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COLLEGE OF LIBERAL ARTS

INVESTIGATIONS AT THREE SMALL CLASSIC MIMBRES SITES, GRANT COUNTY, NEW MEXICO

by

DORY BOYD FUNK

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ABSTRACT

Investigations at Three Small Classic Mimbres Sites,
Grant County, New Mexico

Dory B. Funk

The applicability of three functional models concerning the occurence of small Classic Mimbres phase architectural sites is evaluated in light of data obtained from three sites in Grant County, New Mexico. One model proposes that small sites serve a trade-related function, another holds that small sites serve as agricultural fieldhouses, and the third posits small sites are actually crop storage facilities.

Emphasis is focused on the structural attributes of the sites dealt with here due to the disturbed condition of each. The distinction between temporary and permanent habitational status of each site is made, based upon architectural data and associated room features.

None of the functional models discussed herein account for the variability observed at the three sites. It is suggested that before viable general models describing the role of small sites in the cultural adaptation of the Classic Mimbres phase can be developed, a sample of sites must be examined from the perspective of their own unique contexts and attributes.

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Introduction

In the last decade, three major studies concerning settlement pattern analysis in the Mimbres region have put forth three different variations of a non-habitation, special activity model for small Classic Mimbres architectural sites. Using data obtained from field research, the sites NAN-4, NAN-5, and DELK-1 will be treated as case studies with which to review the three different models of site function and distribution.

Each summer since 1978, the Anthropology Department at Texas A&M University under the direction of Dr. Harry J. Shafer has conducted excavations at the NAN Ranch Ruin, a large Classic Mimbres Phase pueblo, in the Mimbres River Valley in Grant County, New Mexico (Shafer 1983). During the 1982 summer field season, the opportunity arose to extend investigations to three small Classic Mimbres ruins: NAN-4, a one-room ruin, and NAN-5, a four-room ruin, are located approximately 7.5 km northeast of the NAN Ranch Ruin in the Gavalan Arroyo. DELK-1, a two-room ruin, is approximately 25 km northwest of the NAN Ranch Ruin on the Delk Ranch in the Lambright Draw watershed (Figure 1).

Small ruins ranging from one to ten rooms are somewhat of an enigma in Mimbres archaeology. Very little research has been explicitly directed toward their role in the over-all cultural adaptation of the Classic Mimbres people. These small sites, also known as "outliers," are found in high frequencies between large pueblos in the valley proper, and away from the valley up side drainages and tributaries. They are generally categorized as having low artifact yields and exhibiting unsubstantial architectural construction when compared with larger pueblos. Most often, the ruins are examined during surveys. To date, only one such site has been systematically excavated and reported on (Nelson et al. 1979).

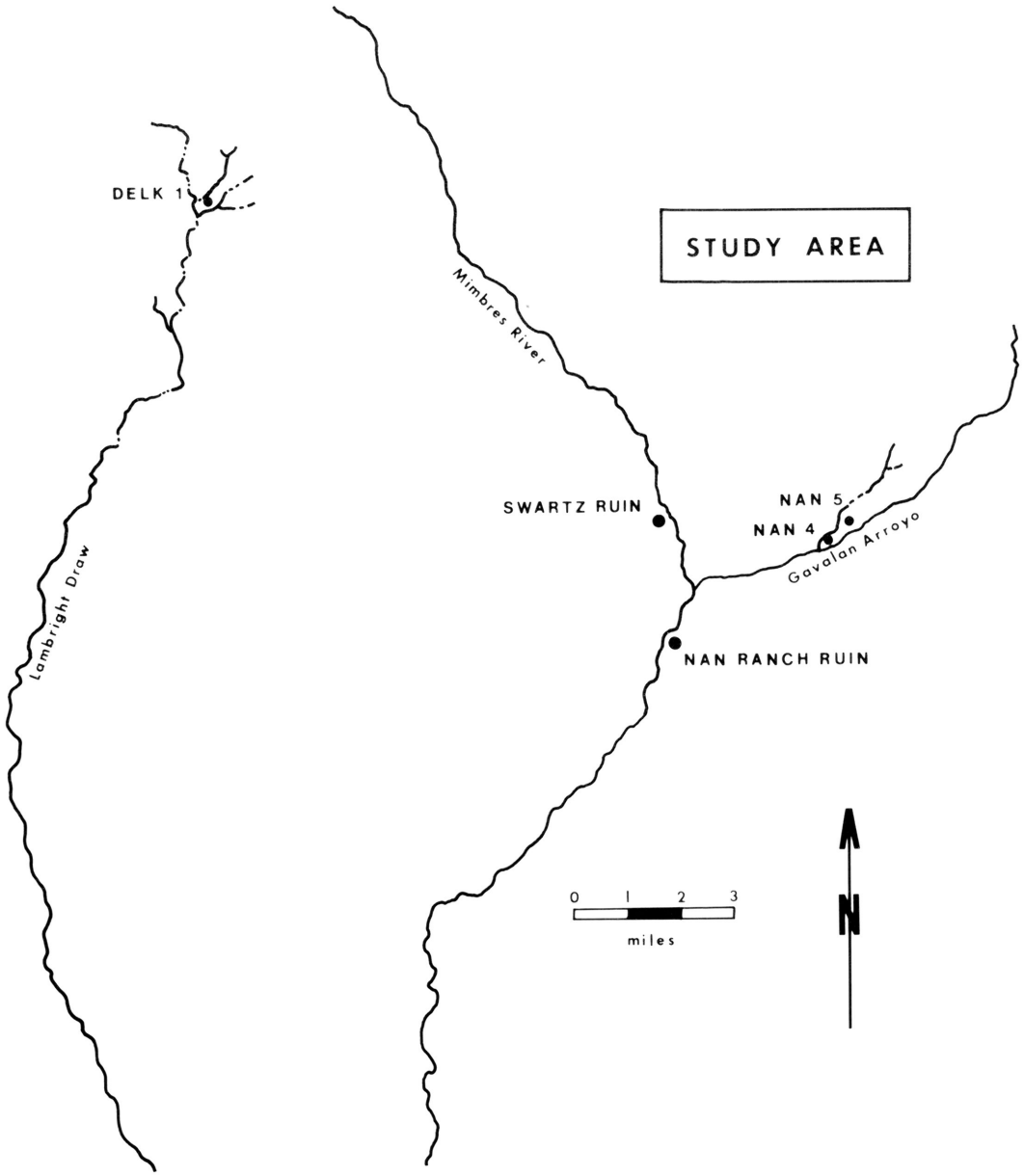
DELK 1
STUDY AREA
Mimbres River
SWARTZ RUIN
NAN 5
NAN 4
Gavalan Arroyo
Lambright Draw
NAN RANCH RUIN
0 1 2 3
miles
N

Figure 1

Three primary objectives are addressed in this report. The first is to contribute to the data based concerning small ruins in the Mimbres Valley through descriptions of NAN-4, NAN-5, and DELK-1. Secondly, inferrences as to the function of each site are offered, based on the examination of the sites within their own unique content. Finally the prevailing functional models explaining the role of small outlier architectural sites in the Mimbres Valley are reviewed in light of information obtained from NAN-4, NAN-5, and DELK-1.

It has been proposed in previous studies (B.K. Nelson 1977, L . Herrington 1979, B.A. Nelson 1980) that ruins of this class located in marginal areas served as non-habitation special activity sites involved with the agricultural and trade practices of the Classic Mimbres phase. It is apparent that two of the three ruins dealt with here do not conform to such a model, thus contradicting trends observed in survey-oriented studies encompassing a much greater number of sites. It is noted that the contradiction could be an artifact of our small sample. However, the data seems to suggest that the prevailing models break down when individual sites are extensively investigated, as opposed to less thorough examinations conducted during surveys.

Mimbres Background

The ruins focused on in this study fall within the Classic Mimbres phase, which culminates a sequence of habitation in the valley stretching back to about 200 A.D. The sequence is generally divided into three periods: the Early Pithouse, the Late Pithouse, and the Classic Mimbres (LeBlanc and Whalen 1980).

The Early Pithouse period lasted until about 550 A.D. During this time, the people built small villages of circular semi-subterranean pithouses situated on top of high hills and ridges overlooking the valley. Pottery was used, and types considered distinctive of this phase include polished redware and plain brownware.

The Late Pithouse period began around 550 A.D. and lasted until about 950 A.D. (LeBlanc and Whalen 1980). Villages had increased both in size and number over the previous phase, indicating a corresponding growth in population. The pithouses of this period are more rectangular in shape and are located at lower elevations, built on benches and terraces closer to the river and floodplains. The Late Pithouse period is further divided into three phases (Georgetown, San Fransicso, and Three Circle) based on evolving ceramic designs and settlement locations progressively nearer the valley floor.

Painted pottery first appeared in the region during the San Francisco phase with bold red designs painted on brownware, a ceramic style known as Mogollon Red-on-Brown. During the Three Circle phase, painted pottery developed in a continous progression of styles from Mogollon Red-on-Brown through Three Circle Red-on-White, a white-slipped brownware with red designs, to Mimbres Boldface Black-on-White (Anyon 1981).

The transition to the Classic Mimbres phase is marked by a switch from semi-subterranean pithouses to above the surface pueblos and a corresponding change in painted ceramic designs. The painted designs developed from Mimbres Boldface Black-on-White through a transitional style (LeBlanc 1976; Shafer 1983) to the intricate, fine-lined designs characteristic of Classic Mimbres Black-on-White pottery.

The surface pueblos were built on the first bench above the river, the same preferred location for the latest pithouse villages. In fact, some Classic Mimbres pueblos are found overlying pithouse settlements (Cosgrove and Cosgrove, 1932; Shafer, et al, 1979). The in situ evolution of pithouses to above-surface pueblos coupled with the stylistic continuum of painted ceramic designs suggest that the Late Pithouse phase and the Classic Mimbres phase were not serparated by a transitional phase (Anyon et al, 1980). Some earlier investigators held that the small ruins lying between the larger pueblos in the valley represent such a transitional phase of occupation, termed the Mangas phase (Dansen 1957).

The typical Mimbres pueblo unit was constructed of walls made with several tiers of large cobbles set in adobe. Floors generally consisted of hardpacked adobe. Slab-lined hearths were built intrusive to the floors, particularly in dwelling units. The Mimbres people also interred their dead beneath the adobe floors of dwelling units. The burials are often accompanied by mortuary vessels inverted over the body's head.

The pueblo ruins in the valley are generally not well preserved due to several factors. First, the striking Classic Mimbres Black-on-White pottery brings substantial prices from private collectors, and relic hunters are well aware of the unusual Mimbres mortuary practices. Many sites have been systematically destroyed in the quest for mortuary vessels, and the great majority of sites exhibit a severe degree of disturbance. Also, the adobe and cobble walls are especially susceptible to erosion. Extensive erosion coupled with the observed aboriginal abandonment pattern (the Mimbres people cleaned out and burned the peublo units upon abandonment) causes only a few tiers of wall rock set in adobe covered by wall

fall debris to be left of the original wall stucture.

Pertinent Studies

The three reports reviewed in this section deal in detail with settlement patterns observed in the Mimbres region. For present purposes, only those aspects of the studies dealing directly with small architectural sites are discussed.

Bonnie K. Nelson (1977), in a settlement pattern analysis utilizing quantitative spatial models, has suggested that the occurance and distribution of outlier sites in the Mimbres Valley are due to trade-related factors. This proposition generates from her thesis that outside influences played the dominant role in the cultural development of the Classic Mimbres phase.

Nelson classifies the multitude of sites in the valley in terms of a hierarchy using 5 categories based on room number and total room area. She reserves the "special activity" designation for only one-room sites, which constitutre her first category. According to Nelson, one-room sites are clustered in two major areas of mid-portion of the valley. However, no special resources are known to be present at the clustering loci (1977: 84). She postulates that the fact that the clusters exist indicates specialization or functions other than habitation. Nelson (1977:90) then suggests that "...the marked differentiation of site types i.e., special function versus habitation..." combined with the large range of site sizes, the increase of exotic raw materials during the Classic Mimbres period, and "... the fluorescence of the refined ceramic tradition..." supports the notion that outside influences played the dominant role in the cultural

development of the Classic Mimbres. Specifically, the influence originated from a trade route established during this period between Casas Grandes to the south and Chaco Canyon to the north.

Laverne Herrington (1979), in a thorough settlement pattern analysis focusing on the Arenas Valley drainage in the Mimbres region proposes that the observed settlement patterns are due to the unequal distribution of water and arable land. She too classifies pueblo ruins in the Mimbres region into five categories. Following Herrington, first order sites have 20 to 30 dwelling rooms, third order sites have 9 to 18 dwelling rooms, fourth order sites have 2 to 8 dwelling rooms and fifth order sites (her "outlier" category) have 1 or 2 rooms. She differentiates between the first four orders of ruins and fifth order ruins on the basis of four criteria: artifact assemblage, kind of construction, presence and relative numbers of small rooms and large rooms, and presence of burials. The pueblos of the first four orders display a full range of artifact types and wall construction is substantial, often having four or five tiers of large cobbles. On the other hand, fifth order structures display limited artifact assemblages and insubstantial wall construction with only a single base course of stone, and adobe constituting the rest. While the preferential location of pueblos is on the first bench, fifth order structures occur in high frequency (Herrington identified 41 in the Arenas Valley) both on the first bench of the valley and in upland areas. The outlier sites encountered in upland areas were situated proximally to either check dams in drainages or cleared terraces and open fields suitable for cultivation. One site was found isolated on a hilltop. The observed average area for 5th order structures is 6.25m^2.

Herrington proposes that outlier sites served as temporarily utilized fieldhouses whose occupants tended crops or maintained check dams. She further suggests that the structures slight construction makes the possibility of the sites serving as storehouses unlikely.

Ben A. Nelson (1980) investigated cultural responses to population changes in the Mimbres Valley. In his report Nelson posits that population pressure is the determinate factor of the Classic Mimbres Phases settlement pattern.

During the Classic Mimbres phase, the population of the valley was at its peak. Le Blanc offers absolute population estimates derived from floor area estimates corresponding to each phase of occupation (LeBlanc n.d., cited by B.A. Nelson 1980:74). According to Le Blanc, the population increased from 1205 during the Late Pithouse phase to 3604 during the Classic Mimbres phase. Nelson contends that the Mimbres People were forced to adopt secondary, higher-risk agricultural strategies in addition to the cultivation of the river plain. In other words, the aboriginal farmers were forced to exploint marginal lands. He defines marignal areas as arable land which runs a higher risk of crop failure than fields in the valley proper, and includes in this category the arable land in side drainages and tributaries (114-130).

Nelson suggests a basic dichotomy of site types is present in the Mimbres Valley between pueblos of about 20 rooms or more, and small sites containing 1 to 10 rooms. He designates outliers as ruins 7 to 10 rooms. Notable differences between Nelson's outliers and pueblo sites are that outliers exhibit no surficial mounding, little or no wall rubble, a low density of artifact debris accompanied by a limited artifact range, and no

burials; the presence of which are considered characteristic of larger pueblos. He proposes that outliers were utilized only during the growing season, thus heavy walls for insulation and hearths for providing heat were not necessary.

Nelson posits that outliers served as crop storage facilities. Using data from excavation at the Swartz Ruin and ethnographic analogies from the Tepehuan and Tarahumar northern Mexico, he suggest that storage facilities evident at larger pueblos account for only 10 to 20 percent of his proposed necessary amount of storage space for the number of dwelling rooms present. He concludes that outlier sites are the prime candidates for the missing store rooms.

The primary motif connecting these three studies is that outliers serve as special activity sites as opposed to permanent habitation sites. The three authors also agree on the general physical characteristics of outlier sites being as follows: outlier sites may occur in locations different from the locational preference of village settlements, no burials occur in association with outlier sites, outlier site exhibit insubstantial architectural construction, and limited artifact assemblages are associated with them.

The citied authors differ as to the number of rooms constituting outlier sites, the proposed dynamic behind the observed settlement pattern, and the proposed functions of outlier sites. Concerning the number of rooms present at a typical site, B.K. Nelson includes only one-room structures in her outlier category while Herrington includes 1 to 2 rooms structures, and B.A. Nelson includes structures of 7 to 10 rooms or less. Concerning the observed settlement pattern, B.K. Nelson asserts it is

largely the result of external trade influences, Herrington concludes it is dependent upon the availability of water and arable land, and B.A. Nelson holds that the settlement pattern is the result of population pressure forcing Mimbres farmers to exploit marginal areas. Finally, B.K. Nelson proposes that outlier sites serve a special activity function as a result of trade practices, as opposed to permanent habitation. Herrington proposes that outliers were seasonally utilized and the occupants tended check dams and crop fields. B.A. Nelson proposes that outliers are the ruins of crop storage facilities.

LA12109

As previously mentioned, to date only one outlier site has been excavated and reported on. B.A. Nelson (et al. 1979) investigated a Classic Mimbres ruin designated LA12109.

The ruin contains 7 to 10 rooms, and is located on the first bench above the river in the Mimbres Valley proper. Embedded cobbles marked the wall alignment of the structure at the surface, and surficial mounding was absent. Artifacts collected from the surface included a large amount of lithic waste and a single ceramic sherd.

Because the site is straddled by a fence representing a property division line, and the owner of the side that the majority of the ruin lies on refused to grant permission to examine that part of the site, only two rooms were excavated. Artifacts collected during the exacavation included 771 lithics and four sherds. A shallow post hole was encountered in one room, and no well defined floors were present. Wall remains consisted of simple a single tier of stone set in an adobe matrix. This, coupled with

the lack of wall fall, caused the investigators to conclude that architectural construction was insubstantial. One room covered an area of 6.75 m^2 and the other 9.0 m^2. A relic hunter's trench that cut through the inaccessible portion of the site was examined. It indicated to the authors that the same limited situation evident in the excavated rooms was characteristic of the entire site.

On the basis of the lack of burials, the limited range of artifacts and the lack of sturdy construction, the authors proposed the LA12109 was not a permanent habitation site. Upon analysis of the lithics collected, it was concluded that extensive plant processing occurred at the site. The authors suggested that the site was a seasonally utilized fieldhouse. However, B.A. Nelson in his previously discussed study (B.A. Nelson 1980: 200), reinterprets the data and postulates that LA12109 was actually a storage facility.

The Household Model

Based on extensive data obtained during five seasons of fieldwork at the NAN Ranch Ruin, Shafer (1983) has developed a model for distinguishing habitation units in Classic Mimbres phase ruins. Shafer demonstrates a functional dichotomy between pueblo units by analyzing rooms within the context of household clusters rather than as separate units for comparison. Relying on dendrochronology dates obtained from charred beams and posts collected from individual rooms and wall bonding patterns, a chronological architectural sequence for the east room block at the NAN Ranch Ruin has been worked out. This allowed the definition of some individual household units by eastablishing the single period construction of specific room

clusters. The data obtained supports the assumption by Hill (1970), B.A. Nelson (1980), and Rapson and Gilman (1981) that large rooms were the focal point in living activities and that smaller connected rooms served primarily as storage areas.

Using five defined household units at the NAN Ranch Ruin, mean size of large rooms was computed to be about 19 m^2 and mean size of storage rooms was computed to be about 11.5 m^2. This produces a living-room-to storage-room ratio of approximately 1.65. Household units are then defined as having an interconnecting interior doorway (since the only exterior entrance to Classic Mimbres pueblos is through the roof, it is hypothesized that joined rooms were utilized by the same residence group) and as approximating the 1.65 room area ratio established at the NAN. Shafer further suggests the use of the household model in evaluating small sites.

Introduction to Site Descriptions

As is evident from this brief review of pertinent studies, the small-site problem in the Mimbres region is a complex matter. It is the opinion of this author that an underlying problem with the current explanations of the presence of outlier sites is the tendency to make generalizations about the sites in question without examining a sufficient number of sites within their own unique context. The conclusions reached in the three reviewed studies are based on theoretical constructs not yet tested with data from individual sites. With this situation in mind, the three small sites dealt with in this report are analyzed with specific emphasis on individual distinctive qualities.

Since the primary functional distinction between outlier sites and pueblos is the question of special activity versus permanent habitation, particular attention is focused on evidence of the function of each of the sites dealt with here. To aid in making that distinction, the sites will be discussed within the framework of Shafer's household model and the functional models presented by B.K. Nelson, Herrington, and B.A. Nelson.

The investigations conducted at NAN-4, NAN-5, and DELK-1 consisted of detailed mapping and extensive surface collections. The interior areas of all three sites were almost completely dug out by relic hunters. However, relic hunters are concerned primarily with obtaining whole ceramic vessels and not the sherds and lithics that archaeologists find useful. Therefore, a surface collection was taken in the hopes of obtaining some idea of the range of the actual artifact assemblage. Realizing the obvious limitations imposed by such a situation, no conclusions are strictly founded on the artifact data. Rather, the differentiation between special activity and permanent habitation is made primarily on locational and architectural attributes.

The fuctional and habitational status of each site is evaluated on the basis of four criteria: 1) artifact assemblages, 2) structural features, 3) room association, and 4) site location. If the sites were actually loci of permanent habitation, one would expect the same types of activities to be carried on as at the larger pueblos (B.A. Nelson et al. 1979). This would be reflected in similar structural features and artifact assemblages. If the sites served special activity functions, structural features and artifact assemblages should be distinctive of that function and different from those at permanent settlement sites (ibid). Room

features characteristic of habitational structures include burials beneath the floors, hearths, and sturdy architectural construction. The room association criteria used is Shafer's household model. Locational characteristics taken into account include comparing the particular site's placement against the locational preference of Classic Mimbres settlements, and the proximity of the site to natural resources such as arable land, water, and so on.

NAN-4

NAN-4 is a one room structure (Figure 2) located approximately 7.5 km northeast of the NAN Ranch Ruin in a large side drainage named Gavalan Arroyo. The ruin is situated in an unusual position approximately halfway up the uniformly steep slope of the first bench of the northern side of the Arroyo overlooking a widened floodplain area of about 10 acres. The bench slope's vertical height is approximately 30 m, consequently NAN-4 is about 15 m above the floodplain. The structure cuts into the slope, positioned with a downward slant towards the floodplain. The opposite side of the arroyo is bounded by high sharply rising hills.

The remaining wall structure consists of only on or two tiers of large rocks set in a small amount of eroded adobe. There is no extensive wall fall and no surficial mounding. The presence of numerous large rocks in the immediate area makes the possibility of aboriginal removal of wall rock for use as building material for other structures unlikely. It is probable that only the lower portion of the original wall was supported by rock. The room itself contained an area of 6.8 m^2, which closely approximates Herrington's observed average size of fifth order sites as

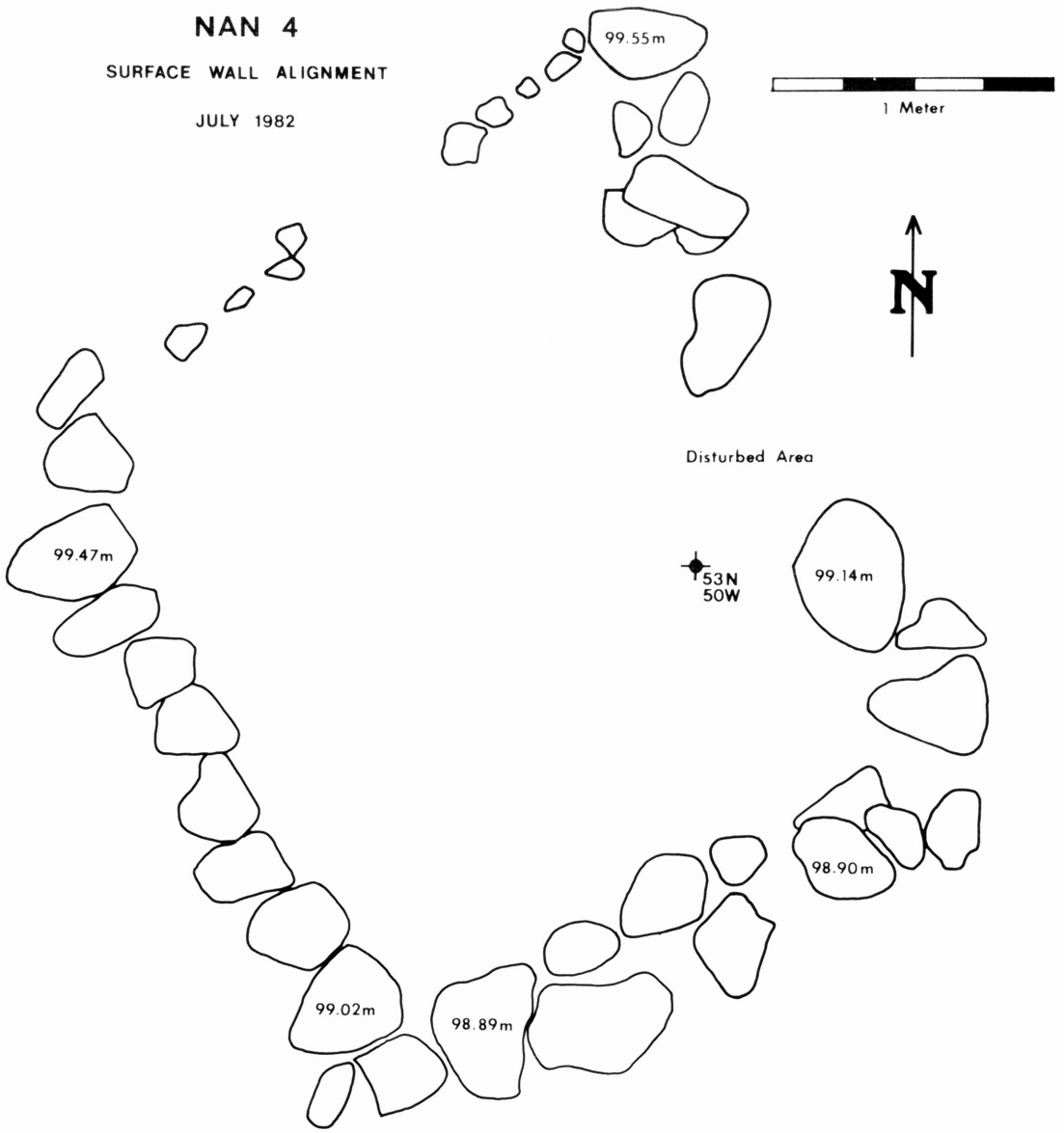
NAN 4
SURFACE WALL ALIGNMENT
JULY 1982
99.55m
1 Meter
N
Disturbed Area
53N
50W
99.47m
99.14m
98.90m
99.02m
98.89m

Figure 2

6.5 m^2 (Herrington 1979:86). No evidence of burials was observed.

Eight Classic Mimbres Black-on-White sherds indicate that the ruin is a Classic Mimbres phase site (See Figures 5 and 9). A fairly wide range of ceramics was collected, especially considering the limited total number of sherds (25). The sherds were grouped according to design and textural differences in order to gain some idea of the number and type of vessels represented. Only four vessels types appear to be present: at least three Classic Mimbres Black-on-White bowls, at least one Classic Mimbres Black-on-White olla , and at least four corrugated ollas. Keeping in mind the inadequacies of the sample, the ceramic assemblage does not exhibit the range encountered at larger pueblos, although it is more extensive than expected.

A much smaller amount of lithic debitage was recovered than is generally expected at outlier sites (B.A. Nelson et al. 1979; Herrington 1979; B.A. Nelson 1980). The 22 lithics collected include one chopper and 21 secondary flakes. Six of the flakes exhibit edges that have been damaged or retouched. The sample is composed mainly of coarse materials, primarily ryholite and basalt, along with two flakes of cryptocrystalline material. No ground stone was found.

NAN-4 displays all the characteristics of a special activity site. The limited artifact range, the insubstantial architectural construction, its single room status, and its unusual location in ths slope of a steep bench, all suggest some function other than permanent habitation. Considering the site's location overlooking a widened area of arable floodplain, NAN-4 was possible a seasonally utilized fieldhouse or storage facility whose occupants tended crops in the field below. The ruin could be

classified by Herrington's fifth order catergory. Furthermore, NAN-4 was apparently to unsubstantially constructed to keep out such pests as rodents, which would seem to be a requisite of crop storage facilities.

NAN-5

Located roughly 1 km up Gavalan Arroyo from NAN-4 is a four-room ruin designated NAN-5 (Figure 3). It is situated on top of the first bench on the same side of the arroyo as NAN-4 (the north side) some 5 m from the bench edge. The bench still exhibits a uniformly steep slope and a gully cuts into it 30 m east of the site. NAN-5 overlooks a more narrow portion of the arroyo and the opposite side is again marked by high steep hills.

Set in a north-south orientation, the rooms are aligned in a strictly linear fashion. Beginning with the room closest to the bench edge, they are arbitrarily numbered 1 through 4. Room areas are as follows:

Rm. 1 - 9.85 m^2
Rm. 2 - 5.35 m^2
Rm. 3 - 6.20 m^2
Rm. 4 - 9.23 m^2

Distinctive surface characteristics of the site include wall alignment marked by embedded cobbles surrounded by an extensive amount of wall fall, although no surficial mounding was noted. Five well-integrated layers of wall fall consisting of large cobbles stretched 2 m north of room 4. The pattern is strikingly distinct, and it looks as though the north wall of room 4 toppled over as a whole and the adobe matrix eroded away, leaving the stone course skeleton.

The remaining wall base consists of three tiers of large rocks still tightly set in adobe throughout most of the structure. The exception is

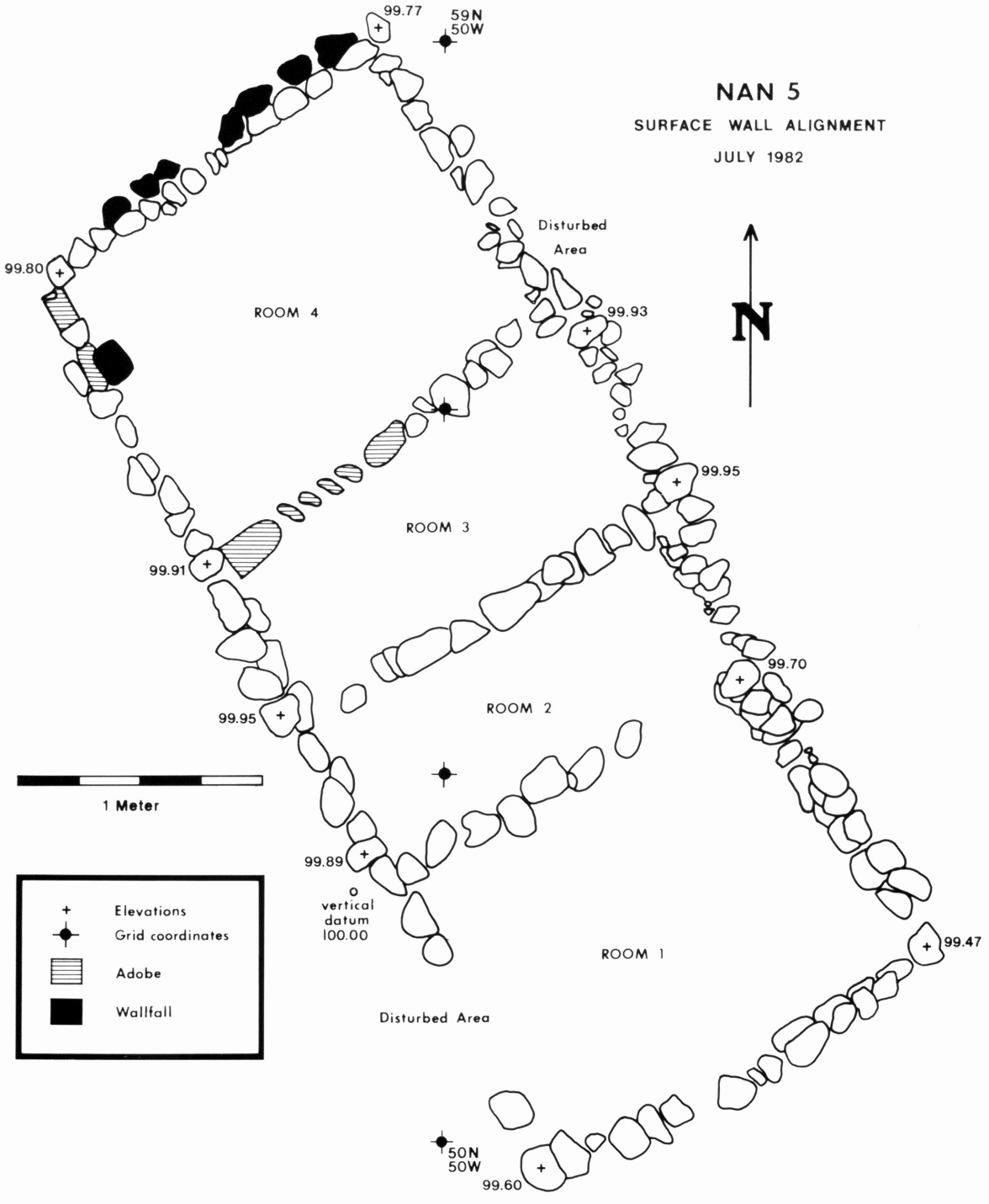
NAN 5
SURFACE WALL ALIGNMENT
JULY 1982
99.77
59N
50W
Disturbed
Area
99.80
ROOM 4
99.93
N
99.95
ROOM 3
99.91
99.70
ROOM 2
99.95
1 Meter
99.89
0
vertical
datum
100.00
ROOM 1
99.47
Elevations
Grid coordinates
Adobe
Wallfall
Disturbed Area
50N
50W
99.60

Figure 2

the west wall of room 1, which was completely jumbled by relic hunters. Patches of an adobe floor surface were encountered while defining the wall alignment. All the wall joints appear to be bonded, with the possible exception of the corner between the east walls of room 1 and 2. The alignment of the east wall of room 1 is slighly off the linear pattern, jutting just to the inside of the west wall of room 2.

Concerning the ceramics sample collected, a surprisingly wide range of sherds is again exhibited considering the small total number gathered (26). The sherds were grouped according to design and textural differences to help identify the range of vessels represented. In comparison with NAN-4, at least three more ollas are present in the NAN-5 sample, while considerably fewer plainware bowls are represented. Also, a Classic Mimbres Black-on-White flare rim sherd was collected at NAN-5 (See Figures 5, 10 and 11).

The lithics collected consist primarily of ryholite and basalt, with the exception of a broken chert blade. The flakes are generally thinner and display more signs of deliberate chipping than those gathered from NAN-4. A ryholite core and a broken stone trough metate were also found.

Unfortunately, the samples collected at both NAN-4 and NAN-5 are too small to generate any conclusions. However, it should be noted that both sites exhibit a much broader range of artifacts than those collected at LA12109 (B.A. Nelson, et al. 1979).

The architectural structure of NAN-5 conforms to Shafer's household model. In the walls separating rooms 1 and 2, and rooms 3 and 4, there are disjunctions of appropriate width to accomodate doorways. Thus, hypothesizing that rooms 1 and 2, and rooms 3 and 4, are interconnected, the mean small room to large room area ration is 1.61, as compared to 1.65

exhibited at the NAN Ranch Ruin. This conformity to the household model plus the structure's sound construction as evidenced by extensive wall fall and sturdy wall bases, suggest that NAN-5 was more likely a permanent habitation site than a non-habitation special activity site.

DELK-1

DELK-1 is a two-room ruin located on Delk Ranch property at the base of forested hills overlooking a small meadow at the junction of Lambright Draw and another arroyo. The ruin is situated at the northern edge of the meadow. Approximately 25 m south of DELK-1 is the ruin of another two-room structure designated DELK-2. Because of the extremely disturbed condition of DELK-2 and limitations on time, it was not investigated.

The two rooms of DELK-1 are set in a linear fashion and oriented along an east-west line (Figure 4). The east room covers an area of 8.65 m^2, and the west room covers 6.25 m^2. The interior of the site was dug some time ago by members of the Delk family. They report finding a hearth in the east room and an infant burial accompanied by a Classic Mimbres Black-on-White mortuary vessel with a naturalistic design in the northwest corner of the west room (See Figure 8). Two other Classic Mimbres Black-on-White vessels were found lying broken on the floor by the Delks.

The wall alignment was surrounded by rubble representing wall fall and back fill from the interior of the ruin. Excavation revealed that the west wall of the west room was nearly completely destroyed. A hardpan base .35 to .40 m wide remained. The rest of the outer wall remnants of the site consisted of two to three tiers of medium-sized cobbles still set in adobe. The dividing wall was somewhat narrower and is interrupted by

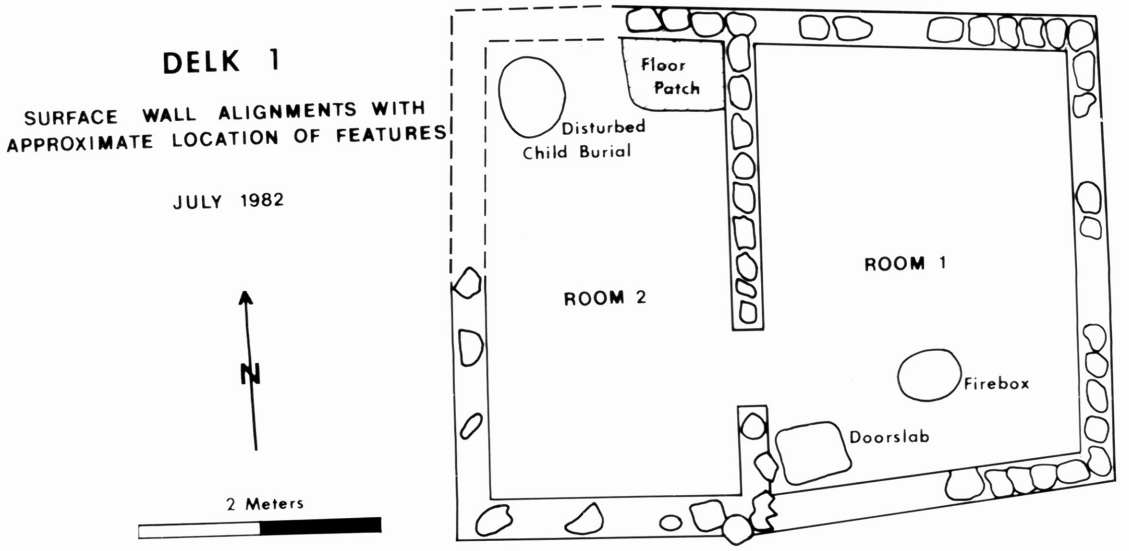
DELK 1
SURFACE WALL ALIGNMENTS WITH APPROXIMATE LOCATION OF FEATURES
JULY 1982
N
2 Meters
Floor Patch
Disturbed Child Burial
ROOM 1
ROOM 2
Firebox
Doorslab

Figure 4

a possible doorway .58 m wide. Slabs were encountered in the disturbed fill of the east room, which resemble those commonly found surrounding fire boxes in the Mimbres region. A possible door slab was also found in the southwest corner of the east room.

In addition to a surface collection, the backfill surrounding the site and jumbled fill from the interior were all screened. A total of 139 sherds were collected. The numerous sherds together with the vessels and firebox reported by the Delk family give evidence of activity such as would be characteristic of a household unit (Shafer 1983). As with NAN-4 and NAN-5, however, no tradeware sherds were found. Represented in the sherd collection are at least six Classic Mimbres Black-on-White bowls, at least three Clssic Mimbres Black-on-White painted ollas, and more than ten unpainted ollas.

Among the lithics collected are a number of especially interesting flakes of greenstone, the material that axes are made of in the Mimbres Valley (M.C. Nelson 1981). A large greenstone axe preform was also collected. The Delk family reported that a number of axes have been found throughout the hills surrounding the site. The prepondrance of the greenstone axe material at DELK-1 suggests that the inhabitants may have been supplying some portion of the Mimbres area with building materials from the pinon-juniper forests in the surrounding hills.

A total of 35 flakes were collected, including 16 flakes of greenstone axe material. Also present in the lithic sample are two irregular bifaces, two broken arrow points, and a circular mano.

Considering an evaluation of the data with our four criteria, DELK-1 displays all the characteristics of a permanent habitation site. The

room size and arrangement also conform to the household model. Concerning the remote location of the site, it is posited that DELK-1 is so located as to facilitate the exploitation of the small meadow and the forests in the immediate area.

Conclusions

The variability exhibited by the three sites dealt with herein demonstrates the difficulties involved in elucidating an explanatory model for the occurrence of small sites in the Mimbres region. The only site accounted for by B.K. Nelson's model, NAN-4, displays no evidence of any special activity other than that involving agricultural practices. No other one-room sites are known within a few kilometers of NAN-4, and no exotic artifacts or tradewares were encountered. The lack of a clustered distribution and the absence of tradewares would seem to contradict B.K. Nelson's position that outlier sites occur in response to trade related factors.

B.A. Nelson's proposal that sites having 7 to 10 rooms or less are likely to have been crop storage facilities is unsupported by evidence from all three sites. However, the presence of NAN-4 and NAN-5 some distance away from the floodplains of the Mimbres River proper and in association with arable land in the Gavalan Arroyo could well be the result of population pressure as suggested by B.A. Nelson.

NAN-4, NAN-5, and DELK-1 are classifiable under the five-category scheme developed by Herrington. Her suggestion that observed settlement pattern is a reflection of differential water and arable land availability is not contradicted.

In summary, the different models proposed to explain small site function and occurrence in the Mimbres area are not rooted in a data base derived from intensive investigations of individual sites; sites which demonstrate a variability probably not explainable by a single monomorphic model. This point is here illustrated by the variability observed among NAN-4, NAN-5, and DELK-1. In order to successfully evaluate the role of small sites in the cultural adaptation of the Classic Mimbres Phase, a greater number of such sites must be investigated within their own unique context before viable general models can be developed.

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Ceramic Assemblages at NAN-4, NAN-5, DELK-1

		NAN-4	NAN-5	DELK-1
Bowls	Mimbres Classic B/W	8	6	18
	Plainware	10	4	20
	Flare rim	0	1	0
Ollas	Mimbres Classic B/W	3	0	15
	Plainware	0	5	39
	Corrugated	4	10	46
	TOTALS	25	26	139*

*Includes one plainware worked sherd

Figure 5

Figure 6

Site photographs from NAN-4, and NAN-5;
top, NAN-4; bottom, NAN-5

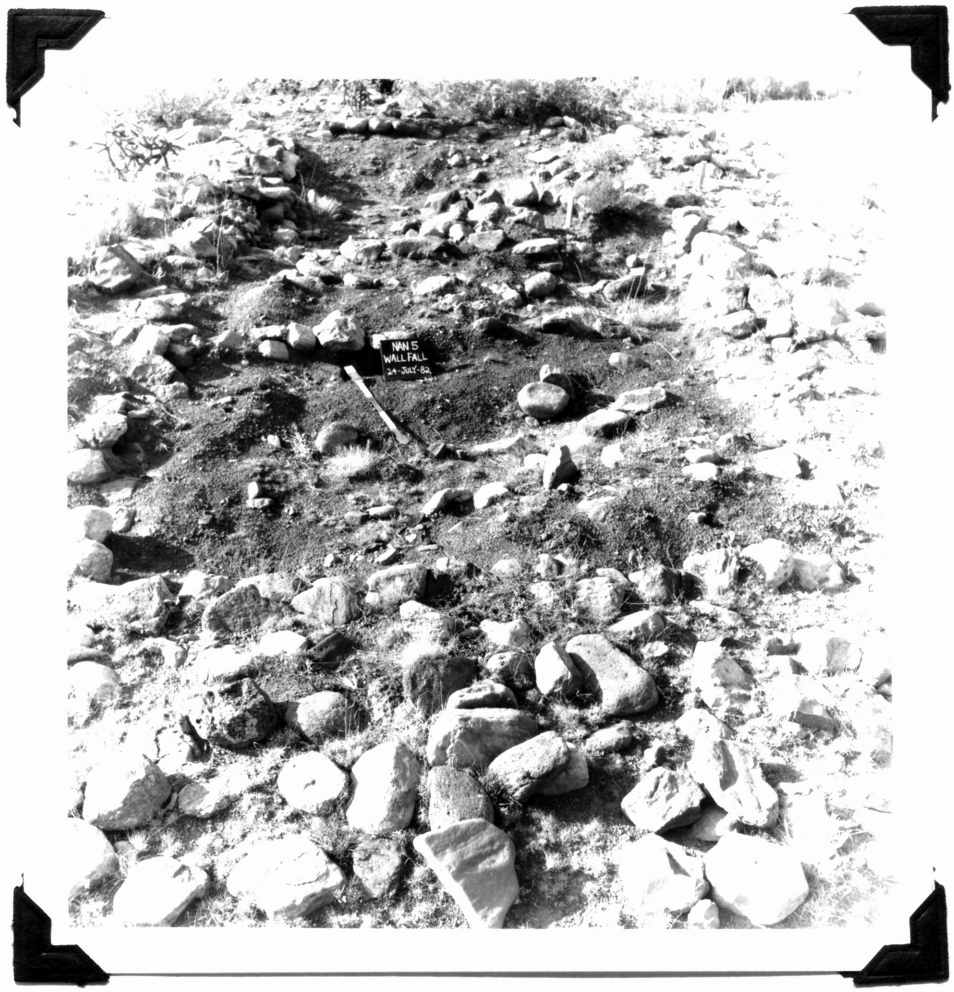

Figure 7

Site photograph from NAN-5;
wall fall closeup.

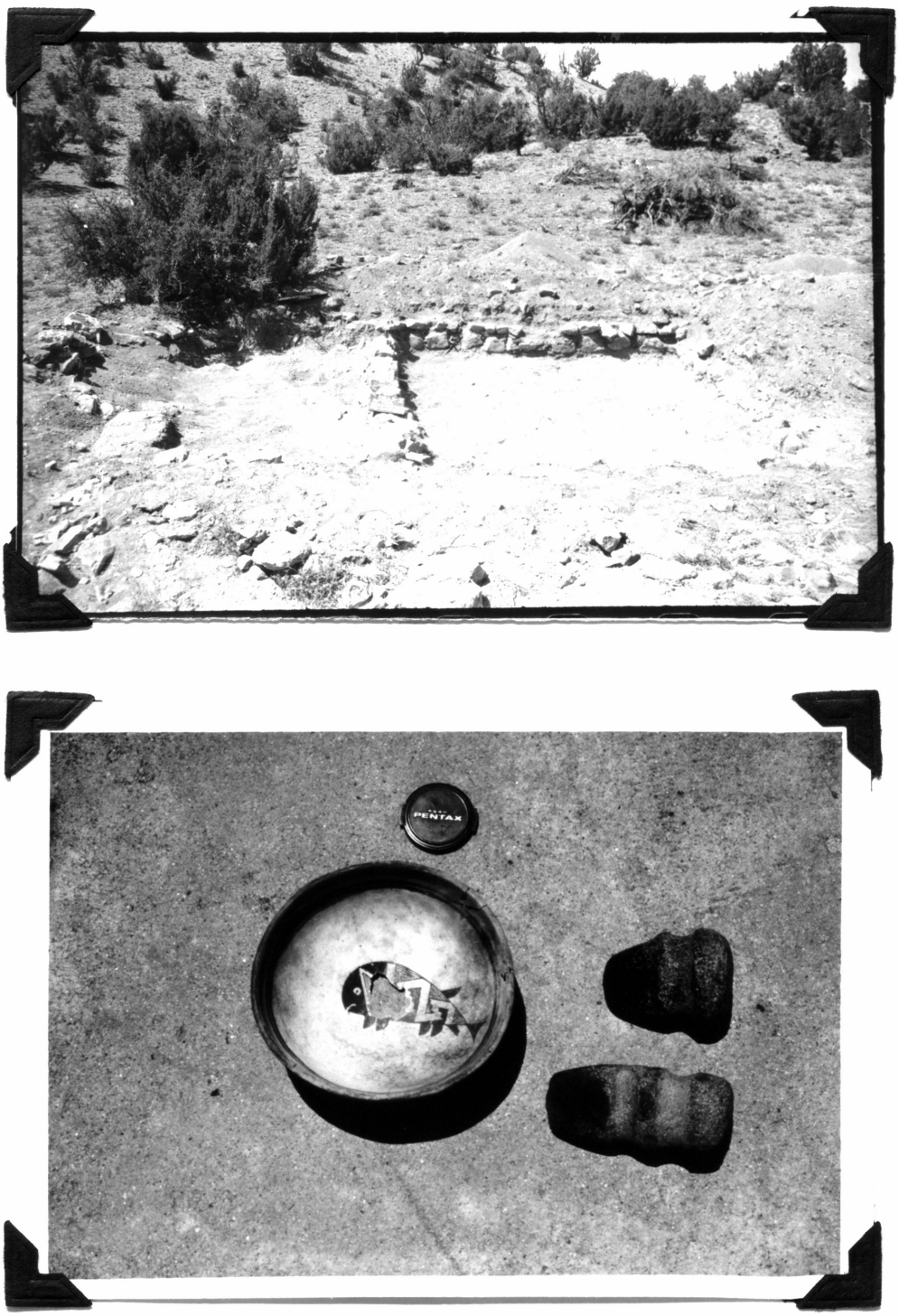

Figure 8

Site and artifact photographs from DELK-1;
top, DELK-1 after excavation; bottom, motuary
vessel from west room and greenstone axes

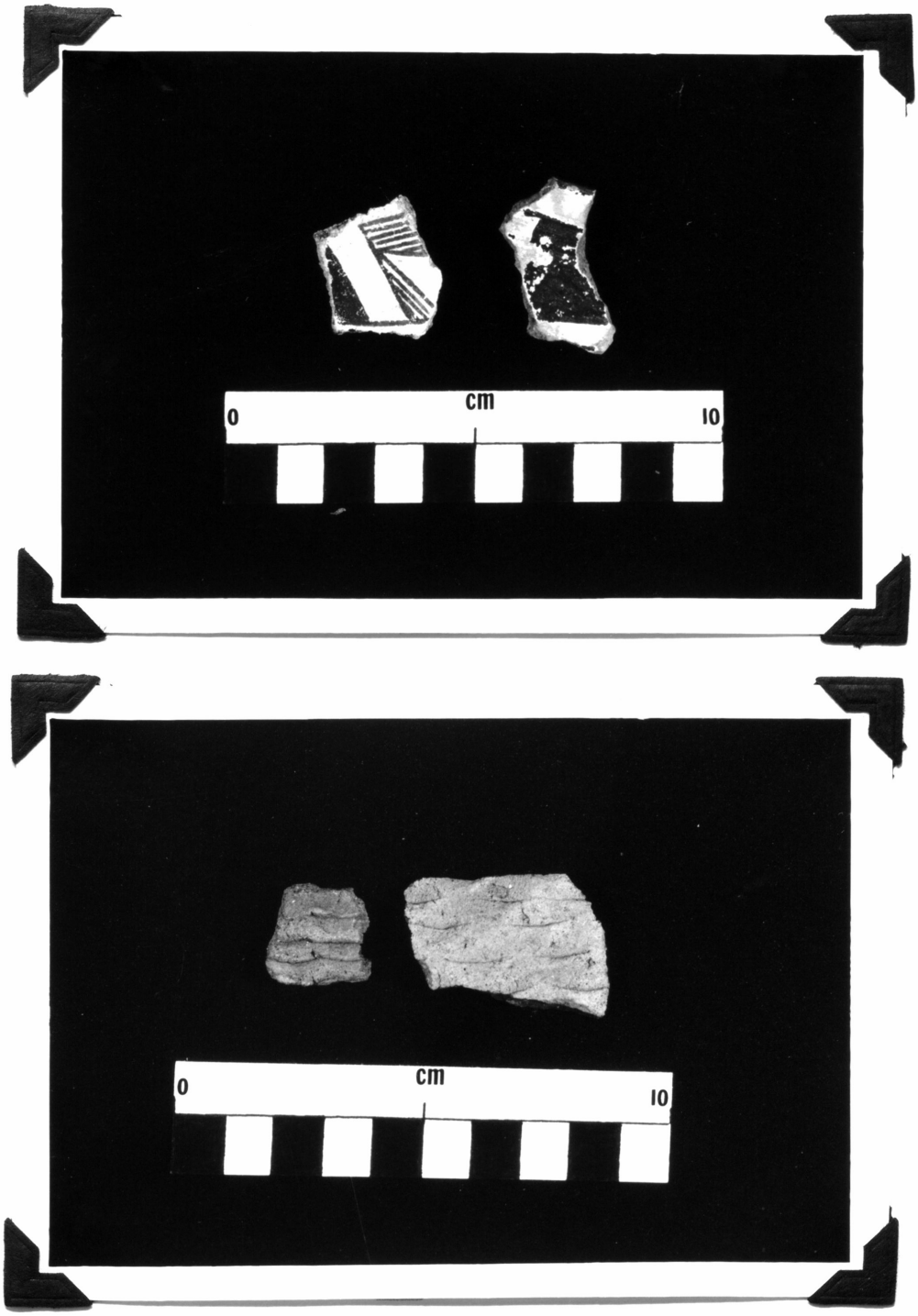

Figure 9

Sherd photographs from NAN-4;
top, Mimbres Classic Black-on-White
bottom, corrugated ollas

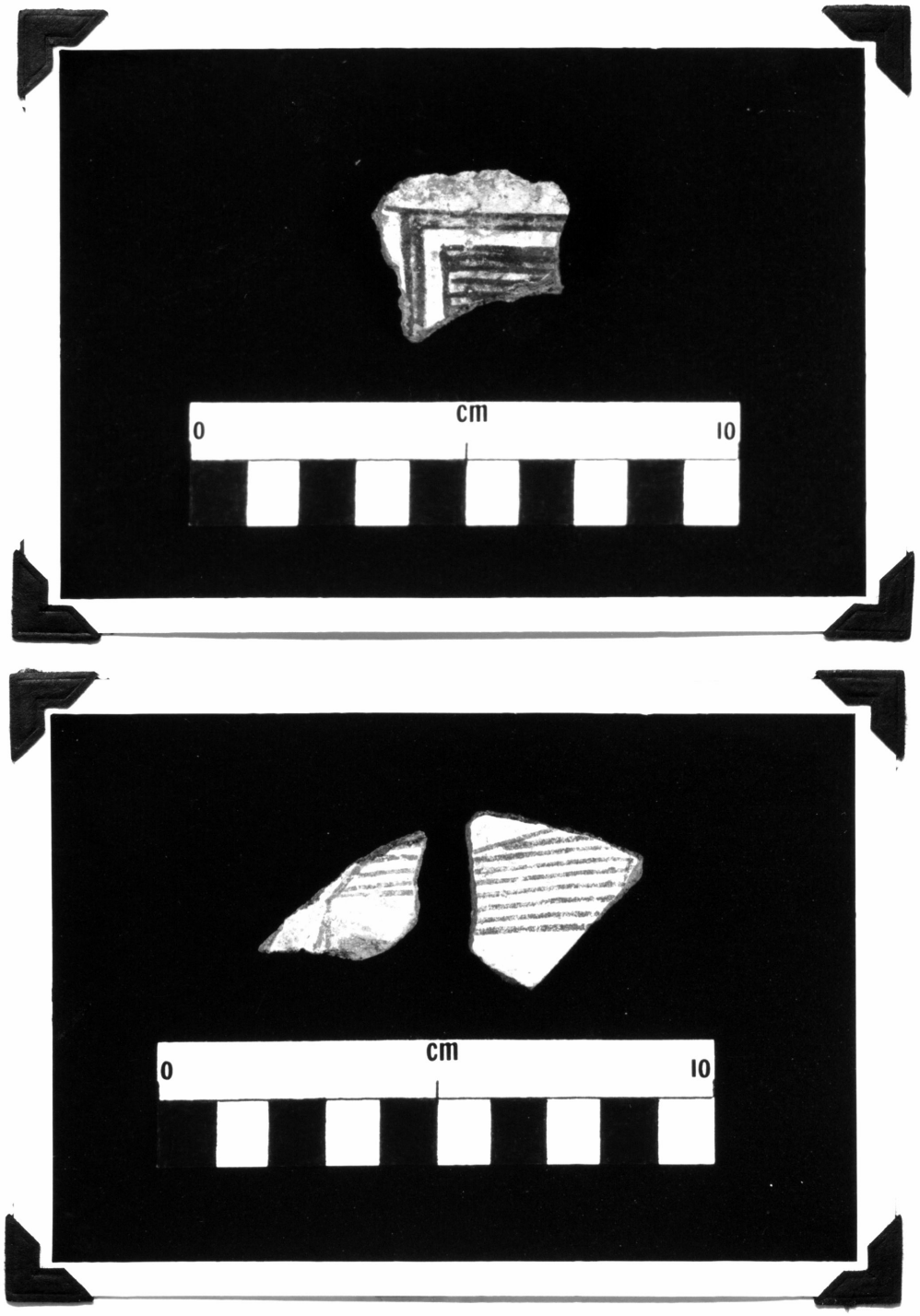

Figure 10

Sherd photographs from NAN-5
top, Mimbres Classic Black-on-White flare rim ;
bottom, Mimbres Classic Black-on-White

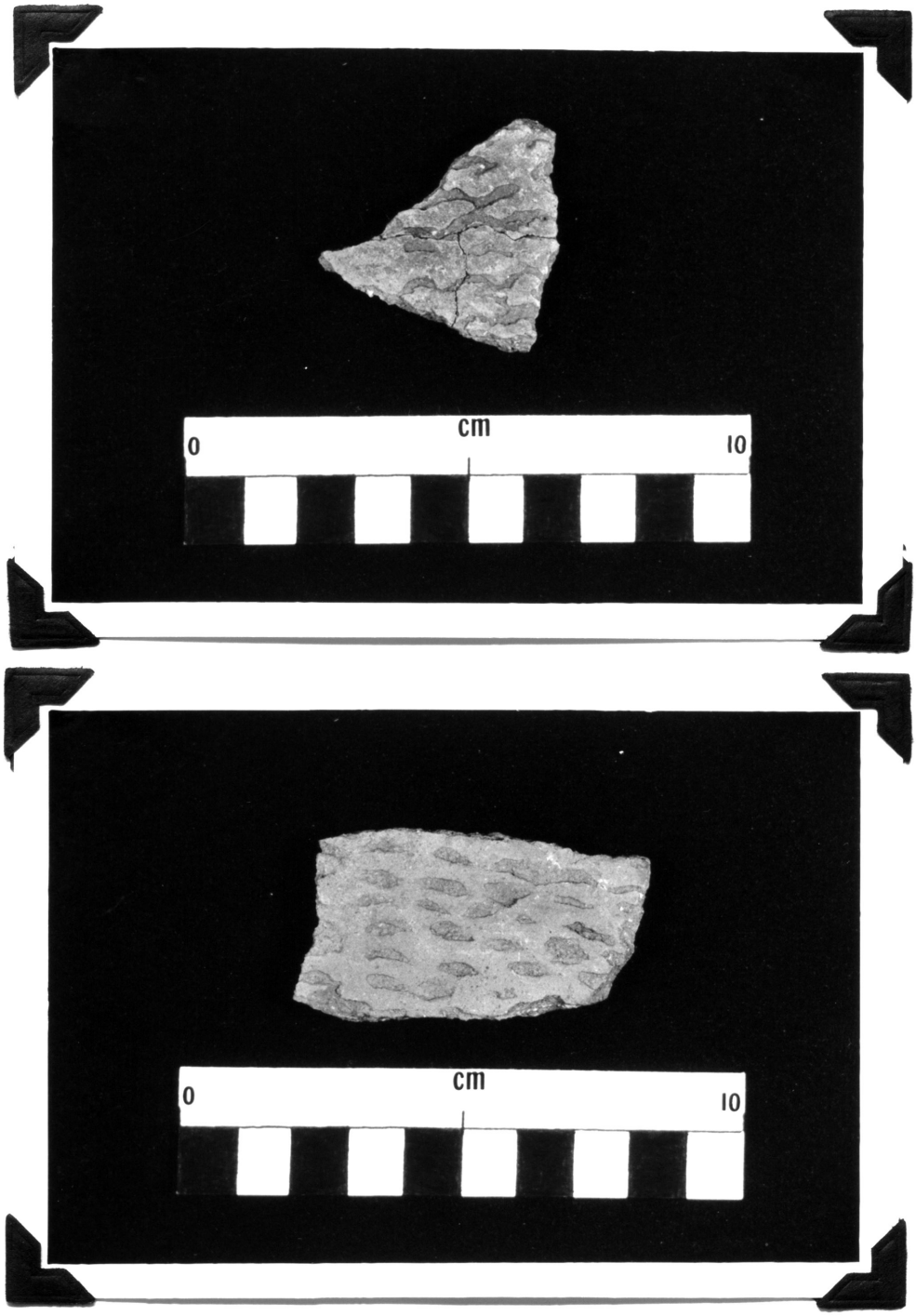

Figure 11

Sherd photographs from NAN-5; corrugated ollas

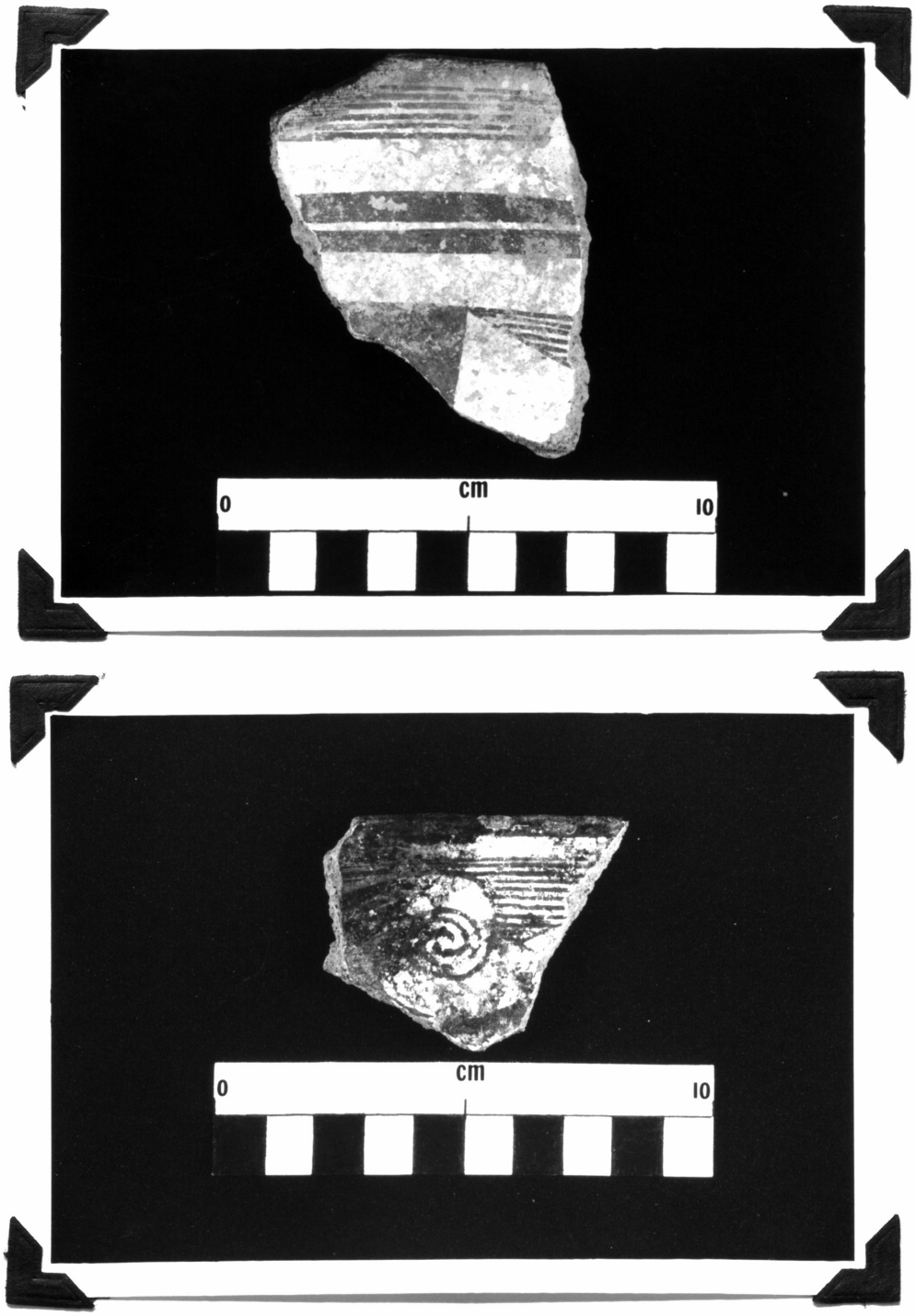

Figure 12

Sherd photographs from DELK-1;
Mimbres Classic Black-on-White

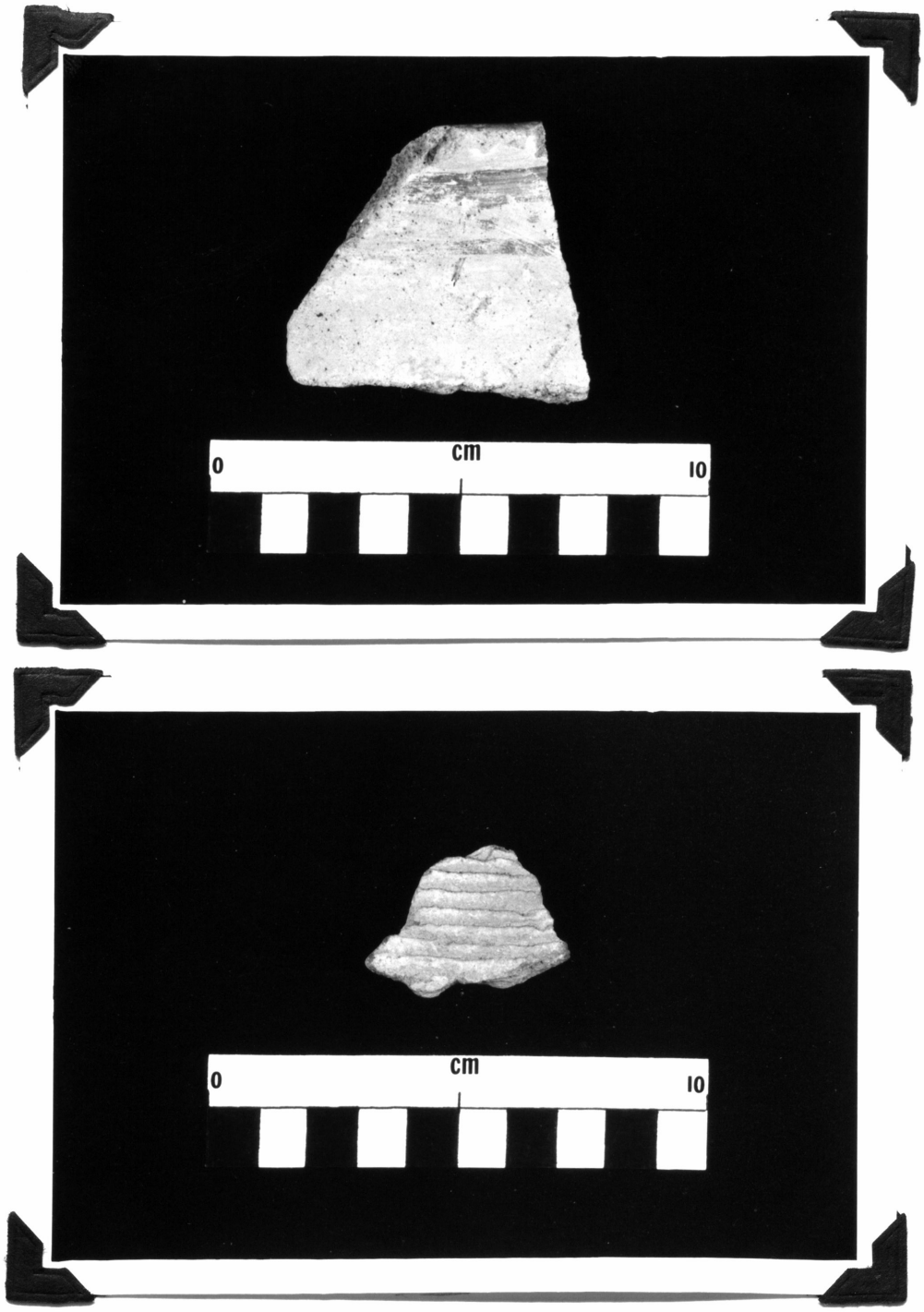

Figure 13

Sherd photographs from DELK-1
top, Mimbres Classic Black-on-White olla rim;
bottom, corrugated olla