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Excavations at Hawk House (Site 5MT4681)

An Archaic-Anasazi Limited Activity Site

by Gary A. Brown

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16. Abstract

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The flaked lithic tool assemblage consisted of highly curated items associated with hunting and game processing; these could date to either the Archaic or to a highy specialized Anasazi group. The nonflaked lithic tool assemblage contained predominately food-processing tools characteristic of the Archaic Tradition.

Ceramic and architectural data indicate site usage between A.D. 850-900, or during the McPhee Phase (A.D. 850-970), according to Dolores Archaeological Program temporal systematics.

The paucity of features at Hawk House indicates that the site had restricted use, but the material culture assemblage reflects both hunting and food-processing activities, possibly occurring as early as Archaic times and also during the McPhee Phase.

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TABLE OF CONTENTS

	PAGE NUMBER
ABSTRACT	1
INTRODUCTION	2
ENVIRONMENTAL SETTING	5
Climate	7
Flora	8
Fauna	9
Historic Land Use	9
SOCIAL SETTING	11
SURFACE EVIDENCE	12
Magnetometer Survey	12
Surface Collection and Sampling	12
EXCAVATION METHODS AND OBJECTIVES	18
ARCHITECTURAL REMAINS	19
Post-abandonment Processes	19
Cultural Units	19
MATERIAL CULTURE	28
Ceramics	28
Flaked Lithics	28
Nonflaked Lithics	30
Dating Methods	30
CONCLUSIONS	32
APPENDICES	
APPENDIX A	33
APPENDIX B	40
Introduction	41
Processing	41
Interpretation	41
Summary	45
REFERENCES CITED	46

LIST OF FIGURES

		PAGE NUMBER
Figure 17.1	Topographic map of Hawk House.	3
Figure 17.2	Overall view of Hawk House before excavation, facing southeast	6
Figure 17.3	Site sampling plan Hawk House.	13
Figure 17.4	Surface distribution of ceramics at Hawk House . .	15
Figure 17.5	Surface distribution of flaked lithics at Hawk House.	16
Figure 17.6	Surface distribution of nonflaked lithics at Hawk House.	17
Figure 17.7	Spatial relationships of major cultural units at Hawk House.	20
Figure 17.8	North-south general site profile, Hawk House . . .	21
Figure 17.9	East-west general site profile, Hawk House	22
Figure 17.10	Photograph of Room 1 after clearing but prior to excavation, facing southwest Hawk House	24
Figure 17.11	Photograph of Room 1, facing north Hawk House	25
Figure 17.12	Final photograph of Room 1, facing west Hawk House	25
Figure 17.13	Final photograph of Feature 3, facing southwest, Hawk House.	25
Figure 17.14	Final photograph of Feature 1, facing north, Hawk House.	25
Figure 17.15	SYMAP of magnetic field, Hawk House.	42
Figure 17.16	Line contour map, including test squares, Hawk House	43

LIST OF TABLES

		PAGE NUMBER
Table 17.1	Summary of Descriptive Frequencies of Ceramics at Hawk House	29
Table 17.2	Lithic Analysis Data Summary for Hawk House, Flaked Lithic Tools	35
Table 17.3	Lithic Analysis Data Summary for Hawk House, Flaked Lithic Debitage	36
Table 17.4	Lithic Analysis Data Summary for Hawk House, Nonflaked Lithic Tools	37
Table 17.5	Magnetic Anomalies with Possible Archaeological Affiliation at Hawk House	44

ABSTRACT

Hawk House (Site 5MT4681) is a multifunctional limited activity site located in extreme southwestern Colorado near the present town of Dolores. The site was excavated in September of 1979 as a part of the Dolores Project Cultural Resources Mitigation Program.

The flaked lithic tool assemblage consisted of highly curated items associated with hunting and game processing; these could date to either the Archaic or to a highy specialized Anasazi group. The nonflaked lithic tool assemblage contained predominately food-processing tools characteristic of the Archaic Tradition.

Ceramic and architectural data indicate site usage between A.D. 850-900, or during the McPhee Phase (A.D. 850-970), according to Dolores Archaeological Program temporal systematics.

The paucity of features at Hawk House indicates that the site had restricted use, but the material culture assemblage reflects both hunting and food-processing activities, possibly occurring as early as Archaic times and also during the McPhee Phase.

INTRODUCTION

Hawk House (Site 5MT4681) lies at the southern edge of a north-south ridge north of the present-day Sagehen Flats marsh. According to spatial and temporal standards employed by the Dolores Archaeological Program (D.A.P.) Hawk House is situated in the Sagehen Flats Locality (Kane [1]) and is culturally affiliated with the Great Cut Phase (3000 B.C.-A.D. 500) through the McPhee Phase (A.D. 850-970) (Kane [2]). This placement is based on observations of architecture and artifactual material.

Hawk House is located in the Southeast Quarter of the Northwest Quarter of the Northeast Quarter, Sec 36, T38N, R16W and can be located on the Trimble Point Quadrangle, Colorado, U.S.G.S. 7.5 Minute Series 1965 Topographic Map. Universal Transverse Mercator coordinates locate this site at 715,400 mE, 4,154,480 mN, Zone 12. Site 5MT4681 lies at an elevation of 2105 m (Figure 17.1).

The original survey report (Dykeman et al. [3]) describes Site 5MT4681 as an extensive lithic scatter with a high incidence of ground stone, bifaces, scrapers, and a few ceramic fragments. On the basis of these surface materials, the surveyors described the site as a food-processing area. An accompanying small rubble mound was interpreted as a field house and was tentatively dated, based on architecture and ceramic materials, to the Sundial Phase (A.D. 1050-1200).

The site was re-examined late in the summer of 1979 and was chosen for excavation because it was thought to be a field house. Excavations at Site 5MT4681 revealed a mixed artifact assemblage exhibiting characteristics of both the Archaic Tradition and the McPhee Phase of the Anasazi Tradition. The nonflaked lithic tool assemblage contains mostly

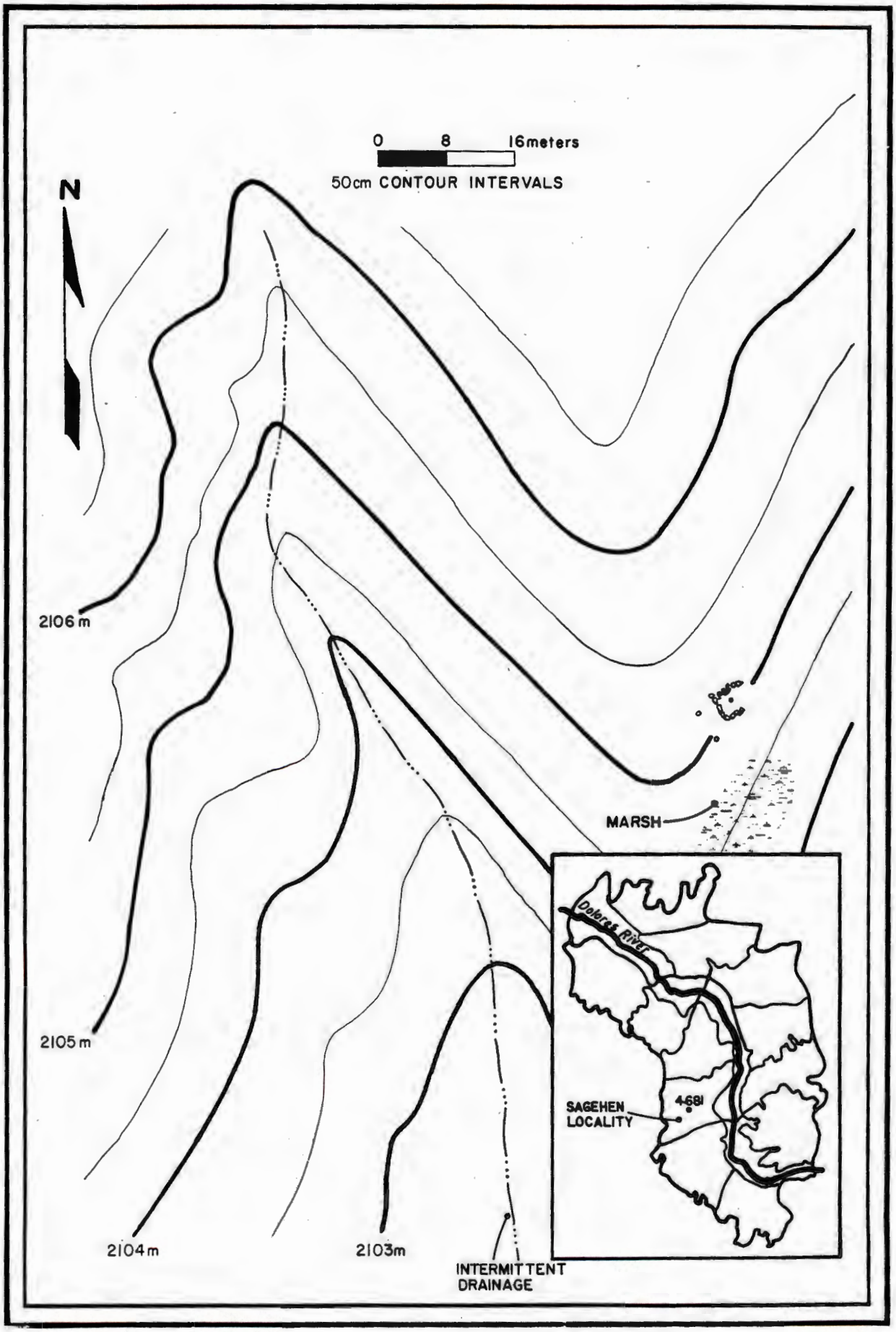

Figure 17.1 Topographic map of Hawk House.

food-processing items that are characterized by one-hand manos and flat grinding stones; these tool types reflect an Archaic component (Appendix A). The ceramic assemblage, though small, indicates use of the site between A.D. 600-900. The architecture at the site resembles McPhee Phase constructions. Based on these data, the site is interpreted as a limited activity site that was used periodically from possibly as early as 3000 B.C. through A.D. 900.

Excavation began 25 September 1979 with a crew of five: G. Brown, site manager; R. Wilshusen, site assistant; M. Girton; M. Cavanaugh; and T. Hovezak. Excavations were completed on 8 October 1979; 370 person hours were expended.

ENVIRONMENTAL SETTING

The environmental setting of Hawk House is briefly discussed here; for a more detailed discussion, see the Sagehen Flats Locality Report (Greenwald [4]).

The environmental descriptions which follow are based on observations made at the time of excavation. The conditions observed do not necessarily reflect those that occurred prehistorically. The Sagehen Flats Locality Report discusses the relationship between environmental processes and resource availability, both past and present. When reference is made to the use of a particular resource, it is assumed that the processes in effect today took place prehistorically, such that the resource was available.

Situated at the southern edge of a narrow north-south trending ridge, Hawk House overlooks the Sagehen marsh (Figure 17.2). The marsh flanks the site to the south and to the east (Greenwald [4]). West of the site is a wide arroyo which drains into the marsh. The ridge is composed of the Dakota Sandstone overlain by Sagehen Paleosol and Batterson-Gladel-rock outcrop complex soils. The site itself is located on the Paleosol, a shallow, well-drained soil developed from old alluvium or loess. The Batterson-Gladel-rock outcrop complex is exposed on the slopes of the ridge. (For a more detailed description of the geology of the area see Leonhardy [5].)

Within a few kilometers of the site, resources for construction and tool production are currently available. Mancos Shale, to the south, east, and west of the site, contains clays suitable for pottery manufacture (W. Lucius, personal communication). Outcrops of the

Figure 17.2 Overall view of Hawk House before excavation, facing southeast (D.A.P. 025222).

Morrison Formation often contain clay seams which yield material suitable for ceramic manufacture, and sandstone in the formation could have been used for construction and nonflaked lithic tool manufacture. The Burro Canyon Formation contains lithic materials suitable for the manufacture of flaked lithic tools. Both of these formations outcrop in the Dolores River canyon. Gravels of the Dolores River are also easily acccessible. Outcrops of Dakota Sandstone would have provided construction materials as well as suitable materials for tool types such as manos and metates. The closest outcrop is located in a small canyon 0.75 km north of the site.

The Dolores River, 1.85 km from the site, would have been the most reliable water source prehistorically. At present, the Sagehen marsh is located 0.25 km southeast of Hawk House. The present-day stability of the marsh is generally attributed to a series of irrigation canals built during historic times. Research is presently underway to test for the prehistoric existence of the marsh. If the marsh existed when Hawk House was occupied, the prehistoric occupants would probably have benefitted from the additional resources that the marsh could have provided, including floral, faunal, and avifaunal species likely to have frequented the marsh.

Climate

The modern climatic pattern of Hawk House is similar to that of the project area in general: low humidity, wide diurnal temperature fluctuations, mild summers, and cold dry winters. The United States Weather Bureau (U.S.W.B.) Station in Dolores, Colorado, located 5 km southeast of the site, has recorded an average annual precipitation of 450 mm. The majority of precipitation occurs during two wet seasons, one from

winter snows and the other from late summer thunderstorms. Data retrieved from the U.S.W.B. in Yellowjacket, Colorado, 15 km west of Site 5MT4681, indicate an average of 126 frost-free days annually in this region.

Flora

The current vegetation in the vicinity of the site is typical of a disturbed area. Recent farming and grazing practices undoubtedly contributed to these disturbances.

Plant species currently growing on and near the site include cheat grass (*Bromus tectorum*), thistle (*Cirsium* sp.), sunflower (*Helianthus annuus*), big sagebrush (*Artemisa tridentata*), rabbitbrush (*Chrysothamnus nauseosus*), brittle cactus (*Opuntia fragilis*), prickly pear (*Opuntia* sp.), wild buckwheat (*Eriogonum heracleoides*), Indian rice grass (*Oryzopsis hymenoides*), lupine (*Lupinus* sp.), and wild onion (*Allium acuminatum*).

There are many exploitable plant resources within a 5 km radius of the site. The Sagehen marsh presently supports various edible plants such as cattail (*Typha latifolia*) and bulrush (*Scirpus acutus*); if the marsh existed prehistorically, these plants might have been exploited. The reedy species could have been used for basketry, mats, and other constructional purposes.

Several species, including prickly pear and broadleaf yucca (*Yucca baccata*), could have provided food, fibers, and soap. Edible bulbs of sego lily (*Calochortus nuttallii*), wild onion, and seeds from sunflowers, Indian rice grass and other grasses are found in abundance throughout the site area today. Fruits, wood, and nuts would have been available from pinyon pine (*Pinus edulis*), juniper (*Juniperus osteosperma*), chokecherry (*Prunus virginiana*), serviceberry (*Amelanchier utahensis*), and squawbush (*Rhus aromatica*).

Fauna

The marsh currently attracts numerous faunal species to the area of Hawk House. Faunal species sighted during excavation include mule deer (*Odocoileus hemionus*), cottontail rabbit (*Sylvilagus* sp.), mouse (*Peromyscus* sp.), and Colorado chipmunk (*Eutamias quadrivittatus*). Though not sighted by crew members during excavation, the following faunal species have been recorded in the vicinity of the site: striped skunk (*Mephitis mephitis*), rock squirrel (*Spermophilus variegatus*), coyote (*Canis latrans*), badger (*Taxidea taxus*), black-tailed jackrabbit (*Lepus californicus*), and American elk (*Cervus canadensis*). Avifauna observed at the site include red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), turkey vulture (*Cathartes aura*), common raven (*Corvus corax*), mourning dove (*Zenaidura macroura*), nighthawk (*Chordeiles* sp.), common flicker (*Colaptes auratus cafer*), golden eagle (*Aquila chrysaetos*), black-billed magpie (*Pica pica*), ring-necked pheasant (*Phasianus colchicus torguatos*), western meadowlark (*Sturnella neglecta*), northern harrier (*Circus cyaneus*), and unidentified water fowl.

Several of the above species might have been hunted by prehistoric peoples utilizing Hawk House; these include mule deer, cottontail, black-tailed jackrabbit, American elk, and species of water fowl known to be attracted to the marsh today.

Historic Land Use

Modern Euro-Americans moved into the Sagehen Flats Locality in the late 1800s and early 1900s. The earliest known development of the land on which Hawk House is located was by Harry Morgan, who owned 160 acres in the area of the site (D. Duranceau, personal communication). When Morgan

and others first moved into the area, the land was covered with sagebrush, oak, pinyon, and juniper. The Morgans plowed the area around Site 5MT4681 in the 1920s for the cultivation of beans; however, the crop failed due to an early frost and the land was never again used for crops of this kind. In 1953 the Fred A. Cline family bought most of the land in this area, cleared it with a brush hog, plowed it with a disc harrow, and burned off the sagebrush. The land was then planted with wild grasses for use as sheep pastureland. In recent years the land has not been grazed and sagebrush and other disturbance species have since become established.

SOCIAL SETTING

There are many sites in the Sagehen Flats Locality that might have been occupied during the times that Hawk House was used; contemporaneity is difficult to assess since the archaeological record suggests that the site has intermittent Archaic and Anasazi components ranging from 3000 B.C. through A.D. 900. The material culture from Hawk House indicates it was a limited activity site, perhaps associated with processing of both vegetal and faunal foodstuffs.

Six sites are located in the same general area as Hawk House that also have temporally mixed assemblages and also lack permanent habitation units. These include Site 5MT2242 (Southward [6]), Site 5MT4682 (Wilshusen [7]), Site 5MT2202 (Schlanger [8]), Site 5MT2236 (Chenault [9]), Site 5MT2199 (Brown [10]), and Site 5MT4513 (Greenwald [11]). The people who used these prehistoric sites as hunting and gathering stations undoubtedly exploited the marsh's resources if it existed at that time.

SURFACE EVIDENCE

Surface evidence of prehistoric occupation at Hawk House consisted of a rubble mound and a lithic scatter covering the entire ridge. The data suggest that the lithic scatter dates to the latter part of the Archaic Tradition, whereas the rubble mound probably dates to the McPhee Phase (A.D. 850-970). Survey operations recovered 18 sherds from the general site area; two additional sherds were recovered during pre-excavation site collections. The rubble mound was the only indication of any architectural features; there were no depressions suggesting subsurface features.

Magnetometer Survey

A magnetometer test survey of Site 5MT4681 was conducted prior to excavation over a total area of 400 m^2 (Figure 17.3). Six magnetic anomalies were recorded and recommended for testing by R. Huggins of the Nebraska Center for Archaeophysical Research. Anomoly 1 was found to be Room 1, the only architectural feature at the site. Anomaly 5 was the only other anomaly found to be cultural; it is a small pit feature with evidence of burning. Figure 17.3 correlates the magnetometer anomalies with the cultural features at Hawk House.

Appendix B presents a detailed discussion of the magnetometer reconnaissance at Site 5MT4681; see Huggins and Weymouth [12] for information on magnetometer procedures and theory.

Surface Collection and Sampling

Investigation of Site 5MT4681 began with the establishment of a 4

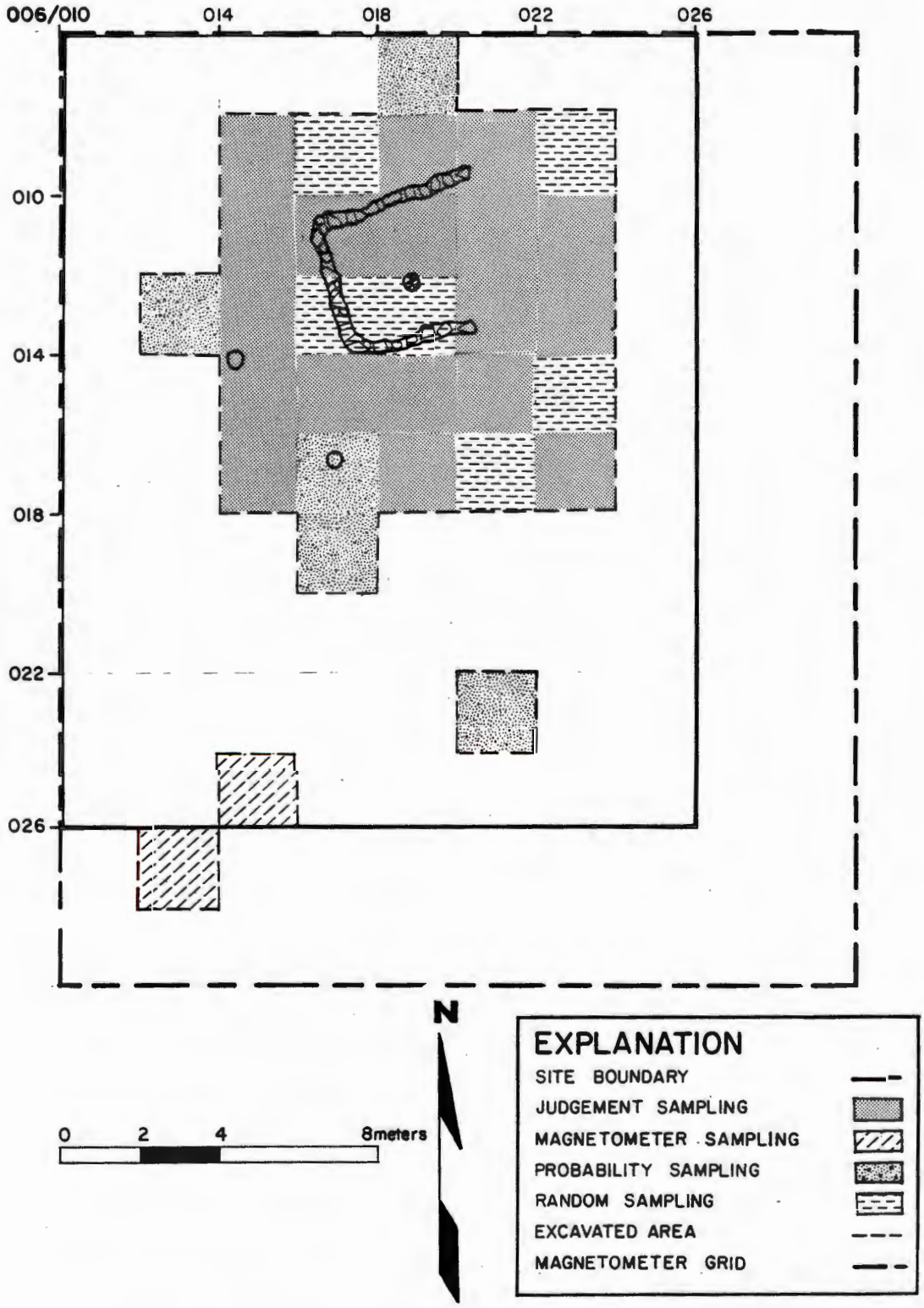

Figure 17.3 Site sampling plan, Hawk House.

by 4 m grid system over a 320 m^2 area of the surface rubble (Figure 17.4). All cultural material within the gridded area was collected. Surface distribution for ceramics, flaked lithics, and nonflaked lithics are shown in Figures 17.4, 17.5, and 17.6, respectively. Once the surface collection was completed, two sampling designs were employed to initiate excavation. Six 2 by 2 m units were chosen for excavation using the probability sampling design (for a detailed description see Kohler [13]). Cultural features were uncovered in two of these units; Room 1 and its central hearth were partially exposed in one unit and a food-processing pit was exposed in the other.

In addition to the probability sampling, a simple random-sampling design was also employed. Due to its limited size (based on the rubble mound and homogeneous artifact assemblage), the entire site was designated as a single area (Area 1). A 6 percent random sample of the 2 by 2 m units within this area was chosen for initial excavation.

The combination of the two sampling designs resulted in the excavation of 14 percent of the site. An additional 22 percent of the site was excavated on a judgement basis, primarily around the rubble mound. Thus, 36 percent of the total site area was excavated.

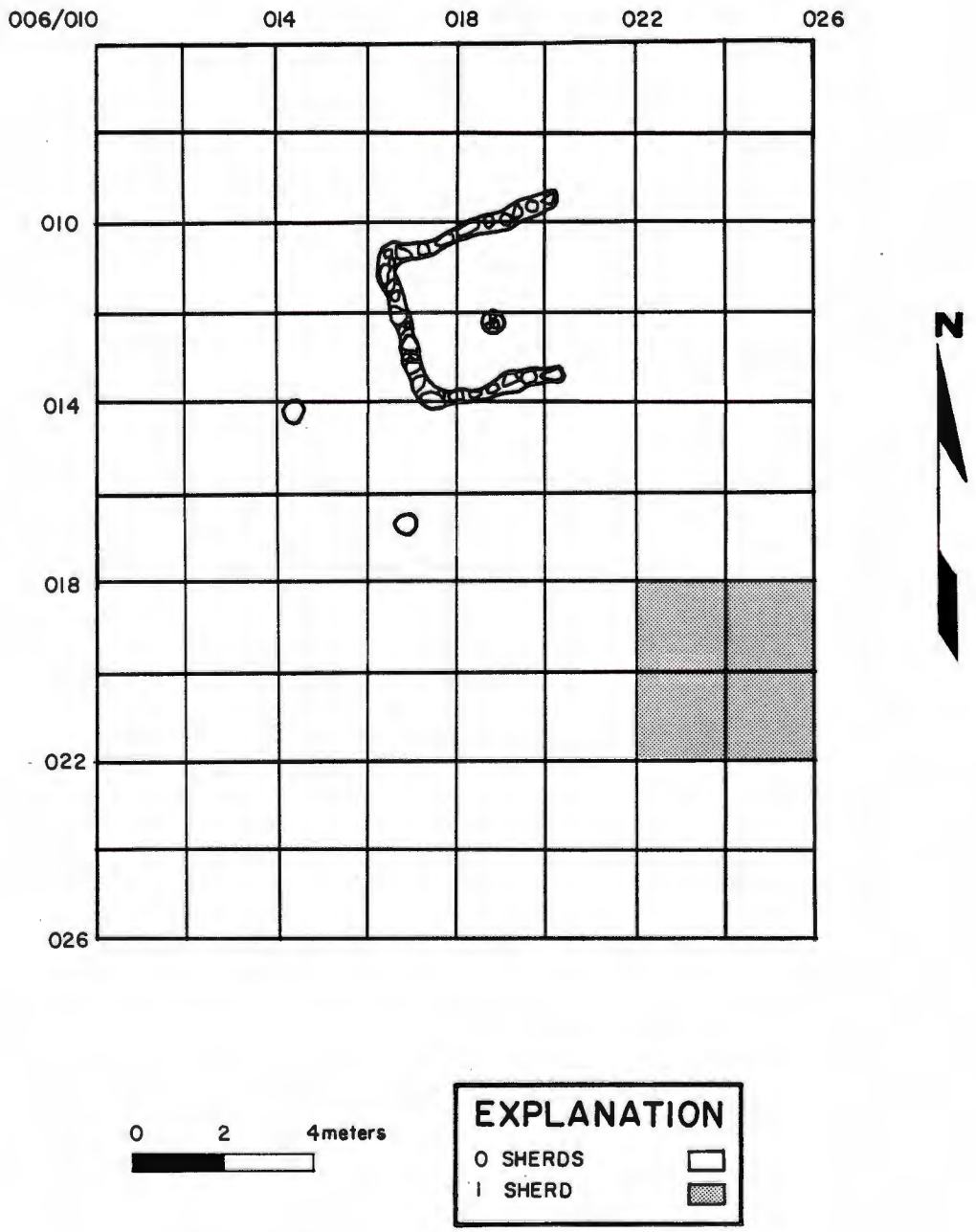

Figure 17.4 Surface distribution of ceramics at Hawk House.

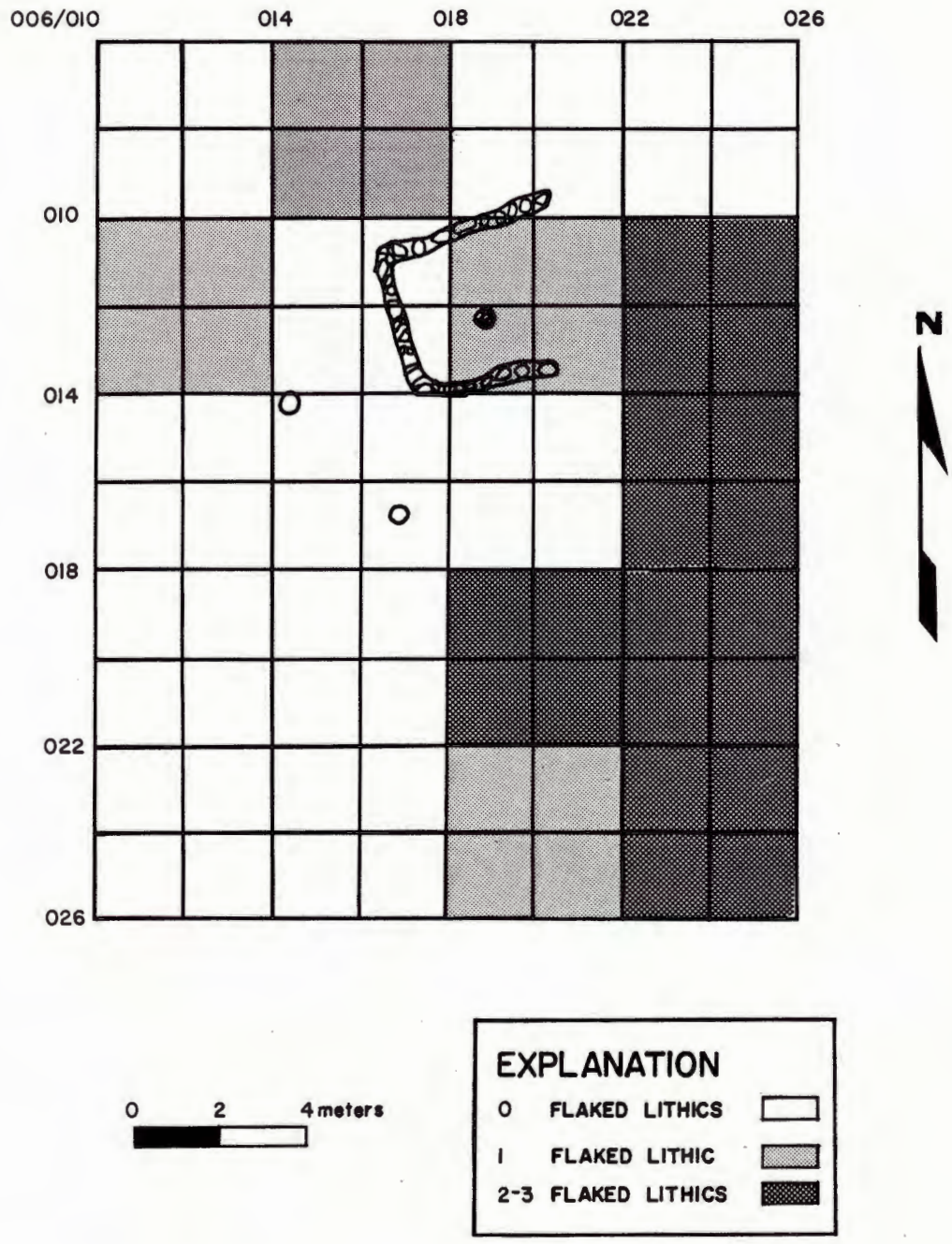

Figure 17.5 Surface distribution of flaked lithics at Hawk House.

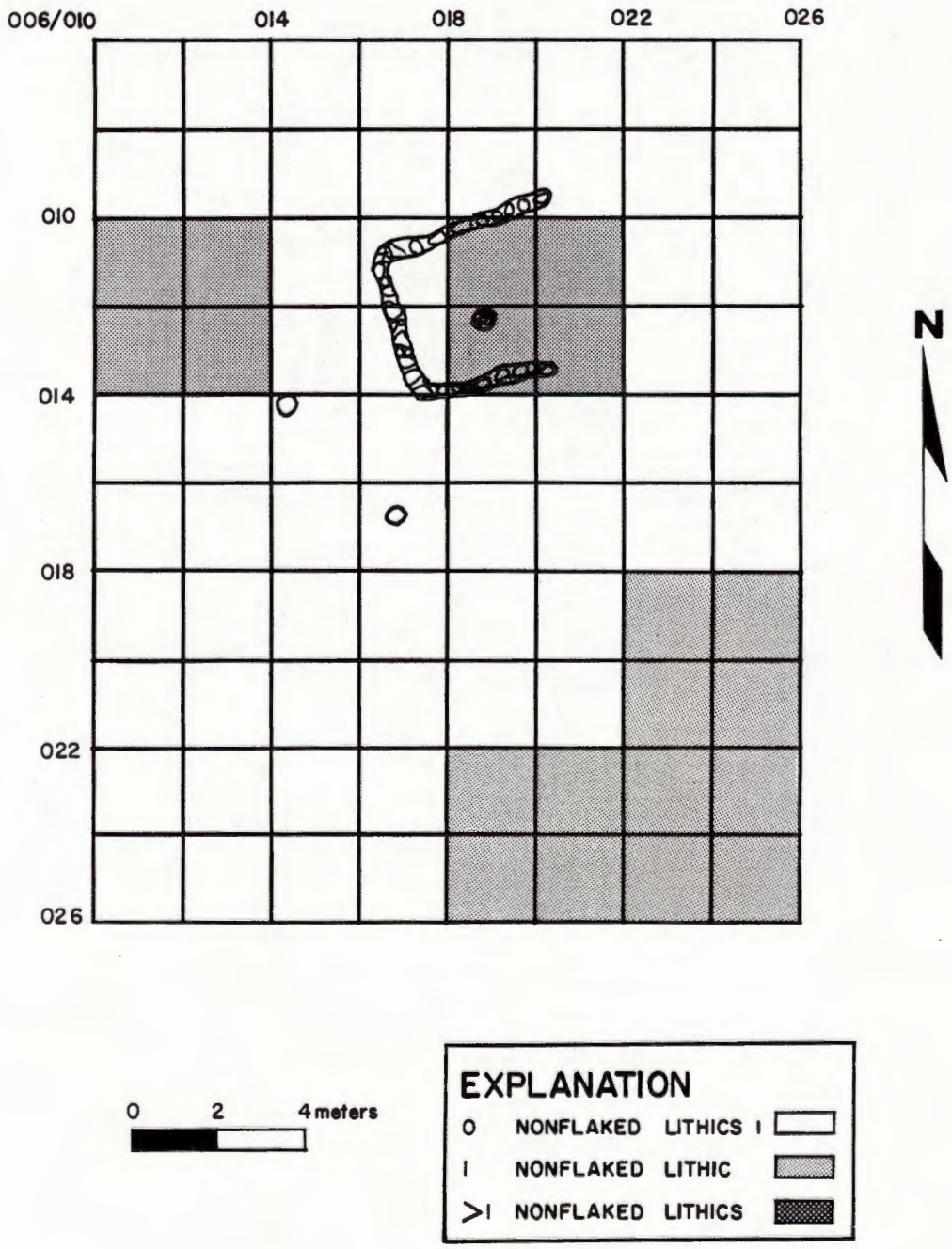

Figure 17.6 Surface distribution of nonflaked lithics at Hawk House.

EXCAVATION METHODS AND OBJECTIVES

Excavation at Hawk House was concentrated in the rubble mound area and the surrounding units. The objective of excavation was to define the architectural units within the site as quickly and efficiently as possible. The cultural fill in all features and the majority of the fill in Room 1 was passed through one-quarter-inch screen. Surrounding units were excavated without screening, except for the probability units, where soil was screened through one-quarter-inch mesh. All 31 of the 2 by 2 m units were excavated to culturally sterile soil.

Environmental sampling of the site was minimal. Bulk soil samples (Kane et al. [14]) were collected from a hearth (Feature 1) and a pit feature (Feature 2). Twelve pollen samples, in three transects, were taken from the modern ground surface of the site for a modern-pollen control sample.

ARCHITECTURAL REMAINS

Architectural remains at Hawk House consist of a single room with a central fireplace, an outside hearth, and a small outside pit (Figure 17.7). Figures 17.8 and 17.9 illustrate the general site profiles.

Post-abandonment Processes

When the site was abandoned, eolian and alluvial processes began to deposit sediment across the site. The rate of deposition was fairly slow; portions of the walls of Room 1 were visible from the modern ground surface. The fill was characterized by a few cultural materials (flaked and nonflaked lithics) and a small amount of charcoal. The red-brown soil (7.5YR4/6) of the fill was characterized by a clay-loam texture and a hard and compact consistency.

Cultural Units

Use Area 1

Use Area 1 (Figure 17.7) is an unbounded locus which includes Room 1, an outside hearth (Feature 1), and an outside pit (Feature 2). The material culture recovered from the area and the architectural style of Room 1 indicate that Use Area 1 was a limited activity area of the McPhee Phase (A.D. 850-970). That Use Area 1 served as a hunting camp is inferred, based on two assumptions: 1) that only one room was present, and 2) that the marsh was present and the various resources associated with it were available.

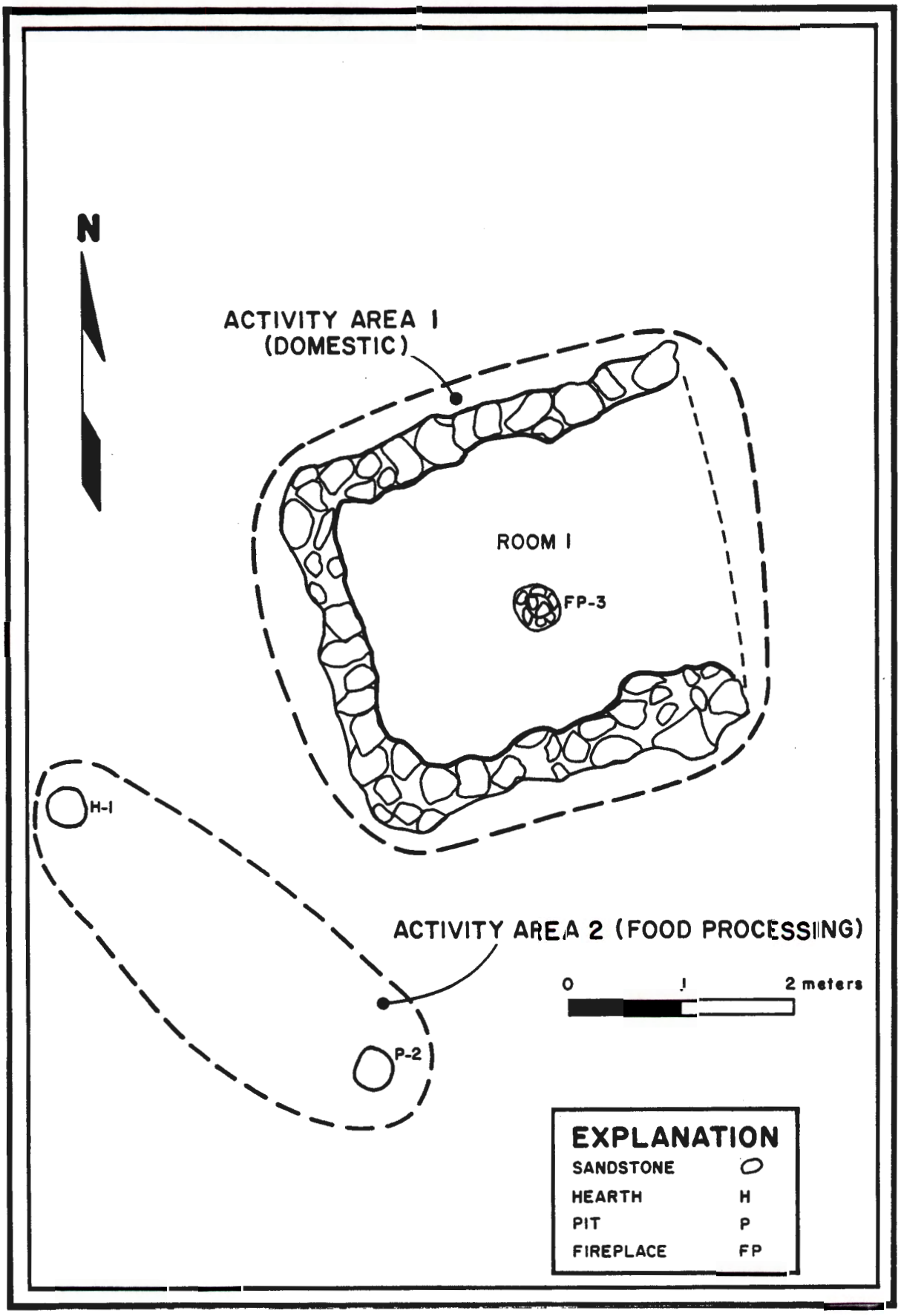

Figure 17.7 Spatial relationships of major cultural units at Hawk House.

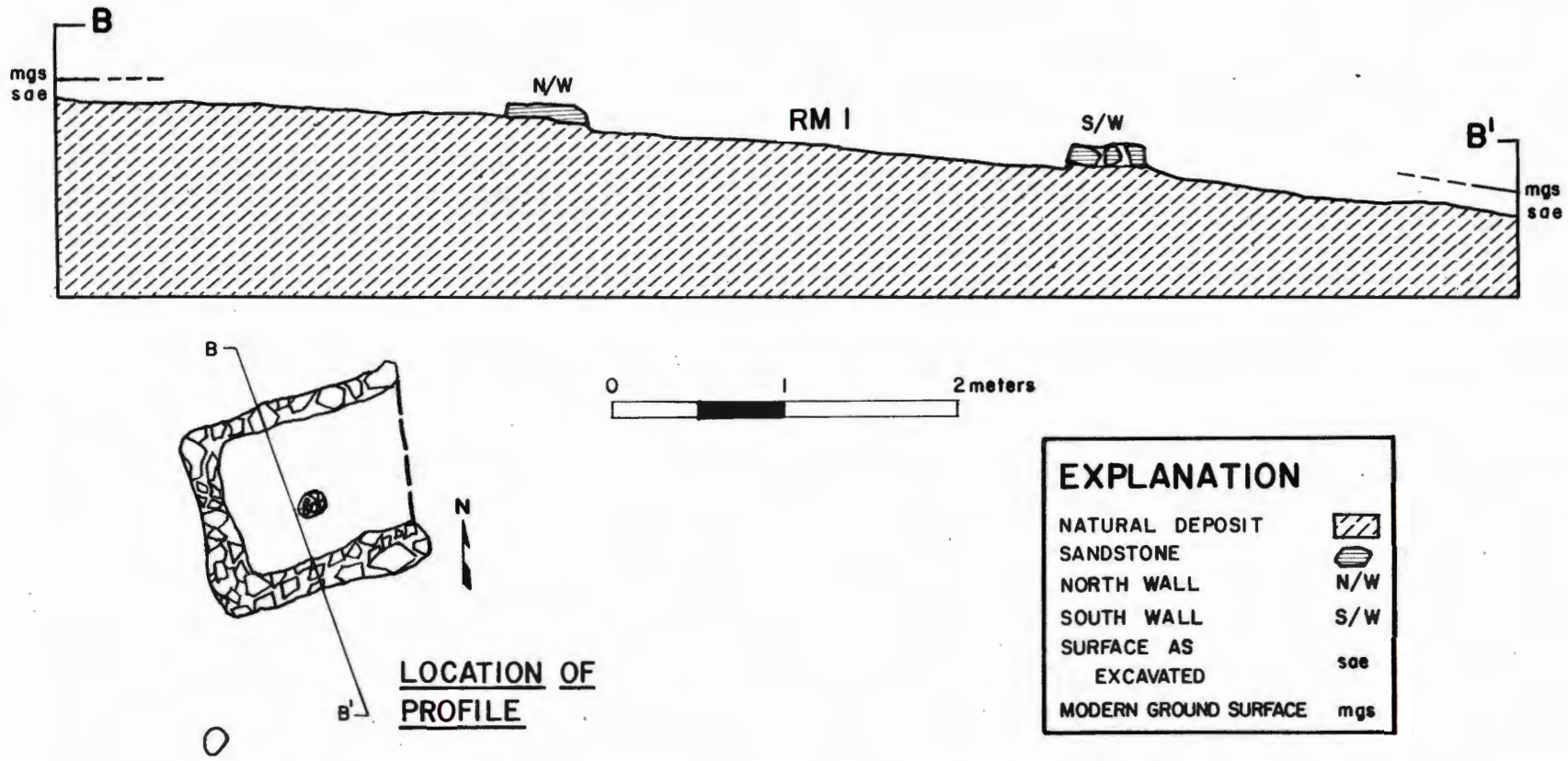

Figure 17.8 North-south general site profile, Hawk House.

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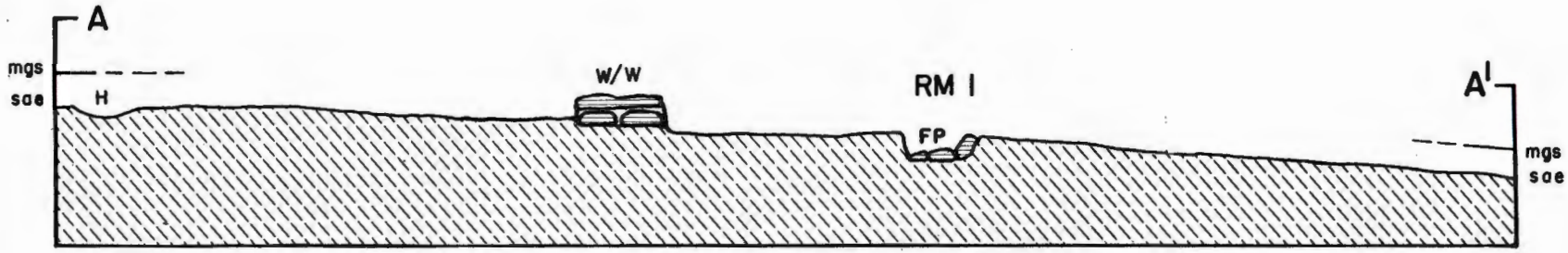
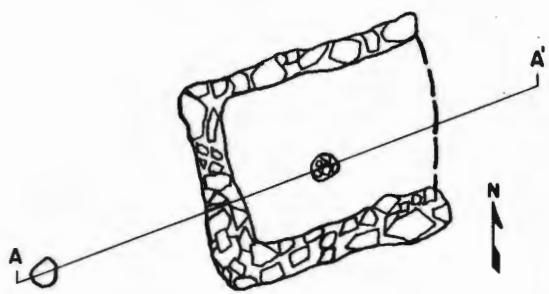
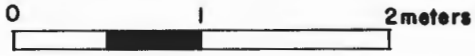




LOCATION OF PROFILE



EXPLANATION

NATURAL DEPOSIT	
SANDSTONE	
EAST WALL	E/W
WEST WALL	W/W
FIREPLACE	FP
SURFACE AS EXCAVATED	sae
MODERN GROUND SURFACE	mgs

Figure 17.9 East-west general site profile, Hawk House.

Activity Area 1. Activity Area 1 (Figure 17.7) is a bounded locus consisting of Room 1 and its central fireplace (Feature 3).

Activities within this area are believed to have centered around hunting. There is no evidence of food processing, tool manufacture, or other domestic activities.

Room 1 (Figures 17.10, 17.11, and 17.12):

Dimensions:

North-south diameter:	2.75 m
East-west diameter:	2.62 m
Floor area:	7.2 m^2

Architectural evidence indicates that Room 1 was constructed and occupied during the McPhee Phase (A.D. 850-970). The length of occupation is inferred to be short due to the paucity of features and cultural material recovered. The construction style is similar to that at McPhee Pueblo (Brisbin [15]).

The remaining walls indicate it was a square structure, although no evidence was found of the eastern wall. The open section of Room 1 is oriented to the northeast, but it is not known if this portion was open during occupation. There was no indication of a prepared or use-compacted floor in Room 1, nor was there evidence of a superstructure over this room.

Walls:

Dimensions:

North Wall:	
Length:	3.90 m
Width:	0.50 m
Height:	0.12 m
South Wall:	
Length	3.50 m
Width:	0.40 m
Height:	0.18 m

Figure 17.10 Photograph of Room 1 after clearing but prior to excavation, facing southwest (D.A.P. 025232), Hawk House.

Figure 17.11 Photograph of Room 1, facing north (D.A.P. 30007), Hawk House.

Figure 17.12 Final photograph of Room 1, facing west (D.A.P. 30013), Hawk House.

Figure 17.13 Final photograph of Feature 1, facing north, (D.A.P. 30003), Hawk House.

Figure 17.14 Final photograph of Feature 3, facing southwest (D.A.P. 30010), Hawk House.

West Wall:

Length:	3.50 m
Width:	0.45 m
Height:	0.19 m

The room was constructed of unshaped sandstone slabs placed horizontally on the prehistoric ground surface; no foundation was evident and no mortar or plaster were recovered. The same construction technique is found at McPhee Pueblo (Brisbin [15]), 1.18 km to the east.

Fireplace (Feature 3):

Dimensions:

Length:	40 cm
Width:	42 cm
Depth:	12 cm

A stone-lined fireplace (Feature 3) was discovered in the center of Room 1 (Figure 7.14). Feature 3 is circular in plan and basin shaped in profile. Small flat sandstone fragments with evidence of burning line the fireplace. The feature had been dug into culturally sterile soil. Fill was homogeneous; it showed indications of charcoal, but no ash was mixed with natural post-abandonment deposits. It is inferred that the fireplace was used for heating and possibly for cooking.

Due to the presence of only one feature and to the small amount of cultural material recovered, it is suggested that Room 1 was used only for limited activities. The small size of the room and the lack of nearby arable soils preclude its use as a field house. Proximity to the possible prehistoric marsh and lowlands suggest that the room might have been used in conjunction with hunting activities.

Activity Area 2. Activity Area 2 (Figure 17.7) is located 1.50 m southwest of Room 1 and consists of a hearth and a small pit (Features 1 and 2, respectively) separated by approximately 3.5 m. This activity area

is believed to be contemporaneous with Room 1, and it is considered part of Use Area 1. The original extent of the activity area is not known. No cultural surfaces were encountered during excavation.

Hearth (Feature 1):

Dimensions:

Length:	30 cm
Width:	33 cm
Depth:	6 cm

Feature 1, a hearth, is located in the northern part of the activity area (Figure 7.13). It is circular in plan and basin shaped in profile. The pit for the hearth was dug into culturally sterile soil. The fill contained two strata; the upper stratum was contemporary with the clay-loam found throughout Use Area 1, but contained minor charcoal speckling, and the second stratum was a thin charcoal lens. The hearth was probably used for cooking purposes.

Pit without burning (Feature 2):

Dimensions:

Length:	36 cm
Width:	32 cm
Depth:	5 cm

Feature 2 is situated in the southern part of the activity area. The pit feature had been dug into culturally sterile soil; it is circular in plan and basin shaped in profile. The pit fill was contemporaneous with the clay-loam stratum found in Use Area 1 and contained a small amount of charcoal. A moderate amount of oxidation was evident on the walls of the pit, indicating its possible use as a baking pit. No stones or other indications of a lining were present within the feature.

MATERIAL CULTURE

Preliminary analyses of the artifact assemblage from Hawk House was conducted by D.A.P. laboratory personnel; the results are presented below.

Ceramics

Twenty sherds were recovered from the survey and excavation activities at Site 5MT4681; these are listed by ware and type in Table 17.1. Of the 20 sherds, 18 were collected by the survey crew and two by the excavation crew; all ceramic items were collected from the surface of the site. All are body sherds, which are not temporally diagnostic. Based on the gray ware and white ware body sherds of Early Pueblo affiliation the ceramic artifacts represent site usage between A.D. 600-900. The presence of two red ware body sherds indicates post-A.D. 750 site use, as red ware does not appear in the project area until approximately A.D. 750. On the basis of ceramic data, site occupation is estimated to be A.D. 750-900.

Flaked Lithics

In total, 481 flaked lithic tools and debitage items were recovered from Hawk House. Totals and field proveniencies for these artifacts are summarized in Appendix A. The distribution of flaked lithic artifacts is not restricted to Use Area 1, but covers a broader area including the entire ridge on which Hawk House lies.

Only 12 of the 481 flaked lithic artifacts are tools (Appendix A, Tables 17.2 and 17.3). The assemblage contains an unusually high

Table 17.1 Summary of Descriptive Frequencies of Ceramics at Hawk House

WARE TRADITIONAL TYPE	BY COUNT												WEIGHTS	
	BOWL		JAR		OTHER		TOTAL		RIMS		MODIFIED			
	#	%	#	%	#	%	#	%	#	%	#	%	gram	%
Mesa Verde Gray														
Early Pueblo			14	88.7			14	80					110	84.6
Mesa Verde White														
Early Pueblo			2	11.1			2	10					6	4.6
Mesa Verde Red														
Early Pueblo	2	100					2	100	1	100	1	100	14	10.7
TOTALS	2		16				18		1		1		130	

percentage of bifaces and a low percentage of utilized flakes, which is indicative of high curation. Production input of this sort could date to the Archaic Tradition or to a highly specialized Anasazi group (Appendix A). The predominant tools are scrapers, which might have been used in hunting (e.g., butchering) activities.

The high percentage of debitage items indicates that tool reduction occurred at the site. Fine- and microscopic-type material classes, characteristic of Archaic assemblages, dominate the collection from Site 5MT4681. However, counts of cortex and platforms are low in the assemblage from Site 5MT4681; Archaic assemblages usually exhibit a high count of these attributes.

Nonflaked Lithics

Of the 27 nonflaked lithic tools recovered from Hawk House, six were from Room 1, six were from the surface collection, and the remaining 15 were from general site proveniences (Appendix A, Table 17.4). Eighty-five percent of the assemblage is either manos or grinding stones that reflect an Archaic component (Appendix A); Archaic-type manos are characteristically one-hand, and Archaic-type grinding stones are flat. Food processing probably occurred at the site; however, whether food-processing activities occurred in conjunction with hunting or gathering activities is unknown.

Dating Methods

The lack of clear-cut datable material does not allow for a secure temporal designation of Hawk House. Based on the material culture, it appears that there were probably two major components at the site (i.e.,

intermittent use over an extended time period by two different groups of people): one during the Archaic Tradition and the other during the McPhee Phase.

The nonflaked lithic tool collection consists predominantly of one-hand manos and flat grinding stones characteristic of an Archaic assemblage. The flaked lithic tool assemblage contains predominantly highly curated items that could be either Archaic or could represent highly specialized Anasazi group (Phagan [16]). The high percentage of debitage items, though indicative of tool reduction, is not temporally diagnostic.

Use Area 1 is dominated by Room 1, which exhibited a construction technique similar in composition to what is found at McPhee Pueblo (Brisbin [15]). Both Room 1 at Hawk House and McPhee Pueblo have horizontally laid tabular sandstone slabs which are temporally diagnostic of the McPhee Phase. The similar construction styles indicate contemporaneity of these two sites; the construction is estimated to date to A.D. 850-970.

The ceramic assemblage from Site 5MT4681 indicates an occupation range of A.D. 750-900. The presence of Early Pueblo types establishes the range at A.D. 600-900. As red ware does not appear in the project area before A.D. 750, the presence of red ware at Hawk House narrows the occupation to A.D. 750-900.

CONCLUSIONS

Hawk House has been described as a hunting camp and food-processing area located on the southern edge of a north-south oriented knoll in the Sagehen Flats Locality. Its greatest locational advantage would have been its view over the surrounding lowlands; it would have provided an excellent vantage point for the procurement of large game and water fowl, if such resources were available.

Hawk House was divided into one use area comprising two activity areas (Figure 17.7) to aid in interpretation of the site's function. The small amount of cultural material recovered from Site 5MT4681 indicates that is was a limited activity site, i.e., a site where a minimal range of activities took place, located away from centralized areas of prehistoric activity (Kane [1]).

The flaked lithic assemblage and the general lack of cultural features indicate that Hawk House was used as a hunting camp; the high incidence of nonflaked lithic tools indicates the site's use as a food-processing locale, probably by food-gathering groups who used it during expeditions in search of edible plants. Based on the material culture and architecture, Hawk House was probably used for both types of activities during the Archaic Tradition and again during the McPhee Phase.

APPENDIX A

LITHIC REPORT FOR HAWK HOUSE

by

Thomas H. Hruby and Carl J. Phagan

The data presented in Tables 17.2, 17.3, and 17.4 represent part of the lithic reductive-technology analysis completed for Site 5MT4681. From a 12-attribute Flaked Lithic Tool (FLT) analysis system, four attributes were selected to illustrate general technological, functional, and raw-material variablity. 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 four 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 [16]).

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 percentage data for all D.A.P. Anasazi

Table 17.2 Lithic Analysis Data Summary for Hawk House, Flaked Lithic Tools

	Surface Collection (N = 4)		Room 1 (N = 3)		Other Excavated Units (N = 5)		Total Site 5MT4681 (N =12)		Anasazi Group (N =7048)
	#	%	#	%	#	%	#	%	%
MORPHO-USE FORM, #2									
Indeterminate					1	20.0	1	8.3	0.5
Utilized flakes	1	25.0					1	8.3	43.6
Cores					2	40.0	2	16.7	19.0
Choppers, Scraper			1	33.3			1	8.3	10.4
Thick scrapers	1	25.0					1	8.3	6.4
Thin scrapers	2	50.0	2	66.7	1	20.0	5	41.7	10.1
Bifaces									3.9
Projectile points					1	20.0	1	8.3	3.7
Specialized forms									2.3
THINNING STAGE: DORSAL									
Indeterminate									0.3
Nonfacial item			1	33.3	1	20.0	2	16.7	19.8
Unthin item, w/ cortex	3	75.0			1	20.0	4	33.3	31.7
Unthin item, no cortex			1	33.3			1	8.3	31.4
Prelim shap, w/ cortex									3.7
Prelim shap, no cortex									2.6
Primary thinning									1.2
Secondary thinning									1.1
Well-shaped	1	25.0	1	33.3	3	60.0	5	41.7	7.5
Highly stylized									0.7
THINNING STAGE: VENTRAL									
Indeterminate									0.2
Nonfacial item					1	20.0	1	8.3	19.5
Unthin item, w/ cortex									1.9
Unthin item, no cortex	4	100	2	66.7	2	40.0	8	66.7	64.4
Prelim shap, w/ cortex									1.4
Prelim shap, no cortex									3.4
Primary thinning									1.2
Secondary thinning									1.0
Well-shaped		25.0	1	33.3	2	40.0	3	25.0	6.4
Highly stylized									0.7
GRAIN SIZE									
Medium (coarse)									2.1
Fine	1	25.0	1	33.3					6.2
Very Fine (detrital)	1	25.0					2	16.7	65.3
Microscopic							1	8.3	
(nongranular)	2	50.0	2	66.7	5	100.0	9	75.0	26.3

Table 17.3 Lithic Analysis Data Summary for Hawk House, Flaked Lithic Debitage

	Surface Collection (N = 25)		Room 1 (N = 186)		Other Excavated Units (N = 258)		Total Site 5MT4681 (N = 469)		Anasazi Group (N=66095)
	#	%	#	%	#	%	#	%	%
GRAIN SIZE									
Medium (coarse)					3	1.1	3	0.6	3.2
Fine	2	8.0	2	1.1	5	1.9	9	1.9	21.4
Very Fine (detrital)	11	44.0	107	57.5	156	60.5	274	58.4	51.6
Microscopic (nongranular)	12	48.0	77	41.4	94	36.4	183	39.0	23.7
Items with Cortex, %	1	4.0	3	1.6	10	3.9	14	3.0	25.9
Items with Platform, %	9	36.0	36	19.3	60	23.6	105	22.4	38.8
Obsidian Items, #					2	0.1	2		18
Mean Weight (grams)	3.80		1.07		1.41		1.39		7.93
Total Debitage, #	25		186		258		469		66095

Table 17.4 Lithic Analysis Data Summary for Hawk House, Nonflaked Lithic Tools

	Surface Collection (N = 6)		Room 1 (N = 6)		Other Excav. Units (N = 15)		Total Site 5MT4681 (N = 27)		Anasazi Group (N=4318)
	#	%	#	%	#	%	#	%	%
MORPHO-USE FORM									
Indeterminate			1	16.7	1	6.7	2	7.4	9.2
Generalized, unhafted			1	16.7	1	6.7	2	7.4	24.0
Hammerstones									9.9
Manos	4	66.7	3	50.0	4	26.7	11	40.7	33.5
Slab Metates			1	16.7	2	13.3	3	11.1	2.1
Trough Metates									9.4
Unspecified & Frag Metates	2	33.3			7	46.7	9	33.3	5.2
Generalized, hafted									2.5
Miscellaneous Specialized									4.0
PRODUCTION EVALUATION									
Indeterminate	1	16.7	3	50.0	10	66.7	14	51.9	8.4
Nodule	4	66.7	2	33.3	3	20.0	9	33.3	53.5
Minimally Shaped	1	16.7			2	13.3	3	11.1	16.7
Well-shaped			1	16.7			1	3.7	21.1
Highly stylized									0.1
ITEM COMPLETENESS									
Indeterminate									0.9
Small Fragment	1	16.7					1	3.7	3.3
Partial Implement	3	50.0	4	66.7	12	80.0	19	70.4	45.6
Complete (+ or -) Implement	2	33.3	2	33.3	3	20.0	7	25.9	50.8
GRAIN SIZE									
Indeterminate									8.1
Coarse	1	16.7	2	33.3	1	6.7	4	14.8	16.5
Medium	1	16.7	4	66.7	6	40.0	11	40.7	39.4
Fine	4	66.7			8	53.3	12	44.4	34.5
Nongranular									1.2

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

Site 5MT4681 is interpreted as a hunting camp and/or limited activity area intermittently used during the Archaic Tradition through the McPhee Phase. Due to the unique status of the site, comparisons with other similar temporal/functional sites cannot be made. The small number of artifacts recovered from the site makes generalizations very difficult. These problems should be kept in mind when reading this appendix.

The flaked lithic tools from Site 5MT4681 are represented by only 12 items. With such a low sample size only the most general of statements can be made. An unusual feature of the lithic tool profile is the high percentage of bifaces, and the relatively low number of utilized flakes. The profile suggests a highly curated technology at the site, possibly Archaic or a highly specialized Anasazi activity locus. The high degree of technological input and the predominance of microscopic raw materials could be used to support either position.

The flaked lithic debitage is the only lithic category that has a large enough sample for meaningful comparisons. Very fine and microscopic raw materials dominate the material types in the assemblage. Archaic sites in the project area have a similar raw material profile but differ in the counts of cortex and platforms. Archaic sites have very high counts of cortex and platform remnants, generally higher than the Anasazi

group. The debitage profile suggests that Site 5MT4681 is a unique technological situation probably representing a tool-reduction sequence. The low mean weight of the debitage would support such a conclusion.

There are 27 nonflaked lithic tools from Site 5MT4681, which reflects a food-processing technology. Manos and metates constitute approximately 85 percent of these tools. The unusually high percentage of food-processing tools suggests that food processing was a very important activity at the site.

A closer examination of the nonflaked lithic tools reveals that the materials present at the site reflect an Archaic assemblage. Archaic nonflaked lithic assemblages are characterized by one-hand manos and flat grinding stones. These tools are heavily faceted with no resurfacing present, suggesting that something other than corn was being processed at the site.

Site 5MT46581 is interpreted as having been a special activity locus/hunting camp dating to both the Archaic Tradition and the McPhee Phase. The nonflaked lithics are probably associated with the Archaic Tradition, while Room 1 probably dates to the McPhee Phase. The flaked lithic artifacts, especially the debitage, suggests that lithic reduction of high input tools was taking place at the site. The flaked lithics could belong to either temporal assemblage, suggesting that the site materials are heavily mixed.

APPENDIX B

MAGNETOMETER REPORT FOR HAWK HOUSE

by

Robert J. Huggins and John Weymouth

Introduction

The magnetometer survey at Site 5MT4681 commenced on 28 August 1978 and as the survey covered only one block the site was completed on that day (see Huggins and Weymouth [12] for background magnetometer information). The grid was established by A. Kane, assisted by the magnetometer crew, and encompassed the eastern site of a ridge-top. A small rubble area, noted by the field crew, occurred within the survey area at the point 18 N, 7 E; no other topographic irregularities were present which might contribute to the magnetic field. Readings of the magnetic field were measured on a grid of points at 1 m intervals, a standard for most of the sites in the project area.

Processing

The data on Site 5MT4681 were corrected for diurnal drift, checked, and stored on the IBM 360/370 in a form accessible by graphic display routines. Preliminary maps of the total field intensity were made in order to examine the magnetic anomalies. Initial information made available 2 October 1979 indicates six areas of potential interest. After re-examination, final versions of the maps were run and photographs made. The result is shown in Figure 17.15, a SYMAP representation and in Figure 17.16, a line contour map.

Interpretation

Table 17.5 lists the anomalies of archaeological interest at Site 5MT4681. Re-assessment of the data after the preliminary report suggested that some of the anomalies indicated in the preliminary report thought to

DOLORES ARCHAEOLOGICAL PROGRAM

SITE 5MT4681

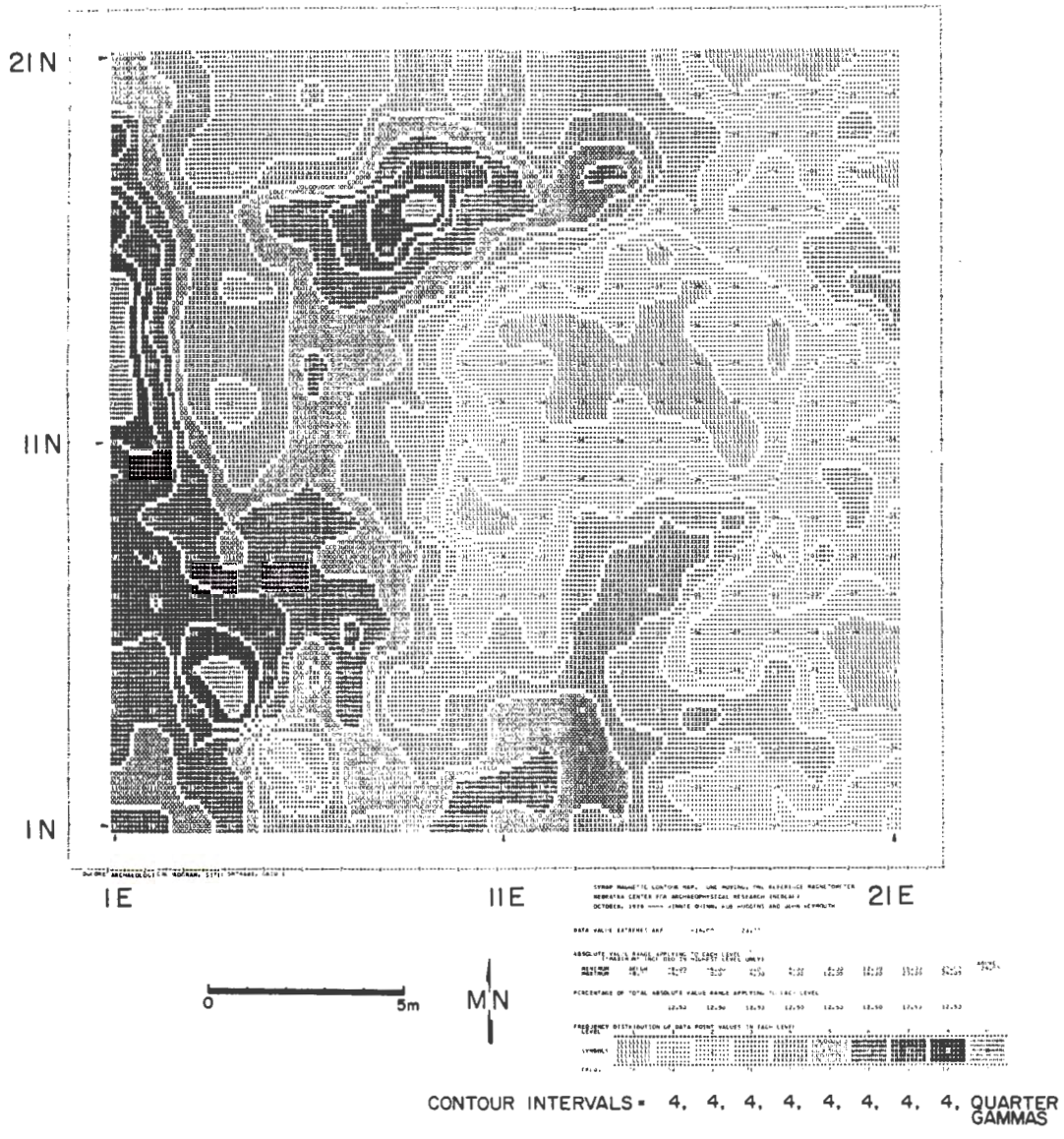
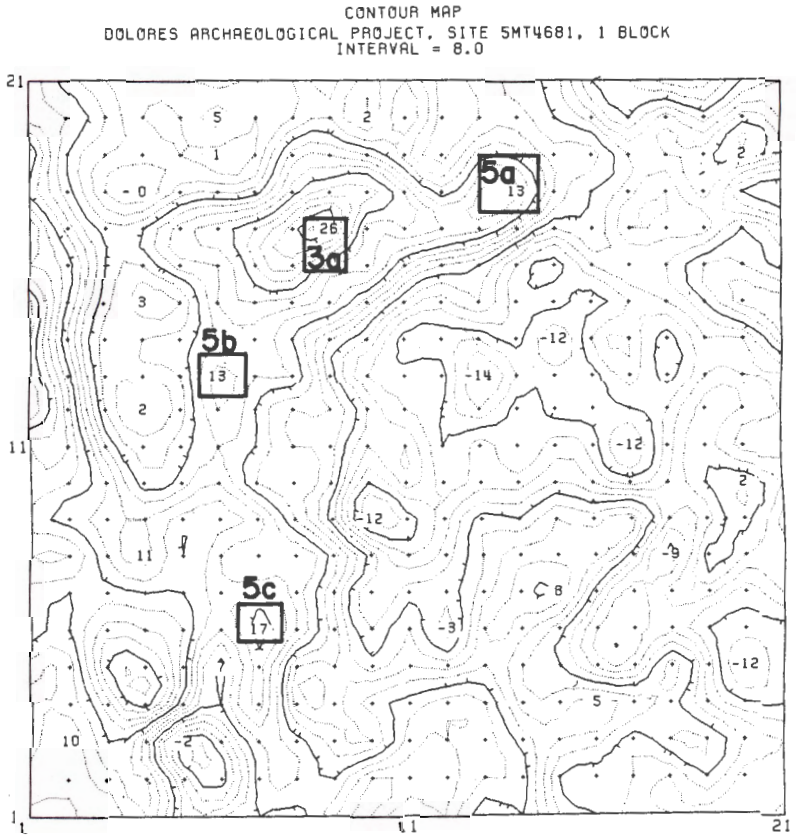


Figure 17.15 SYMAP of magnetic field, Hawk House.



SQUARES INDICATE SUGGESTED TEST AREAS. THE NUMBERING SCHEME IS EXPLAINED IN THE INTRODUCTION.

M N

0 5m

NEBCAR 1980

Figure 17.16 Line contour map, including test squares, Hawk House.

Table 17.5 Magnetic Anomalies with Possible Archaeological Affiliation on Hawk House

Anomaly & Priority	Location of Center	Possible Source	Statistics*	Comments
3a	17N,9E	Surface structure	A = 6 xA = 12	Likely a thin layer** of burned material concentrated at the at the point 17N, 9E. This anomaly corresponds with Anomaly #1 in the preliminary report.
5a	28N,13.5E	Small feature	A = 3 xA = 1	Perhaps associated with 3a, though too indistinct to suggest origin. This anomaly corresponds with Anomaly #4 in the preliminary report.
5b	13N,6E	Small feature, perhaps hearth	A = 2 xA = 1	Indistinct possible burning. This anomaly corresponds with #5 in the preliminary report.
5c	6N,6E	Small feature	A = 1 xA = 1	Indistinct, possible burning. This anomaly corresponds with #3 in the original report.

* Additional explanation is included in the interpreation section of the Magnetometer Appendix.
**A = Magnitude (Gamma/4 units)
xA = Area inside half-width contour (m^2)

have been caused by archaeological sources might be noncultural in origin. As a consequence, some of the numbers assigned to anomalies in the preliminary report may not correspond to the final numbering scheme presented in the table; however, original numbers are noted in the "comments" column. The location of the test squares associated with these anomalies is shown in Figure 17.16.

Anomaly 3a requires additional explanation. This anomaly appears to be the only response of any significant interest, as is indicated by its priority. The anomaly is possibly a shallow burned area centered on the point 17 N, 9 E.

Summary

The magnetometer survey of Site 5MT4681 indicated four areas of potential archaeological interest. Anomaly 3a is the most promising, and may have been caused by a concentration of burned material. Anomalies 5a through 5c have signatures typical of archaeological features but are too indistinct to suggest a definite source. These anomalies do not suggest the presence of other nearby features outside the surveyed grid; future surveying in the immediate vicinity is not advised.

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