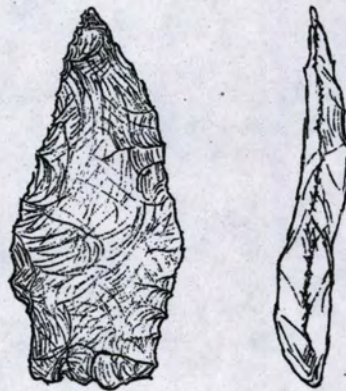


FIGURE 7. A, B, D, E, CASCADE DART POINT. 9,000-6,000 BP.

C, LEAF-SHAPED DART POINT.



A.



B.

FIGURE 8. A, SIDE NOTCHED/CONVEX BASE DART POINT.

B, SLOPED SHOULDER DART POINT.

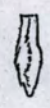


FIGURE 9. STEMMED DART BASE FRAGMENTS.



FIGURE 10. DART BASE FRAGMENTS.



FIGURE 11. POSSIBLE ELKO SERIES DART POINTS. 8,400-650 BP.



FIGURE 12. A, B, C, D, E, ELKO SERIES DART POINTS. 8,400-650 BP.

F, POSSIBLE NORTHERN SIDE NOTCHED DART POINT. 7,400-1,000 BP.

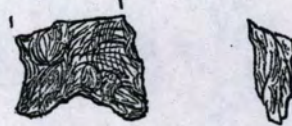
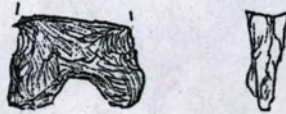


FIGURE 13. PINTO-LIKE DART POINT BASES. 5,700-2,650 BP.

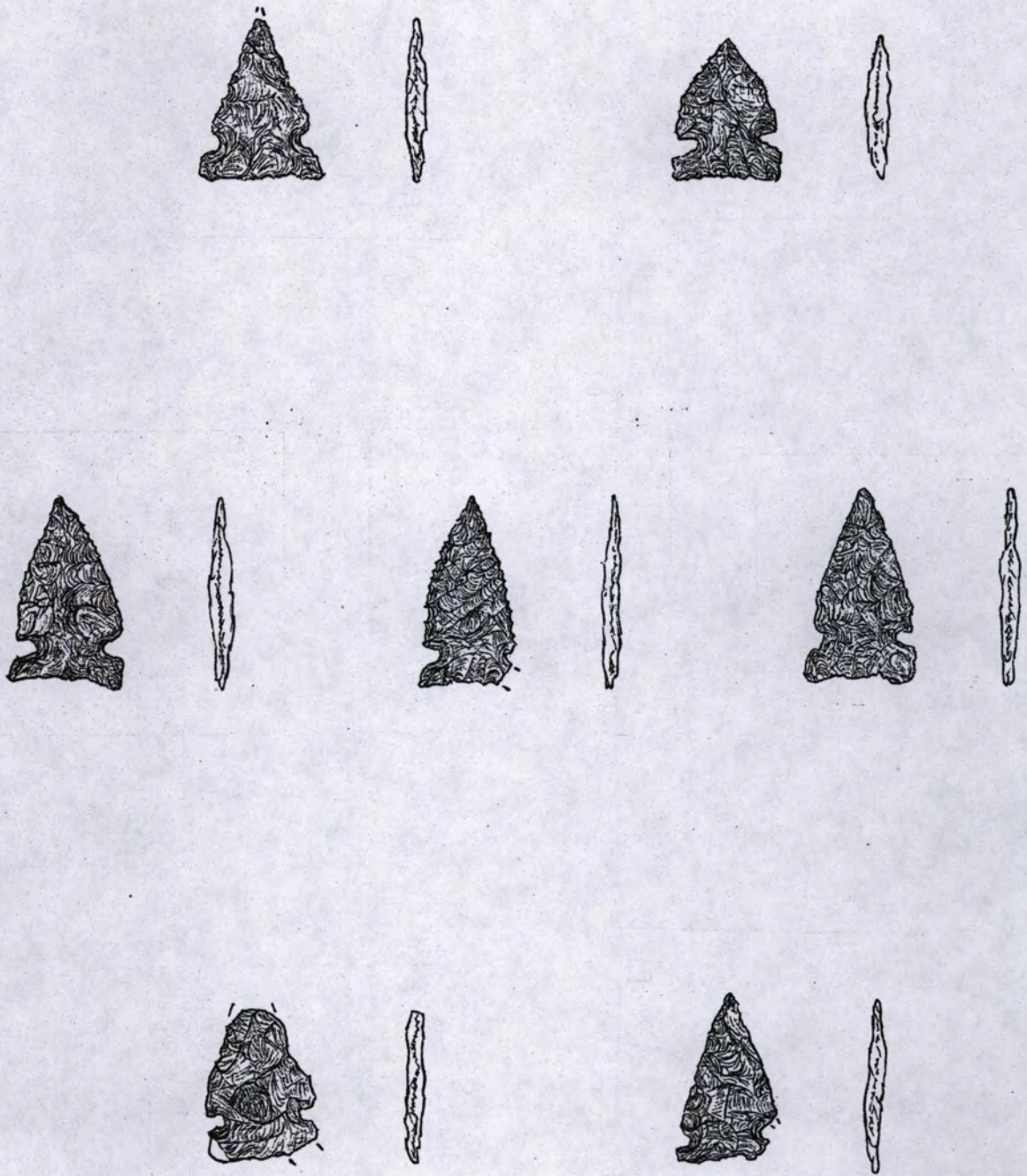


FIGURE 14. SIDE NOTCHED ARROWPOINTS.

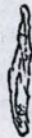
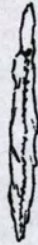


FIGURE 15. EASTGATE EXPANDING STEM. 1,500-500 BP.

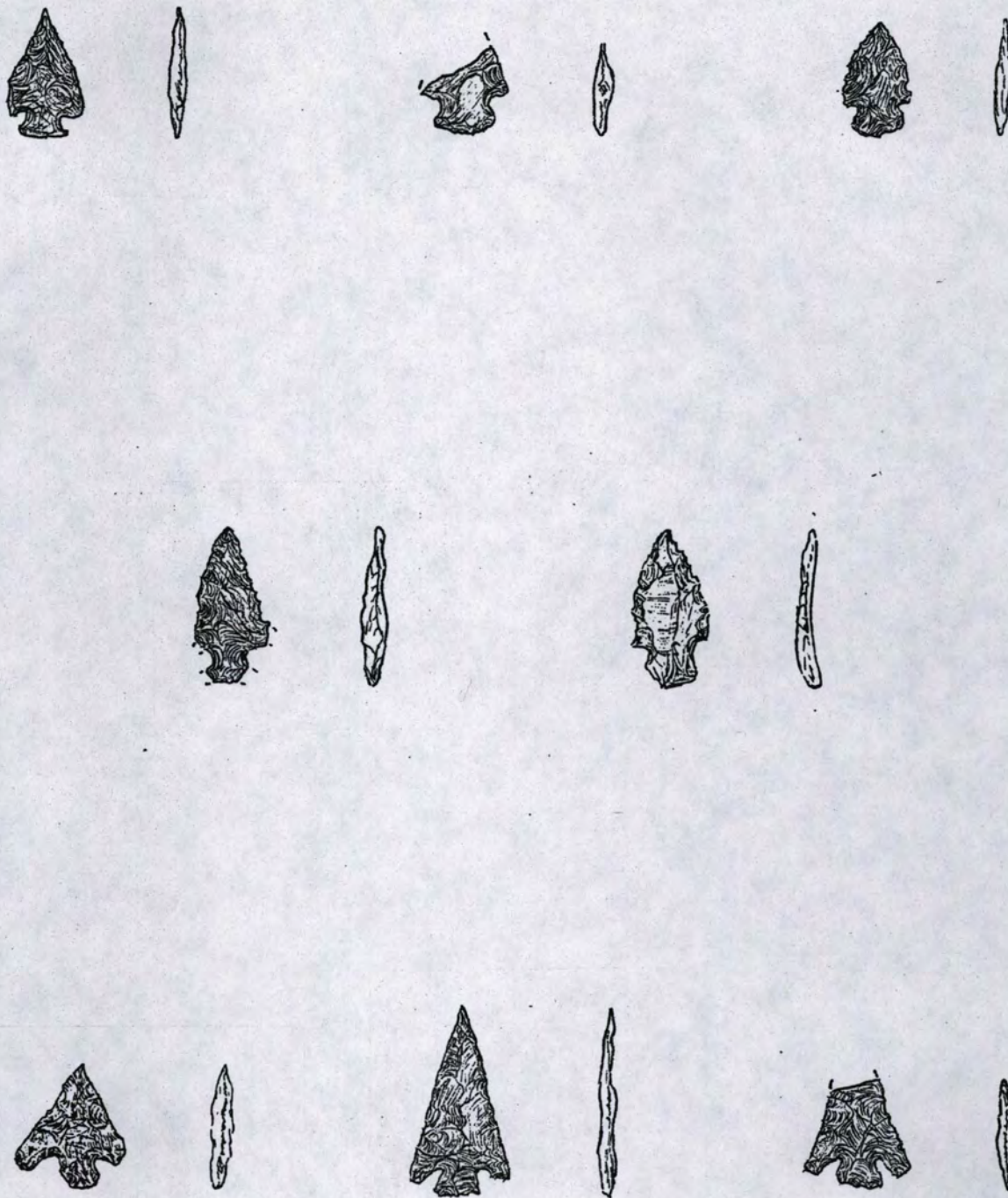


FIGURE 16. ROSE SPRING (ROSEGATE) ARROWPOINTS. 1,500-500 BP.

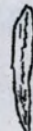


FIGURE 17. DESERT SIDE NOTCHED ARROWPOINTS. 700-100 BP.



FIGURE 18. COTTONWOOD TRIANGULAR PROJECTILE POINTS. 500-100 BP.

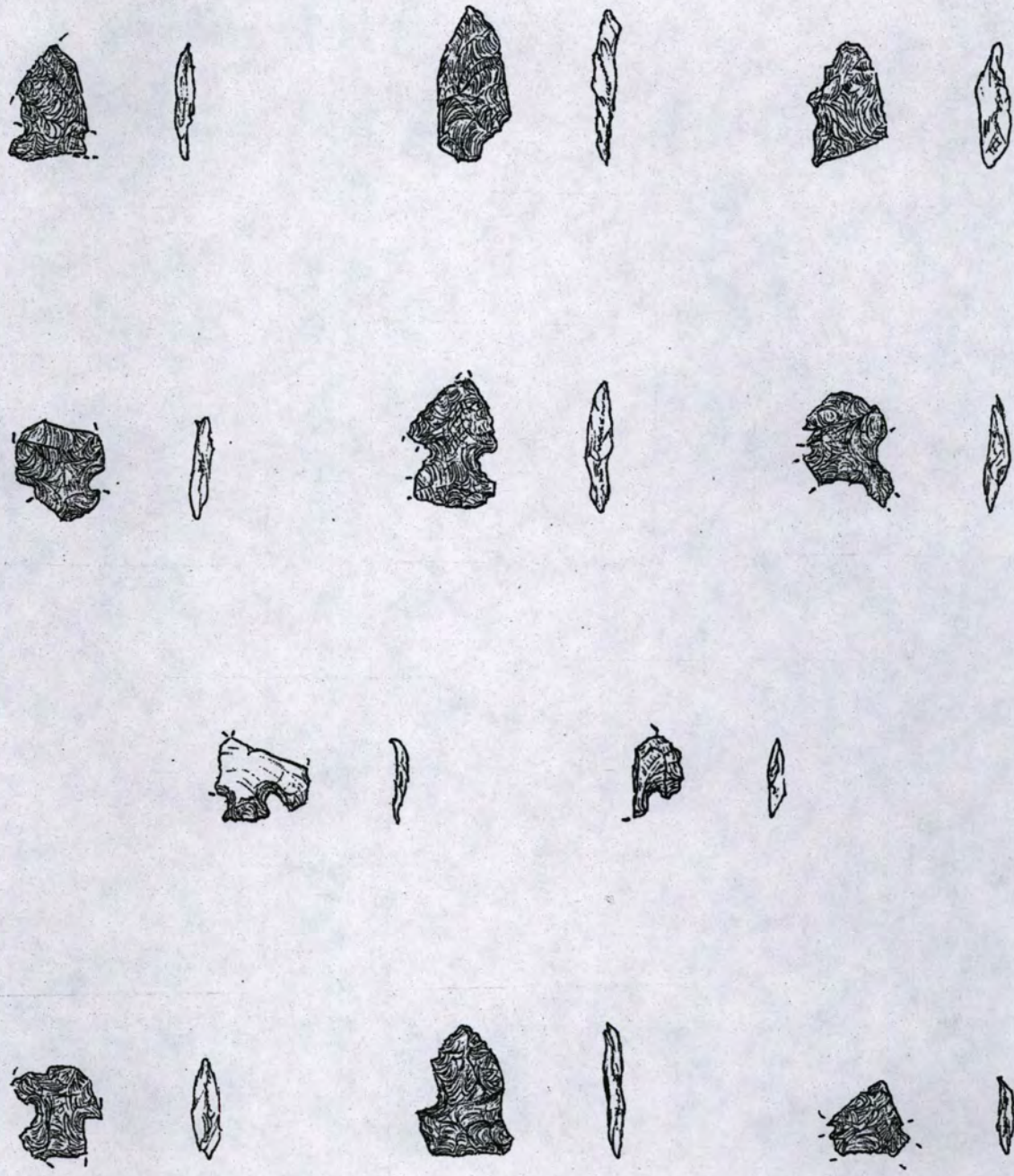


FIGURE 19. ARROWPOINT FRAGMENTS.



FIGURE 20. POST EUROPEAN CONTACT IRON POINT.

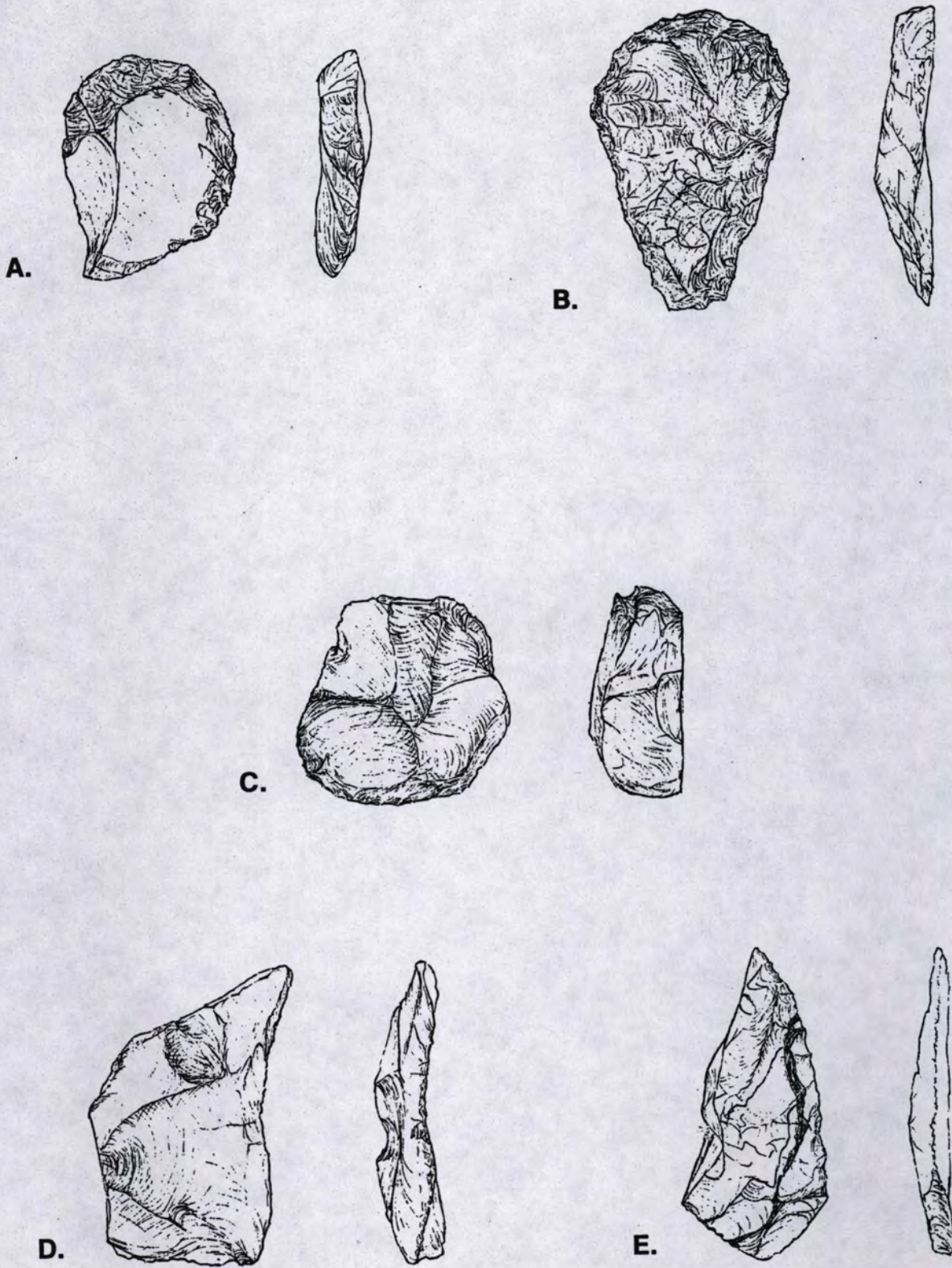


FIGURE 21. A, B, D, E, BIFACE FLAKE TOOLS.

C, UNIFACE FLAKE TOOL.

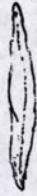


FIGURE 22. PERFORATORS.

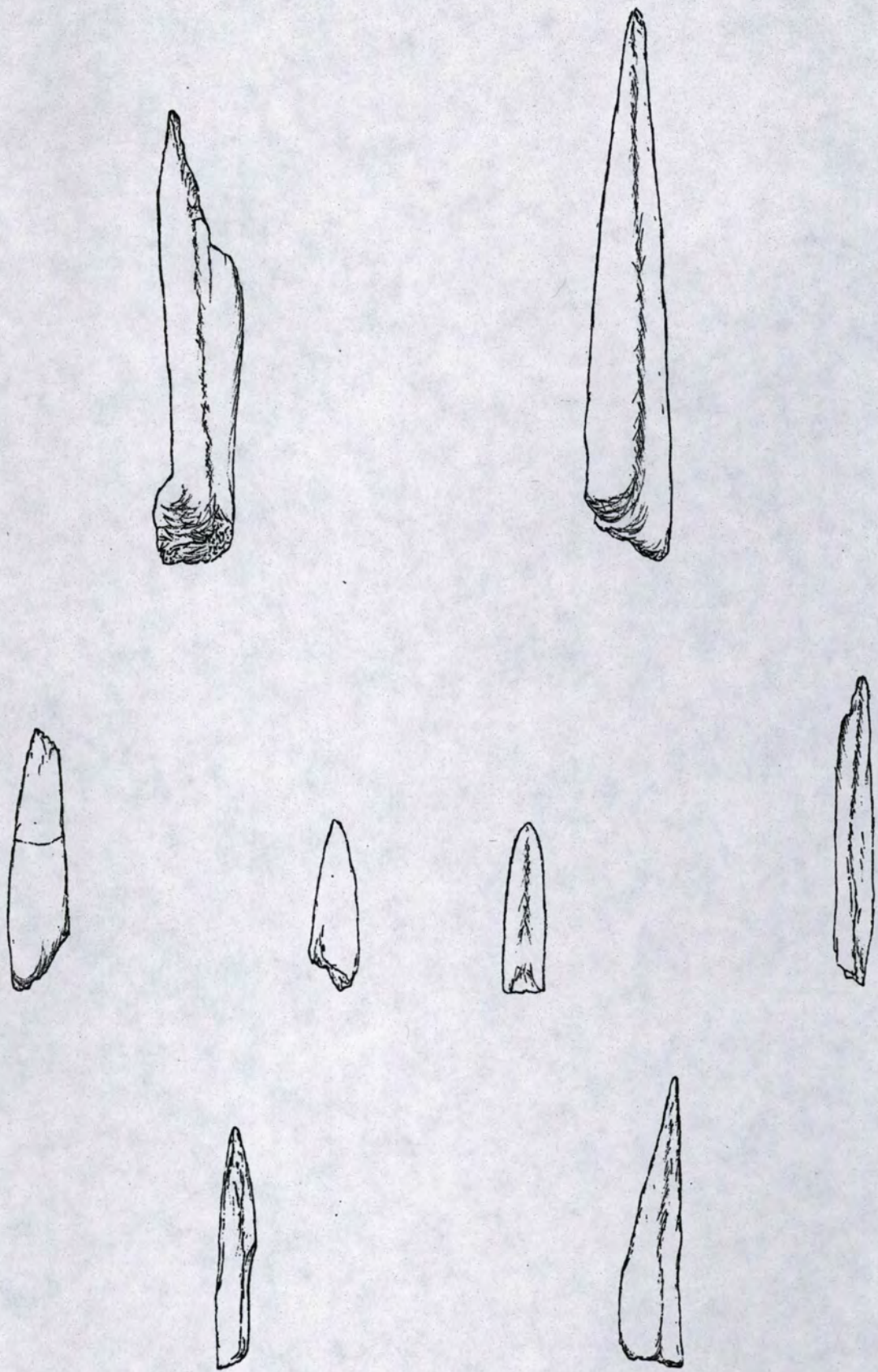


FIGURE 23. BONE AWLS.

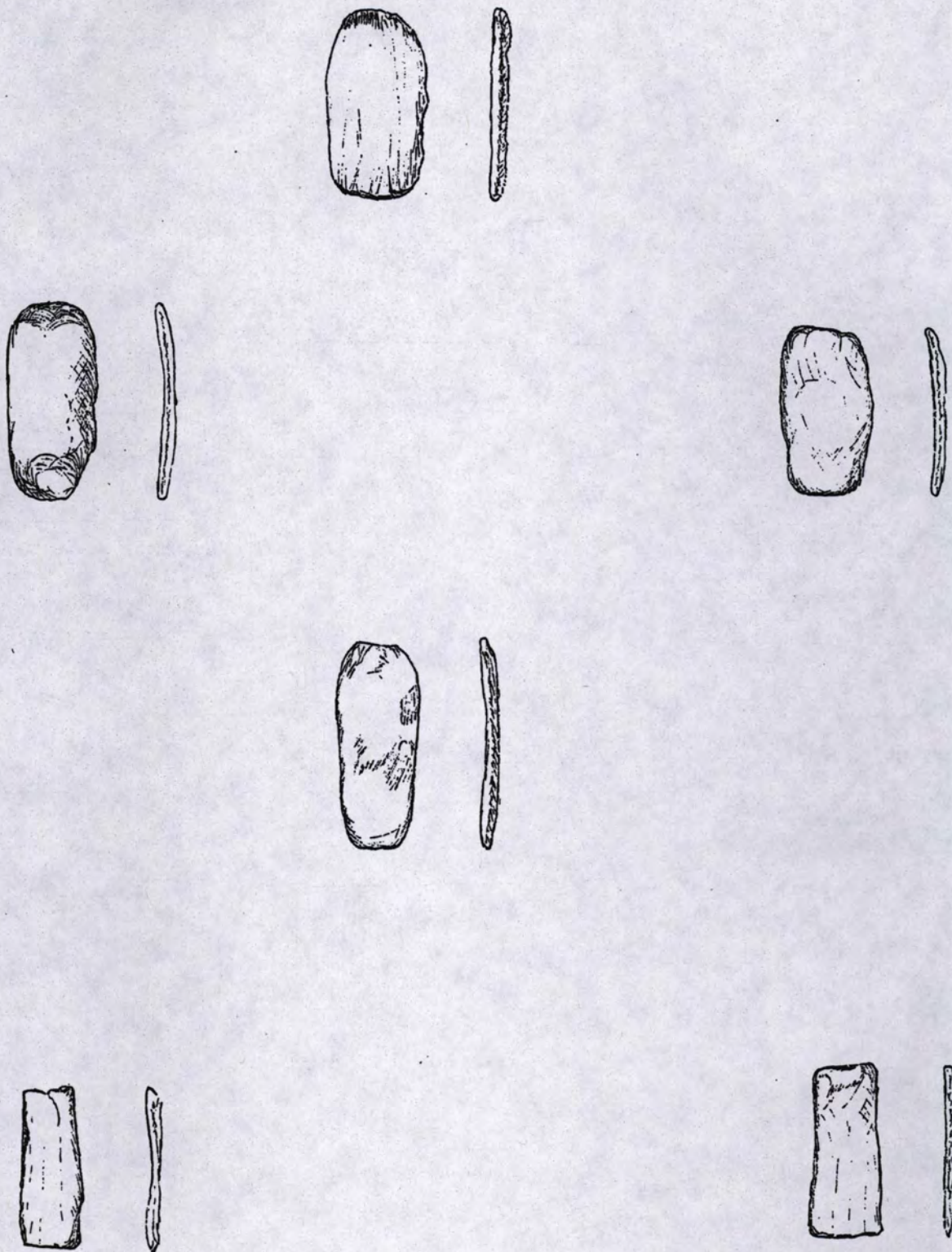


FIGURE 24. POSSIBLE BONE GAMING PIECES.

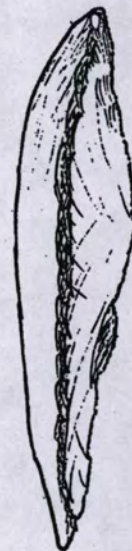
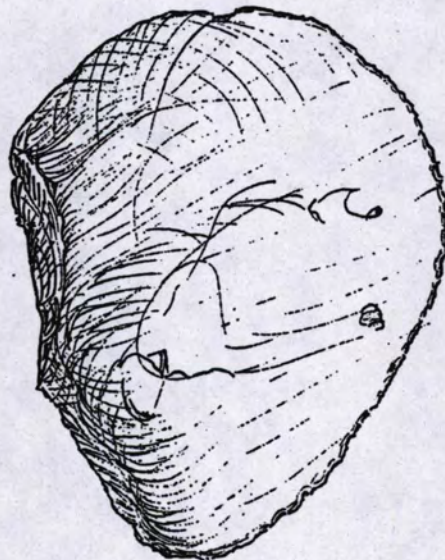
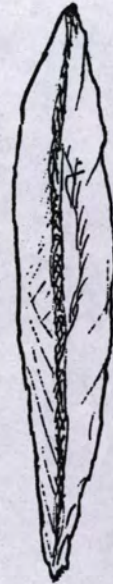


FIGURE 25. TESHOA/SPALL KNIFE.

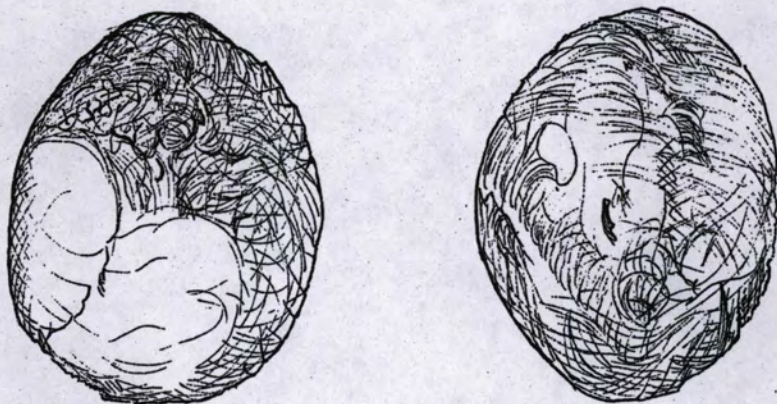


FIGURE 26. HAMMERSTONE.

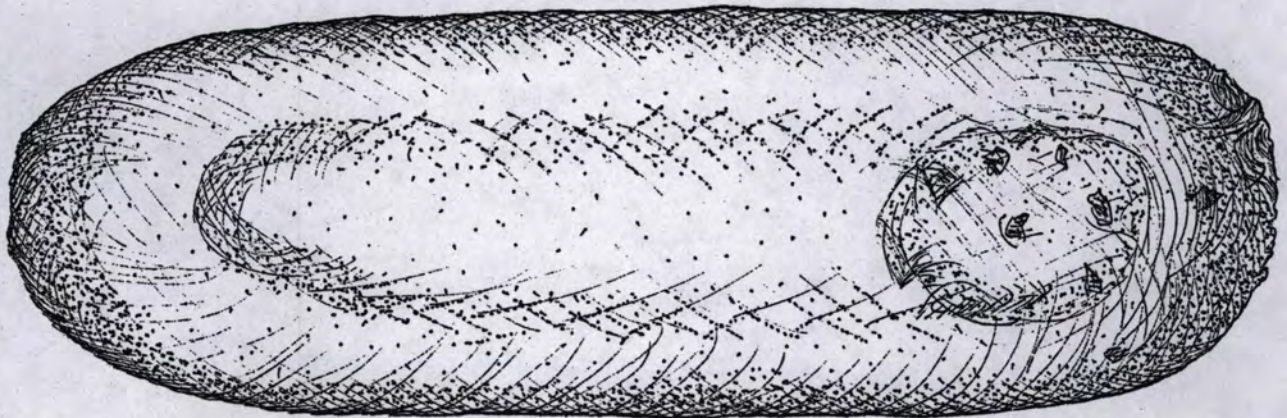
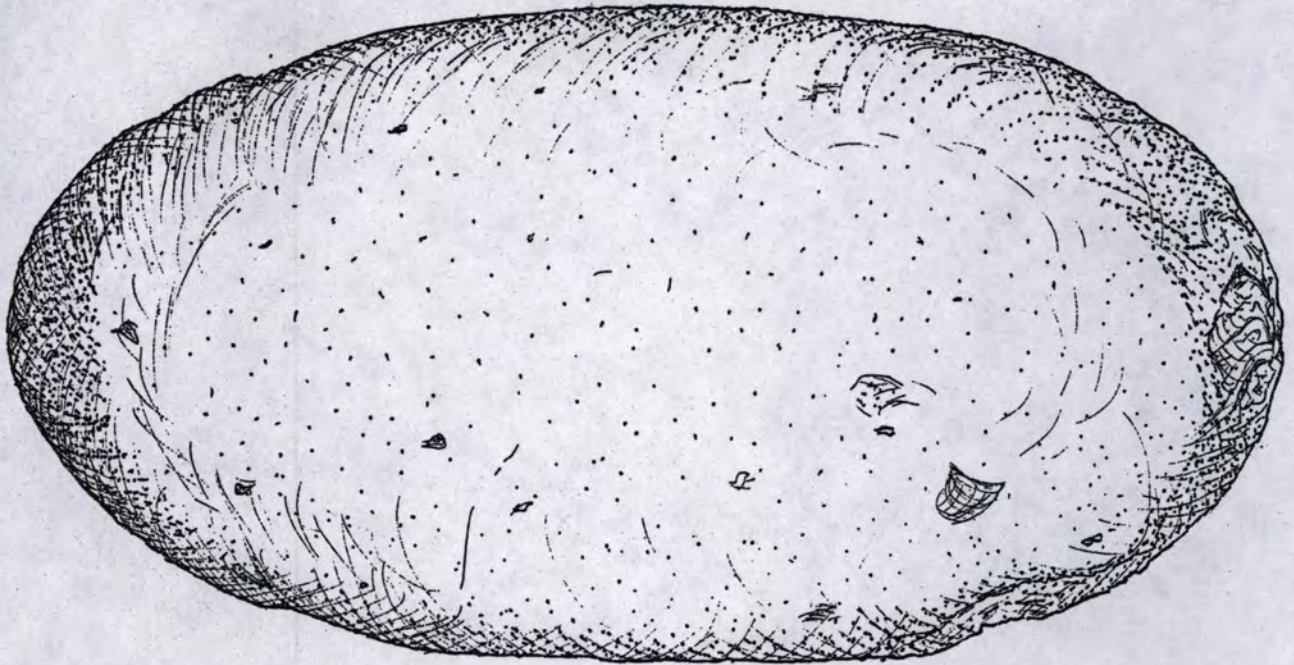


FIGURE 27. MANO/PESTLE.

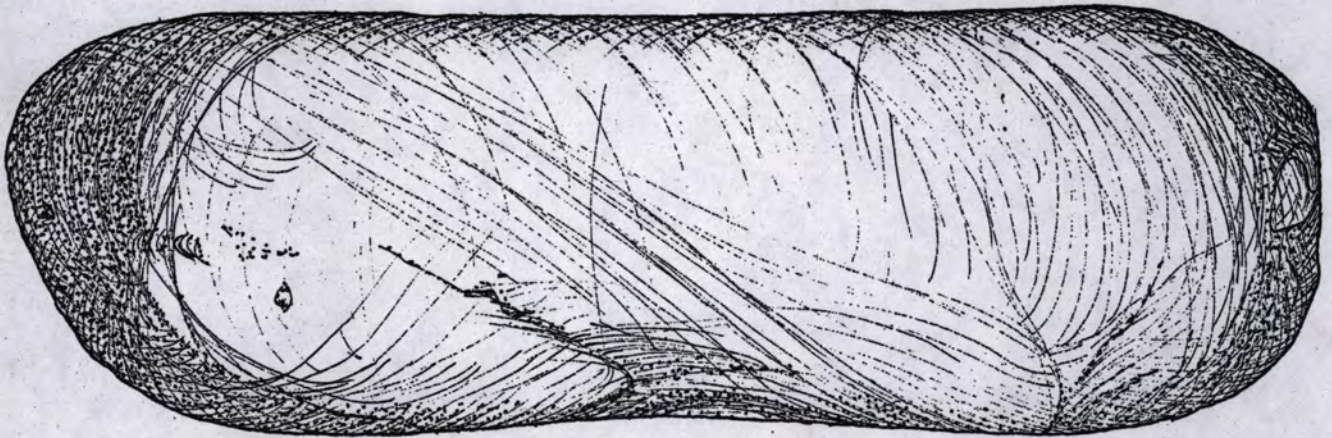


FIGURE 28. PESTLE.