

DOLORES ARCHAEOLOGICAL PROGRAM TECHNICAL REPORTS

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Excavations at Little House (Site 5MT2191),
a Pueblo I/Pueblo II field house.

by

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INTRODUCTION

Little House is a small seasonal habitation or field house situated on a north-south trending ridgeline north of the Sagehen Flats marsh. In the hierarchy of spatial and temporal units employed by Dolores Archaeological Program (D.A.P.) archaeologists (Kane [1]), the site is located in the Sagehen Flats Locality, Escalante Sector (Figure 7.1) and represents one component of the McPhee Phase (AD 850 - 970), Anasazi Tradition. More specifically, Little House is located in the Southeast Quarter of the Northwest Quarter of Sec 35, T38N, R16W. The Universal Transverse Mercator coordinates for the site location are 714910 mE, 4,154,240 mN, Zone 12. A basic reference map for the area is the Trimble Point Quadrangle, Colorado, U.S.G.S. 7.5' series (1965) (topographic).

Surface indications of prehistoric occupation of the site consisted of a small area of sandstone fragments and a relatively sparse scatter of ceramic sherds and lithic debris strewn over the center portion of the ridgeline. The entire artifact scatter measured approximately 40 m north-south by 30 m east-west, with a surface area of 0.12 ha.

The original survey record (Breternitz and Martin [2]) describes Little House as a ceramic and lithic concentration with no evidence of a structure; no preliminary functional interpretations were included. Analysis of the artifacts collected during survey operations indicated that the site was probably occupied during the Pueblo I and early Pueblo II periods. In June 1978 the site was evaluated for possible inclusion in that year's Dolores Archaeological Program excavation schedule and was tentatively designated as a Sagehen or McPhee Phase site. Little House

was later selected for excavation; subsequent investigations led to the site being reassigned as an early McPhee Phase field house.

Operations at the site were supervised by Nancy J. Hewitt, University of Colorado archaeologist. The excavations were conducted by one University of Colorado field crew and one Youth Conservation Corps field crew during the period 10 July - 16 August 1978. Average crew size was six people. Environmental data and archaeomagnetic dates were recovered by the Environmental Studies Program and dating-remote sensing program personnel, respectively. A total of 157 person-days ^{was} ~~were~~ expended on intensive investigations at the site.

ENVIRONMENTAL SETTING

Little House is situated on the crest and south slope of a low ridge north of the Sagehen Flats marsh (Figure 7.1). Narrow drainages to the east and west of the site empty into the marsh basin. The site commands an excellent view of the surrounding slopes and the marsh and its environment.

At an elevation of 2104 m, Little House is located in the Upper Sonoran vegetation zone, although the flora in the immediate site vicinity exhibit certain characteristics of a disturbed environment. The dominant present vegetation cover at the site is big sagebrush (Artemisia tridentata), lupine (Lupinus spp.), birdbeak (Cordylanthus sp.) and thistle (Cirsium spp.); various grasses are also abundant. Squawbush (Rhus aromatica ~~ssp.~~ trilobata) is present in the drainages near the site. Remnant stands of pinyon (Pinus edulis) and juniper (Juniperus osteosperma) are found on higher knolls to the south. Since this area has been cleared for cultivation historically, it is postulated that the pinyon and juniper stands might have been more extensive during the prehistoric occupation of the area. Within a 5 km radius of the site various exploitable plant resources may have been available to the prehistoric occupants. Broadleaf yucca (Yucca baccata) would have yielded fruit, pods, soap, and fiber. Fruit and pods would also have been available from prickly pear (Opuntia spp.). Various grasses, especially Indian rice grass (Oryzopsis hymenoides), would have provided important seed resources. Bulbs could have been harvested from wild onions (Allium spp.) and sego lily (Calochortus nuttallii). Serviceberry (Amelanchier utahensis), squawbush (Rhus aromatica ~~ssp.~~ trilobata),

Figure 7.1:  Little House (Site 5MT2191)
topographic map.



5MT2191

TOPOGRAPHIC VIEW OF SITE

50 cm CONTOUR INTERVALS

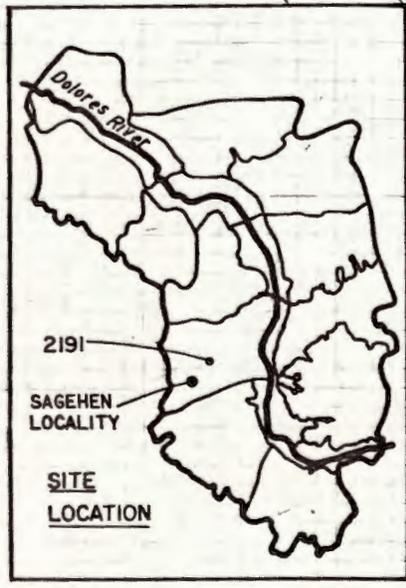
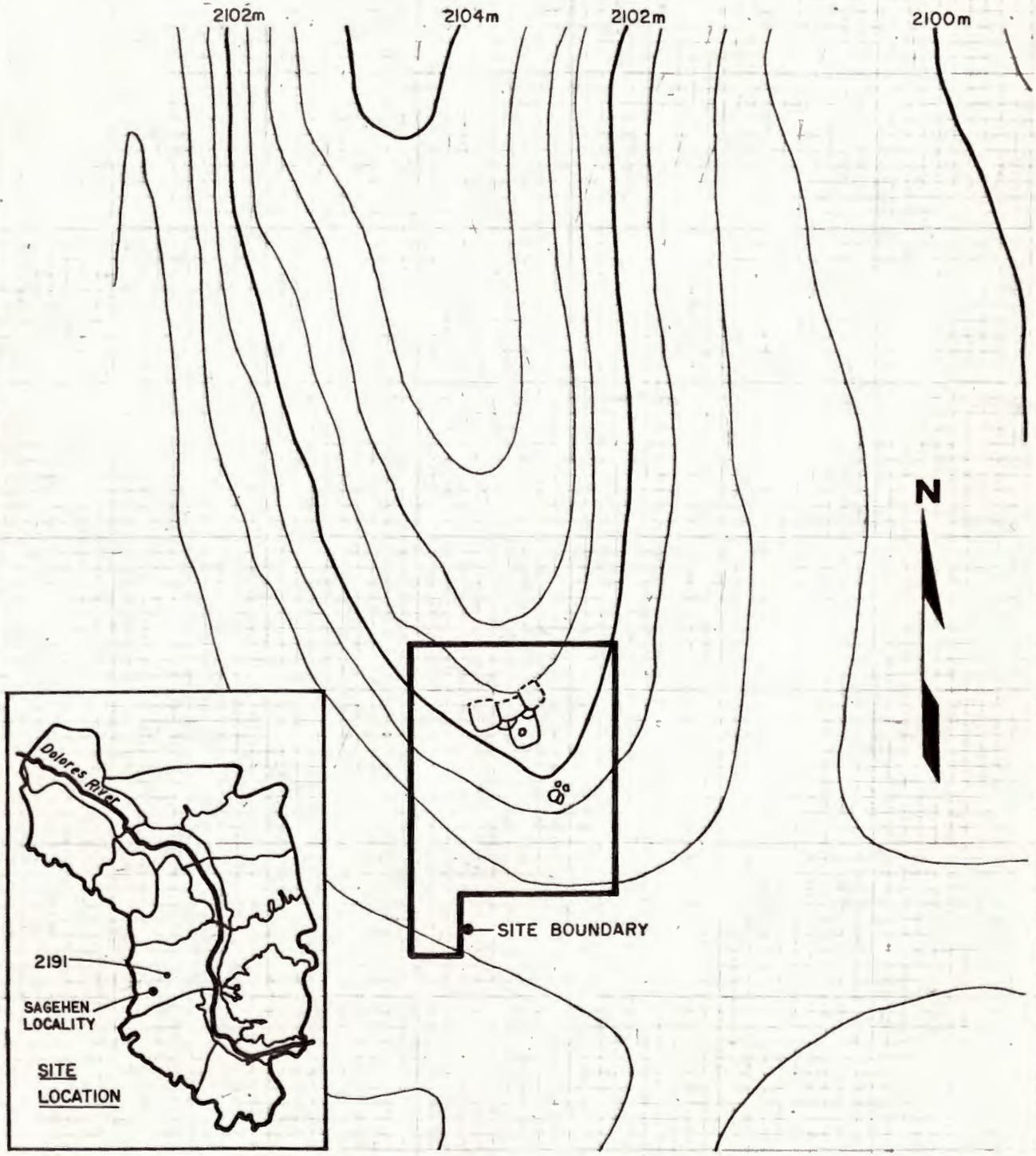
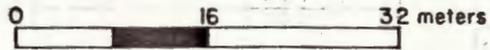


Figure 7.1 Little House (Site 5MT2191), topographic map.

chokecherry (Prunus virginiana) and squaw apple (Peraphyllum ramosissimum) would have provided fruits. And in good years the very important pinyon nut would have been locally abundant.

Animal species observed near the site during excavation operations include Nuttall's cottontail (Sylvilagus nuttallii) and mule deer (Odocoileus hemionus). Avifauna include raven (Corvus corax), mourning dove (Zenaidura macroura), turkey vulture (Cathartes aura), and unidentified song birds and hawks.

Domestic water might have been available from two sources. The closest would have been the Sagehen Flats marsh, located approximately 0.5 km south of the site. However, core tests carried out by program personnel conducting regional pollen studies indicate that the marsh has been in existence only intermittently (Peterson [3]). At this point it is conjectural whether the marsh area was active when Little House was occupied. The other potential domestic water source is the Dolores River. Obtaining water from the river would have required a fairly long (4.2 km round trip), but not difficult, trek.

The microclimate of Site 5MT2191 is similar to that of other low elevation areas within the Escalante Sector. The typical pattern is one of low humidity, wide diurnal temperature fluctuations, mild summers, and cold dry winters. At the Dolores Weather Station, located approximately 7.5 km southeast of the site, the average annual precipitation is 455 mm. This amount is attained primarily during two wet seasons - one during the winter months and the other in late summer. The site vicinity is thought to have an average growing season of 120-130 days, based on data compiled at the United States Weather Bureau Station at Yellowjacket, Colorado, 13.5 km west of the site. The site area, therefore, appears to

copy

Little House (Site 5MT2191)
Chapter 7, Volume I

Errata

<u>Page</u>	<u>Line</u>	<u>Errata</u>
Title page		should read "Excavations at Little House (Site 5MT2191), a Pueblo I/Pueblo II field house"
i	12	"59" should read: "48"
ii		caption for Figure 7.5 "(northwest-southeast)" should read: "(northeast-southwest)"
ii		caption for Figure 7.6 "(southwest-northwest)" should read: "(southeast-northwest)"
ii		caption for Figure 7.9 "profile" should read: "profiles"
v		title for Table 7.12 "149" should read: "151"
v		title for Table 7.13 "flaked lithic tools...154" should read: "Flaked Lithic Tools...156"
v		title for Table 7.14 should read: Table 7.14 Little House (Site 5MT2191) Lithic Analysis Data Summary, Flaked Lithic Debitage...159"
v		title for Table 7.15 should read: Table 7.15 Little House (Site 5MT2191) Lithic Analysis Data Summary, Nonflaked Lithic Tools...162"
✓ 1	2	"(5MT2191)" should read: "(Site 5MT2191)"
✓ 1	12	"small scale" should read: "small-scale"
✓ 1	16	"perhaps more" should read: "perhaps no more"
3	9	"personnel" should read: "personnel,"
✓ 3	9	"were expended" should read: "was expended"
✓ 4	14	"(<u>Pinus edulus</u>)" should read: " <u>(Pinus edulis)</u> "
4	22	"(<u>Opuntia spp.</u>)" should read: " <u>(Opuntia spp.)</u> "
4	23	"hymenoides" should read: " <u>hymenoides</u> "
✓ 9	7 & 8	should read: "Skull Camp, Site 5MT2202 (Schlanger [5]), 420 m to the west; and Horse Bone Camp, Site 5MT2199 (Brown [6]), 930 m to the west."
✓ 9	12	"Casa Roca (Site 5MT2203 [7])" should read: "Casa Roca, Site 5MT2203 (Brisbin [7])"

<u>Page</u>	<u>Line</u>	
9	17 & 18	"McPhee Village (Site 5MT4475 [8])" should read: "McPhee Pueblo, Site 5MT4475 (Brisbin [8])"
11	caption	for Figure 7.2 should read "Little House (Site 5MT2191), location of contemporaneous sites."
✓ 12	8	"which must" should read: "which might"
✓ 13	2	"post occupational" should read: "post-occupational"
13	12	"cists" should read: "cist"
13	14	"features" should read: "features,"
✓ 17	4	"rooms and" should read: "rooms, and"
20	2	"(northwest-southeast)" should read: "(northeast-southwest)"
21	2	"(northwest-southeast)" should read: "(northeast-southwest)"
22	2	"(southwest-northeast)" should read: "(southeast-northwest)"
23	2	"(southwest-northeast)" should read: "(southeast-northwest)"
26	11	footnote should read "* - See Figure 7.8"
29	2	"Architectural" should read: "architectural"
30	1	"profile" should read: "profiles"
31	2 ✓	"North" should read: "north"
32	1	delete ",central hearth."
✓ 33	1	"episodes, of occupation" should read: "episodes, occupation"
✓ 34	5	"modernal" should read: "modern"
✓ 34	9	"cross-section" should read: "cross section"
34	12	"(sample #2)" should read: "(Sample #2)"
✓ 37	10	"2.85 m" should read: "1.80 m"
✓ 37	11	"1.80 m" should read: "2.85 m"
42	Table 7.2	delete extra period after title of table

<u>Page</u>	<u>Line</u>	
42	Table 7.2	footnote should read: "* - See Figure 7.13"
46	15	"sanstone" should read: "sandstone"
47	15	"peices" should read: "pieces"
62	29	"7.22)" should read: "7.23)"
62	31	delete "a shaped sandstone slab associated"
63	1	delete "with Surface 2," at beginning of line
63	Table 7.4	footnote should read: "* - See Figure 7.17"
64	Table 7.5	footnote should read: "* - See Figure 7.18"
64	20	"fill) compact" should read: "fill) of compact"
65	8	"flecks of charcoal" should read: "flecks of charcoal,"
68	23	delete semicolon
75	16	"intusive" should read: "intrusive"
76	18	"Appendix 4" should read: "Appendix 3"
78	Table 7.7	footnote "***numerous" should read: "***N - numerous"
81	2	"vegetal materials;" should read: "vegetal materials:"
81	5	"kernal" should read: "kernel"
83	2	"debitage were" should read: "debitage items were"
83	7	"silstone" should read: "siltstone"
84	1	"flaked" should read: "flaked lithic"
84	1	"test trench 3" should read: "Test Trench 3"
84	1	"surface 2" should read: "Surface 2"
88	3	"modern surface" should read: "modern ground surface"
90	2	"chapper" should read: "chopper"
92	3	"unifaces all" should read: "unifaces, all"
100	4	"Figure 7" should read: "Figure 7.8"
111	(second such page no.)	should be: page no. "113" - this is Figure 7.39

<u>Page</u>	<u>Line</u>	
112	3	"fill Room 1." should read: "fill, Room 1."
116		title for Table 7.8 should read "Little House (Site 5MT2191), C-14 and Archaeomagnetic Sample Proveniences and Results"
116		fourth entry under "Comments" column should read: "Of the 12 specimens collected from the fireplace, 6 were used in the final analysis"
116		fifth entry under "Comments" column should read: "Directions for this sample were too scattered; thus no date was attempted"
117	4	"Early McPhee" should read: "early McPhee"
117	25	"Based n the available evidnce," should read: "Based on the available evidence,"
118	5	"archeomagnetic" should read: "archaeomagnetic"
121	1	"use Area 2" should read: "Use Area 2"
121	9	"the robable vegetal" should read: "the probable vegetal"
121	12	"McPhee or Crestview Village" should read: "McPhee Village or Crestview Hamlet"
121	14	"food stuffs" should read: "foodstuffs"
121	16	"Similarly the" should read: "Similarly, the"
121	18	"vicinity and in a" should read: "vicinity and within a"
125	15	"harvest of and collected" should read: "harvest and of collected"
130	4	"inter-site," should read: "inter-site"
130	11	"continguous" should read: "contiguous"
130	20	"from Sample 25, all" should read: "from Sample 25; all"
131	4	"or" should read: "of"
132	14	"Occupation/Activity Area 2, neither" should read: "Occupation/Activity Area 2; neither"
132	17	"storage cistin" should read: "storage cist in"

<u>Page</u>	<u>Line</u>	
135	3	"Utiliation" should read: "Utilization"
136	5	"Early McPhee Phase" should read: "early McPhee Phase"
136	7	"Sample one" should read: "Sample 1"
136	8	"Sample two" should read: "Sample 2"
136	15	"levelling" should read: "leveling"
136	16	"magnetic ceclination" should read: "magnetic declination"
136	20	"Adminisration" should read: "Administration"
137	2	"samples 1 and 2" should read: "Samples 1 and 2"
137	5	"outliers ere" should read: "outliers are"
137	16	"cirlce" should read: "circle"
137	18	"indicated" should read: "indicate"
137	19	"paramenter" should read: "parameter"
145	1	"site" should read: "Site"
145	7	"belwo" should read: "below"
145	9	"whold" should read: "whole"
145	14	"suquentially" should read: "sequentially"
145	20	"plowzone provceniencies" should read: "plow zone proveniencies"
145	23	"(vessels" should read: "(vessel"
146	Table 7.11, Line 18	"Indeterminate Gray" should read: "Indeterminate"
146	Table 7.11, Line 20	"Indeterminate W" should read: "Indeterminate"
148	2	"Occurences" should read: "occurrences."
150	2	"Project are" should read: "Project area"
150	4	"subdivide" should read: "subdivides"
150	5	"repsented" should read: "represented"

have an adequate frost free period for the maturation of certain varieties of maize (Carter [4]:88-89). Cold air drainage into the marsh basin area might have affected prehistoric cultivation and its distribution.

The red loess soils in the site vicinity are quite suitable for agricultural purposes. Testing revealed that the soil depths on the site itself range from 0.6 m to 1.2 m, which is adequate for cultivation. ✓

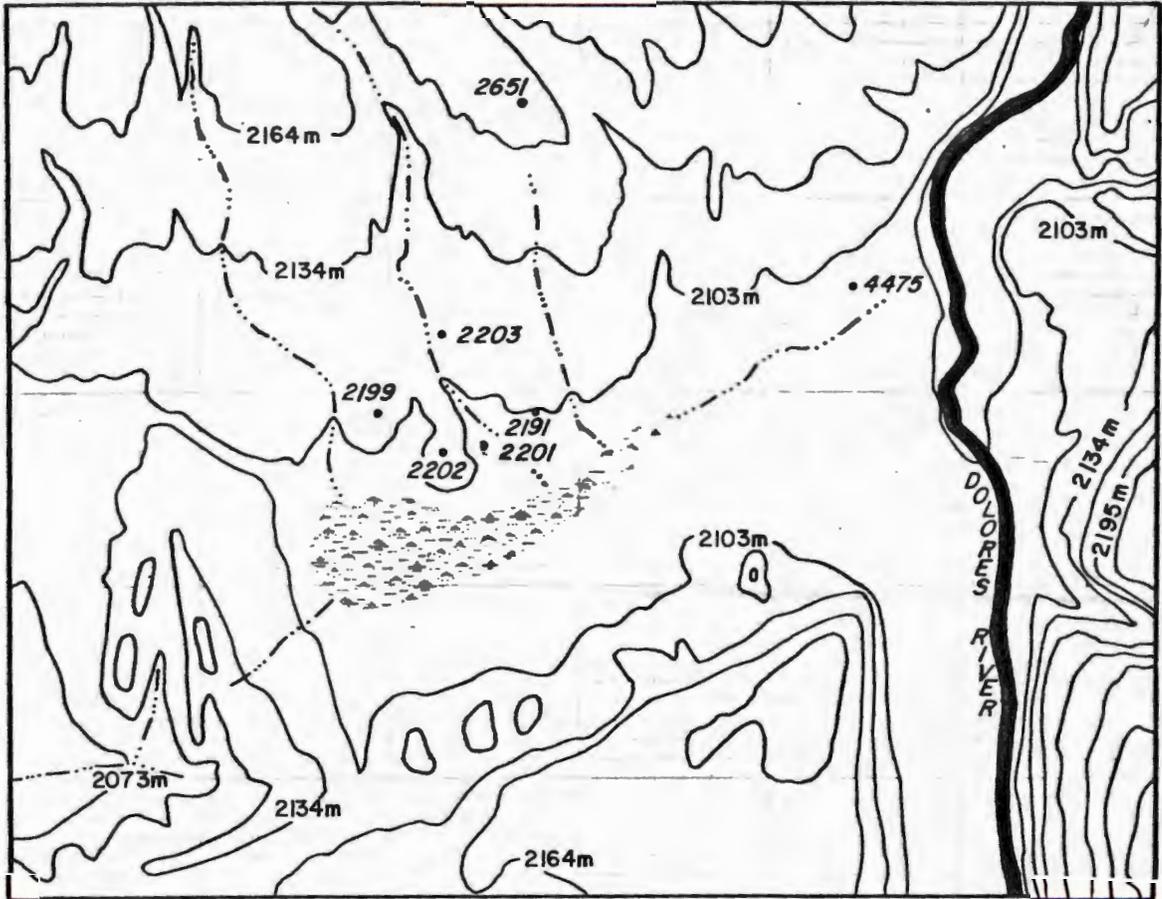
SOCIAL SETTING

Typist - see attached

Within a 1 km radius of Little House are four sites assigned McPhee Phase components and therefore considered to be archaeologically contemporaneous (Figure 7.2). Three of these sites are classified as limited activity loci while the fourth is classified as a field house. The limited activity loci are Site 5MT2201, 300 m to the southwest; Sheep Skull Camp, ~~Site 5MT2202 [5]~~, 420 m to the west, and Horse Bone Camp, ~~Site 5MT2199 [6]~~, 930 m to the west. Although it is impossible to tell at this time if these sites were used by the occupants of Little House, it seems likely that they were all used by members of the same community.

The other site within 1 km is Casa Roca, ~~Site 5MT2203 [7]~~, located 580 m northwest. This site has also been classified as a McPhee Phase field house. It is inferred that Casa Roca was also used on a seasonal basis by members of a local community, albeit by a different household than the one that occupied Little House.

The nearest contemporary habitation sites are McPhee ~~Village~~, ~~Site 5MT4475A [8]~~, located 1.65 km to the east and Crestview Hamlet (Site 5MT2651), located 1.75 km to the north (see Kane [9]). Due to its location it is believed that Little House represents an outlying area used by inhabitants of either McPhee ~~Village~~ or Crestview Hamlet. Specifically, Little House probably functioned as a centralized location where individuals from a household from one of the local communities could carry out agricultural activities during the season from planting to harvest.



INTERMITTENT DRAINAGE 
 MARSH 



Figure 7.2. Little House (Site 5MT2191), location of contemporaneous site 5.

Figure 7.2: Little House (Site 5MT2191), location of selected contemporaneous sites.

EXCAVATION PROCEDURES

Surface indications at Little House consisted of a sparse scatter of sherds, flaked stone, ground stone, and building rubble. The area of artifact concentration measured about 30 m north-south and 25 m east-west [#] over the top and south slope of the knoll. The building rubble was confined to a 10 by 8 m area in the north portion of the site. It was assumed that this concentration of sandstone fragments represented a surface structure. No depressions which ^{might} ~~must~~ indicate pitstructures were observed. Excavation objectives were to discover and record any architectural features, to recover a representative sample of the material culture, and to reconstruct the types and extent of activities performed by the prehistoric occupants of the site.

Investigation was initiated by establishment of a grid system of 2 m squares over the extent of the artifact scatter. By applying standard sampling procedures developed prior to the field season, 16 2 by 2 m squares were randomly chosen for excavation. After the vegetation had been removed within the gridded area, excavation was begun on the random squares. All of these units were excavated in 15 cm levels until sterile soil or cultural phenomena were encountered. This resulted in the exposure of masonry walls in the area of rubble concentration. Once these indicators of architecture were encountered, the random square design was abandoned and efforts were concentrated on defining the total extent of the structures. When all the masonry walls had been exposed and the limits of all rooms defined, a small test pit was excavated in the fill of each room to determine the character and depth of the deposits and to determine the location of the floors. Since there were

no cultural strata in the room deposits and since they appeared to be post-occupational in nature, these deposits were removed as a single excavation unit. Usually the fill was less than 25 cm deep. In Room 1, 5 cm above the floor, was an intermittent layer of roof fall which was removed as a separate provenience unit.

The random squares and two test trenches failed to reveal any other features or structures. To settle the issue of whether a pitstructure was present at the site, another long test trench was dug to the south of the roomblock, using a backhoe. This trench extended 9 m southeast of the main room (Room 1) and exposed a cluster of ancillary features (later designated as Occupational/Activity Area 2): a refuse pit, a storage cists, and a fireplace; no pitstructure was uncovered. Once these smaller cultural features were defined, the fill was removed by hand. In the case of small features, one-half of the fill was removed first to expose a vertical profile and the fill was collected for flotation. Additional testing of peripheral areas was done by surface scraping with a mechanized blade and by subsurface probing with a posthole digger. The total extent of the area sampled at Little House and the locations of test trenches and blading are depicted in Figure 7.3.

Artifacts were collected according to both artificial and cultural provenience units. For random units and for peripheral area testing, collection units were standardized levels. For excavation of structures and features, the collection units corresponded with cultural phenomena (e.g., floors in rooms and strata in features). A small sample (about 1 percent) of the deposits from the cultural units was screened in order to recover some of the smaller cultural materials which are difficult to recover using other excavation techniques.

Figure 7.3: Little House (Site 5MT2191),
site sampling plan.

5MT2191

SITE SAMPLING PLAN

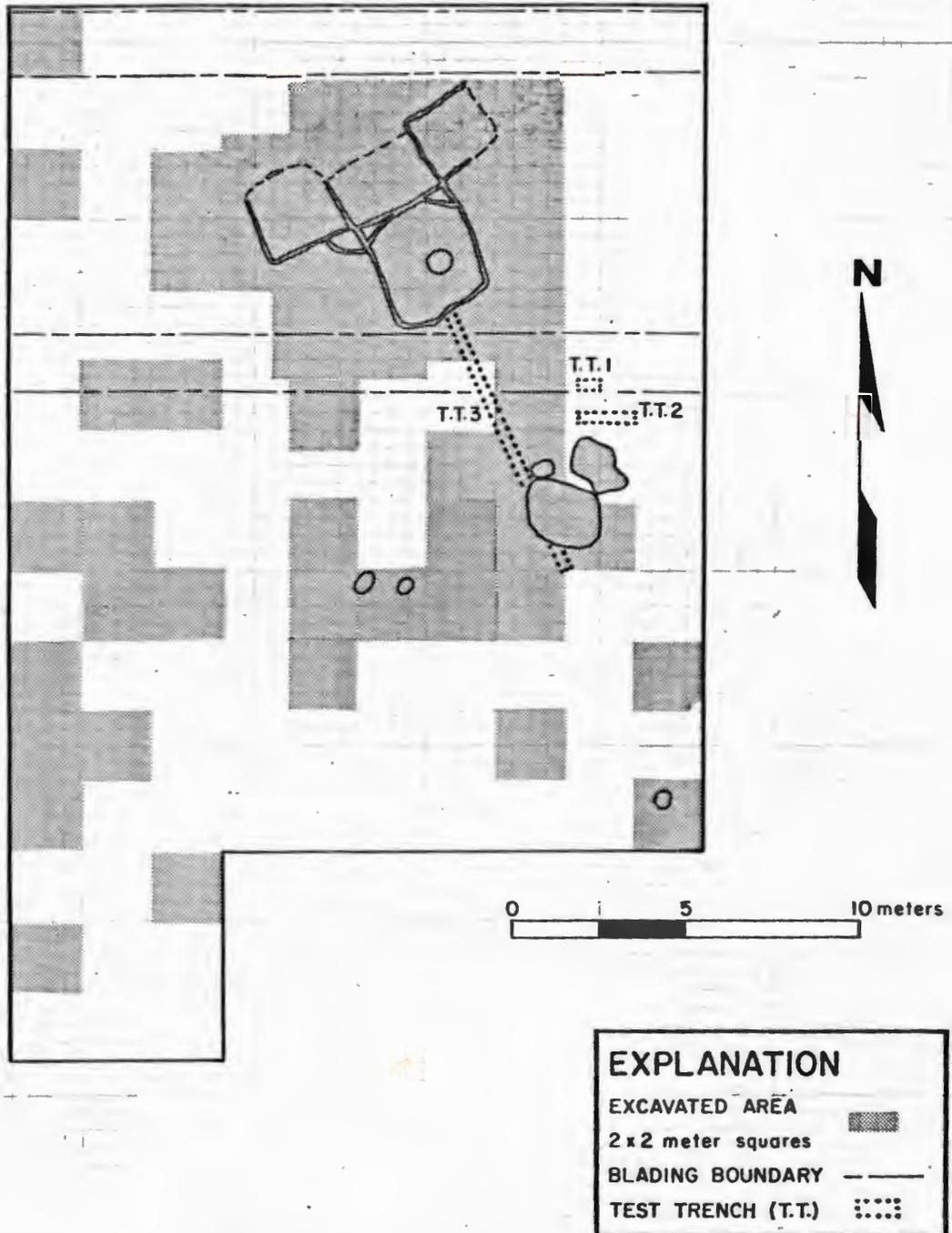


Figure 7.3. Little House (Site 5MT2191), site sampling plan.

Bulk soil samples for flotation processing were collected from grid squares, hearths, pits, cists and room floors. Pollen samples (Appendix 1) were taken from surfaces in rooms and use areas according to a quadrant sampling design and from under artifacts discovered in situ on these surfaces. Pollen samples were also taken from cists, pits, and hearths.

Dating materials recovered from the site include three radiocarbon samples obtained from hearths and charred vegetal material and two archaeomagnetic samples (Appendix 2). None of the charred wood specimens discovered during excavation ^{were} ~~was~~ suitable for dendrochronological analysis.

ok



CULTURAL UNITS

Architectural remains at Little House consist of a roomblock containing one living room and three probable storage rooms, several smaller features within the rooms, and clusters of features outside the roomblock which have been used to define two nonstructural cultural units. One of these latter units (termed occupation/activity areas) is located just west of and adjacent to the living room (Room 1). The other is situated approximately 4 m southeast of the roomblock (Figures 7.4, 7.5, 7.6, and 7.7).

Room 1

Dimensions:

<i>Length</i> (North-south diameter):	2.80 m (average)
<i>Width</i> (East-west diameter):	3.28 m (average)
Floor (less area of bins):	8.51 sq m
Total roofed area (incl. bins):	9.08 sq m
Depth of structure (modern ground surface to floor):	<i>0.3 m</i> 30 cm
Reconstructed roof height:	not reconstructable

Room 1 is a small, nearly square structure with base walls of unshaped rubble masonry. Interior features include a central hearth and two bins formed by an upright slab partition wall (Figures 7.8, 7.9, 7.10, and Table 7.1). A description of Room 1 is presented below.

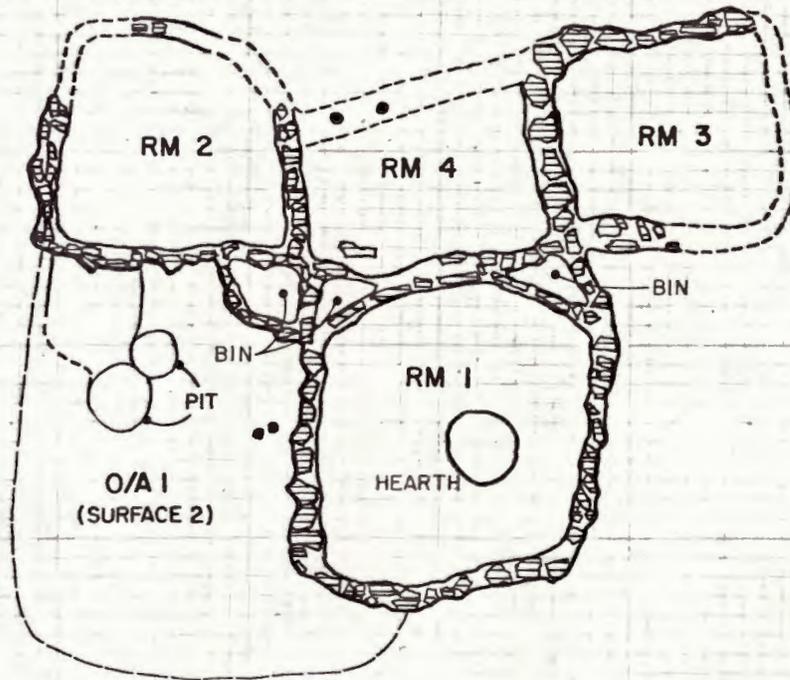
Period and Span of Occupation

Room 1 is attributed to the McPhee Phase. The span of occupation is believed to correspond to the occupation of the site in general. Based on depositional characteristics and on the lack of a midden or of major

Figure 7.4: Little House (Site 5MT2191). Spatial relationships of major cultural units.

5MT2191

SPATIAL RELATIONSHIPS OF
MAJOR CULTURAL UNITS



EXPLANATION

POSTHOLE	●
SANDSTONE	▨
OCCUPATION / ACTIVITY AREA	O/A

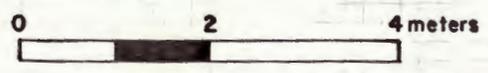
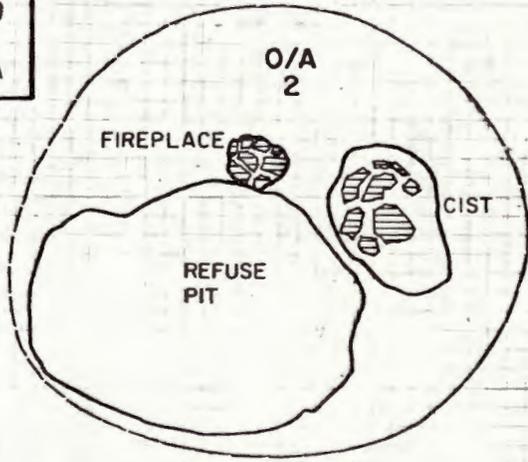
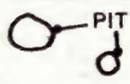
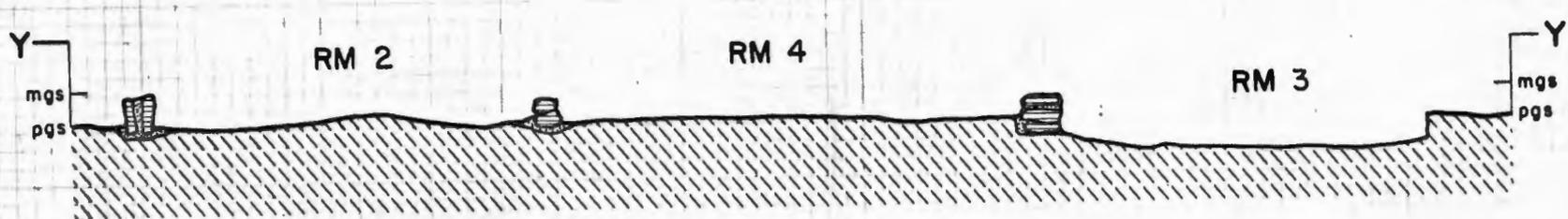


Figure 7.4 Little House (Site 5MT2191), spatial relationships of major cultural units.

Figure 7.5: Little House (Site 5MT2191), general
site profile (northwest-southeast).
east west

5MT2191

GENERAL SITE PROFILE SOUTHWEST-NORTHEAST



EXPLANATION	
SANDSTONE	
MORTAR	
NATURAL DEPOSITS	
MODERN GROUND SURFACE	mgs
PREHISTORIC GROUND SURFACE	pgs

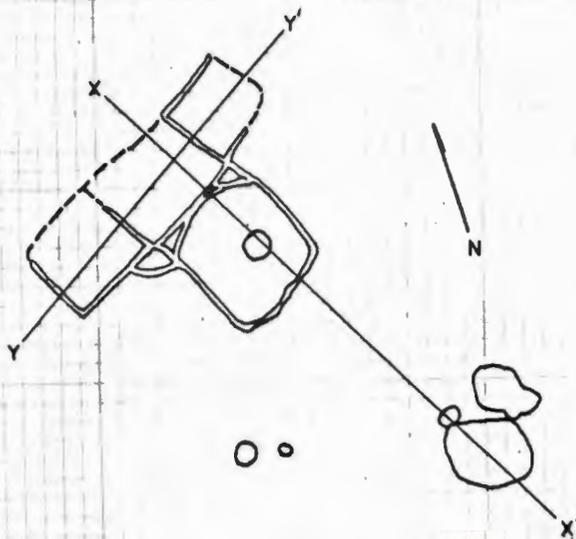
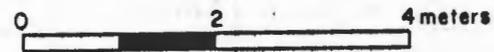
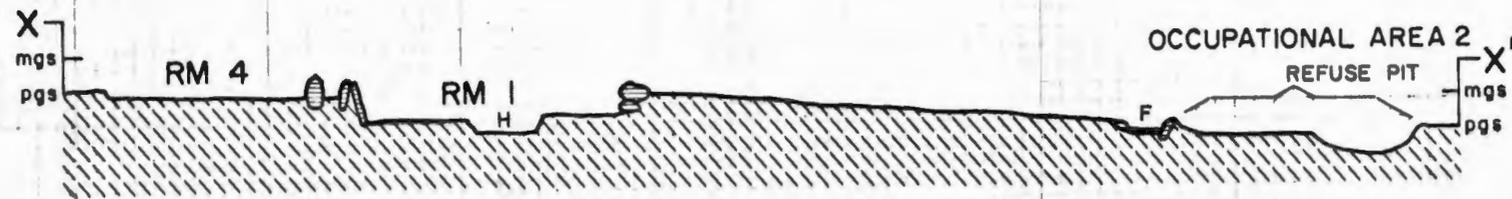
Figure 7.5. Little House (Site 5MT2191), general site profile (northwest-southeast).
east west

Figure 7.6: Little House (Site 5MT2191), general site profile (southwest-northeast).

east west

5MT2191

GENERAL SITE PROFILE
NORTHWEST - SOUTHEAST



EXPLANATION	
NATURAL DEPOSITS	
SANDSTONE	
FIREPLACE	F
MODERN GROUND SURFACE	mgs
PREHISTORIC GROUND SURFACE	pgs
HEARTH	H

LOCATION OF PROFILES

Figure 7.5. Little House (Site 5MT2191), general site profile (southwest-northeast).
east



Figure 7.7: Little House (Site 5MT2191), view to the southwest of roomblock area. Note tested grid squares in background.

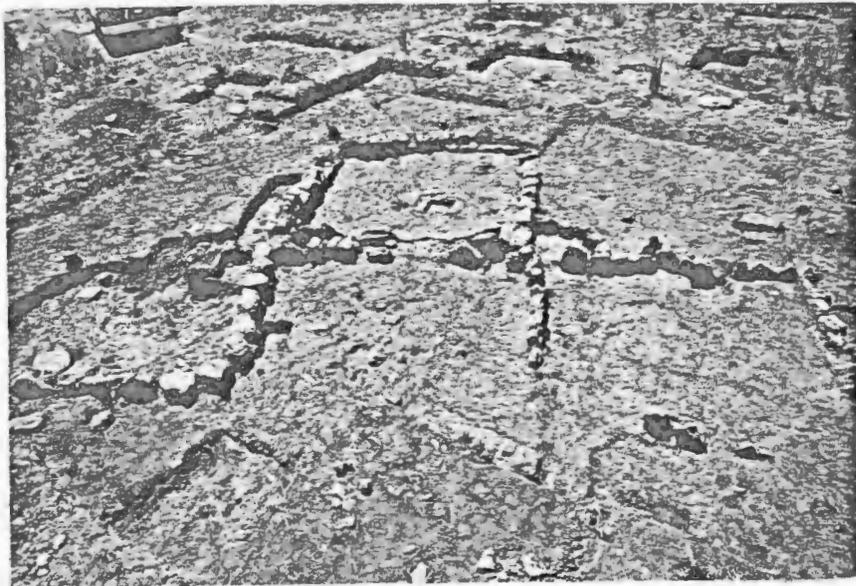


Figure 7.7. *e* Little House (Site 5MT2191), view to the southeast of roomblock area.

Table 7.1. Little House (Site 5MT2191), Room 1,
Point-Located Floor Artifacts.

<u>Description</u>	<u>Location</u>	<u>P.L. Number</u>
Obsidian projectile point	southwest quadrant	1
Core	northeast quadrant	2
Mano	southeast quadrant	3
Metate	leaning against south wall	4
Shaped sandstone slabs	northwest quadrant	5
Slab metate	southwest quadrant	6
Mano	northwest corner bin	7

* - See Figure 7.8



Figure 7.8: Little House (Site 5MT2191),
Room 1, plan view.

5MT2191

PLAN VIEW, ROOM I

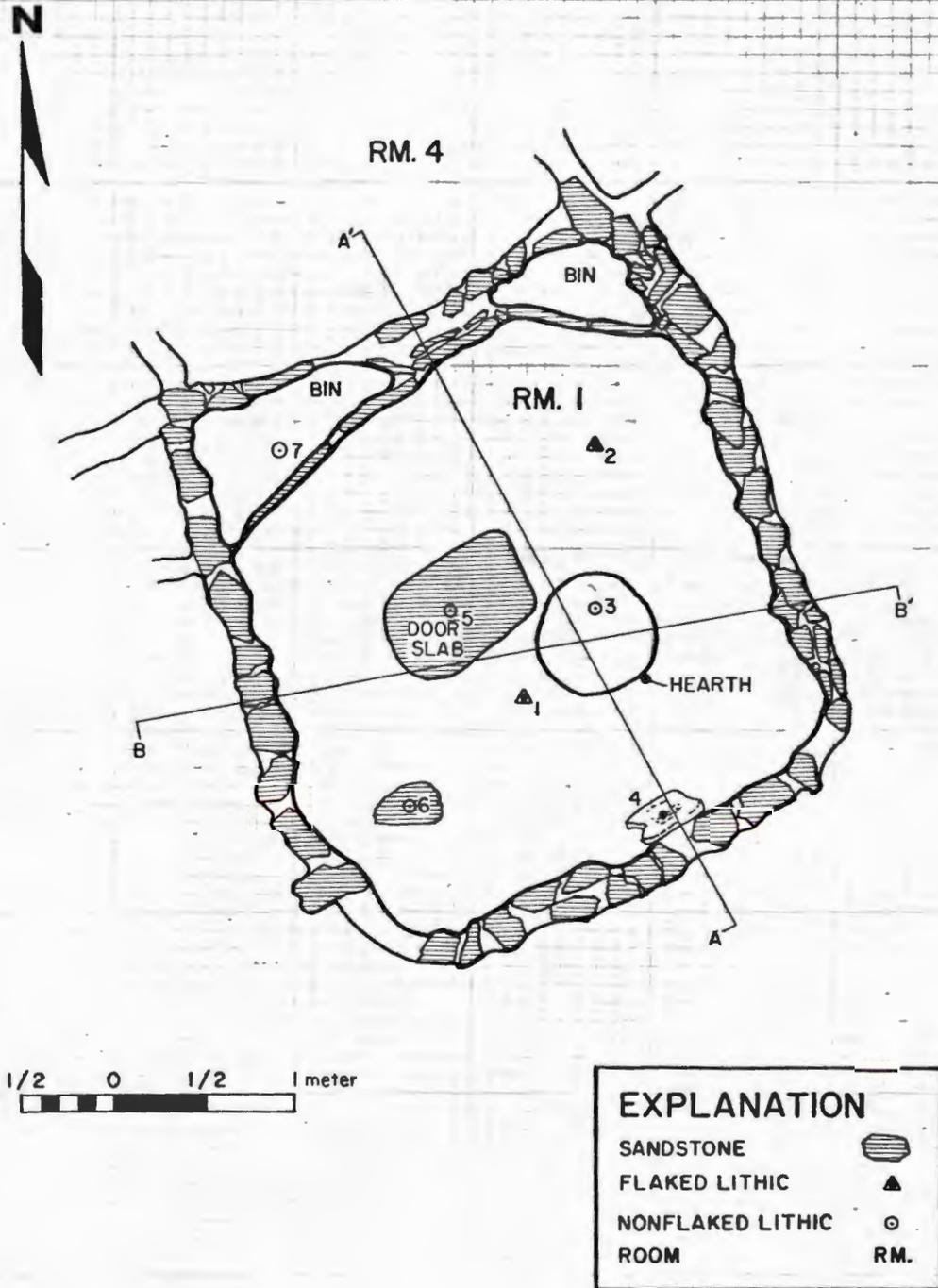
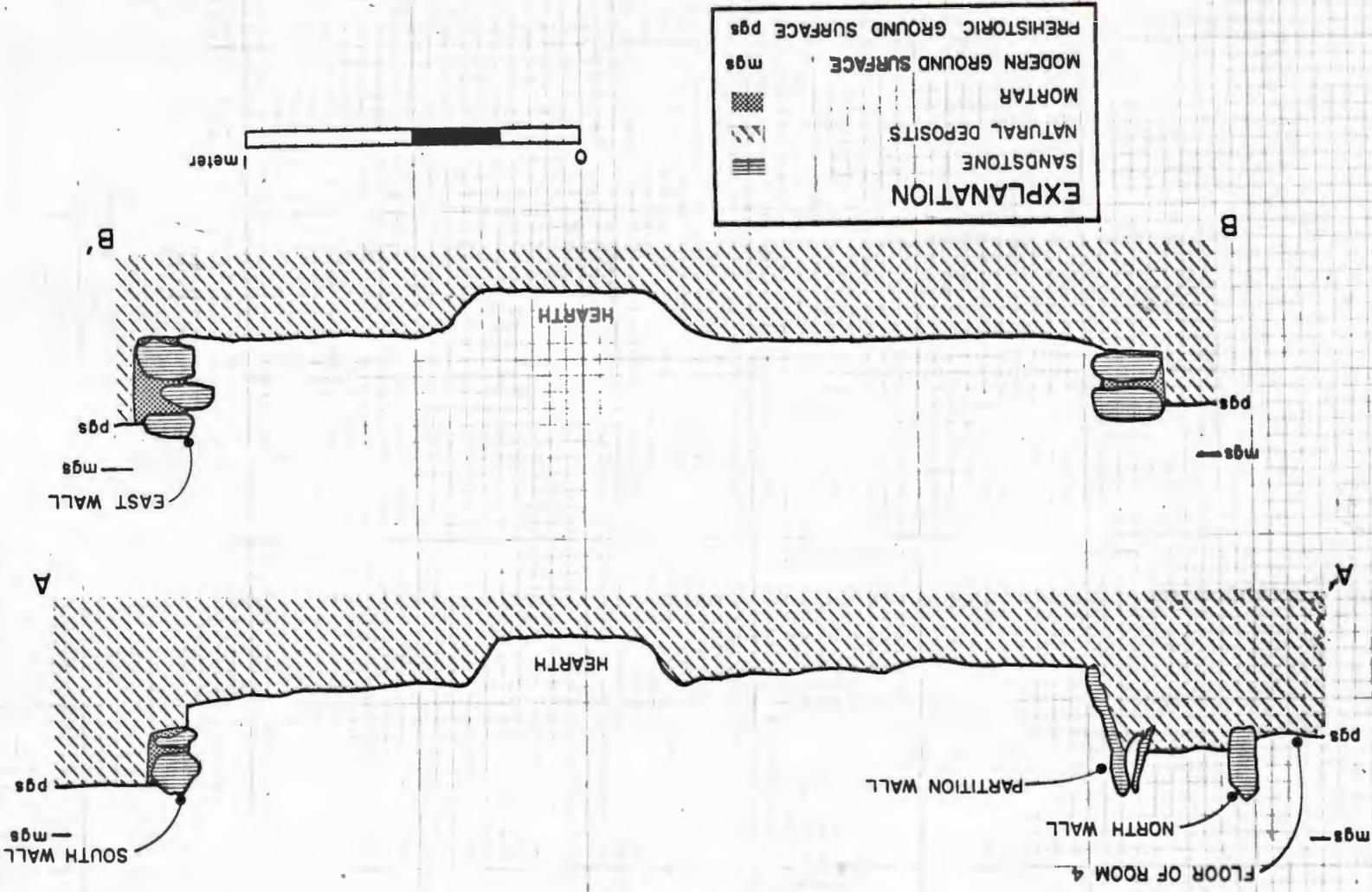


Figure 7.8. Little House (Site 5MT2191), Room 1, plan view.

Figure 7.9: Little House (Site 5MT2191),
Room 1, Architectural profiles.

Figure 7.9 Little House (SMT2191), Room 1, architectural profiles



5MT2191
ARCHITECTURAL PROFILES
OF ROOM 1

Figure 7.10: Little House (Site 5MT2191), Room 1, view from North. Note doorslab in center of room, bins in northwest and northeast corners, and metate against south wall.

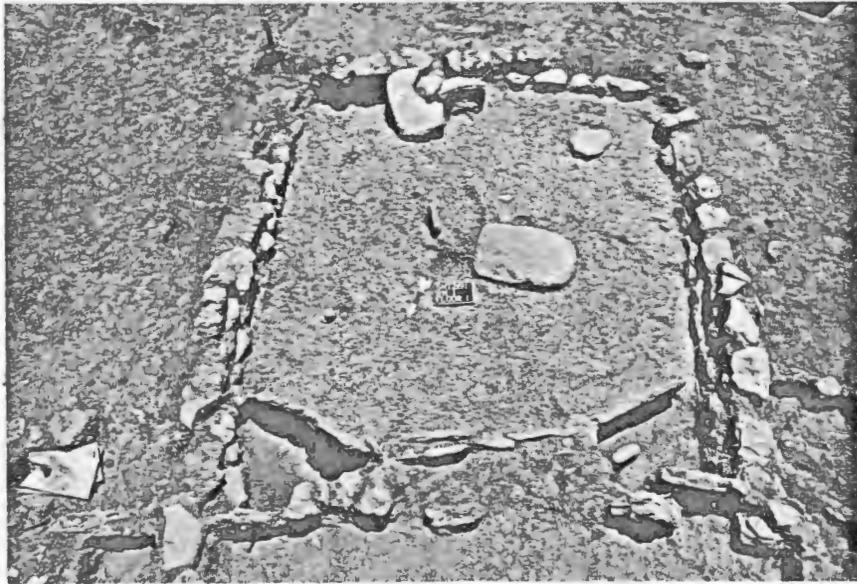


Figure 7.10. Little House (Site 5MT2191), Room 1, view from north, central hearth.

✓ remodeling episodes, of occupation is assumed to have been brief.

Ceramic analysis indicates that the room was occupied during the ninth century AD.

Shape

This structure is a nearly square room with a floor excavated about 15 cm below the original ground surface.

Orientation

The main (northwest-southeast) axis of the room is oriented 30 degrees west of magnetic north, an orientation which corresponds with typical Anasazi construction practices.

Walls

The existing wall remnants of Room 1 are constructed of crude coursed masonry. Construction materials consist of unworked sandstone fragments bonded with a local soil mortar. All of the walls are a single stone thick and range between one and four courses in height. Since only very small amounts of building rubble were found in the deposits inside and outside the structure, it is inferred that the remnant masonry wall originally formed the base on which an adobe or jacal superstructure was constructed. The prehistoric height and exact construction method could not be verified based on the available evidence. Across the north end of the room a slab wall was constructed inside the crude coursed outer wall. The inside wall consists of five upright unworked sandstone slabs that are oriented end-to-end across the main side of the room forming a bin in each corner (Figure 7.8). The outer wall was based at the floor level of the adjacent north room (Room 4) rather than at floor level of Room 1 (30 cm below floor level of Room 4). Therefore, there was a block of sterile

soil between the inner slab wall and the outer coursed wall of Room 1 (Figure 7.9).

Floor

The floor of this structure is located approximately 30 cm below the modern ground surface. Consisting of hard-packed native soil, it is otherwise unprepared and uneven.

Hearth

Located slightly southeast of center is a circular collarless hearth (Figure 7.11). In cross-section the feature is a basin-shaped pit with a flat bottom and fairly steep sloping sides. The sides and bottom are composed of fire-hardened and slightly fire-reddened native earth. An archaeomagnetic sample (sample #2) obtained from the hearth did not provide a reliable date for this feature (Appendix 2). The fill of the feature consisted mainly of ash and small pieces of charcoal interspersed with concentrations of coarse yellow sand. Covering the entire hearth, and thereby concealing it, was a layer of native red soil which was level with the room floor.

Storage Bins

At the north end of the room the upright slab wall partitions off the corners of the room, forming a storage bin in each corner. Both bins are triangular in outline and their floors are level with the floor of the rest of the room. Corncobs, kernels, and ceramic fragments were recovered from both bins; a mano was found on the bottom of the northwest bin (Point Location 7, Figure 7.8).

Floor Artifacts

Seven artifacts (Table 7.1) were recovered in situ from the floor of Room 1, including the mano recovered from the floor of the northwest

Figure 7.11: Little House (Site 5MT2191), Room 1, view of central hearth. The feature has been sectioned to reveal the nature of cultural and post-occupational deposits.



Figure 7.11 ✓ Little House (Site 5MT2191), Room 1, view of central hearth. ✓

storage bin (Figure 7.8). Another mano was found at floor level on the native soil which covered the central hearth. An obsidian projectile point was located a few centimeters southwest of the hearth and a core was found 45 cm northeast of the hearth. Near the center of the room was a large shaped sandstone slab, possibly a door cover. In the southwest corner of the room was a slab metate. A broken trough metate was leaning against the south wall.

Room 2

line up decim of points

Dimensions:

“ ”

Length (North-south diameter):	2.85 m (average)
Width (East-west diameter):	1.80 m (average) →
Floor area:	5.70 sq m
Total roofed area:	5.70 sq m
Depth of structure (modern ground surface to floor):	0.27 m
Reconstructed roof height:	not reconstructable ✓

Room 2 is a small, nearly square structure and is the westernmost room of the roomblock. It is inferred that the walls of Room 2 were constructed of adobe or jacal with a sandstone base. Due to its size and its lack of interior features, it is believed that this room functioned as a storage facility (Figures 7.12 and 7.13, and Table 7.2).

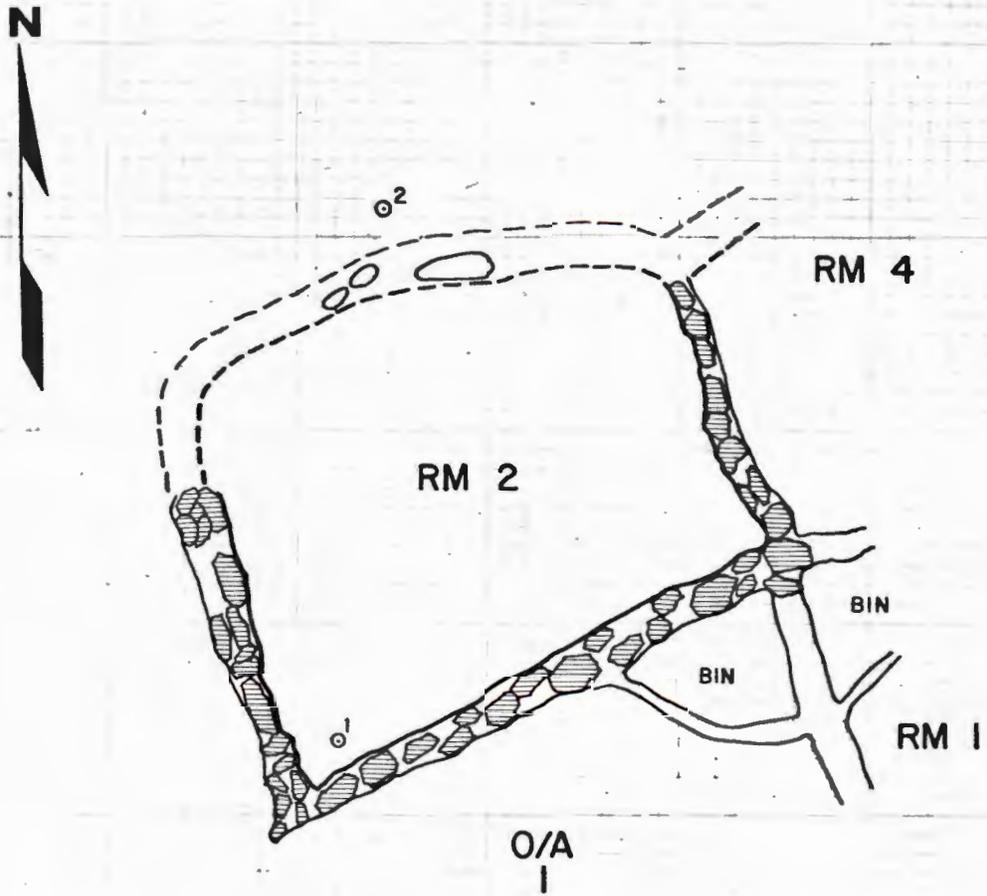
Figure 7.12: Little House (Site 5MT2191), Room 2,
view from north.



Figure 7.13: Little House (Site 5MT2191),
Room 2, plan view.

5MT2191

PLAN VIEW OF ROOM 2



0 1 2 meters

EXPLANATION

SANDSTONE	
NONFLAKED LITHIC	
OCCUPATION/ ACTIVITY AREA	

Figure 7.13. Little House (Site 5MT2191), Room 2, plan view.

TABLE 7.2 Little House (Site 5MT2191), Room 2,
Point-Located Floor Artifacts

P.L. Number*	Provenience	Description
1	southwest corner of room	Metate fragment
2	outside room, closest to north wall	

* - See Figure 7.12 ~~12~~ 13

Should pl 2 really be included since its outside room ✓

Period and span of occupation

Room 2 is presumed to have been occupied at the same time as Room 1 and as Little House in general; the room was occupied seasonally for a brief period during the ninth century AD. ✓

Orientation

The main (northwest-southeast) axis of this room is oriented 25 degrees west of north and corresponds to the usual pattern of Anasazi construction.

Walls

The south and west wall remnants are a single stone high and are constructed of unshaped, upright sandstone fragments. The east wall remnant, a common wall for Room 2 and Room 4, is two courses high and constructed of unshaped fragments of sandstone. Three sandstone fragments are all that remain of the north wall. All walls are a single stone thick. Due to the lack of stone building materials in the fill inside and outside the structure, it is assumed that the walls above the first few stone courses were constructed of perishable materials - perhaps adobe or jacal.

Floor

The floor of Room 2 is approximately level with the prehistoric ground surface. It consists of fairly hard-packed, but otherwise unprepared, native soil.

Floor artifacts

A metate fragment was recovered from the southwest corner of the room and a mano was found at floor level just outside the north wall of Room 2 (Figure 7.13).

Features

No floor or wall features were discovered in Room 2.

Roof

No remains of a roofing structure for Room 2 were found during excavation.

Room 3

Dimensions:

Length (East-west diameter):	2.87 m (average)
Width (North-south diameter):	2.15 m (average)
Floor area:	6.05 sq m
Total roofed area:	6.05 sq m
Depth of structure (modern ground surface to floor):	0.4-0.45m
<u>Reconstructed roof height:</u>	<u>40-45 cm</u> → not reconstructable

line up decimals

Room 3 is the northeasternmost unit in the roomblock at Little House. The room is basically square in outline and is similar in construction techniques to Room 2. This structure probably functioned primarily as a storage facility (Figure 7.14).



Figure 7.14: Little House (Site 5MT2191),
Room 3, plan view.

5MT2191

PLAN VIEW OF ROOM 3

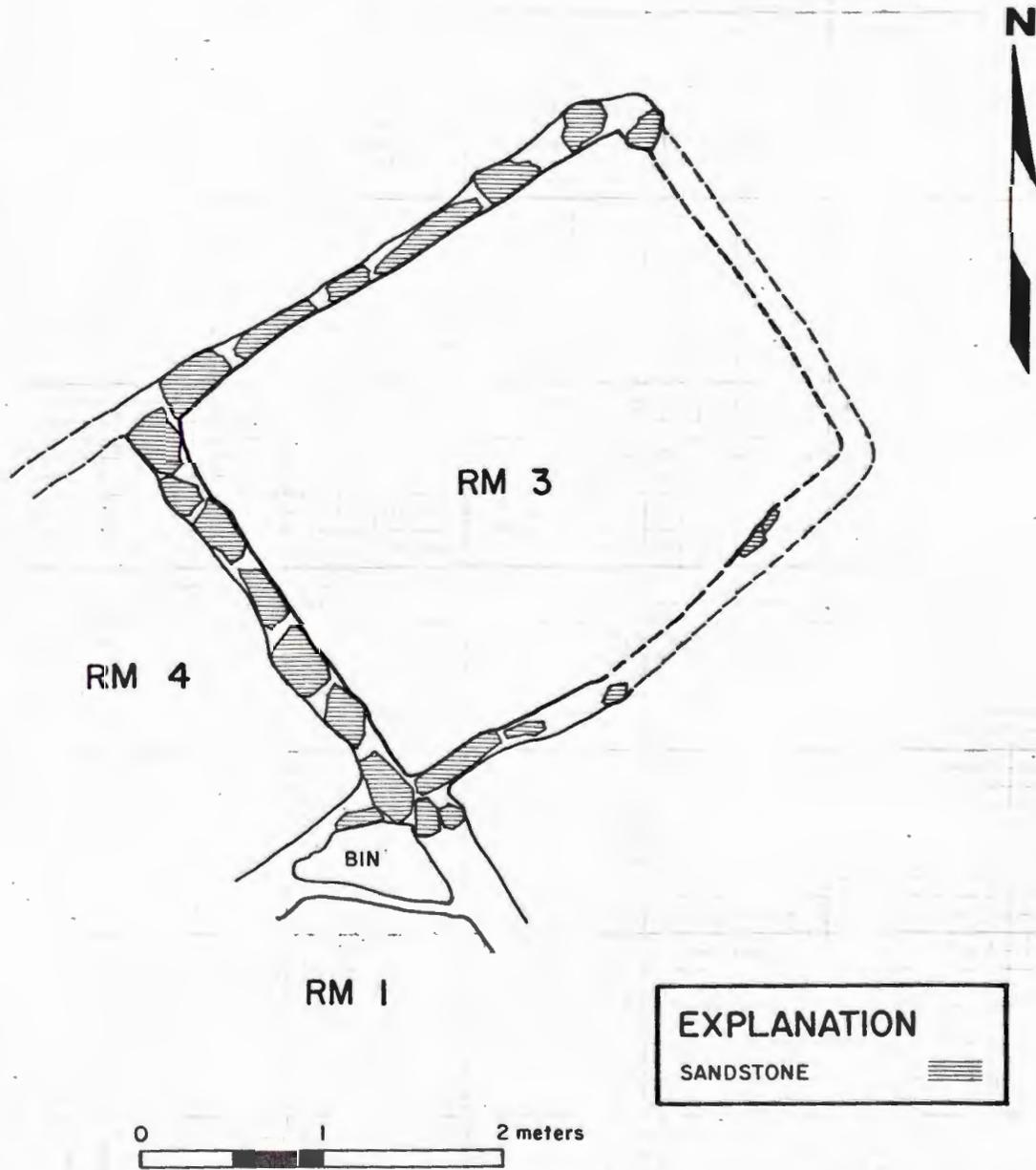


Figure 7.14. Little House (Site 5MT2191), Room 3, plan view.

Period and span of occupation

Room 3 is believed to have had the same occupational history as the other units in the roomblock and as Little House in general. The room was used on a seasonal basis for a brief period during the ninth century

AD.

Shape

Original shape of this room is not certain since the east and south walls are virtually nonexistent, but it was probably square like the other three rooms.

Orientation

The main (northwest-southeast) axis of the room is 33 degrees west of magnetic north.

Walls

The west wall remnant, shared by Rooms 3 and 4, consists of crude coursed masonry formed by unshaped sandstone fragments laid a single course high. The north wall remnant consists of a single row of unshaped, upright sandstone slabs. The south wall remnant is defined by three unshaped sandstone fragments at the southwest corner of the room and two unshaped sandstone fragments at the southeast corner of the room. A single stone is all that remains of the east wall. All walls are a single stone thick. It is inferred that these architectural remnants represent the bases of more substantial structures which have not withstood erosional forces. Because of the scarcity of stone building materials in the fill, it is assumed that the upper portions of the walls were constructed of adobe or jacal. The original height of these walls could not be reconstructed.

Floor

There was no definite hard-packed surface in Room 3 that could be defined as a floor, but sterile soil was encountered 30 cm below the original ground surface. The walls of the structure were footed on the original ground surface but the inside of the room had been excavated ~~down~~ 25-30 cm below the base of the walls.

Roof

No roof construction materials were encountered in the fill of Room 3, so it is not possible to reconstruct the roof type for this structure. Roof height above the bottom of the room could not be reconstructed from the available evidence.

Large shallow pit

Original impressions were that in the middle of Room 3 there was a basin-shaped pit containing small stone rubble, charcoal, and various artifacts, including a mano and several core and pieces of debitage. However, further observation and excavation revealed that this pit extended to the north and west walls of the room and to the east and south where the sparse remnants of those walls remain. Therefore it seems the occupants of the complex excavated this room to about 30 cm below the prehistoric ground surface just as they did with Room 1.

Floor artifacts

No artifacts were recovered in situ from the bottom surface of Room 3.

Room 4

Dimensions:

Length (EW *pull out like others* inside diameter): 2.80 m (average)
Width (NS *pull out like others* inside diameter): 2.02 m (average)
Floor area: 5.70 sq m
Total roofed area: 5.70 sq m
Floor depth (Modern ground surface to floor): *0.1-0.15 m*
~~10-15 cm~~ ✓

Room 4 (Figures 7.15 and 7.16, Table 7.3) is the center back room of the major structural complex at Little House. With walls probably constructed of jacal or adobe with sandstone rubble bases, this room apparently served the same function as Rooms 2 and 3; that is, these three rooms probably served as storage facilities for the inhabitants of the site.

Table 7.3 *e* Little House (Site 5MT2191) Room 4, *e*
Point-located Floor Artifacts. ✓

P.L. Number*	Provenience	Description
1	east center portion of room	Mano fragment
2	south center part of room	Mano fragment

*see Figure 7.15

Shape

This structure is roughly square even though the north wall is missing.

Orientation

The main (northwest-southeast) axis of this room is 35 degrees west of magnetic north.

g
Figure 7.15: Little House (Site 5MT2191), Room 4,
plan view.

~~Switch order
of fig 7.15 + 7.16~~



Figure 7.17: Little House (Site 5MT2191), plan of
Surface 2, Occupation/Activity Area 1.

5MT2191

PLAN OF OCCUPATION /ACTIVITY AREA 1, SURFACE 2

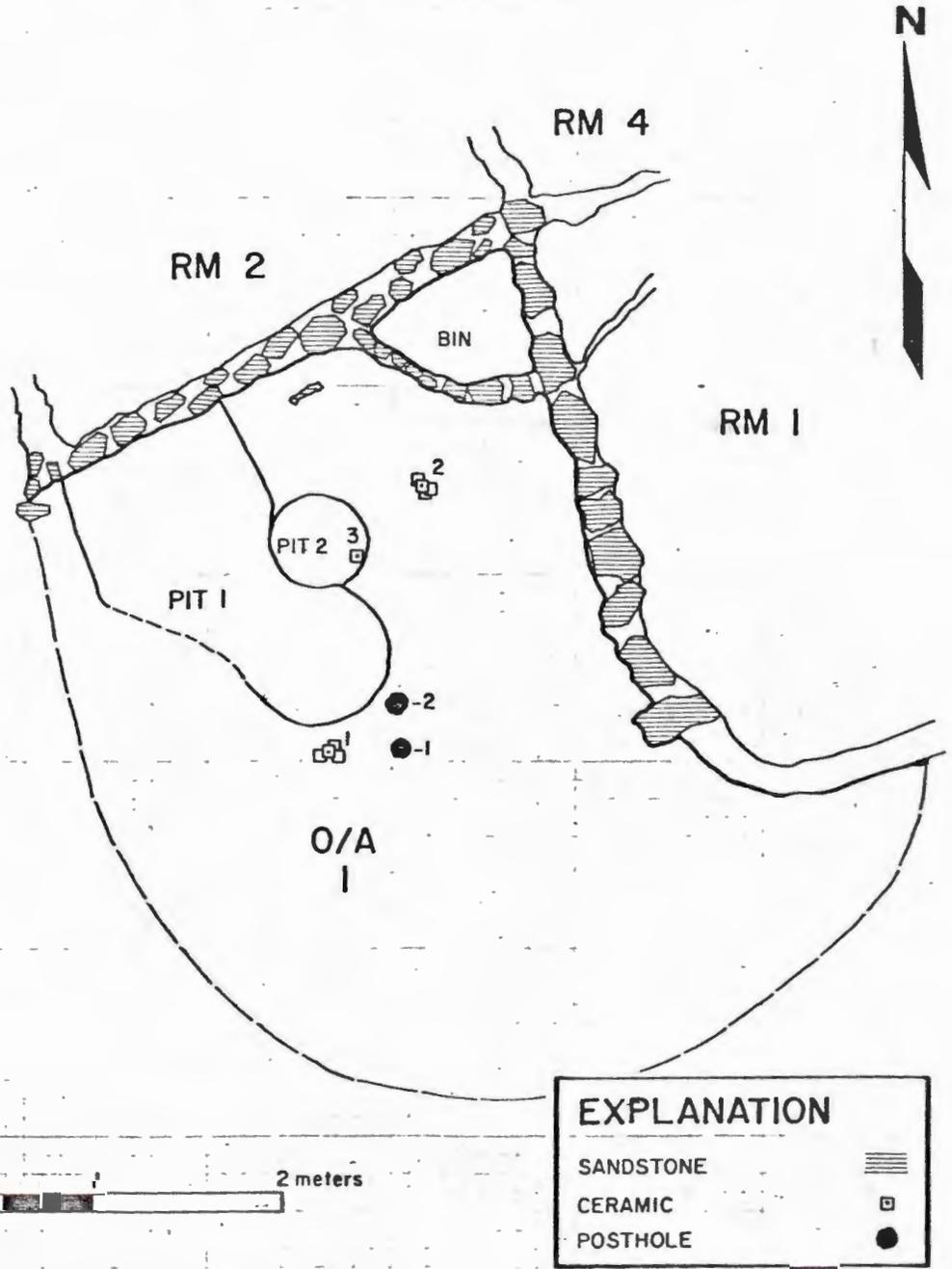


Figure 7.17 Little House (Site 5MT2191), plan of Surface 2, Occupation/Activity Area 1.

Figure 7.18: Little House (Site 5MT2191), plan view of Surface 3, Occupation/Activity Area 1.

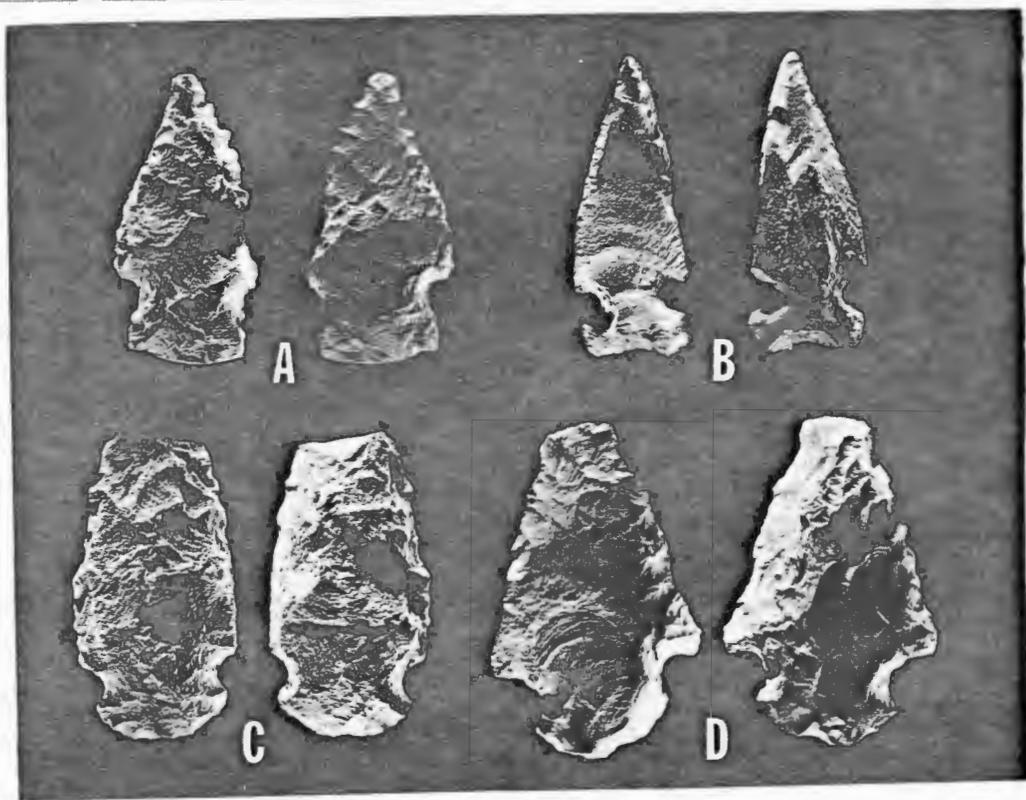


Figure 7.25. ⁹ Little House (Site 5MT2191), flaked lithic tools.

5MT2191

PLAN OF OCCUPATION /ACTIVITY AREA 1, SURFACE 3

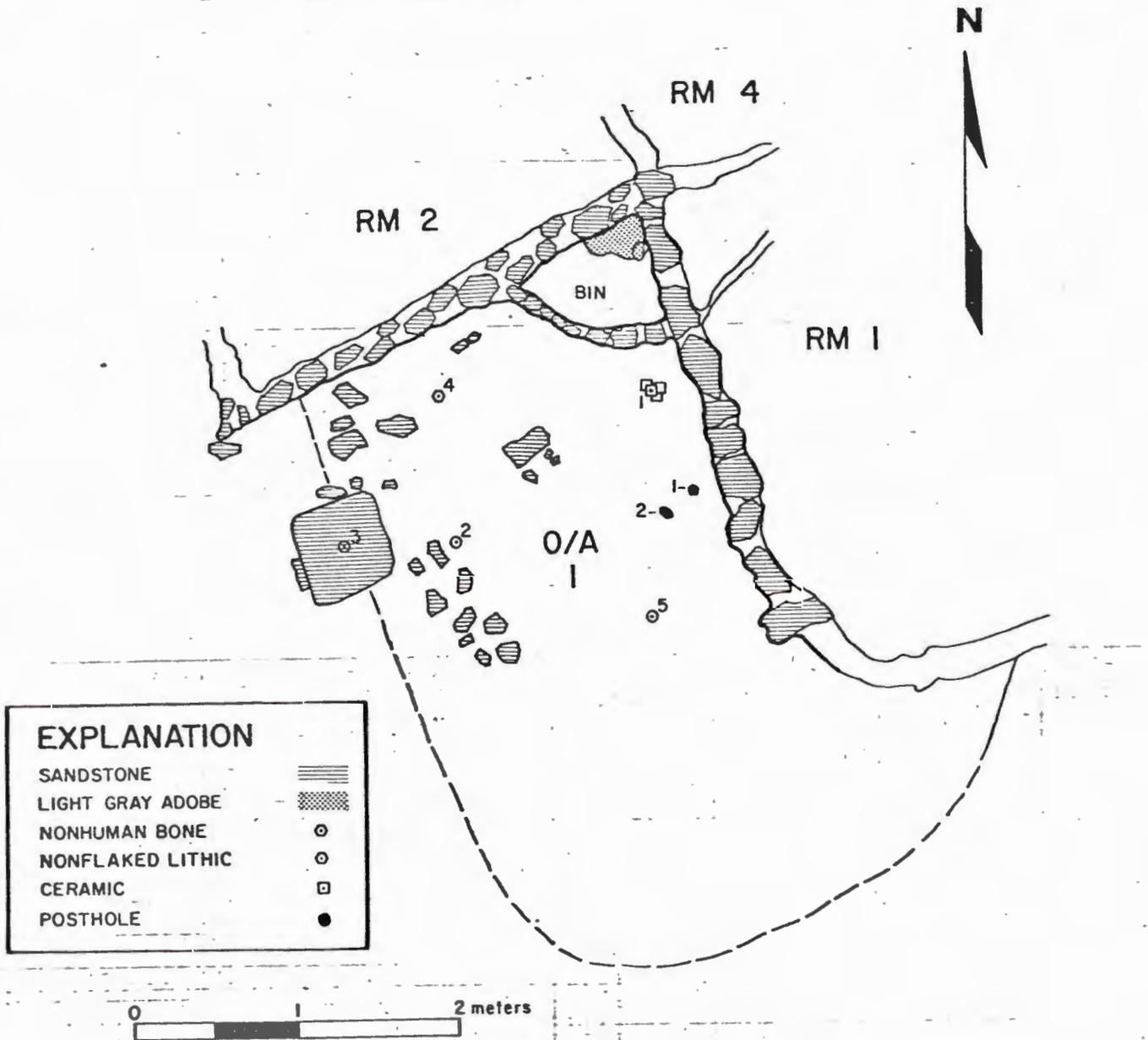


Figure 7.18. Little House (Site 5MT2191), plan of Surface 3, Occupation/Activity Area 1.

Figure 7.19: Little House (Site 5MT2191),
Occupation/Activity Area 1, Surface 2,
view from north.

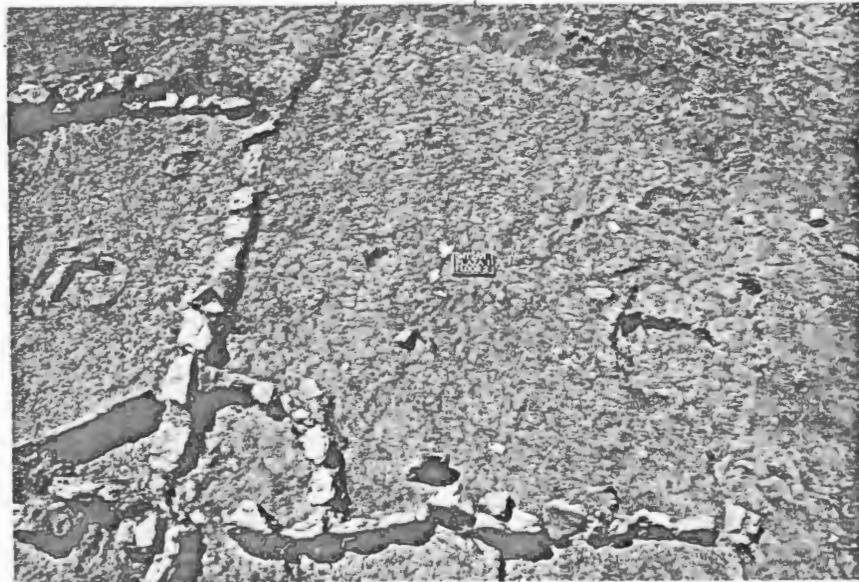


Figure 7.19. Little House (Site 5MT2191), Occupation/Activity Area 1, Surface 2, view from north.

Walls

The south wall of Room 2 and the west wall of Room 1 define the north and east limits of this unit. Descriptions of these walls are included in the individual discussions of these units.

Floor

Three occupation surfaces were identified in Occupation/Activity Area 1, each separated by 3-5 cm of fill. Surface 3 was the most recent and therefore in the best condition, with definite limits. Surface 2 covered nearly the same area as Surface 3 but was not as well defined. The first occupation surface was patchy and difficult to define; only small portions of it could be found near the walls of Room 1 and Room 2. All three surfaces were of unprepared use-compacted soil which was a mixture of native soil and cultural debris.

Storage Bin

Dimensions:

Length (East-west):	100 cm
Width (North-south):	80 cm
Depth (top of rock wall to bottom of bin):	20 cm

In the northeast corner of the occupation/activity area is a small storage bin (Figure 7.18). Triangular in shape, two of its sides are formed by the walls of Room 1 and Room 2; the third side consists of a single course of unshaped sandstone fragments. Gray adobe lined portions of the bottom of the bin and the same material was used as mortar between the rocks of the southwest side of the feature. Several ground stone artifacts were found in the fill of this feature, including three manos. This bin was probably constructed at the same time as the earliest occupation surface (Surface 1), but utilized throughout the occupation of the site.

Postholes

Two small postholes were found on Surface 3 near the west wall of Room 1 (Figure 7.18); Posthole 1 has a diameter of 6 cm and a depth of 5 cm, and Posthole 2 a diameter of 6 cm and a depth of 6 cm. Two other small postholes were found in association with Surface 2 and are located near the middle of the occupation/activity area (Figure 7.17). The diameter of Posthole 3 is 8 cm and its depth is 18 cm; Posthole 4 has a diameter of 11 cm and a depth of 28 cm.

The location of the first two postholes suggests an east-west orientation; the latter two, a north-south orientation. Although there is no conclusive evidence, it is postulated that the holes held posts which supported a ramada, sun shade, or drying rack.

Subsurface Pits

Dimensions:

Pit 1:

Diameter (East-west):	110 cm
Diameter (North-south):	195 cm
Depth:	35 cm (maximum)

Pit 2:

Diameter (East-west):	110 cm
Diameter (North-south):	46 cm
Depth:	ca. 15 cm

Two pits were found in association with Surface 2 (Figure 7.17). Pit 1, the larger of the two, is located in the northwest corner of the occupation/ activity area. In shape it is rather square at the north end, then narrows and becomes circular at the south end. It is possible that this feature was originally two pits that were later connected. In the charcoal-flecked fill of this pit were a bone weaving tool (Figure 7.27), ³ ~~3~~ three pieces pieces of debitage, and 12 Mesa Verde sherds: 10 Gray Ware, ¹ ~~1~~ one Red Ware, and ¹ ~~1~~ one White ware. Although most of this pit was clearly associated with Surface 2, ~~a shaped sandstone slab associated~~

with ~~Surface 2~~, a shaped sandstone slab associated with Surface 3 covered the northern portion of the pit. Therefore part of the pit may have been used during the last occupation of this nonstructural unit. The function of the pit is unknown; it may have been used for storage.

Pit 2 is located adjacent to the east side of Pit 1 and actually merges with it. Pit 2 is circular and has fairly vertical sides and a flat bottom. One Moccasin Gray sherd, a projectile point fragment, and small pieces of charred wood were recovered from the fill in the pit. Like Pit 1, the use of this feature is unknown; a possibility is that it was used for storage. Both pits were dug into native soil and were unlined.

Floor artifacts

Five artifacts were found in situ on Surface 3 (Figure 7.18) and three on Surface 2 (Figure 7.17) of Occupation/Activity Area 1. On the western edge of Surface 3 was a large shaped sandstone slab which covered part of Pit 1, a feature associated with Surface 2. A bone awl, second piece of worked bone (Figure 7.23) and a cluster of sherds were located in the northern half of the Occupation/ Activity area, and two manos were found in the central portion. Two of the floor artifacts associated with Surface 2 were clusters of ceramic sherds, the third was a single large sherd (Tables 7.4 and 7.5).

Table 7.4 Little House (Site 5MT2191), Surface 2, Occupation/Activity Area 1, Point-
Located Floor Artifacts.

P.L. Number*	Provenience	Description
1	near center of area	Ceramic cluster
2	northwest quadrant	Ceramic cluster
3	northwest quadrant	Sherd

*see Figure 7.16

Table 7.5, Little House (Site 5MT2191), Surface 3,
Occupation/Activity Area 1, Point
Located Floor Artifacts

P.L. Number*	Provenience	Description
1	northeast quadrant	Sherd cluster
2	northwest quadrant	Mano
3	northwest quadrant	Shaped sandstone slab
4	northwest quadrant	Bone awl
5	southeast quadrant	Mano fragment

*see Figure 7.1

Post-abandonment Processes

Due to the nature of the fill in the rooms and in Occupation/Activity Area 1, it appears that this area lay open to aeolian sedimentation and decay after abandonment. There is no evidence to indicate that any of the structures burned.

In general, the topmost layer (upper fill) consisted of 10-15 cm of loose, dry reddish-brown soil; this was essentially the plow zone. A few artifacts and small flecks of charcoal were found in this layer. In Room 1, between this stratum and the floor, was a 25-35 cm layer (lower fill) of compact reddish-brown soil containing sherds, manos, metate fragments, flakes, small pieces of charred wood, and stone rubble. Above the floor were patchy areas of hard-packed reddish soil, possibly roof fall. Although more artifacts were found in the fill of this room than in the others, they may have originally been on the roof of the structure and have fallen into the room when it collapsed, rather than being deposited there as the result of slope wash or of deliberate action by other prehistoric groups after abandonment.

Beneath the plow zone (upper fill) in Room 3 was a 25-30 cm lower fill of reddish-brown soil containing flecks and some concentrations of charcoal, stone rubble, patches of grayish soil (adobe melt?) and several flaked and nonflaked lithic tools (Appendix 4). This fill also appears to be the result of natural forces as opposed to deliberate cultural deposition.

In Room 4, beneath the plow zone stratum (upper fill), was a 15 cm layer of reddish-brown, fairly compact soil containing flecks of charcoal, a few artifacts, and patches of grayish soil (adobe melt?). In this lower fill (downward from 15 cm below present ground surface) were the intrusive firepit and a few associated artifacts: two projectile points, a broken mano, and a few ceramic sherds. This probably represents a brief, temporary use of this room after the main occupation of the site.

Between the plow zone and the occupation surfaces of Room 2 and Occupation/Activity Area 1 was a 5-10 cm lower fill of a compact reddish-brown soil containing small flecks of charcoal.

Occupation/Activity Area 2

Dimensions:

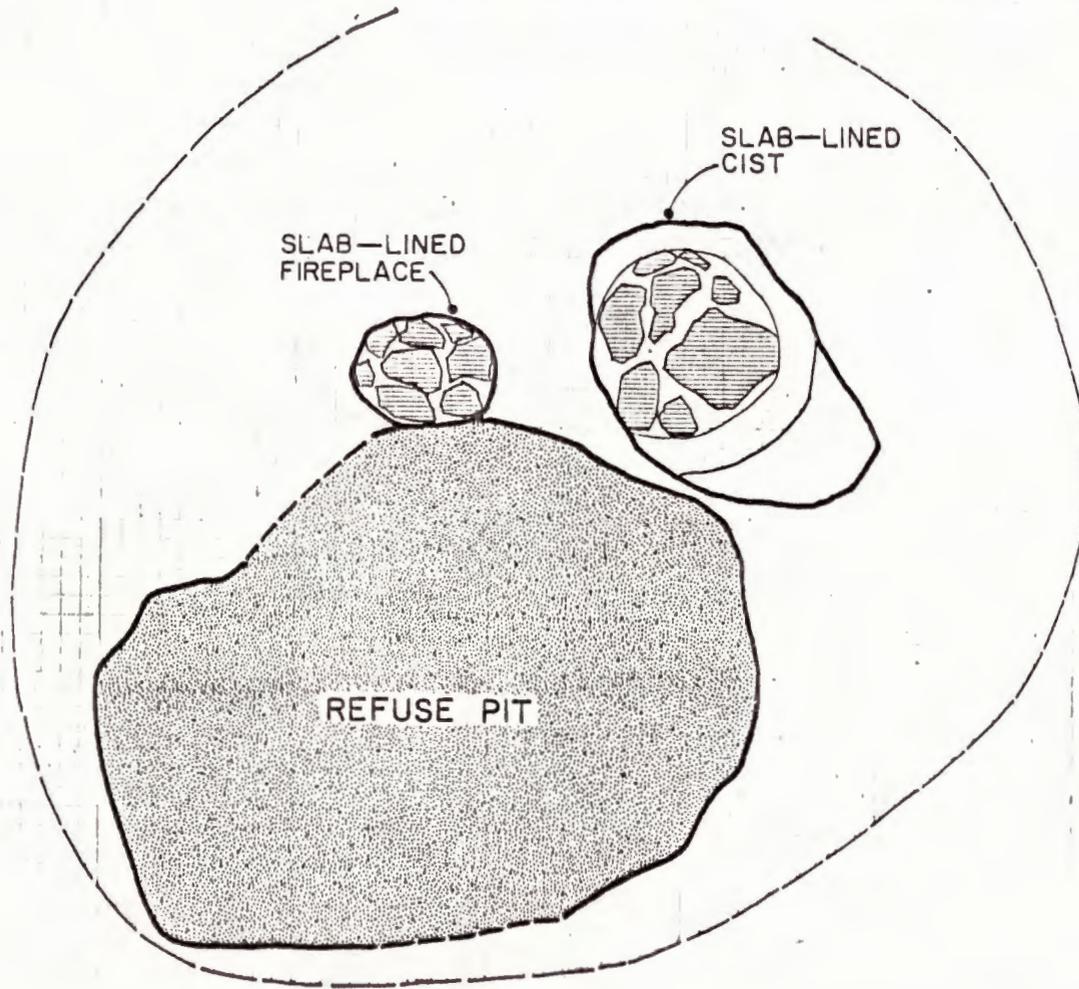
Length (East-west):	ca. 5 m
Width (North-south):	ca. 4 m
Area:	ca. 20 sq m

Occupation/Activity Area 2 has no definite boundaries but is probably rectangular; it is located approximately 4 m southeast of the room-block at Little House (Figures 7.3 and 7.5). This locus of activity does not incorporate any rooms or other major architectural features and is therefore assumed to represent a primarily outdoor use area. Included in the area are a refuse pit, a storage cist, and a fireplace (Figure 7.20);

Figure 7.20: Little House (Site 5MT2191), plan view
of Occupation/Activity Area 2.

5MT2191

PLAN OF OCCUPATION /ACTIVITY AREA 2



0 1/2 1 meter

EXPLANATION	
CHARCOAL & TRASH FILL	
SANDSTONE	

Figure 7.20 Little House (Site 5MT2191) plan of Occupation/Activity Area 2

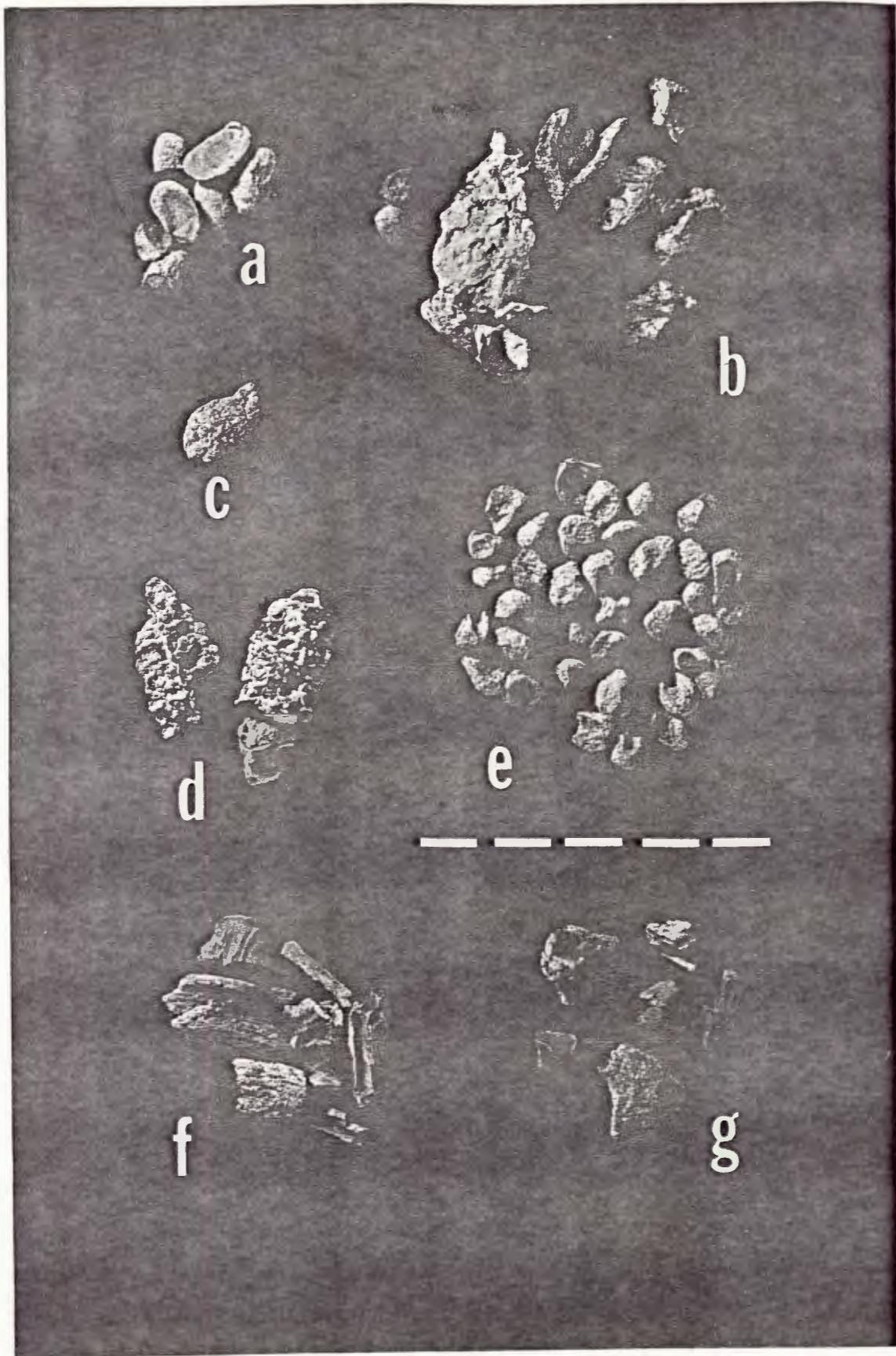


Figure 7.24. *g* Little House (Site 5MT2191), selected vegetal materials. *✓*

these are described below. The occupation/activity area was not bounded, nor was a prepared use-compacted surface in evidence. The limits of the area have been arbitrarily defined by estimating the extent of intensive activity around the cluster of features. Based on the nature of the features and the associated artifactual assemblage, it is inferred that Occupation/Activity Area 2 served as a locus for processing vegetal resources.

Refuse pit

Dimensions:

North-south diameter:	2.70 m
East-west diameter:	3.60 m
Depth:	25-55 cm 0.25-0.55 m ↗

Located just south of the ~~firepit~~ ^{hearth} and the storage cist in ^{fireplace} Occupation/Activity Area 2 is a roughly oval pit. Cut into native soil, the pit is unlined, with steep sloping sides and an uneven bottom. The east and west portions of the pit are deeper than the center, almost like small pits themselves. The fill throughout the feature was dark gray, charcoal-stained soil which contained an abundance of pottery sherds; charred vegetal remains, including yucca, corn and beans; ground and flaked stone tools, including projectile points; and nonhuman bone. These remains are interpreted to indicate that this feature served as a refuse pit. ✓

Storage cist:

Dimensions:

North-south diameter:	94 cm (at bottom)
East-west diameter:	94 cm (at bottom)
Depth:	55 cm

Located approximately 10 cm northeast of the trash pit is another small cist, or pit (Figure 7.21). This pit is roughly oval at the top

Figure 7.21 ✓ Little House (Site 5MT2191),
Occupation/Activity Area 2, view of ✓
storage cist.

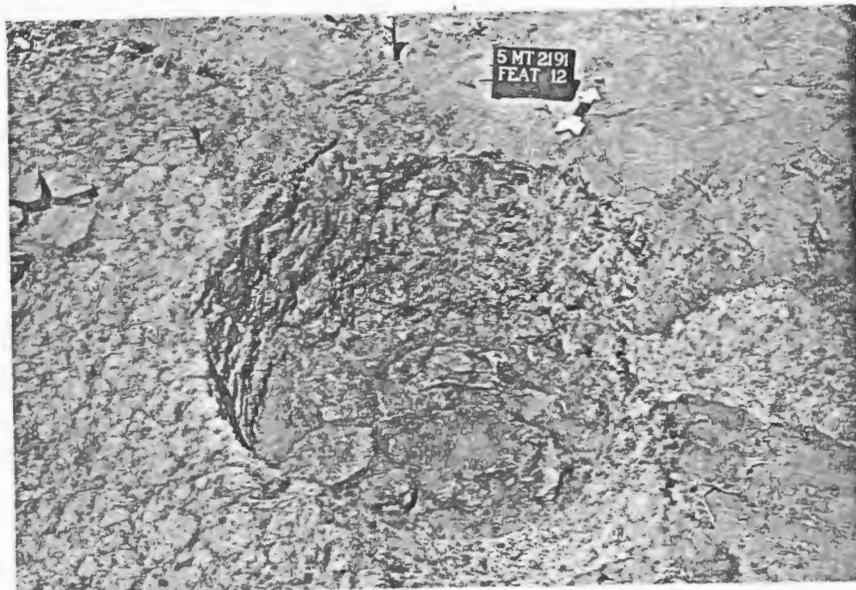


Figure 7.21. ✓ Little House (Site 5MT2191), Occupation/Activity Area 2, ✓
view of storage cist.

and circular at the bottom. Cut into native soil, it has unlined, nearly vertical sides and a flat bottom lined with sandstone slabs. The fill of this feature was charcoal-stained and fairly compact; it contained ceramic sherds, flakes, and charred plant materials. The character of the fill indicates deliberate cultural deposition; therefore, it is assumed that this feature was ultimately used as a trash depository. However, the stone-lined bottom and carefully carved sides indicate that its original purpose was probably for something other than trash. The stone lining would have prevented rodent burrowing, and plaster on the sides would have similarly limited rodent activity (although there is no evidence of plaster). Therefore it is postulated that this feature was originally constructed as a storage facility.

~~Hearth~~
Fireplace

Dimensions:

North-south diameter	50 cm
East-west diameter	70 cm
Depth:	10 cm

Adjacent to the north edge of the refuse pit is a stone-lined ~~hearth~~ fireplace (Figure 7.22). Roughly oval, this feature consists of seven unshaped sandstone fragments and one pecked piece of sandstone. These stones, charcoal-stained and burned, are not in a basin or pit but are lying on sterile soil. Between the stones was a dark charcoal-stained soil containing a few sherds and charred twigs. An archaeomagnetic sample (Sample # 1) was obtained from this feature (Appendix 2).

Figure 7.22: Little House (Site 5MT2191),
Occupation/Activity Area 2, view of
fireplace.

hearth



Figure 7.22. Little House (Site 5MT2191), Occupation/Activity Area 2,
view of fireplace.
hearth

Other Features

Several small ancillary features were discovered and excavated at Little House. These could not be associated with any inferred activity loci at the site and are therefore discussed separately. It is likely that these features were associated with supplemental activity although their cultural origin might be questioned.

Hearth Fireplace

Located approximately 6 m south of Occupation/Activity Area 2 is an isolated ~~fireplace~~ ^{hearth} (Figure 7.3). Roughly oval-shaped, this feature consists of a shallow basin with a large unshaped sandstone slab lining the bottom. Its dimensions are 65 cm east-west, and 40 cm north-south, with a depth of 6 cm. In the basin were 5-6 cm of very dark charcoal-stained soil devoid of artifacts. This feature is located 35 cm below present ground surface and does not appear to be associated with any other features. Its cultural affiliation with the rest of the site is unclear.

Pits

Located 6.2 m south of the roomblock are two irregular pits filled with charcoal-stained soil (Figure 7.3). Pit 1, the westernmost pit, contained burned sandstone fragments and charred sagebrush; no artifacts were associated with this feature. The pit is unlined, has steep sides and tapers to a width of 20 cm at the bottom. The top diameter is 50 cm north-south by 45 cm east-west; maximum depth is 40 cm. Pit 2 is a shallow basin-shaped feature containing charcoal-stained soil, a few sherds and burned rocks. Cut into native soil and unlined, this pit has a north-south diameter of 40 cm, an east-west diameter of 40 cm and a depth of 8 cm. The purpose of both pits is unknown, and they may be of a noncultural origin (e.g., rodent burrows).

MATERIAL CULTURE

Of the various categories of portable artifacts recovered, only preliminary analysis of nonhuman bone, lithic, and vegetal collections are complete at this writing; a general description of ceramic types is also available.

Nonhuman Bone

Sixty-seven nonhuman faunal specimens, representing six biological orders, were recovered during the excavation of Little House. Totals and proveniences are summarized in Table 7.6. Only three of the bones had been worked - an awl, a weaving tool, and an unidentified tool (Figure 7.23). The relatively small size of the faunal assemblage at the site permits few interpretations. Several of the species represented may have been used for food by the prehistoric inhabitants, including cottontail rabbit, mule deer, sage grouse, raven, and domesticated dog. Others, such as the pocket gopher and Gunnison's prairie dog, may also be  ⁵intusive. 

Ceramics

The ceramic assemblage represented in the artifact collection includes three wares and five temporally diagnostic types. These are as follows:

- Gray Ware: Chapin Gray, Moccasin Gray, and numerous gray ware body sherds (Early Pueblo Gray).
- White Ware: Chapin Black-on-white, Piedra Black-on-white, and numerous white ware body sherds (Early Pueblo White).
- Red Ware: Bluff Black-on-red and numerous red ware body sherds (Early Pueblo Red).

No definable trade ceramics were identified in the assemblage. ✓

The recovered collection can be used to estimate the approximate age of the main occupation of the site. According to Breternitz, et al. [10], Moccasin Gray was manufactured during the period AD 775-900, Piedra Black-on-white during the span AD 750-900, and Bluff Black-on-red from AD 750-900. The collection lacks later gray and white ware types such as Mancos Gray (AD 875-950) and Cortez Black-on-white (AD 900-1000). From assessment of the temporally diagnostic types present, it appears that the occupation can be assigned to the span AD 800-875, or the early McPhee Phase, according to the chronological scheme developed by the Dolores Archaeological Program (Kane [1]). ✓ ✓ ✓ ✓

The ratio between jar and bowl fragments represented in the collection is approximately 7:1. Such a bias toward jars may reflect the role of storage as a major site function. However, comparison of this ratio with that of habitation sites of the same period has not been accomplished. Only three fragments of a specialized vessel form, the seed jar, were recovered from the site. Ceramic totals and a summary statement concerning the ceramic assemblage is available in Appendix 3 of this report. ✓ ✓

Vegetal Remains

Charred remains of five vegetal food types were recovered from Little House, as well as numerous pieces of charred sagebrush branches. Totals and proveniences are summarized in Table 7.7. This table indicates that most of the food items were recovered from storage bins, hearths, and the refuse pit (Figure 7.24).

Table 7.6 Little House (Site 5MT2191), Recovered Assemblage of Faunal Materials

	Rodentia	Sciuridae Prairie Dog Pocket Gopher	Lagomorpha Cottontail Rabbit	Artiodactyla Mule Deer	Carnivora Indian Dog	Galliformes Sage Grouse	Passeriformes Common Raven	Mammal, Unidentifiable	Unidentifiable
Level 1†	2	1	1	1		1	3	1	
Room 1									
Upper Fill		1	1					1	
Lower Fill			1						
Hearth			1				1		
Room 4									
Upper Fill							1		
Occ./Activ. Area 1									
Surface 3				1*				1**	
Fill btwn. Sur. 3 and Surface 2								1	
Surface 2								1	
Storage Bin			2						
Subsurface Pit 1								1***	
Occ./Activ. Area 2									
Storage Cist								1	
Refuse Pit			36		2		1		
Test Trench 1							5		

*Worked Awl **Worked Long Bone ***Weaving Tool

†plow zone (0-15 cm) in other excavated units

Table 7.7. Little House (Site 5MT2191),
Provenience of Vegetal Remains.

	Nonidentified Wood	Juniper Seeds	Curcubit Seeds	Yucca Seeds Fruits	Corn Cobs Kernels	Phaseolus	Sagebrush
Level 1†					1	2	N**
Room 1							
Upper Fill						6	N
NE storage bin					N	N	
NW storage bin	N				1	1	
Hearth	N					1	
Room 2							
Upper Fill							N
Room 3							
Upper Fill					1		N
Lower Fill				N			
Room 4							
Intrusive Hearth					N	N	
Occ./Activ. Area 1							
Surface 2					1	1	
Occ./Activ. Area 2							
Refuse Pit			1	1	N	N	2
Storage Cist	N	1*		3	N	N	
Other features							
Pit 1 (modern?); south of roomblock							N
Fireplace south of O/A 2							N

† plow zone (0-15 cm) in other excavation units

* tentative identification

** numerous

^
N=

Figure 7.23 Little House (Site 5MT2191), worked bone artifacts. Left: awl manufactured from split mule deer metapodial, recovered from Surface 3, Occupation/Activity Area 1. Center: worked long bone fragment from unidentified mammal, recovered from Surface 3, Occupation/Activity Area 1. Right: weaving tool fragment recovered from Subsurface Pit 1, Surface 2, Occupation/Activity Area 1.

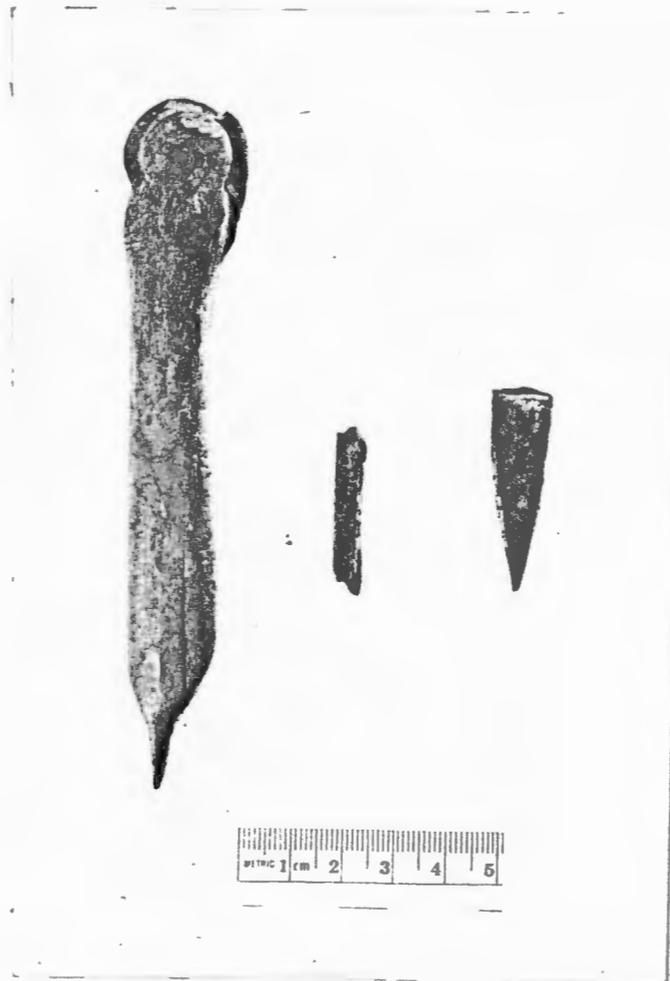


Figure 7.23. ✓ Little House (Site 5MT2191), worked bone artifacts. ✓

✓ Figure 7.24: ✓ Little House (Site 5MT2191), selected
vegetal materials. a) Phaseolus
cotyledons, b) Yucca fruit and seeds, c)
Curcubita seed, d) Zea cob fragments,
e) Zea kernels f) Artemisa/ Chenopodium
wood, and g) Pinus and Populus wood.
(Dashed white line is scale in
centimeters.)

colon

Lithics

✓ A total of 85 flaked stone tools and 511 debitage ^{items} were recovered from Site 5MT2191. The flaked tool inventory included cores, unifaces, bifaces, projectile points and utilized flakes (Figures 7.24-7.34). ²⁵ There were no clusterings of these artifacts that would indicate specific work or processing areas. Raw materials used for flaked stone tools include quartzite, ⁺ _^ siltstone, basalt, andesite, and chert. This assemblage is described in detail in Appendix 4. ✓

A total of 117 nonflaked stone tools were recovered and all are utilitarian types (Figures 7.35-7.40). Manos, the most abundant category, were found in all the rooms, in both occupation/activity areas, and scattered throughout Stratum 1, the plow zone. Their abundance suggests a primary concern with processing of certain food stuffs, such as corn, beans, and probably wild grains and seeds. Metates and grinding stones are also well represented. Other tools include hammerstones, choppers, polishers, pestles, and a maul, all of which are multi-use tools. Shaped stone slabs probably served as covers for cists, doorways, and hatchways. Raw materials used for the production of these tools are mainly sandstones, with some andesite, diorite, quartzite and rhyolite. Totals and proveniences are tabulated in Appendix 4. ^{metate?}

Figure 7.25: Little House (Site 5MT2191), flaked tools: projectile points. (a) upper fill of Room 3, (b) fill of test trench 3, (c) fill of subsurface Pit 2, surface 2, Occupation/Activity Area 1, (d) upper fill of Room 1 (actual size).

lithic ✓

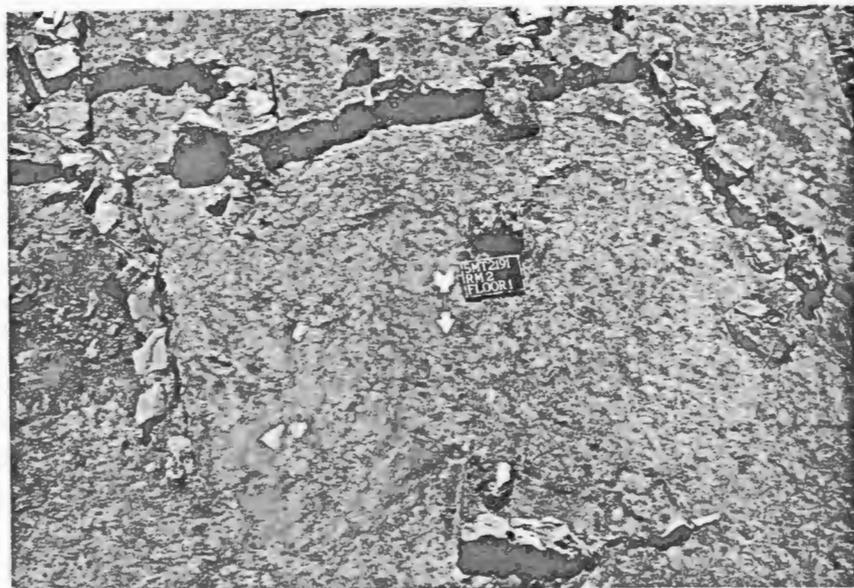


Figure 7.12. Little House (Site 5MT2191), Room 2, view from north.

Figure 7.26: Little House, (Site 5MT2191) flaked
lithic tools. Left: core from fill of
refuse pit, Occupation/Activity Area 2.
Right: core from upper fill, Room 3.

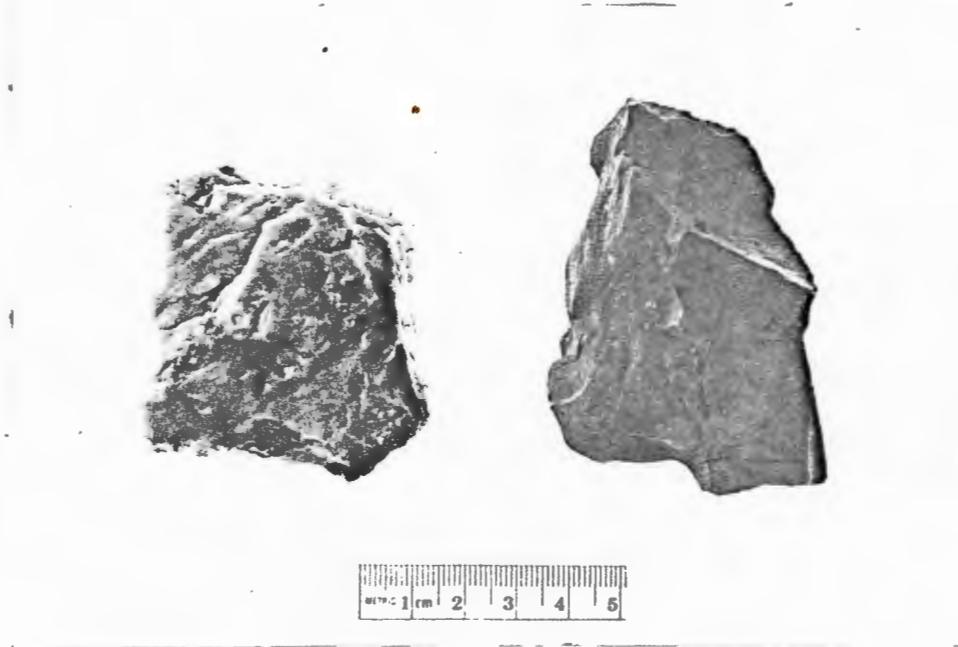


Figure 7.26, Little House (Site 5MT2191), flaked lithic tools.

Figure 7.27: ✓ Little House, (Site 5MT2191), flaked
✓ lithic tools. Left: scraper from
modern surface, 2 m south of roomblock
area. ✓ Right: uniface from fill of
refuse pit, Occupation/Activity Area
2. ✓

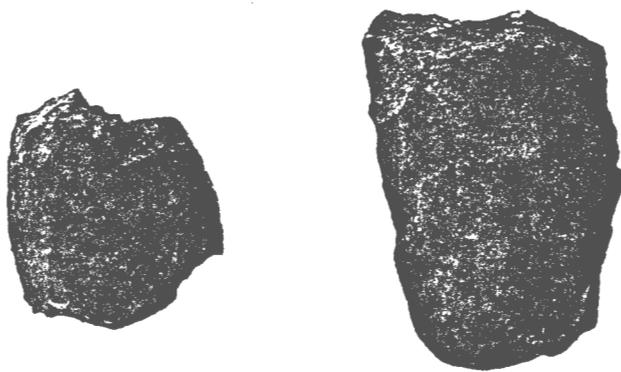
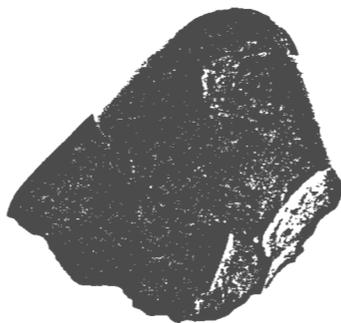


Figure 7.27 ✓ Little House (Site 5MT2191), flaked lithic tools. ✓

✓ Figure 7.28. *g* Little House (Site 5MT2191), flaked lithic tool: *ch* chopper from plow zone stratum, 2 m southeast of roomblock area. ✓✓



1 2 3 4 5

Figure 7.28. Little House (Site 5MT2191), flaked lithic tools.

Figure 7.29: Little House (Site 5MT2191), flaked
lithic tools. Left, center, and right:
unifaces, all from upper fill, Room 3.



1 2 3 4 5

Figure 7.29 ⁹ Little House (Site 5MT2191), flaked lithic tools.



Figure 7.30: Little House (Site 5MT2191), flaked
lithic tool: utilized flake from plow
zone stratum just east of roomblock.

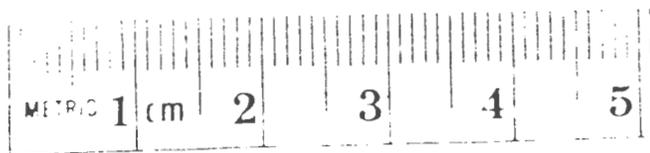


Figure 7.30 ✓ Little House (Site 5MT2191), flaked lithic tools. ✓

Figure 7.31: Little House (Site 5MT2191), flaked
lithic tools: perforator from plow zone
stratum in test square ca. 16 m
southeast of roomblock.

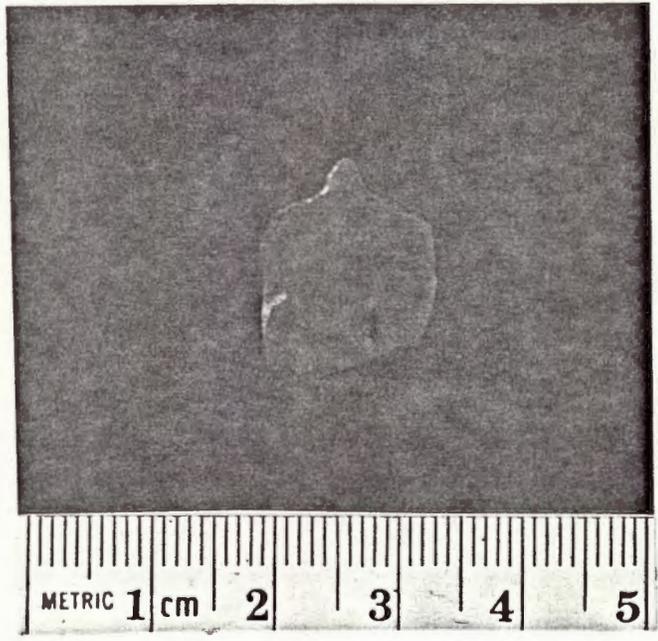


Figure 7.31 *e* Little House (Site 5MT2191), flaked lithic tools. *e* ✓

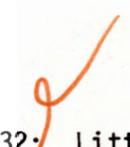


Figure 7.32: Little House (Site 5MT2191), flaked lithic tools: bifaces. Left: from plow zone in test squares 4 m south of Occupation/Activity Area 2. Center: from plow zone stratum, 2 m south of roomblock area. Right: from modern ground surface 3 m south of roomblock.



9
Figure 7.32. Little House (Site 5MT2191), flaked lithic tools.

Figure 7.33: ✓ Little House (Site 5MT2191), flaked lithic tool: core from northeast quadrant, floor of Room 1 (Floor Artifact 2, see Figure 7).

7.8

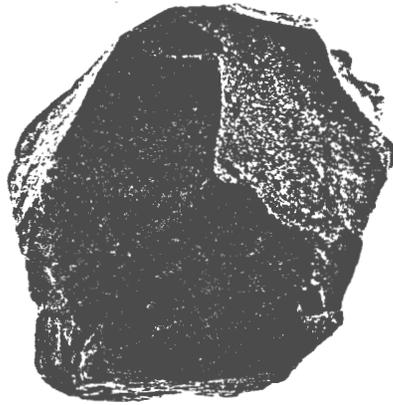
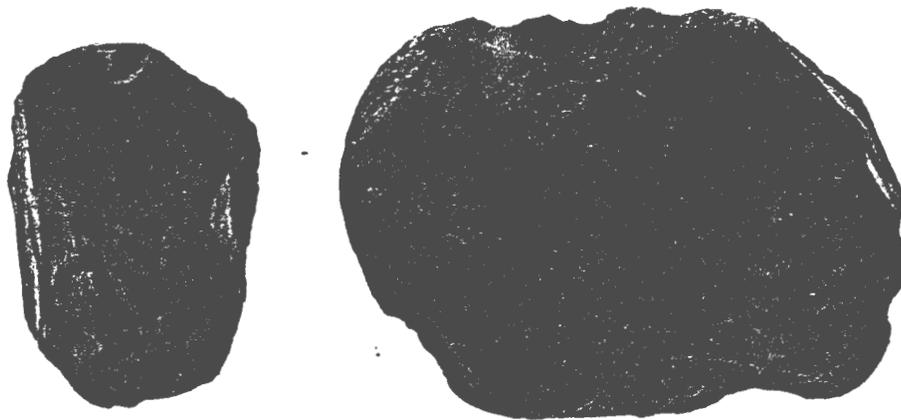


Figure 7.33. Little House (Site 5MT2191), flaked lithic tools.

Figure 7.34: Little House (Site 5MT2191), flaked lithic tools: utilized cores. Left: from plow zone stratum in test square about 2 m south of Occupation/Activity Area 2. Right: from upper fill, Room 3.



1 2 3 4 5

Figure 7.34. ✓ Little House (Site 5MT2191), flaked lithic tools. ✓

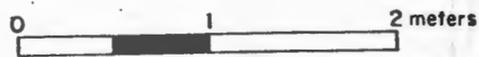
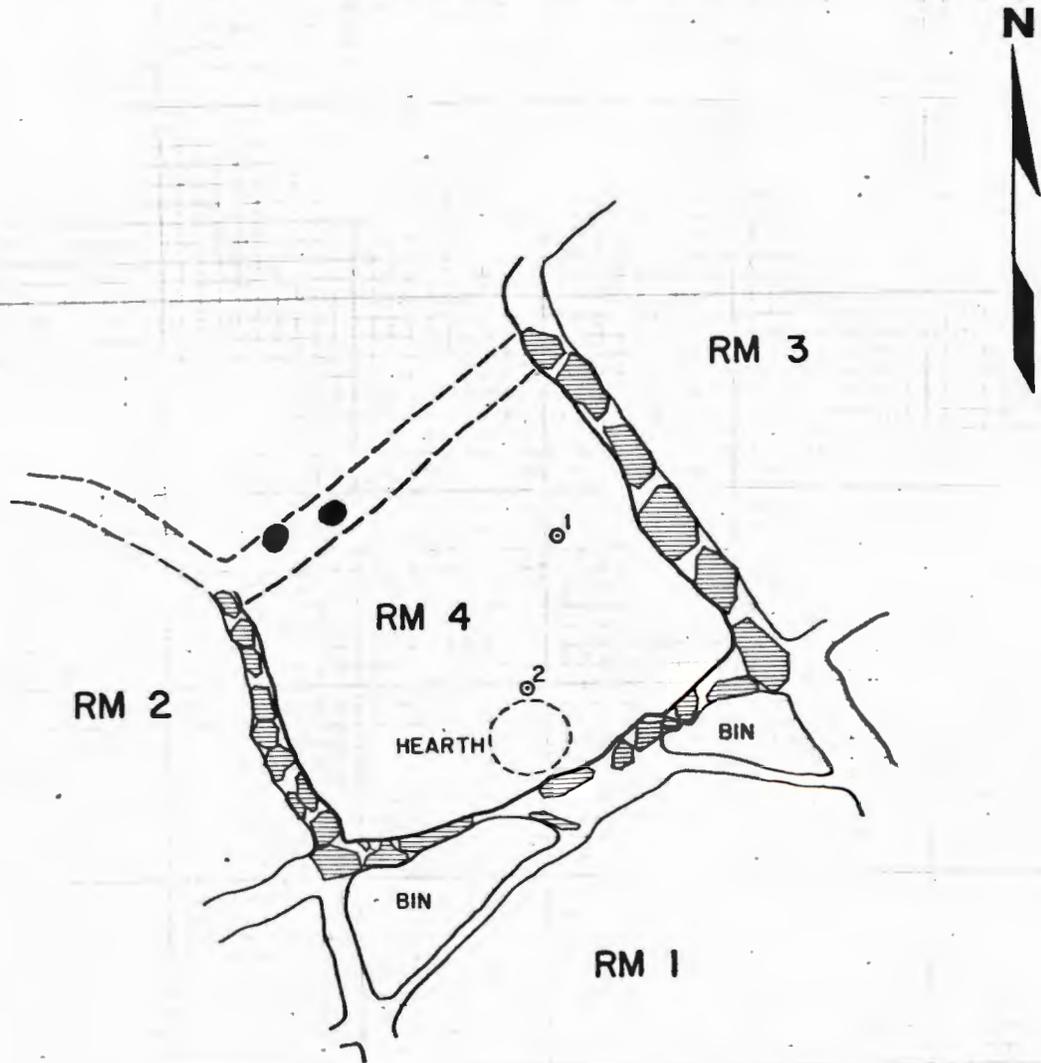
Figure 7.35: Little House (Site 5MT2191), nonflaked
lithic tool: unworked hammerstone from
plow zone stratum above storage cist in
Occupation/Activity Area 2.



Figure 7.35. Little House (Site 5MT2191), nonflaked lithic tools.

5MT2191

PLAN VIEW OF ROOM 4



EXPLANATION	
SANDSTONE	
POSTHOLE	
NONFLAKED LITHIC	

Figure 7.15 Little House (Site 5MT2191), Room 4, plan view.

Figure 7.16: Little House (Site 5MT2191), Room 4,
view from north.

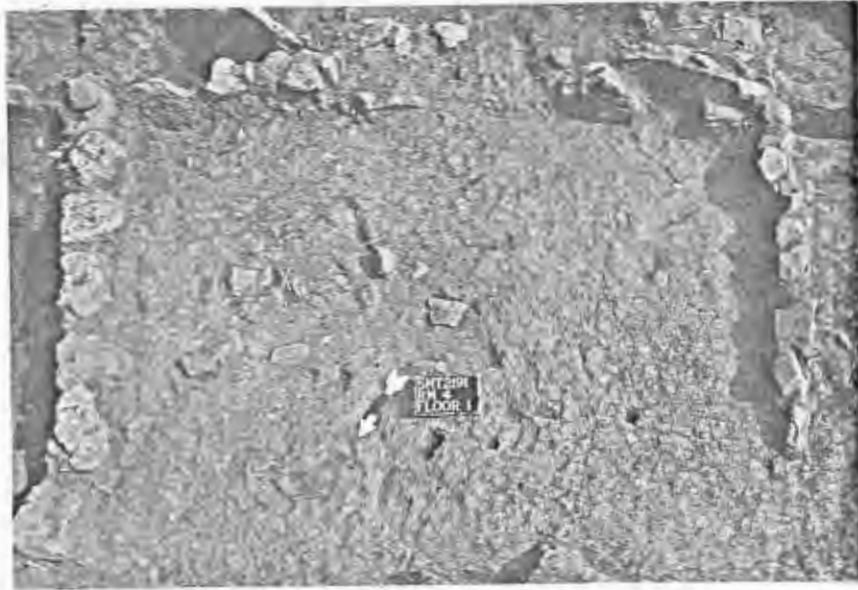


Figure 7.16 ⁹ Little House (Site 5MT2191), Room 4, view from north.

Walls

The existing walls are of crude coursed masonry incorporating unshaped sandstone fragments. The west wall, a common wall with Room 2, is two courses high. The other two walls are a single course high and all walls are one stone thick. Two postholes near the northern limit of the room may be all that remain of the fourth wall which was possibly constructed of wattle and daub.

Floor

The floor of this structure consisted of unprepared use-compacted native soil. This surface is approximately at the same level as the aboriginal ground surface.

Intrusive Hearth

In the fill of Room 4, 10 cm above the floor, was an intrusive hearth. Nearly circular, with vertical walls and a shallow basin-shaped bottom, this feature was unlined and showed no sign of fire reddening or fire hardening. Around the northeast edge of the feature were two fragments of sandstone and a mano fragment. Recovered from the fill of the hearth were fragments of charred corncobs, corn kernels, and a bean. Due to its location in the fill of the room, this feature probably represents a temporary post-main-occupation use of the complex.

Floor artifacts

Two artifacts, both mano fragments, were recovered in situ from the floor of the room (Table 7.3). One was located in the northeast quadrant, the other in the southeast quadrant (Figure 7.15).

Postholes

Two small postholes, each about 20 ^{cm} ~~centimeters~~ in diameter, are located near the northwest limit of the room and might have originally supported poles for a roof or a wattle-and-daub wall (Figure 7.15). ✓

Occupational/Activity Area 1

Dimensions:

Surface 1:

Length (East-west):	ca. 1 m
Width (North-south):	ca. 2 m
Area:	ca. 2 sq m
Depth (modern ground surface to Surface 1):	ca. 23 cm ^{0.23 m}

Surface 2:

Length (East-west):	ca. 3.40 m
Width (North-south):	ca. 3.05 m
Area:	ca. 10.4 sq m
Depth (modern ground surface to Surface 2):	ca. 20 cm ^{0.2 m}

Surface 3:

Length (East-west):	2.0 m
Width (North-south):	3.05 m
Area:	5.8 sq m
Depth (modern ground surface to Surface 3):	ca. 15 cm ^{0.15 m}

Occupation/Activity Area 1 is located adjacent to Room 1 on the west side. The west wall of Room 1 and the south wall of Room 2 served to enclose the north and east sides of the occupation area. The other two sides are open, but are well defined by the limits of hard-packed surfaces. This unit probably functioned as a locus of processing and maintenance activities for the site (Figures 7.17, 7.18, and 7.19).

Orientation

The main axis (northwest-southeast) of the occupation/activity area is 26 degrees west of north.

Figure 7.36: Little House (Site 5MT2191), nonflaked
lithic tools: manos, both from upper
fill, Room 1.

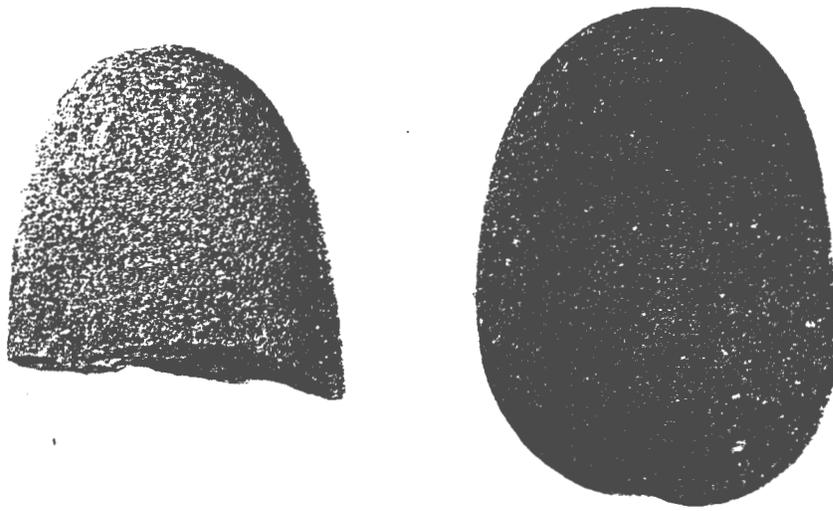


Figure 2 3 4 5

g Figure 7.35. Little House (Site 5MT2191), nonflaked lithic tools. ✓

Figure 7.37: Little House (Site 5MT2191), nonflaked
lithic tool: mano from plow zone stratum
in test square about 2 m south of
Occupation/Activity Area 2.



Figure 7.37 Little House (Site 5MT2191), nonflaked lithic tools.

Figure 7.38: Little House (Site 5MT2191), nonflaked
lithic tools: manos. Left: from plow
zone stratum in test square 2 m southeast
of roomblock area. Right: from fill of
refuse pit, Occupation/Activity Area 2.

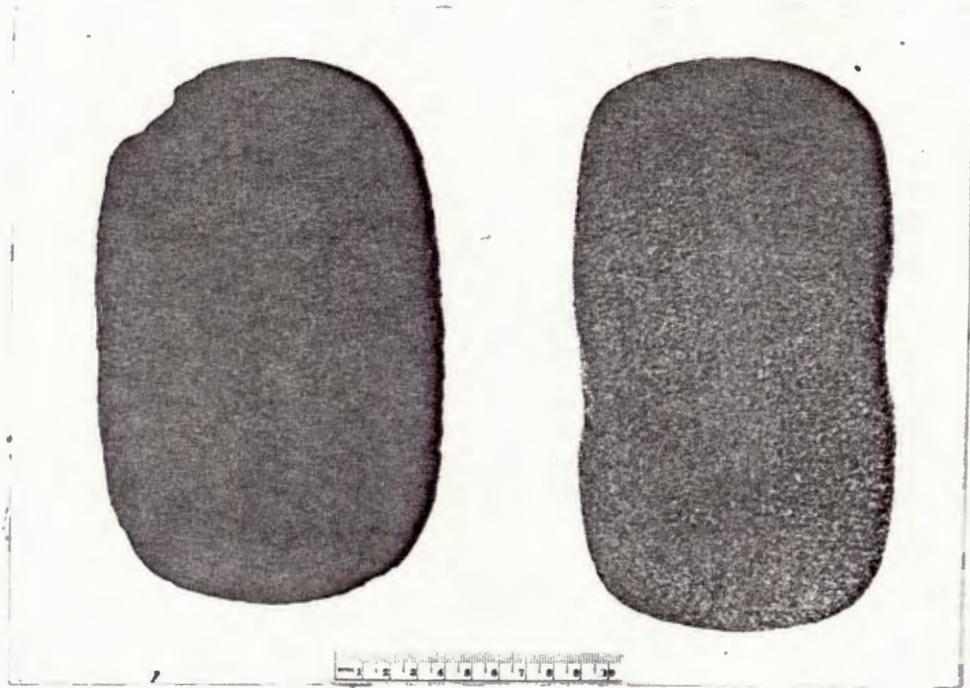


Figure 7.38 ✓ Little House (Site 5MT2191), nonflaked lithic tools. ✓

Figure 7.39: Little House (Site 5MT2191), nonflaked
lithic tool: slab metate from upper
fill, Room 1.

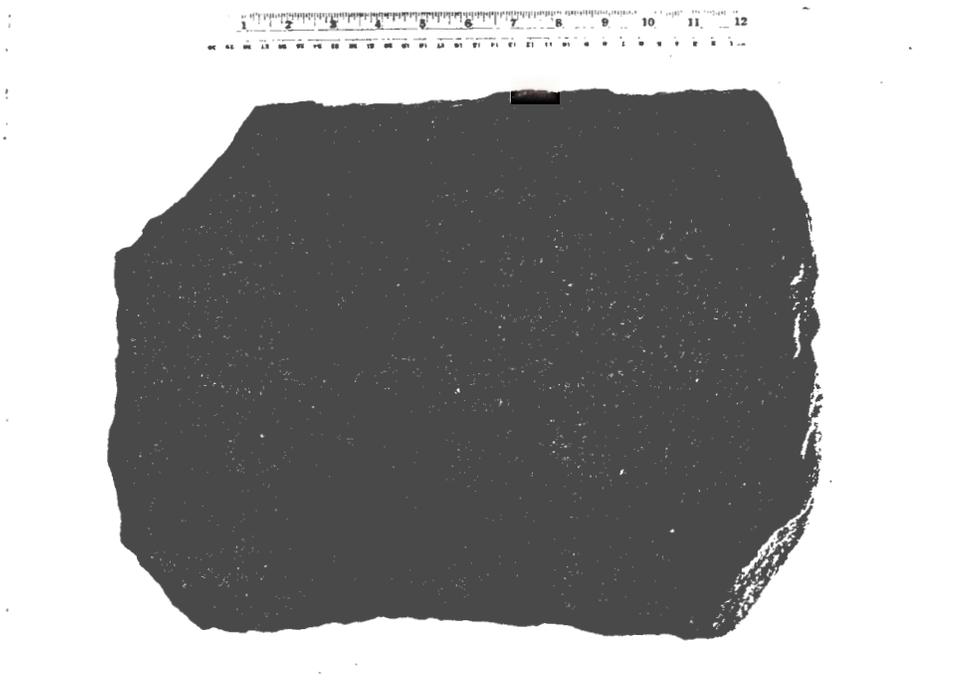


Figure 7.39. Little House (Site 5MT2191), nonflaked lithic tools.



Figure 7.40: Little House (Site 5MT2191), nonflaked
lithic tool: trough metate from Surface
1, Room 1 (white line equals 10 cm).

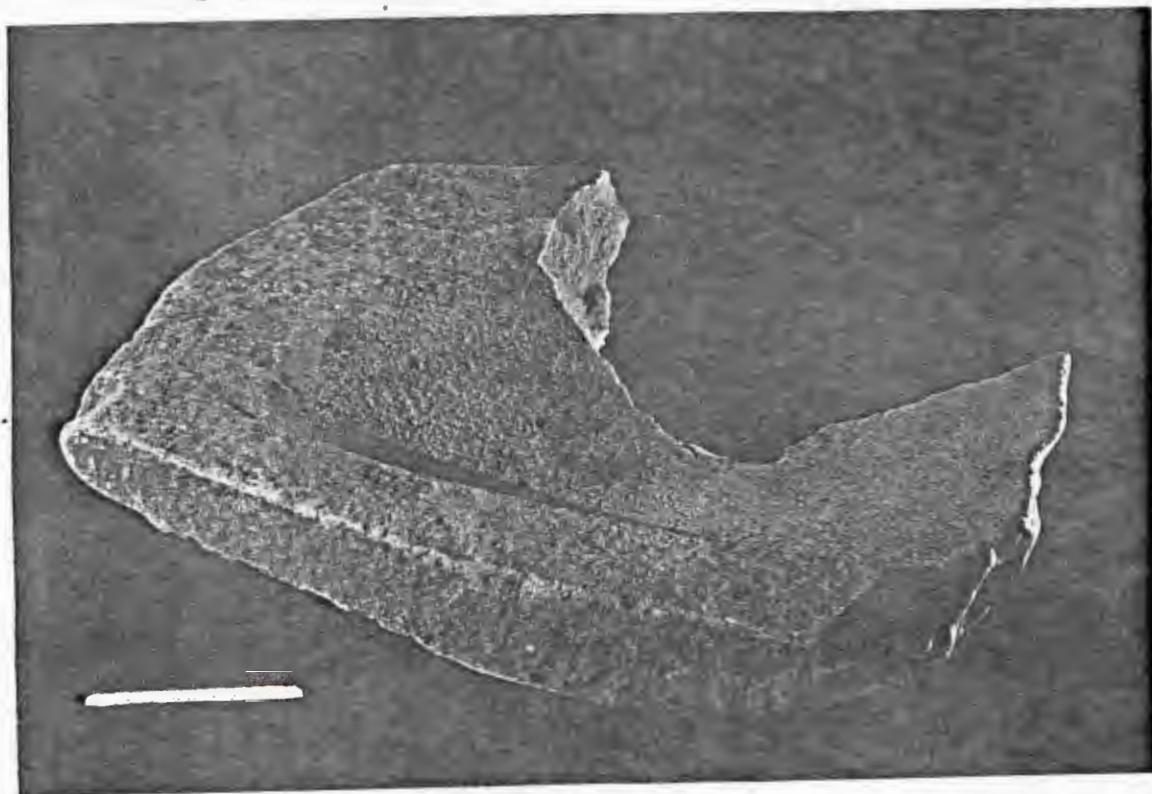


Figure 7.40 ✓ Little House (Site 5MT2191), nonflaked lithic tools. ✓ ✓

DATING SAMPLES

The variety and number of dating samples recovered during the excavations at Little House were inadequate to derive absolute dates for occupation of the site. Besides datable ceramic fragments, other dating materials recovered from the site were three radiocarbon samples and two archaeomagnetic samples (Appendix 2). Due to poor preservation, no dendrochronological samples were obtainable. Table 7.8 presents the provenience and results for all dating samples taken at the site.

Table 7.8 Little House (Site 5MT2191), C-14 and Archaeomagnetic Sample Provenience and Results

Sample Type	Sample # D.A.P.	Sample # Beta	Provenience	Sample Date	Comments
C-14	1	----	Test Trench 1 Level 1 0-03 cm	-----	Sample was not run.
C-14	2	----	Room 1 Level 1 (Upper Fill)	-----	Sample was not run.
C-14	3	Beta-1932	2x2 016-012 Surface 1 Slab lined Cist Oc./Act.Ar. 2**	AD 1130 + 70	Sample was created from vegetal material
AM*	1	----	2x2 014-012 Surface 1 Fireplace Oc./Act.Ar 2**	AD 1130 = 60	Of the 12 specimens collected from the fireplace 6
AM*	2	----	Room 1 Surface 1, Hearth, Room 1	-----	Directions for this sample were to scattered; thus no date was attempted

AM* - Archaeomagnetic sample

PRELIMINARY INTERPRETATIONS

Chronology

Based on ceramic and architectural remains, the occupation of Little House can be placed between AD 800 and AD 875, or in the Early McPhee Phase (Pueblo I). The ceramic assemblage lends the strongest support to this chronological placement. The recovered collection includes Piedra Black-on-white and Moccasin Gray Wares which, according to Breternitz et al. [10], were manufactured between AD 750 and AD 900. The presence of Moccasin Gray Ware in the collection implies the site was occupied after the appearance of this type in Anasazi ceramic inventories; this appearance date is cited as AD 775 by Breternitz et al. [10]. The collection also lacks Mancos Gray and Cortez Black-on-white wares, indicating that the site was occupied prior to AD 875 - 900.

Other evidence used to place Little House in a relative time frame is the architectural style manifested at the site. The rooms at this site apparently consisted of jacal walls with a stone base, a construction technique which appears to be more substantial than that used at Dos Casas Hamlet (AD 750 - 780) and less formal than McPhee Pueblo Village (AD 875 - 950).

The fact that this site appears to be a field house also helps to place the occupation at Little House in the ninth century AD, since field houses are thought to have been added to the Anasazi site set about AD 800 - 825, when the population became centralized in villages like McPhee.

Based on the available evidence, the length of occupation at Little House was probably less than a single generation, perhaps thirty years.

There was no substantial architectural remodeling at the site; the various surfaces within Occupation/Activity Area 1 probably represent relatively short periods of use, and there is no apparent change in the material culture. Thus only one element is represented at Little House.

✓ The only datable archeomagnetic sample obtained from this site came from the ^{hearth} fireplace in Occupation/Activity Area 2 and yielded a date of 1130 ± 60 years (Appendix 2). This may suggest that ^{the} last use of this outlying area was not associated with the occupation of the main structure at the site. ✓ ✓ ✓

Adaptation and Economic Activities

Little House represents a seasonal locus probably used by a household or subhousehold group which resided permanently at a nearby village. Local McPhee Phase communities are assumed to have practiced a Formative Stage pattern of subsistence and adaptation; this involved primary reliance on cultivation of vegetable foodstuffs combined with a lesser emphasis on raising of domestic animals (the dog and turkey) and hunting and gathering of nondomesticated food items. Little House is believed to have served as a field house, or agricultural station in the local community cluster; that is, a location where a household or subhousehold group residing permanently at a nearby village centered its activities during the growing season. Thus the site is viewed as a vital component in the local Formative settlement-subsistence system, a locus closely linked to primary subsistence (agricultural) activities. The vegetal remains recovered from the site include the common Anasazi cultigens, corn, beans and squash, and also wild resources, specifically yucca fruits and juniper berries. Sagebrush was apparently used as fuel in many of the ^{hearths} firepits. ✓

A consideration of the total faunal collection suggests that several animal species were used at the site and perhaps collected in the vicinity. These include cottontail rabbit (although remains of this species may be due to postabandonment burrow intrusions into site strata), dog (perhaps representing a domestic individual kept at the site), sage grouse, and raven.

A number of economic and domestic activities can be inferred to have been performed at the site, based on architectural and artifactual analysis, provenience information, and associations. To describe these activities, the site has been divided into three "use areas" (areas which apparently served as loci for broadly similar activities). Individual activities are described below according to the defined use areas.

Use Area 1

The area is seen as a center for domestic maintenance, tool storage and secondary processing activities; spatially, it includes Room 1 and Occupation/Activity Area 1. Room 1 is thought to be a living room because of the hearth and because the surfaces and walls are more substantial than those of Rooms 2-4. Domestic activities such as sleeping, cooking, and eating are inferred to have been centered in Room 1. Secondary processing (milling) of seeds and grains was apparently also centered in Room 1, as more than one-half of the total of metate and metate fragments recovered from the site were from proveniences in Room 1. These included one specimen apparently left by the prehistoric inhabitants propped against the front (south) wall. Several flaked lithic tools, a core, and a slab metate found in situ on the floor of Room 1, may represent maintenance of the tools used in everyday activities at the site and perhaps nonintensive manufacture of needed

tools as well. The bins located in the northwest and northeast corners of the room are believed to have functioned as storage areas for tools; a mano was recovered in situ from the northwest bin.

Occupation/Activity Area 1, adjacent to Room 1 on the west side, is inferred to have functioned as an adjunct to Room 1. Evidence that some processing, probably of foodstuffs, was being performed in the area is provided by the recovery of a maize cob and kernels and five manos (from internal collecting proveniences). The assemblage of bone tools (an awl, a weaving tool, and one indeterminant specimen, Figure 7.23) may indicate that repair of clothing, netting, or other workable material was performed in Occupation/Activity Area 1. The bin and pits in the area probably represent storage facilities; three manos were recovered from the bin in the northeast corner.

Use Area 2

The three smaller back rooms of the houseblock make up Use Area 2. This complex of structures provided storage of foodstuffs prior to and subsequent to mealing, parching, and other processing activities. The small size of these rooms in comparison to Room 1 and their lack of hearths, tools, and other utilitarian items, lead to this functional assessment. ✓

Use Area 3

Use Area 3 is composed of the storage cist, ~~fireplace~~ ^{hearth,} and refuse pit in Occupation/Activity Area 2. Complementary activities of processing, storage, and discard may have been performed in this portion of the site. Based on the provenience and type of vegetal remains recovered from this area, it is projected that the hearth was used for the parching, boiling, or other heat treatment of these foods which were then stored in bulk in ✓

Use Area 2. The slab-lined storage cist adjacent to the hearth may have been used for temporary storage before processing. Accidental charring of some of these products probably was commonplace and the unusable portion discarded in the refuse pit along with broken vessels, worn out tools, and other trash. At some indeterminable point in the history of the site, the storage cist ceased to function as a cache and was subsequently used as a repository for discarded materials.

Having identified the activities that took place in various areas within the site, a reconstruction of the probable vegetal material flow through Little House is presented in Figure 7.41.

In late summer and early fall, members of one of the households of either ~~McPhee~~ ^{Butts Village} or ^{Hamlet} Crestview Village moved to Little House to harvest wild grains, seeds, and fruits, as well as the corn, beans, and squash growing in their fields. The exact source locations of the wild food stuffs cannot be determined but they were undoubtedly growing fairly close to the site. Similarly, the exact location of agricultural plots has not been identified; however, Witt loam soil, suitable for farming, is found in the immediate site vicinity and ^{with} in a radius of several kilometers surrounding the site.

Once these wild and domestic foods had been collected they were stored in Use Area 2 until they could be processed. When time allowed, or perhaps as an ongoing process, these goods may have been transported to either Use Area 1 to be ground into meal, or to Use Area 3 where they were parched or boiled to prepare them for winter storage. These processing tasks, as well as day-to-day subsistence operations, would naturally result in a certain amount of waste material which was discarded in Use Area 3 and possibly also in the southern portion of the site, where diffuse sheet trash occurs.

(too many lines?)

9
Figure 7.41: Little House (Site 5MT2191), Model of
Vegetal Material Flow.

5MT2191

MODEL OF VEGETAL MATERIAL FLOW

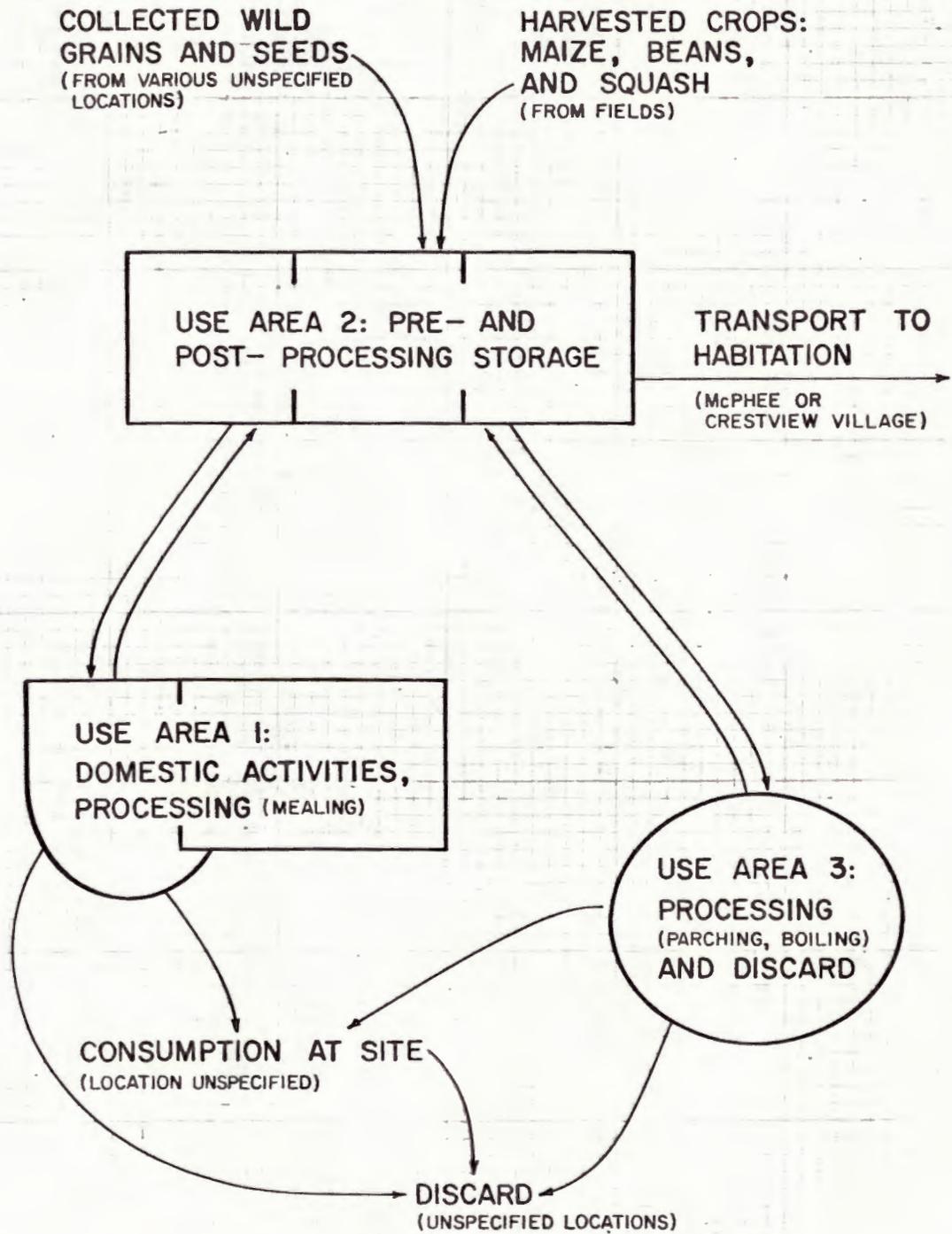


Figure 7.41 Little House (Site 5MT2191), Model of Vegetal Material Flow,

Once the grains and seeds were processed they were returned to Use Area 2 for temporary storage until they could be transported back to the permanent habitation.

Although there is little supportive material evidence it is likely that Little House was also used during the planting and maintenance stages of the agricultural season. Whether the site was visited off and on during the season or whether certain individuals remained at Little House for the duration of the growing cycle is not clear, but certainly the site would have been used by those individuals involved in activities such as planting, cultivating, and weeding the nearby crops.

Paleodemography

It is hypothesized that Little House was seasonally inhabited by members of a household unit belonging to either the McPhee or Crestview Village Community. Both Birkedal [11] and Flannery [12:23] indicate that households during the American Formative stage consisted of the nuclear family. This social unit can be described as the parent pair, their children and perhaps a few close relatives; thus the unit could vary between two to three individuals at the minimum and eight to ten individuals maximum, or an average of five to six persons.

However, it is not known if the entire household group would have used the seasonally occupied field house. Using Narroll's [13] estimate of population size based on available habitation area, it is estimated that Room 1, which has a total floor area of 8.51 sq m, could only be comfortably occupied by one person. However, this does not allow for the possible use of the storage rooms as sleeping areas when they were

empty, i.e., during the planting season, nor does it allow for the fact that Little House was occupied during that part of the year that is favorable toward outside sleeping, cooking and eating areas. Therefore a roofed structure such as Room 1 would not always be necessary for domestic purposes, and perhaps the entire household unit could occupy the field house whenever it was in use. On the other hand it may be that only certain members of the household unit visited and carried out the activities at the field house, in which case the available roofed living space would have been adequate.

Social Activities

It can reasonably be assumed from artifactual and architectural remains that activities at Little House were primarily focused on storage and processing, and on any social functions directly related to these operations. Activity sets performed by the household unit at the site include domestic types and processing of the harvest of and collected wild plants. Other extra-site activities were also probably performed by this unit, some of which may have necessitated intergroup cooperation (clearing, tilling, and the actual harvest process), and others that did not (hunting and collecting, weeding, and discouragement of predators and pests). In short, the site played a significant, specialized role in the food production chain. There is no perceptible evidence to indicate that any religious or ceremonial activities occurred at the site; corn pollen could be present due to sprinkling prior to planting (a perfunctory ceremonial activity) or to accidental deposition during harvest.

No inferences pertaining to status, to political organization, or to the presence of extra household social groups can be made based on available data.

Trade

Although there are no articles in the cultural inventory that would indicate that the temporary occupants of Little House were involved in a trading system with cultural groups outside of the local community, this does not mean that such trading did not occur. Tradeware items would probably have had a certain amount of value and would be left at the permanent habitation rather than transported to the field house. However, Pillis [14] has indicated that such is not the case at Sinagua field houses where trade items do occur, but in smaller quantities than would normally be found at permanent habitations.

The extent of trade and mutual cooperation between the inhabitants of Little House and others of the community cannot be estimated based on the evidence available at Little House.

Cultural Process

Based on the amount of material remains and on the lack of major remodeling episodes, it is believed that Little House was occupied on a seasonal basis for no more than 25-30 years. It would be expected that during this short time period there would not be any significant internal cultural change, and this expectation is realized in the material remains at the site. Clearly only a single element is represented at the site and the tools and ceramics and other material culture remain homogeneous in style and function.

On a broader scale, Little House documents the change from dispersed hamlets (Sagehen Phase) to centralized villages in cooperative peripheral field houses, reflecting not only a change in the settlement pattern, but also a change in social structure.

SUMMARY

In summary, it can be concluded that Site 5MT2191 was a field house used during the agricultural growing and harvest season by members of a local community. Little House was used as a seasonal structure for a brief period and then it fell into disuse for unknown reasons. Perhaps the soils in the site vicinity had become depleted with continual use and new field locations were necessary. Future excavations in the Sagehen Flats Locality will help to further elucidate the role of the field house for prehistoric inhabitants living in centralized communities during the McPhee Phase.

APPENDIX 1
POLLEN REPORT FOR SITE 5MT2191
by
Linda Scott

Pollen Samples were collected at various sites to obtain information concerning the prehistoric environment and potential economic resources used by the prehistoric peoples. Discussion of the methodology involved and inter-site ² ~~9~~ comparisons are presented in the Pollen Administrative Report (Scott [15]). Not all the pollen recovered is discussed in detail in that report, but mention is made of the various types and the entire pollen record is graphically represented.

The pollen samples from Little House (Site 5MT2191) were taken in a roomblock and ² use areas at this site (Table 7.9).

Pollen Sample 3 was taken from Occupation/Activity Area 1, contiguous to the roomblock, against a west-facing wall. This sample did not yield sufficient pollen for analysis.

Pollen Sample 7 was taken from the floor in Room 2. This sample yielded a very small amount of arboreal pollen (6 percent). Aside from the 2 percent Zea pollen noted in this sample, there is no indication of economic pollen. All other pollen types within this sample can be attributed to background or ambient pollen.

Pollen Sample 25 was taken from the bottom of a pit in Room 3 and contains 23 percent arboreal pollen. There are no indications of economic pollen from Sample 25; all pollen types present can be attributed to background or ambient pollen.

Pollen Sample 2 was taken from the northeast quadrant of ^{Surface} Floor 1, Room 1, while Sample 22 was taken from the southeast quadrant of ^{Surface} Floor 1 in Room 1. The pollen contents of these ² samples are very similar and apparently represent ambient or background pollen. A small amount of Cleome (3 percent) was noted in Sample 20, but no other economic pollen

Table 7.9. Little House (Site 5MT2191), Provenience of Pollen Samples

POLLEN SAMPLE #	FS #	SURFACE STRUCTURE #	PROVENIENCE AND COMMENTS
3	66	Oc./Act.Ar.2*	SE quarter ^{of?} NE quarter, against W facing wall, no pollen
7	95	Room 2	Floor 1, SE quad, floor contact <i>Surface</i>
20	85	Room 1	Floor 1, NE quad, floor contact <i>Surface</i>
22	84	Room 1	Floor , SE quad, floor contact <i>Surface</i>
25	122	Room 3	Bottom of pit
27	125	Room 1	Floor 1, hearth, no pollen <i>Surface</i>
28	136	Isolated firepit hearth	SQ 018,022 ✓
32	127	Oc./Act.Ar.2*	Bottom of fill, large trash pit, no pollen
33	141	Oc./Act.Ar.2*	Stone-lined fireplace ^{hearth} , SQ 014-012, no pollen
34	142	Oc./Act.Ar.2*	Bottom of fill, Oc./Act.Ar.2* oval-shaped, stone-lined, storage cist, no pollen
37	142	Oc./Act.Ar.2*	Bottom of fill, Oc./Act.Ar.2*, oval-shaped, stone-lined, storage cist

* Oc./Act.Ar. 2 = Occupation/Activity Area 2.

types were noted in either sample. The presence of Cleome pollen does suggest that Cleome was utilized in Room 1. Another sample, Pollen Sample 27, was also taken from the hearth on ~~Floor~~^{Surface} 1 in Room 1, but it did not yield sufficient pollen for analysis. ✓

An isolated ~~firepit~~^{hearth} located approximately 8 ~~meters~~^{feet} southeast of Occupation/Activity Area 2 was sampled for its pollen content (Sample 28). This ~~firepit~~^{hearth} contained 14 percent arboreal pollen. With the exception of the Zea, Sphaeralcea, and Cleome noted within Sample 28, most of the pollen is attributed to ambient or background types. It is probable that the Cleome and Zea pollen observed in this sample may be accounted for by the cooking of food in this ~~firepit~~^{hearth} or food preparation near the ~~firepit~~^{hearth}. ✓

Pollen Samples 32 and 33 were taken from the bottom of the fill of a large trash pit and from a stone-lined ~~firepit~~^{hearth}, both in Occupation/Activity Area 2; neither of these samples contained sufficient pollen for analysis. ✓

Pollen Samples 34 and 37 were taken from the bottom of the fill in the stone-lined storage cist^{*} in Occupation/Activity Area 2. Sample 34 did not contain sufficient pollen for analysis, but Sample 37 did. This storage cist contains very little economic pollen. It is difficult to ascertain whether the 4 percent Cleome pollen might have been due to the storage of Cleome within this cist or to ambient pollen which may have been present in the dirt which filled the cist. All other pollen in this sample may be attributed to the accumulation of ambient pollen. ✓

Elements of the prehistoric environment at this site represented in the pollen record include: Juniperus, Pinus, Quercus, short-spined Compositae, Artemisia, high-spined Compositae, Chenopods, Sarcobatus, Cleome, Lepidium, Ephedra nevadensis-type, Ephedra torreyana-type, ✓

Eriogonum, Graminae, Polygonum sawatchensis, and Sphaeralcea. Zea was the only cultigen noted in the pollen record. Most of these samples appear to be composed primarily of ambient pollen, with very little evidence of economic pollen. Cleome pollen was noted in Room 1, the isolated ~~firepit~~^{hearth}, and the bottom of a stone-lined storage cist in Occupation/Activity Area 2. This pollen evidence suggests that Cleome was probably cooked and stored at this site. Cleome leaves could have been boiled down into a paste, then made into cakes, and allowed to dry (Robbins et al. [16]) before being stored for future use. Zea pollen was also noted in Room 2 and in the isolated ~~firepit~~^{hearth} sample. If this site was a seasonal field house (Kane [17]), the Zea pollen indicates the possible field preparation and storage of corn as it was brought in from the fields.

APPENDIX 2

Archaeomagnetic Results, Site 5MT2191

by

J. Holly Hathaway and Jeffery Eighmy

INTRODUCTION

Archaeomagnetic dating is a relatively recent chronometric method which has important implications for the archaeologist. Utilization of this method will not only refine estimates of ancient chronology, but will enable archaeologists to assign dates in the absence of other dating methods (e.g., dendrochronology or C-14). Care should be taken, however, in reporting results because, in a young science, methodology needs thorough discussion. Archaeomagnetic methods are continually being refined in an attempt to increase the variety of datable features, to tighten temporal control, and to further understand the nature of magnetic change. For a more complete discussion of laboratory and field methods see Hathaway and Eighmy [18].

FIELD SAMPLING AND METHODS

Two samples were collected on Site 5MT2191 during the 1978 field season. The site is located at latitude 37.56 N and longitude 251.48 E in the Sagehen Flats area of the Dolores Archaeological Program. The site probably functioned as a field house during the Early McPhee Phase (AD 850 to AD 970).

Sample ~~one~~¹ was collected beneath a slab-lined fireplace located at the site's southern perimeter in Occupation/Activity Area 2. Sample ~~two~~² was collected from a hearth in Room 1, located in the main roomblock. These were the only areas judged suitable for archaeomagnetic collection.

Twelve specimens were collected for each of the samples. Each specimen (an estimated volume of 3.4 ~~cubic centimeters~~^{cu. cm}) was encased in a 1-in plaster cube (15.6 cc). The orientation of each specimen was maintained by leveling the cube and measuring the magnetic declination of one cube side. To control for the current local magnetic declination the North Star was sighted on 5 September 1978. The average observed magnetic declination was 13.5 degrees, one-half degree different than the U.S.G.S. 1965 geological map, and in substantial agreement with expected values calculated from the National Oceanic and Atmospheric Administration map "Magnetic Declination in the United States-Epoch 1975.0.0".

RESULTS

Results from samples 1 and 2 are recorded in Table 7.10. The individual magnetic directions are plotted in Figure 7.42 for Sample 1. Sample 2 was too scattered and was not plotted. In Sample 1, six outliers ~~are~~ identified. It is recognized that this is an uncomfortably large percentage of the collected specimens. Outliers were identified/defined in the following manner. The sample was re-run with relatively extreme specimens excluded, and a new mean and the angular standard deviation were calculated. The excluded specimens were defined as outliers of the new (smaller) sample if they fell beyond two standard deviations ^{from the mean}. It is felt that there is a strong possibility that these "outliers" are not part of the same population and that the new sample is a better representation of the true direction created by the ancient firing.

Three tests were used to determine sample reliability. Alpha 95 is defined as the radius of a circle centered on the observed mean direction within which the true mean will fall 95 percent of the time. Small values indicated tighter clustering about the mean. The precision parameter is estimated by Fisherian statistics, and values increase geometrically with internal consistency. The mean sample vector indicates internal consistency as the value approaches the number of specimens used for determination of the mean. Error along the great circle and perpendicular to the great circle are functions of the alpha 95 which has an oval distribution when plotted, with a short axis (EP) which runs along the great circle between the collecting site and paleopole. The long axis is perpendicular to the short axis; both are centered on the paleopole.

Table 7.10. Little House (Site 5MT2191), Archaeomagnetic Sampling Results

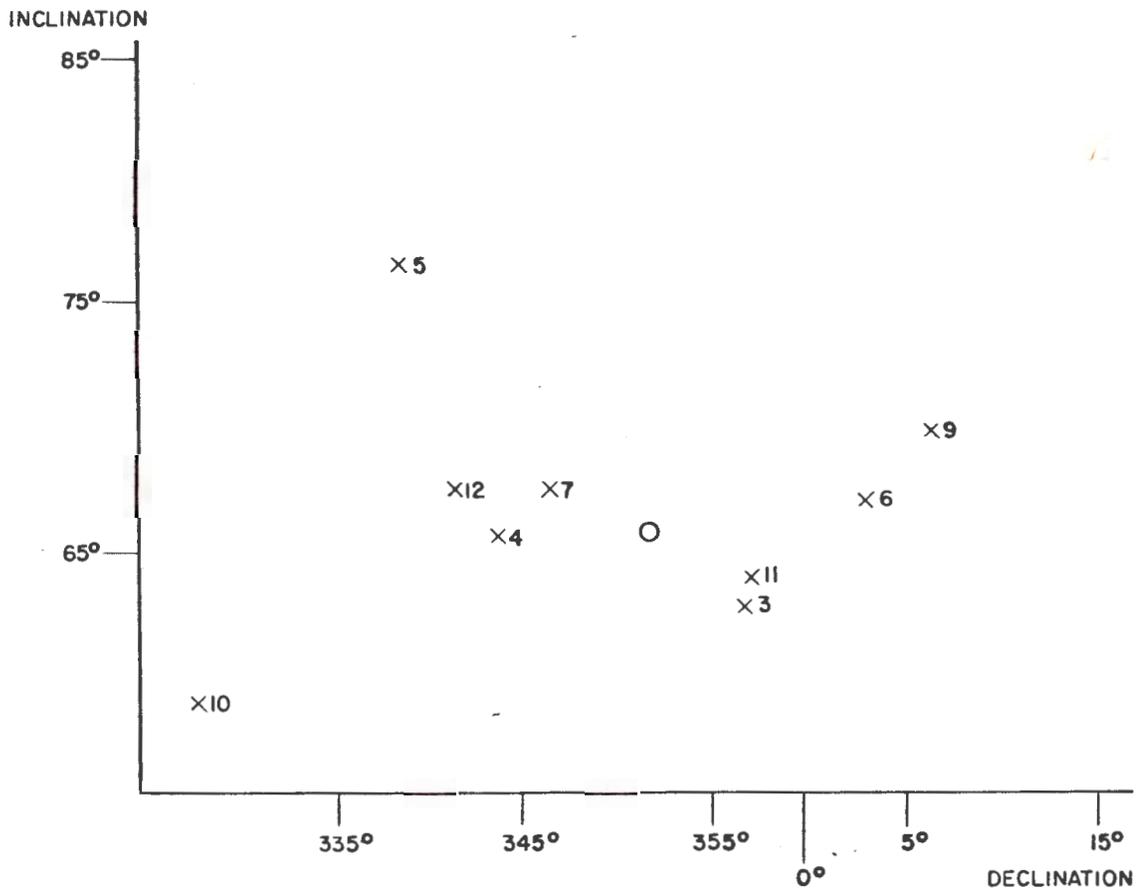
Archaeomagnetic Designation	Sample 5MT2191-1	Sample 5MT2191-2
Feature and Provenience	Hearth Fireplace Occupation/Activity Area 2	Hearth Room 1, Floor 1
Specimens used in final analysis/total collected	6/12	12/12
Degauss level	150 Oersted	150 Oersted
Mean Inclination	65.23	62.58
Mean Declination	352.07	352.38
Mean Intensity	.172196x10 ⁻⁴	.873629x10 ⁻⁴
Mean Sample Vector	5.99	11.22
Precision Parameter (k)	402.15	14.19
Alpha 95	3.35	11.94
Paleolatitude	78.65 N	81.40 N
Paleolongitude	223.08 E	68.81 E
Error along great circle (EP)	4.38	14.59
Error perpendicular to great circle (EM)	5.41	18.66



Figure 7.42: Little House (Site 5MT2191), archaeo-
magnetic specimen plots, Sample 1.

5MT2191

ARCHAEOMAGNETIC SPECIMEN PLOTS SAMPLE 1



O indicates the mean direction of the sample as determined from Specimens 3, 4, 6, 7, 11, and 12. All other specimens fall outside two standard deviations of the mean value and were defined as outliers. Specimens 1, 2, and 8 fall outside the plotting surface.

Figure 7.42. Little House (Site 5MT2191), archaeomagnetic specimen plots, Sample 1.

The demagnetized and cleaned results of Sample 1 were then plotted on the Southwest master curve (Figure 7.43). The sample appears to fall near the AD 1130 segment of the curve with a relatively large error range (± 60 years). Little scatter produces smaller error ranges. When plotted, this error has an oval distribution with a short axis (EP) which runs along the great circle between the collecting site and the paleopole. The long axis is perpendicular to the short axis; both are centered on the paleopole. This range represents the area within which the true pole is likely to fall 95 percent of the time.



Figure 7.43: Little House (Site 5MT2191), Southwest master curve.

APPENDIX 3
Ceramic Appendix
by

William Lucius and Eric Blinman

✓ Preliminary (inventory) analysis of the ceramic artifacts from site ✓
5MT2191 was carried out by members of the D.A.P. additive analysis ✓
laboratory subsequent to the field operations. Descriptions of the ✓
preliminary analysis procedures and structure, and resulting data ✓
interpretability are available in Lucius [22]. Familiarity with the ✓
inventory analysis program will aid in the understanding of the data and ✓
✓ interpretations provided below. ✓

✓ Table 7.11 is a summary of ceramic frequencies for the site as a ✓
✓ whole^e (ceramics collected during the 1972 inventory survey were not ✓
available for analysis and are not included). Sherds are grouped by ✓
"culture categories and wares" (Lindsay et al. [23]). All sherds from ✓
5MT2191 were assigned to wares of the Mesa Verde Culture Category and ✓
reflect a local (Mesa Verde region) manufacturing tradition and exchange ✓
system. Pottery types within each ware are listed ^esequentially from ✓
early to late, and grouped types (e.g., Early Pueblo Gray) are listed ✓
last and include sherds not assignable to specific types (e.g., gray ware ✓
body sherds). ✓

Five partially or wholly reconstructable ceramic vessels were found
at 5MT2191, and their counts and weights are excluded from Table 7.11.
✓ All vessels were recovered from fill or plowzone [#]proveniences and were ✓
broken and scattered prior to recovery by the excavation program. They ✓
include portions of two different Moccasin Gray jars (vessels 4 and 5) as ✓
well as the body of a jar that could not be classified ^eto type (vessels ✓
1). Two bowls (vessels 2 and 3) were also found, one Chapin ✓
Black-on-white and one Piedra Black-on-white. ✓
? ✓
? ✓

Table 7.11. Summary of Descriptive Frequencies of Ceramics at Site 5MT2191.

WARE TRADITIONAL TYPE	BY COUNT												WEIGHTS	
	BOWL		JAR		OTHER		TOTAL		RIMS		MODIFIED			
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Mesa Verde Gray														
Chapin Gray			57	3	2	67	59	3	59	42			436	4
Moccasin Gray			157	9			157	8	39	28			1052	11
Early Pueblo			1336	81			1336	70					6845	69
Mesa Verde White														
Chapin B/W	15	6					15	1	4	3	1	100	90	1
Piedra B/W	3	1	11	1			14	1	3	2			71	1
Early Pueblo	156	62	25	2			181	9	20	14			866	9
Mesa Verde Red														
Bluff B/R	6	2					6	<1	1	1			40	<1
Early Pueblo	46	18	41	2	1	33	88	5	13	9			330	3
Late Pueblo	24	10	26	2			50	3	2	1			184	2
Indeterminate Gray														
Gray			2	<1			2	<1					5	<1
Indeterminate W														
White	1	<1					1	<1					1	<1
Total	251		1655		3		1909		141		1		9920	

Relative weights of temporally diagnostic types have been extracted from Table 7.11 and are presented graphically in Figure 7.44. Each type is expressed as a percentage of its ware total (excluding sherds not identifiable to type and excluding sherds from reconstructable vessels). The relative contribution of each ware to the classifiable site total is listed on the left. Temporal spans for the diagnostic types are based on Breternitz, Rohr, and Morris [10] with some adjustments based on dating results from within the D.A.P. This figure illustrates the intensity of occupation as well as the temporal range of occupation, and it can be compared with similar figures prepared for other D.A.P. sites. ✓

A conservative estimate of the range of occupation at the site is from AD 750 to 875. This is based on the presence of Chapin Black-on-white and the absence of Mancos Gray (found on Project area sites as early as AD 850 but not common until about AD 875). However, the presence of Bluff Black-on-red, several slipped red ware sherds (Late Pueblo Red), and the abundance of Moccasin Gray suggest that the primary occupation of 5MT2191 occurred between AD 800 and 875. This places occupation of the site contemporaneous with sites assigned to the early McPhee phase as outlined by D.A.P. ✓
✓
✓

No ceramics were recovered that reflect nonlocal origin (outside of the Mesa Verde region). Crushed igneous rock temper was present in 95 percent of the sherds, and the remaining 5 percent were tempered with a multilithic sand (percentages based on weight). Crushed rock temper is widely distributed throughout the Mesa Verde region; although a specific source area has not been defined, the sand temper is currently thought to indicate intraregional exchange with areas to the southwest or west of the Project area. Absence of definable trade wares from outside the Mesa ✓

✓ Figure 7.44: Little House (Site 5MT2191), diagnostic type occurrences. ✓

Shouldn't "ceramics" be mentioned somewhere in caption? ✓

5MT2191

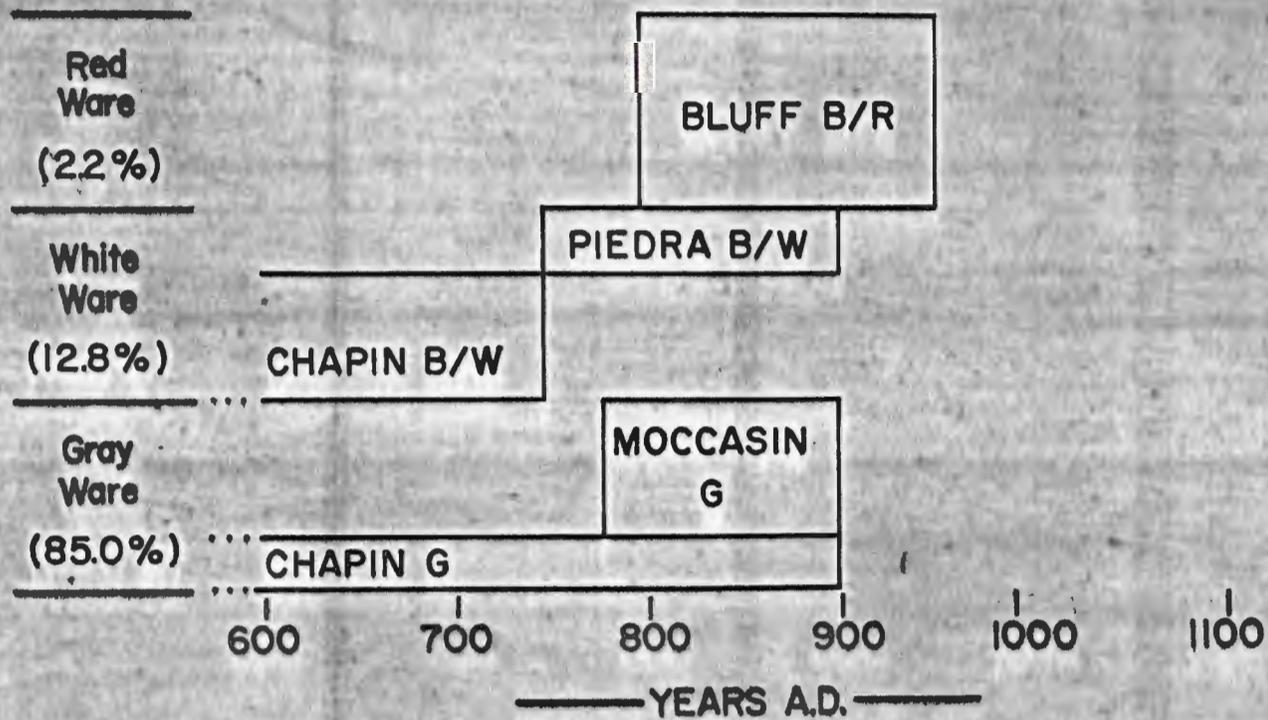


Figure 7.41. Little House (Site 5MT2191), diagnostic type occurrences.

Shouldn't "ceramics" be mentioned?

Verde area is not unusual at this time period; Cibolan and Chuskan
✓ ceramics did not begin to appear in the Project are^o until the latter half ✓
✓ of the ninth century (about AD 875). ✓

✓ Table 7.12 subdivides^s the site ceramics into smaller provenience ✓
✓ units. Temporally diagnostic sherds are not differentially represented in ✓
excavation vs. surface collections. The only unusual occurrence is the
presence of 50 Late Pueblo Red sherds in the "other excavation" units;
most of these sherds were recovered from the fill of the large refuse pit
at the site. These sherds are red wares with a thin surface slip but
without other diagnostic attributes. Although slipped red wares are more
✓ frequent^r after AD 900 (Deadmans Black-on-red), they are present in ✓
✓ limited ^{numbers} ~~times~~ from the onset of red ware production in the Mesa Verde
region. ✓

Table 7.12. Little House (Site 5MT2191), Ceramic Data from Selected Proveniences (Page 1 of 3)

	SURFACE COLLECTION					Total	
	Units over use Area 1 % (N=3)	Units over use Area 2 % (N=24)	Units Around Refuse pit % (N=23)	Other % (N=6)	#	%	
MESA VERDE GRAY							
Chapin Gray			4	17	2	4	
Moccasin Gray			9	17	3	5	
Early Pueblo	67	79	70	67	41	73	
MESA VERDE WHITE							
Chapin B/W					3	5	
Piedra B/W		13			5	9	
Early Pueblo	33	4	13				
MESA VERDE RED							
Bluff B/W							
Early Pueblo		4	4		2	4	
Late Pueblo							
INDETERMINATE							
Gray Ware							
White Ware							
Total					56	100	
VESSEL FORMS							
Bowl	33	8	17		7	12	
Jar	67	92	83	100	49	88	
Other							

Table 7.12 Little House (Site 5MT2191), Ceramic Data from Selected Proveniences (Page 2 of 3)

	SURFACE STRUCTURES				
	Room 1 fill % (N=87)	Rooms 2,3,4 fill % (N=57)	Occupation/Activity Area 1		
			Surface 1 % (N=5)	Surface 2 % (N=54)	Surface 3 % (N=15)
MESA VERDE GRAY					
Chapin Gray		10		11	7
Moccasin Gray		14			
Early Pueblo	6	14			
	85	67	80	85	93
MESA VERDE WHITE					
Chapin B/W	1				
Piedra B/W	1				
Early Pueblo	7	4	20		
MESA VERDE RED					
Bluff B/W					
Early Pueblo		5		4	
Late Pueblo					
INDETERMINATE					
Gray Ware					
White Ware					
Total					
VESSEL FORMS					
Bowl	8	9	20	4	
Jar	92	91	80	96	100
Other					

Table 7.12. Little House (Site 5MT2191), Ceramic Data from Selected Proveniences (Page 3 of 3)

	SURFACE STRUCTURES				Total Site	
	Occupation/Activity Area 2 % (N=634)	Other Excav.		#		
MESA VERDE GRAY						
Chapin Gray				59	3	
Moccasin Gray	2	32	3	157	8	
Early Pueblo	13	59	6	1336	70	
	61	731	73			
MESA VERDE WHITE						
Chapin B/W	<1	12	1	15	1	
Piedra B/W		10	1	14	1	
Early Pueblo	12	93	9	181	9	
MESA VERDE RED						
Bluff B/W		6	1	6	<1	
Early Pueblo		5	1	88	5	
Late Pueblo		50	5	50	3	
INDETERMINATE						
Gray Ware		2	<1	2	<1	
White Ware		1	<1	1	<1	
Total		1001		1909		
VESSEL FORMS						
Bowl	20	102	10	251	13	
Jar	80	896	90	1655	87	
Other		3	<1	3	<1	

APPENDIX 4

Data and Summary Statements,
Lithic Remains from Site 5MT2191

by

Thomas H. Hruby

The data presented in Tables 7.13, 7.14, and 7.15 represent part of the lithic reductive-technology analysis completed for Site 5MT2191. From a 12-attribute Flaked Lithic Tool (FLT) analysis system, 4 attributes were selected to illustrate general technological, functional, and raw-material variability. A traditional morphological-use classification, a ranked estimation of production technology input for dorsal and ventral surfaces, and a grain-size evaluation are included. Six variables are included from the Flaked Lithic Debitage (FLD) analysis system: grain-size ranking, classification of items with cortex, items which retain a striking platform, obsidian items, mean weight, and total number of debitage items. The Nonflaked Lithic Tool (NFLT) analysis system is represented by 4 variables: traditional morphological-use item classification, production-input evaluation, indication of item completeness, and raw-material grain-size evaluation. The complete lithic-analysis systems are described elsewhere in D.A.P. publications (Phagan [24]).

During 1980 the D.A.P. lithic-laboratory personnel have repeatedly reviewed the utility and reliability of the lithic-analysis systems. In this review, a number of analysis variables have been modified, particularly the item morphological-use variables on both the FLT and NFLT systems. Analytical perspectives change as information accumulates and as models of tool production and use improve. In order to minimize the effects of this analytical modification on interpretation, the observed values of these variables have been regrouped into larger categories within which analytic consistency is reliable.

In addition to the individual site data and for comparative purposes, the tables include data for both a grouping of temporally and functionally similar D.A.P. sites, as well as percentage data for all D.A.P. Anasazi

Table 7.13. Lithic Analysis Data Summary for Site 5MT2191, Flaked Lithic Tools (Page 1 of 3).

	Surface Collection (N = 5)		Surface Structure (N = 13)		Non-structures (N = 28)		Other Excavated Units (N = 39)	
	#	%	#	%	#	%	#	%
<u>MORPHO-USE FORM, #2</u>								
Indeterminate								
Utilized flakes	2	40.0	2	15.4	7	25.0	9	23.0
Cores	1	20.0	3	23.0	5	17.9	5	12.8
Choppers, <u>Scraper planes</u>	2	40.0	5	38.4	9	32.1	15	38.5
Thick scrapers			1	7.7			1	2.5
Thin scrapers					1	3.5		
Bifaces							3	7.7
Projectile points			2	15.4	4	14.3	4	10.3
Specialized forms					2	7.1	2	5.1
<u>THINNING STAGE: DORSAL</u>								
Indeterminate								
Non-facial item	2	40.0	4	30.8	4	14.3	10	25.6
Unthinned item, w/cortex					5	17.9	3	7.7
Unthinned item, no cortex	1	20.0	1	7.7	4	14.3	3	7.7
Prelim shaping, w/cortex	2	40.0	4	30.8	4	14.3	11	28.2
Prelim shaping, no cortex			2	15.4	3	10.7	3	7.7
Primary thinning					1	3.6	1	2.6
Secondary thinning							1	2.6
Well-shaped			2	15.4	7	25.0	6	14.5
Highly stylized							1	2.6
<u>THINNING STAGE: VENTRAL</u>								
Indeterminate								
Non-facial item	2	40.0	3	23.0	4	14.3	8	20.5
Unthinned item, w/cortex					1	3.5	2	5.1
Unthinned item, no cortex	2	40.0	7	53.8	9	32.1	15	38.5
Prelim shaping, w/cortex			1	7.7	1	3.5		
Prelim shaping, no cortex	1	20.0			5	17.9	7	18.0
Primary thinning					1	3.5		
Secondary thinning								
Well-shaped			2	15.4	7	25.0	6	15.4
Highly stylized							1	2.5
<u>GRAIN SIZE</u>								
Medium (coarse)	1	20.0	4	30.8	5	17.9	8	20.5
Fine					3	10.7	5	12.8
Very Fine (detrital)	4	80.0	8	61.5	17	60.7	19	48.7
Microscopic (non-granular)			1	7.7	3	10.7	7	18.0

Table 7.13. Lithic Analysis Data Summary for Site 5MT2191,
Flaked Lithic Tools (Page 2 of 3)

	Room 1 <i>Surface Floor</i> (N = 2)		Activity Area 1 Surface 3 (N = 3)		Room 1 Fill (N = 3)		Rooms 2, 3, & 4 Fill (N = 8)	
	#	%	#	%	#	%	#	%
<u>MORPHO-USE FORM, #2</u>								
Indeterminate								
Utilized flakes			1	33.3	2	66.7		
Cores	1	50.0	1	33.3			2	25.0
Choppers, <u>Sc</u> rapper planes					1	33.3	4	50.0
Thick scrapers							1	12.5
Thin scrapers								
Bifaces								
Projectile points	1	50.0	1	33.3			1	12.5
Specialized forms								
<u>THINNING STAGE: DORSAL</u>								
Indeterminate								
Non-facial item	1	50.0			1	33.3	2	25.0
Unthinned item, w/cortex								
Unthinned item, no cortex					1	33.3		
Prelim shaping, w/cortex							4	50.0
Prelim shaping, no cortex					1	33.3	1	12.5
Primary thinning								
Secondary thinning								
Well-shaped	1	50.0	3	100.0			1	12.5
Highly stylized								
<u>THINNING STAGE: VENTRAL</u>								
Indeterminate								
Non-facial item	1	50.0					2	25.0
Unthinned item, w/cortex								
Unthinned item, no cortex					3	100.0	4	50.0
Prelim shaping, w/ cortex							1	12.5
Prelim shaping, no cortex								
Primary thinning								
Secondary thinning								
Well-shaped	1	50.0	3	100.0			1	12.5
Highly stylized								
<u>GRAIN SIZE</u>								
Medium (coarse)	1	50.0			1	33.3	2	25.0
Fine								
Very Fine (detrital)			2	66.7	2	66.7	6	75.0
Microscopic (non-granular)	1	50.0	1	33.3				

Table 7.13. Lithic Analysis Data Summary for Site 5MT2191,
Flaked Lithic Tools (Page 3 of 3)

	Activity Area 2 Fill (N = 25)		5MT2191 Total (N = 85)		5MT2205 5MT4512 Total (N = 86)		Anasazi Group (N = 7048)
	#	%	#	%	#	%	%
<u>MORPHO-USE FORM, #2</u>							
Indeterminate					3	3.5	0.5
Utilized flakes	6	24.0	20	23.6	37	43.0	43.6
Cores	4	16.0	14	16.5	19	22.1	19.0
Choppers, Scraper planes	9	36.0	31	36.5	7	8.1	10.4
Thick scrapers			2	2.4	9	10.5	6.4
Thin scrapers	1	4.0	1	1.2	6	7.0	10.1
Bifaces			3	3.5	1	1.2	3.9
Projectile points	3	12.0	10	11.8	3	3.5	3.7
Specialized forms	2	8.0	4	4.7	1	1.2	2.3
<u>THINNING STAGE: DORSAL</u>							
Indeterminate					2	2.3	0.3
Non-facial item	4	16.0	20	23.5	22	25.6	19.8
Unthinned item, w/cortex	5	20.0	8	9.4	24	27.9	31.7
Unthinned item, no cortex	4	16.0	9	10.6	31	36.0	31.4
Prelim shaping, w/cortex	4	16.0	21	24.7	1	1.2	3.7
Prelim shaping, no cortex	3	12.0	8	9.4	2	2.3	2.6
Primary thinning	1	4.0	2	2.4			1.2
Secondary thinning			1	1.2	2	2.3	1.1
Well-shaped	4	16.0	15	17.6	1	1.2	7.5
Highly stylized			1	1.2	1	1.2	0.7
<u>THINNING STAGE: VENTRAL</u>							
Indeterminate					1	1.2	0.2
Non-facial item	4	16.0	17	20.0	22	25.6	19.5
Unthinned item, w/cortex	1	4.0	3	3.5	3	3.5	1.9
Unthinned item, no cortex	9	36.0	33	38.8	51	59.3	64.4
Prelim shaping, w/cortex	1	4.0	2	2.4	1	1.2	1.4
Prelim shaping, no cortex	5	20.0	13	15.3	4	4.7	3.4
Primary thinning	1	4.0	1	1.2	1	1.2	1.2
Secondary thinning					1	1.2	1.0
Well-shaped	4	16.0	15	17.6	1	1.2	6.4
Highly stylized			1	1.2	1	1.2	0.7
<u>GRAIN SIZE</u>							
Medium (coarse)	5	20.0	18	21.2			2.1
Fine	3	12.0	8	9.4	19	22.1	6.2
Very Fine (detrital)	15	66.0	48	56.5	50	58.1	65.3
Microscopic (non-granular)	2	8.0	11	12.9	16	18.6	26.3

Table 7.14. Lithic Analysis Data Summary for Site 5MT2191,
Flaked Lithic Debitage (Page 1 of 3)

	Surface Collection (N = 16)		Surface Structures (N = 62)		Non-structures (N = 167)		Other Excavated Units (N = 266)	
	#	%	#	%	#	%	#	%
<u>GRAIN SIZE</u>								
Medium (coarse)	3	18.8	10	16.1	12	7.2	30	11.3
Fine	6	37.5	29	46.8	42	25.1	143	53.8
Very Fine (detrital)	7	43.8	21	33.8	113	81.4	87	32.7
Microscopic (non-granular)			2	3.2			6	2.3
Items with Cortex, %	5	31.3	18	29.0	43	25.7	87	32.7
Items with Platform, %	13	81.3	50	80.6	136	81.4	229	86.1
Obsidian Items, #								
Mean Weight (grams)	5.9		71.0		7.0		6.4	
Total Debitage, #	16		62		167		266	

Table 7.14 ^g Lithic Analysis Data Summary for Site 5MT2191,
Flaked Lithic Debitage (Page 2 of 3) ^e

	Activity Area 1 Surface 1 (N = 11)		Room 1 Fill (N = 30)		Rooms 2, 3, & 4 Fill (N = 32)		Activity Area 2 Fill (N = 156)	
	#	%	#	%	#	%	#	%
<u>GRAIN SIZE</u>								
Medium (coarse)	5	45.4	8	26.7	2	6.3	7	45
Fine	4	36.3	11	36.7	18	56.3	38	24.3
Very Fine (detrital)	2	18.2	9	30.0	12	37.5	111	71.2
Microscopic (non-granular)			2	6.7				
Items with Cortex, %	3	27.3	6	20.0	12	37.5	40	25.6
Items with Platform, %	8	72.7	22	73.3	28	87.5	128	82.0
Obsidian Items, #								
Mean Weight (grams)	10.45		137.9		8.2		6.77	
Total Debitage, #	11		30		32		156	

caps?

Table 7.14. Lithic Analysis Data Summary for Site 5MT2191, Flaked Lithic Debitage (Page 3 of 3).

	5MT2191 Total (N = 511)		5MT2205, & 5MT4512 Total (N = 1027)		Anasazi Group (N = 66095)
	#	%	#	%	%
<u>GRAIN SIZE</u>					
Medium (coarse)	55	10.7	29	2.8	3.2
Fine	220	43.0	374	36.4	21.4
Very Fine (detrital)	228	44.6	500	48.7	51.6
Miscroscopic (non-granular)	8	1.6	124	12.1	23.7
Items with Cortex, %	153	30.0	238	23.2	25.9
Items with Platform, %	428	87.7	485	47.2	38.8
Obsidian Items, #			2	0.2	18.
Mean Weight (grams)	14.4		11.0		7.93
Total Debitage, #	511		1027		66095

what gets capped?

Table 7.15 Lithic Analysis Data Summary for Site 5MT2191,
Nonflaked Lithic Tools (Page 1 of 3)

	Surface Collection (N = 5)		Surface Structures (N = 44)		Non-structures (N = 24)		Other Excavated Units (N = 44)	
	#	%	#	%	#	%	#	%
<u>MORPHO-USE FORM</u>								
Indeterminate			10	22.7	1	7.4	5	11.4
Generalized, unhafted	1	20.0	4	9.0	4	16.7	2	4.5
Hammerstones			2	4.6	6	25.0	1	2.3
Manos	4	80.0	14	31.8	7	29.2	28	63.6
Slab Metates			3	6.8	1	4.2	2	4.5
Trough Metates			3	6.8	1	4.2		
Unspec & Frag Metates			5	11.4	1	4.2	6	13.6
Generalized, hafted								
Misc. Specialized			3	6.8	3	12.5		
<u>PRODUCTION EVALUATION</u>								
Indeterminate			4	9.0	2	8.3	6	13.6
Nodule	4	80.0	22	50.0	20	83.3	23	52.3
Minimally Shaped	1	20.0	12	27.3	2	8.3	12	27.3
Well-shaped			6	13.6			3	6.8
Highly stylized								
<u>ITEM COMPLETENESS</u>								
Indeterminate								
Small Fragment								
Partial Implement	2	40.0	26	59.0	15	62.5	32	72.7
Complete (+ or -) Implement	3	60.0	18	41.0	9	37.5	12	27.3
<u>GRAIN SIZE</u>								
Indeterminate								
Coarse	1	20.0	15	34.1	17	70.8	10	22.7
Medium	2	40.0	26	59.1	6	25.0	29	65.9
Fine	2	40.0	3	6.8	1	4.2	5	11.4
Non-granular								

Table 7.15. Lithic Analysis Data Summary for Site 5MT2191, Nonflaked Lithic Tools (Page 2 of 3)

	Room 1 Surface Floor (N = 5)		Activity Area 1 Surface 1 (N = 7)		Room 1 Fill (N = 25)		Rooms 2, 3, & 4 Fill (N = 11)	
	#	%	#	%	#	%	#	%
<u>MORPHO-USE FORM</u>								
Indeterminate			1	14.3	5	20.0		
Generalized, unhafted							1	9.1
Hammerstones							1	9.1
Manos	2	40.0	3	42.8	12	48.0	4	36.4
Slab Metates	1	20.0	1	14.3	2	8.0		
Trough Metates	1	20.0	1	14.3	1	4.0		
Unspec & Frag Metates					4	16.0	4	36.4
Generalized, hafted								
Misc. Specialized	1	20.0	1	14.3	1	4.0	1	9.1
<u>PRODUCTION EVALUATION</u>								
Indeterminate			1	14.3	4	16.0		
Module			5	71.4	10	40.0	9	81.8
Minimally Shaped	4	80.0	1	14.3	6	24.0	2	18.2
Well-shaped	1	20.0			5	20.0		
Highly stylized								
<u>ITEM COMPLETENESS</u>								
Indeterminate								
Small Fragment								
Partial Implement	1	20.0	4	67.2	17	68.0	7	63.6
Complete (+ or -)	4	80.0	3	42.8	8	32.0	4	36.4
Implement								
<u>GRAIN SIZE</u>								
Indeterminate								
Coarse			5	71.4	6	24.0	9	81.8
Medium	4	80.0	2	28.6	17	68.0	2	18.2
Fine	1	20.0			2	8.0		
Non-granular								

Surface Floor

caps?

Table 7.15. Lithic Analysis Data Summary for Site 5MT2191, Nonflaked Lithic Tools (Page 3 of 3)

	Activity Area 2 Fill (N = 17)		5MT2191 Total (N = 117)		5MT2205 5MT4512 Total (N = 107)		Anasazi Group (N = 4318)
	#	%	#	%	#	%	%
<u>MORPHO-USE FORM</u>							
Indeterminate			16	13.7	15	14.0	9.2
Generalized, unhafted	4	23.5	11	9.4	21	19.6	24.0
Hammerstones	6	35.3	9	7.6	22	20.6	9.9
Manos	4	23.5	53	45.3	26	24.3	33.5
Slab Metates			6	5.1	4	3.7	2.1
Trough Metates			4	3.4	5	4.7	9.4
Unspec & Frag Metates	1	5.9	12	10.3	12	11.2	5.2
Generalized, hafted					1	0.9	2.5
Misc. Specialized	2	11.8	6	5.1	1	0.9	4.0
<u>PRODUCTION EVALUATION</u>							
Indeterminate	1	5.9	12	10.3	26	24.3	8.4
Module	15	88.2	69	59.0	57	53.3	53.5
Minimally Shaped	1	5.9	27	23.1	15	14.0	16.7
Well-shaped			9	7.7	9	8.4	21.1
Highly stylized							0.1
<u>ITEM COMPLETENESS</u>							
Indeterminate					9	8.4	3.3
Small Fragment					46	43.0	45.6
Partial Implement	11	64.7	75	64.1	52	48.6	50.8
Complete (+ or -) Implement	6	35.3	42	35.9			
<u>GRAIN SIZE</u>							
Indeterminate					8	7.8	8.1
Coarse	12	70.6	43	36.8	12	11.7	16.5
Medium	4	23.5	63	53.8	51	49.5	39.4
Fine	1	5.9	11	9.4	28	27.2	34.5
Non-granular					8	3.9	1.2

cap?

sites analyzed prior to the 1980 field season. This latter "Anasazi group" data have been generated from computer files which have not undergone complete editing, and final figures may differ slightly from those presented. Comparisons and interpretations presented here, partially those of an inter-site nature, are based on a qualitative assessment of lithic profile variation, since significance has not been statistically established.

Site 5MT2191 is a small, seasonally used field house occupied during the Periman Subphase of the McPhee Phase. Two other field houses with the same temporal/functional classification, 5MT2205 and 5MT4512, are grouped together for comparative purposes. Site 5MT2191 is unique among Periman Subphase field houses: utilized flakes are under represented, while choppers/scrapper planes and projectile points are over represented. The FLT profile for Site 5MT2191 probably represents a greater degree of hunting activities than is present at most Anasazi villages or field houses. Technological production input in the FLT system is quite high and probably represents considerable attention to the importance of bifaces, specialized forms, and projectile points. Site 5MT2191 also differs from other Anasazi sites in the ratio of tools to the total number of flaked lithics. Site 5MT2191 has 14.3 tools per one hundred lithic items, while the Anasazi Group has 9.6 tools. Other Periman Subphase field houses have 7.6 tools per one hundred items. Raw material counts are roughly comparable, even though the low percentage of nongranular items might indicate a selection for local materials.

The FLD profile indicates a focus on selection of local raw materials. Occupants of the McPhee Phase field houses appear to have selected raw materials in a rather expedient manner--Site 5MT2191 is

doesn't hang together right

probably the best example of this. The high cortex percentage and large flake size for Site 5MT2191 indicates that the production focus at the site was on the larger, lower input items rather than on projectile points or other high-input items. Production at the site probably focused on low input tools with high-input items brought into the site. ✓ ✓

The NFLT system shows that the field houses are all very similar to each other, while being substantially different from the Anasazi Group. Approximately 60 percent of the tools from the Periman Subphase field houses are nonflaked lithic tools, while the Anasazi Group has 38 percent nonflaked lithic tools. This suggests that processing of agricultural foods is very important at field houses locations. Supporting this conclusion is the high percentage of manos and metates present in these locations. Though Site 5MT2191 is dominated by manos and under-represented in the hammerstone and generalized tool categories, these differences are probably not very significant on a subphase level of comparison. ✓

The lithic tools from Site 5MT2191 indicate a close technological relationship to other Periman Subphase field houses. Site 5MT2191 is unique with respect to other field houses because of the relatively large component of hunting-associated tools. All Periman Subphase field houses are substantially different from the grouped total of all Anasazi sites, particularly in the higher percentage of nonflaked lithic tools found at the field house. ✓

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