Appendix 7

Additional archæological investigations at Denney Road Site, 7K-C-113, Kent County, Delaware in connection with Denney's Road improvements May - July 1985

1. INTRODUCTION

PURPOSE: The purpose of this investigation was to explore the Archaic-period archæological site discovered during testing of a knoll east of Fork Branch, in the right-of-way of the proposed Denney's Road relocation. During earlier tests, two projectile points and some flakes were found. It was determined by the State Historic Preservation Officer's staff that additional, detailed, testing was necessary.

THE SITE: The site is a spur or knoll projecting into the swampy bottom of Fork Branch, about 200 feet long, with a relatively flat crown between 15 and 40 feet wide. The earlier tests indicated that the spur has never been plowed or otherwise disturbed in historic times. Along the sides of the knoll are terraces, which may be animal paths. A gentle slope on the downstream side may have been used as a road during historic times. On the inland side, to the northeastward, a field has been cultivated during the present century. The crown of the bluff or knoll is therefore the only place in the vicinity where prehistoric remains might be found *in situ*. It is calculated that the knoll contains room for approximately 230 five-foot squares. A 5% sample of the site would be 12 such units.

PREVIOUS WORK IN THE PROJECT AREA; Two units had already been placed on the bluff (tests 6 and 7 of the original survey). The first was sited on the most protected part of the south-facing knoll, overlooking the streambed, because it was the location most likely to yield prehistoric remains. The second test was placed 50 feet away, downslope, to test the effects of erosion on the knoll and its associated archæological remains. Two projectile points were found lying near the surface of the first unit.

TYPE OF WORK; In contrast to the original tests, the present study was a detailed, systematic, controlled test of the entire site. All units were taken to a depth beyond any recovered artifacts, to an horizon that predated human activity, if such horizon could be identified.

PROCEDURES; Vertical and horizontal controls were maintained, and all artifacts and features were recorded by depth and location. A total of nine test units were opened at approximately 25-foot intervals along the spine of the bluff, with a tenth unit selected in the field. With the two earlier units, this represented approximately a 5% sample.

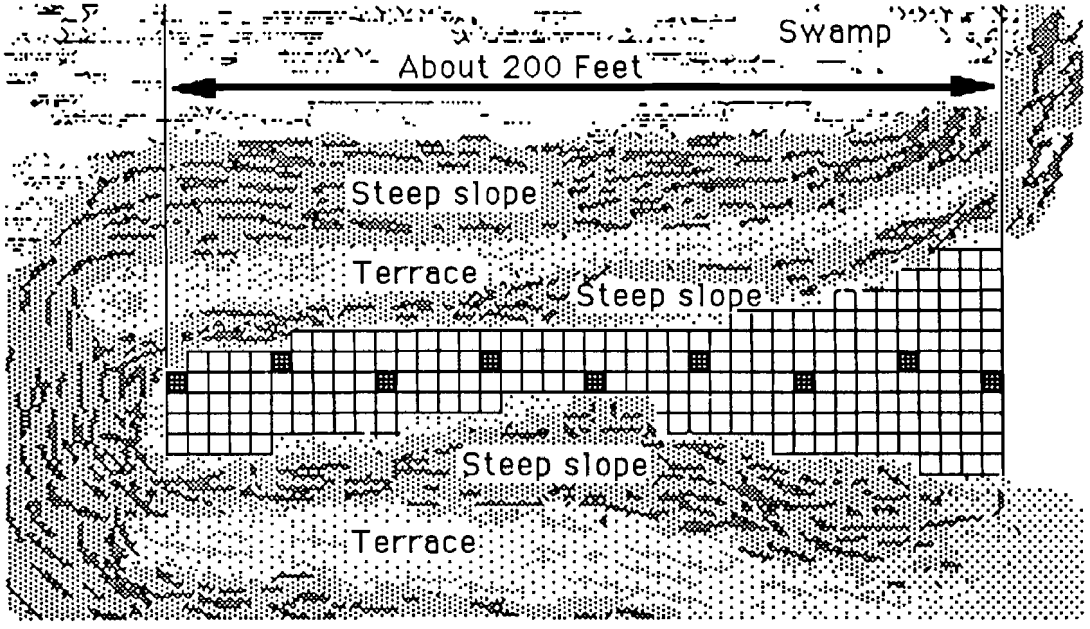


FIGURE 1: Sketch map of the knoll or spur, with grid-north to the right, demonstrating the original proposal for allocating the nine pre-selected units (not to scale). Each square represents a unit five feet on a side.

EXCAVATION METHOD; The topmost level was humic material, leaf mold and whole leaves, which was designated with the unit number (ER, or excavation register) without suffix (ER1, etc.).

Each subsequent excavated level or feature was designated by a letter, indicating the order in which it was opened (ER1Bb, ER1c, etc.). Topsoil levels, and those containing relatively large numbers of artifacts, were trowelled and screened through quarter-inch screen. If artifacts appeared to be *in situ,* they were plotted. Lower, relatively sterile, layers were shovelled and screened. Artifacts were bagged separately for each quarter of certain layers. Quarters were designated by a number (Figure 3) following the letter for the deposit (ER1e.2, etc.). All measurements were kept in the English system. All measurements of unit locations were taken from the northwest corner of the unit, measured to the zero point at the extreme south end of the transect. In practice, the baseline was 230 feet long, measuring along a line of sight between two marked trees.

DATES OF WORK: The grid was laid out May 26, 1985, and work began shortly thereafter. Each unit was excavated in sequence. The tenth unit was finished July 8.

CURATION: All artifacts were numbered and marked according to the cataloguing system of the Island Field Museum, where they are deposited as accession 85/12. In the discussion of each unit in this report, the Island Field number is reported with the ER number. The site is designated 7K-C-113, and its state cultural resources management number is K 5688.

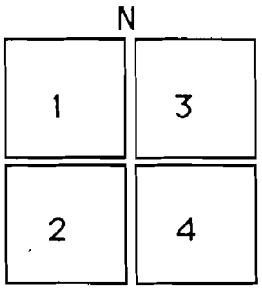


FIGURE 3: Quadrants of units were numbered according to this division scheme.

2. EXCAVATION NARRATIVE

UNIT 1:

Unit 1 was located at the zero point, to the east of the baseline. This location is a sloping site below the brow of the bluff, just south of test 6 in the previous survey.

ER 1 (85-12-1): The surface unit consisted of leaf mold and the black, sandy humus that lay immediately below the leaf mold to a depth of between a half-inch and two inches.

ER 1a (85-12-2): Below the surface black sand was a brown sandy layer that conformed to the slope of the hillside over the entire unit. Running diagonally across the unit in this level was a slightly darker zone that appeared to be a completely deteriorated rootmold. When this level was removed, an apparent rectilinear feature appeared in the southeast corner of the square. This feature was designated ER1c.

ER 1b (85-12-3): An apparently natural soil horizon, ER1b consisted of light tan sand, broken by ER1c. Chunks of broken sandstone and chips of the same material were found in this level. Throughout the excavation, sandstone continued to be the commonest large stone. The only other large stone fragments on the site were two egg-size quartz cobbles that showed no evidence of alteration by man; everything else was very small.

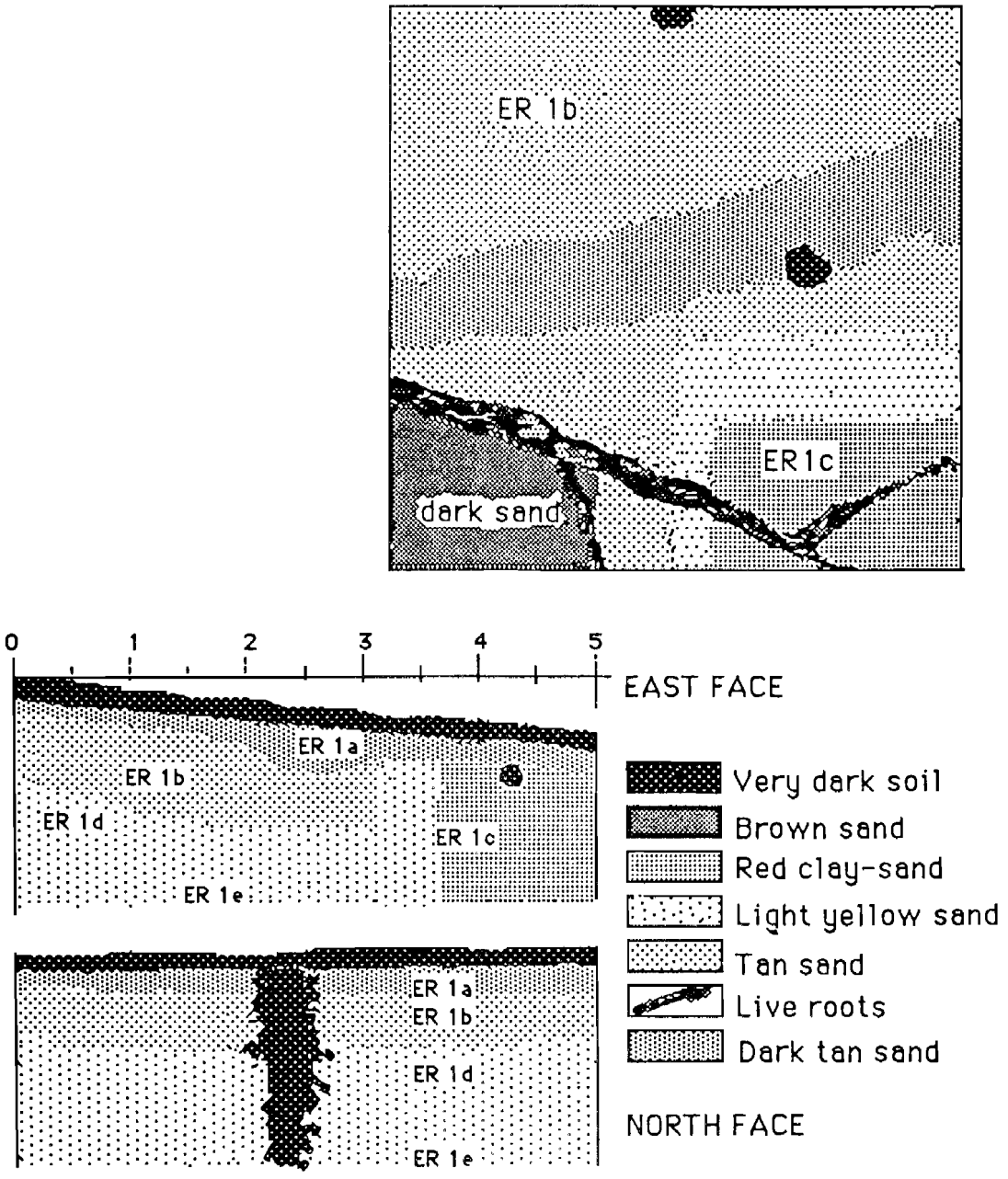


FIGURE 4: Plan and profile of Unit 1

ER 1c (85-12-4): When ER1a was cleared, what appeared to be a rectilinear feature was evident in the southeast corner of the unit. This feature appeared to consist of reddish clayey sand surrounded by a zone of light yellow sand. After the rest of the square was excavated, this feature was probed, first by trowelling and then by shovelling, to a depth of 3'3" below the ground surface at the corner of the unit. Toward the bottom of this probe, the edge of the feature became less well defined, and the matrix became more sandy. Although it appeared at first to be a man-made feature, it had neither associated artifacts nor a clear pit outline at the lower levels. In spite of its rectilinear surface outline, it was determined after all to be natural, probably an ancient tree stump or gully.

ER 1d (85-12-6, 85-12-7, 85-12-8): Below ER1b, and extending unformly over most of the unit, was an apparently natural sandy level, consisting of dense yellow sand interspersed with bodies of orange clayey sand that resembled ER1c. These orange-colored bodies were interpreted as rootmolds or animal burrows into which the orange-colored clay-sand material had washed from above. This level was quartered and shovelled.

ER 1e (85-12-9): the bottom of the excavation unit was trowelled smooth and examined. ER1c continued through this sandy layer, as did several rootmolds from above. Since this level (and ER 1d) is apparently a natural deposit, the investigators assumed that any artifacts found at this depth had migrated down through channels of disturbance. Excavation of the body
of the unit stopped at this point, which was two feet below the grade at the uppermost point of the unit.

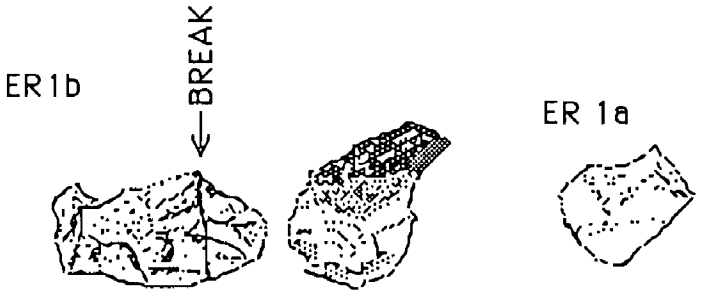


FIGURE 5: Representative artifacts from the first unit include these three examples of worked chert flakes. The specimen on the left, now broken, is red on the left end, graduating to tan on the right. The middle specimen, from the same level, still has rough cortex (dark, at top), and has been roughened on the other edges; the opposite side of this yellow chert flake is unworked. The red flake at right has apparently suffered the loss of both ends (upper right and lower left edges). The edge at lower right is finely serrated.

Artifacts: The artifacts found in Unit 1 include the specimens in Figure 5. "Flinty" cryptocrystalline silicates, quartzites, and quartzes were the commonest materials. Most were tiny chips or flakes barely large enough to stay in the screen during sifting. Long flakes and flakes with retouching or use scars were the next most numerous finds. In ER1a and ER 1b, there were several chunks and chips of sandstone, apparently representing one or two parent rocks. These pieces showed only mild evidence of heat reddening, if any. Small flakes were found as deeply as the bottom of ER 1e, but their presence in an apparently natural level can be attributed to the many disturbances that have penetrated that deep. A smooth fist-size sandstone cobble was found next to ER 1c, at the bottom of ER 1d.4; a piece is broken from one side, but such a break could have been caused by the natural spalling of a friable material.

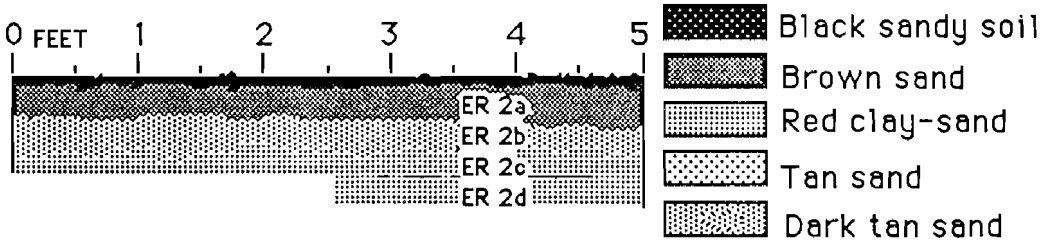


FIGURE 6: East profile of Unit 2. The other faces were similar, and there were no features.

UNIT 2:

The second unit was opened to the west of the baseline, 30 feet from the zero point. It lay on the flat top of the bluff. No features were apparent, and the unit was found to be quite shallow.

ER2 (85-12-10): The top layer consisted of peaty black sand and leaf mold, ranging in depth from a half-inch to an inch and a half deep.

ER 2a (85-12-11): A brown sandy layer, becoming mottled at the bottom, covered the entire unit uniformly. Toward its bottom, it became mottled with yellow sand. It was quartered.

ER 2b (85-12-12, 85-12-13, 85-12-14, 85-12-15): The next natural layer was a light-brown to yellow sandy layer, which was quartered and trowelled.

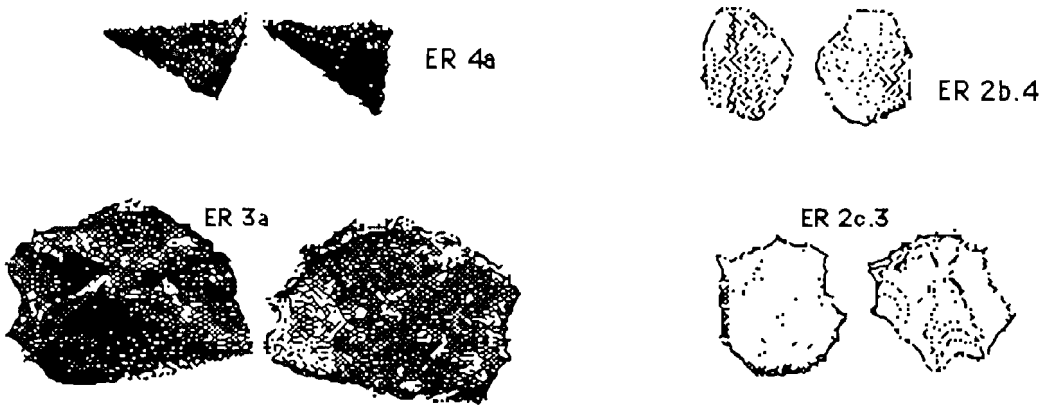


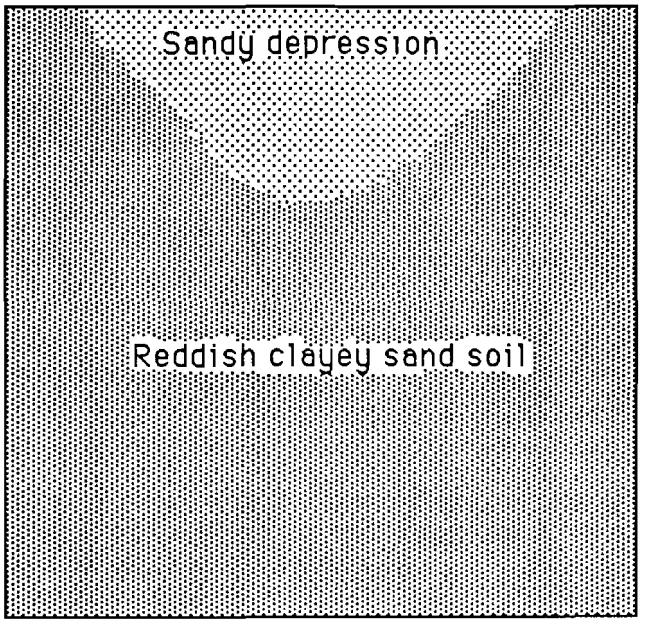
FIGURE 7: Representative artifacts from units 2, 3, and 4, both faces shown, actual size: The implement on the lower left is jasper, yellow with red areas. The flake on the lower right is dark red chert, worked on one face. The projectile-point tip at upper left is brown and tan chert with considerable fine finish worik. The gray argillite flake at upper right has been broken at the top edge.

ER 2c (85-12-16, 85-12-17): Underlying the light-colored sand was a red clayey sand layer that covered the entire unit. It was quartered and excavated an arbitrary three inches deep. Because artifacts were virtually absent, the investigators determined that the reddish clayey sand stratum probably is a natural horizon.

ER 2d (85-12-18): In order to determine if the reddish material was indeed natural, a second arbitrary level, two inches deep, was opened in only quarters 2 and 4. There was no change in the soil color or texture.
Subsequent auger boring encountered coarse sand at a depth of about 6" below ER 2d.

ARTIFACTS: In level 2a was a remarkably pure pebble of clear crystal quartz, from which several flakes had been removed. Level 2b contained the only undeniable example of prehistoric pottery, represented by a single sherd from which shell tempering had leached out. Elsewhere on the site, notably in Unit 3, there were weathered objects of clay and sand that the authors suspect were originally sand-tempered potsherds, daub, or simply lumps of burnt clay.

Oyster shell fragments were found on the south end of the site, in contexts that otherwise did not contain any but prehistoric materials; in the absence of better evidence to the contrary, it must be assumed that prehistoric people brought the shells to the site.



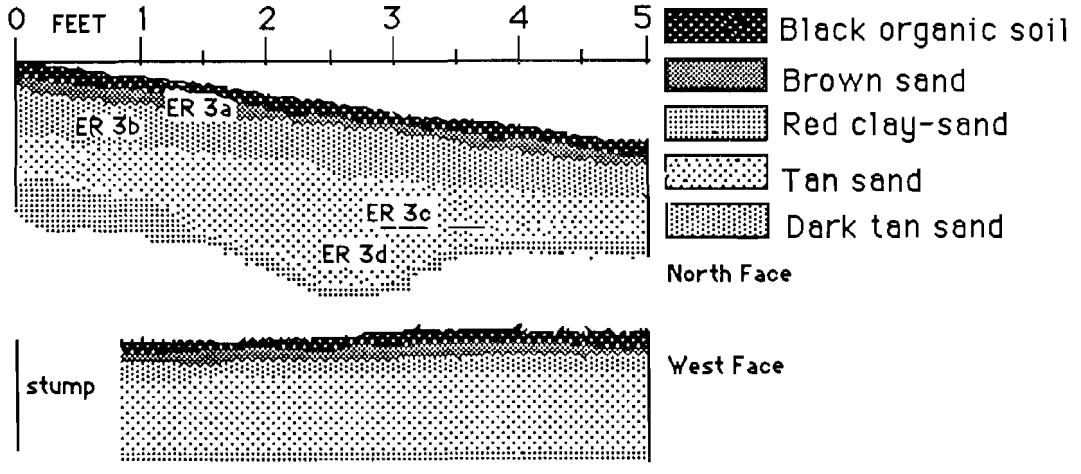


FIGURE 8: Plan and profile of Unit 3

UNIT 3:

The third unit was opened east of the baseline, with its northwest corner 55 feet from the zero point. The unit slopes gently down to the eastward, and lies directly uphill from the seventh test unit of the original survey.

ER 3 (85-12-19): The top unit was black sand immediately under leaves.

ER 3a (85-12-20): A dark sandy layer an inch or two thick overlay the entire unit; some yellow sandy patches indicate recent soil disturbance.

ER 3b (85-12-21, 85-12-22, 85-12-23, 85-12-24): The next level was heavily mottled yellow with brown sandy soil. At a depth of about two inches, it rested upon a more uniform tan sandy layer.

ER 3c (85-12-25, 85-12-26, 85-12-27, 85-12-28): A layer of tan sand lay over the entire unit, thickening at the north side of the unit. It overlay a stratum of the same orange to red clayey sand that was found in ER 2c.

ER 3d (85-12-29): The deeper layer of tan sand, which proved to be a gully or stump hole, was removed to the reddish layer below. Quadrants 1 and 3 were opened a few inches into the underlying layer, which was found to be devoid of artifacts.

ARTIFACTS: A jasper tool was found in level 3a (Figure 7, above). Clay and sand objects of unknown origin were concentrated in level 3b.

UNIT 4:

Unit 4 also was east of the baseline, with its northwest corner at 85 feet from the zero point. This deviation from the original plan was made necessary by thick vegetation.

ER 4 (85-12-30): The richly organic layer of humic sand varied in thickness across the unit. The first certain evidence of historic intrusion was the discovery of a .22 calibre spent bullet in this stratum. South of this unit, not even such chance historic intrusions had been found in the excavated units. To the northward, evidence of historic occupation would increase markedly.

ER 4a (85-12-31): Beneath the black topsoil was the lighter-colored stratum in which most of the artifacts seemed to be found throughout the site. In this particular deposit was a tip of a projectile point. This layer gradually merged into the lighter-colored sand that was streaked with reddish sand.

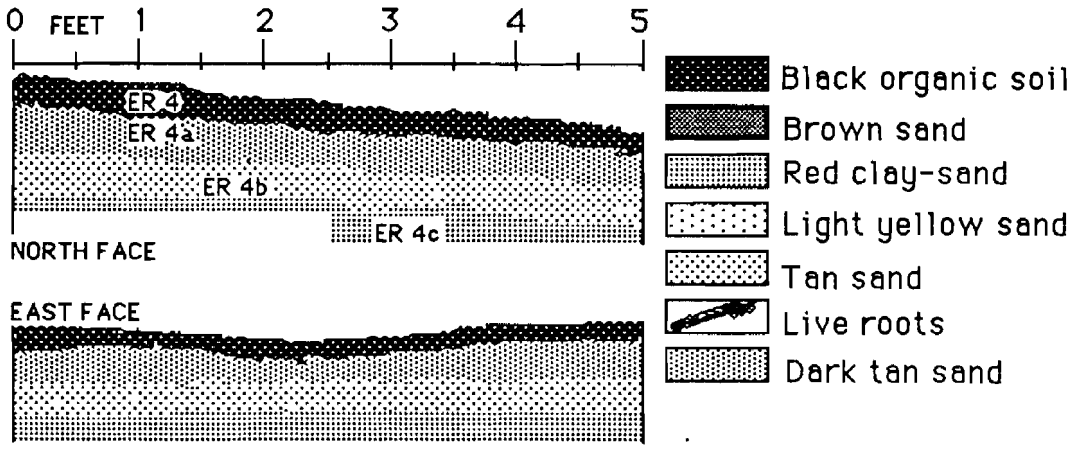


FIGURE 9: Profile of Unit 4

ER 4b (85-12-32, 85-12-33, 85-12-34): The next natural layer was a transition zone, in which there were humps of the underlying reddish clayey sand intruding into the upper, lighter, layer. The investigators had noted a perceptible dropoff in the number of artifacts as the reddish layer was reached. In this unit they took special note of context in this interface zone. Observation confirmed that each artifact in ER 4b was indisputably from the zone above the reddish clayey sand, and not below.

ER 4c: Finally, a test into quadrant ER 4c.3, which was entirely the reddish clayey sand, demonstrated the lack of artifacts in this deposit.

UNIT 5:

The fifth unit lay at the midpoint of the site, to the west of the baseline, with its northwest corner at 105 feet from the zero point. Several large roots and a sapling made recording difficult.

ER 5: The surface deposit of black sand and vegetable matter was thin.

ER 5a (85-12-35, 85-12-36): A thin layer of brown sand underlay the black surface layer. It contained sandstone cobble fragments.

ER 5b (85-12-37, 85-12-38, 85-12-39, 85-12-40): The next layer down was a stratum of perceptibly yellower sand that covered the entire unit.

ER 5c: This layer, which was devoid of artifacts, was a sounding into the reddish clayey sand

below. As this layer was being removed, it became apparent that a yellow clay deposit occupied most of the fourth quarter of the unit at this level. No artifacts were found in ER 5c. This was the first and only body of plastic clay to be discovered on the site.

Artifacts: Unit 5 contained several pieces of sandstone, one of which was a hammer-size cobble fragment. There were also several large flakes of black flint in ER 5b, indicating that toolmaking took place here.

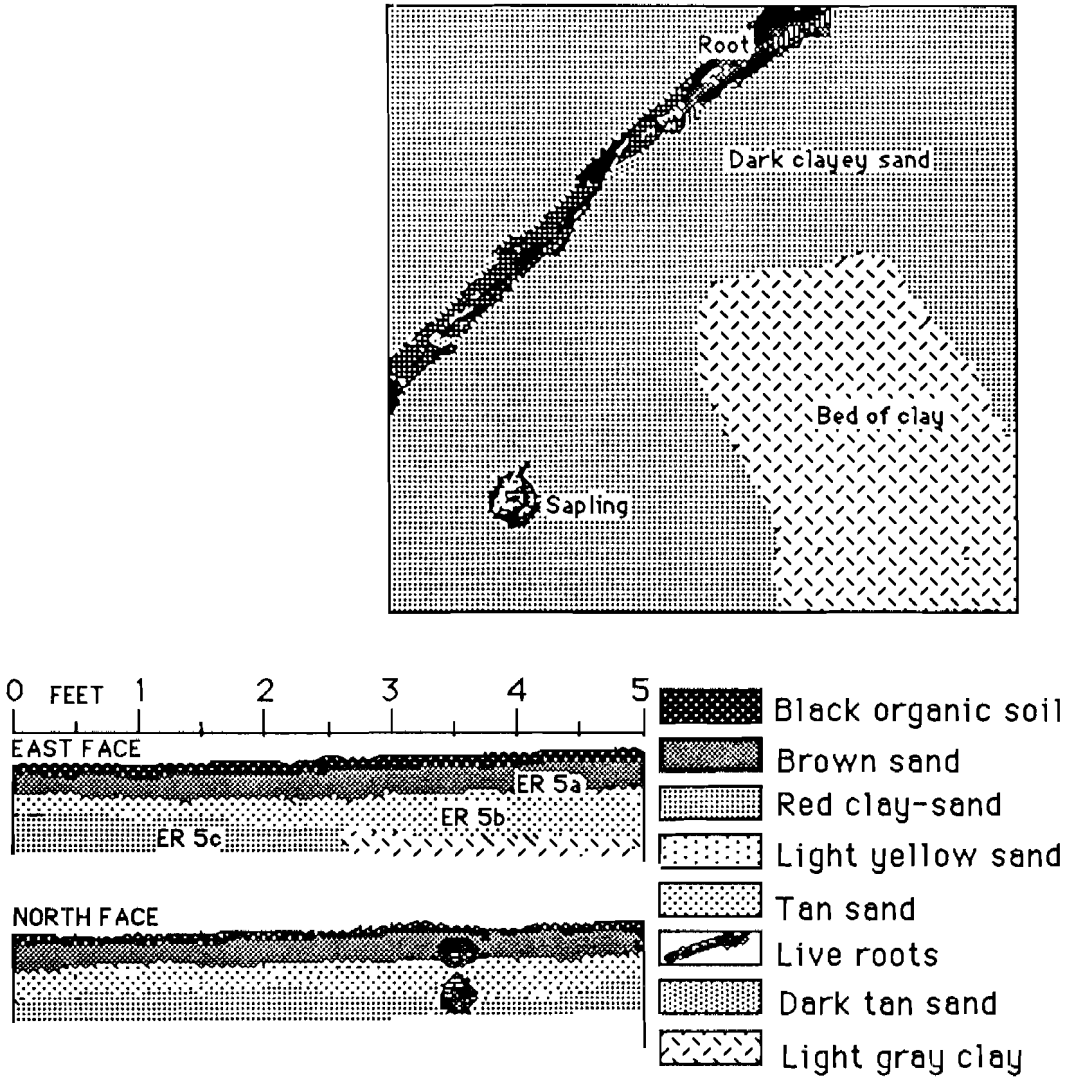


FIGURE 10: Plan and profiles of Unit 5

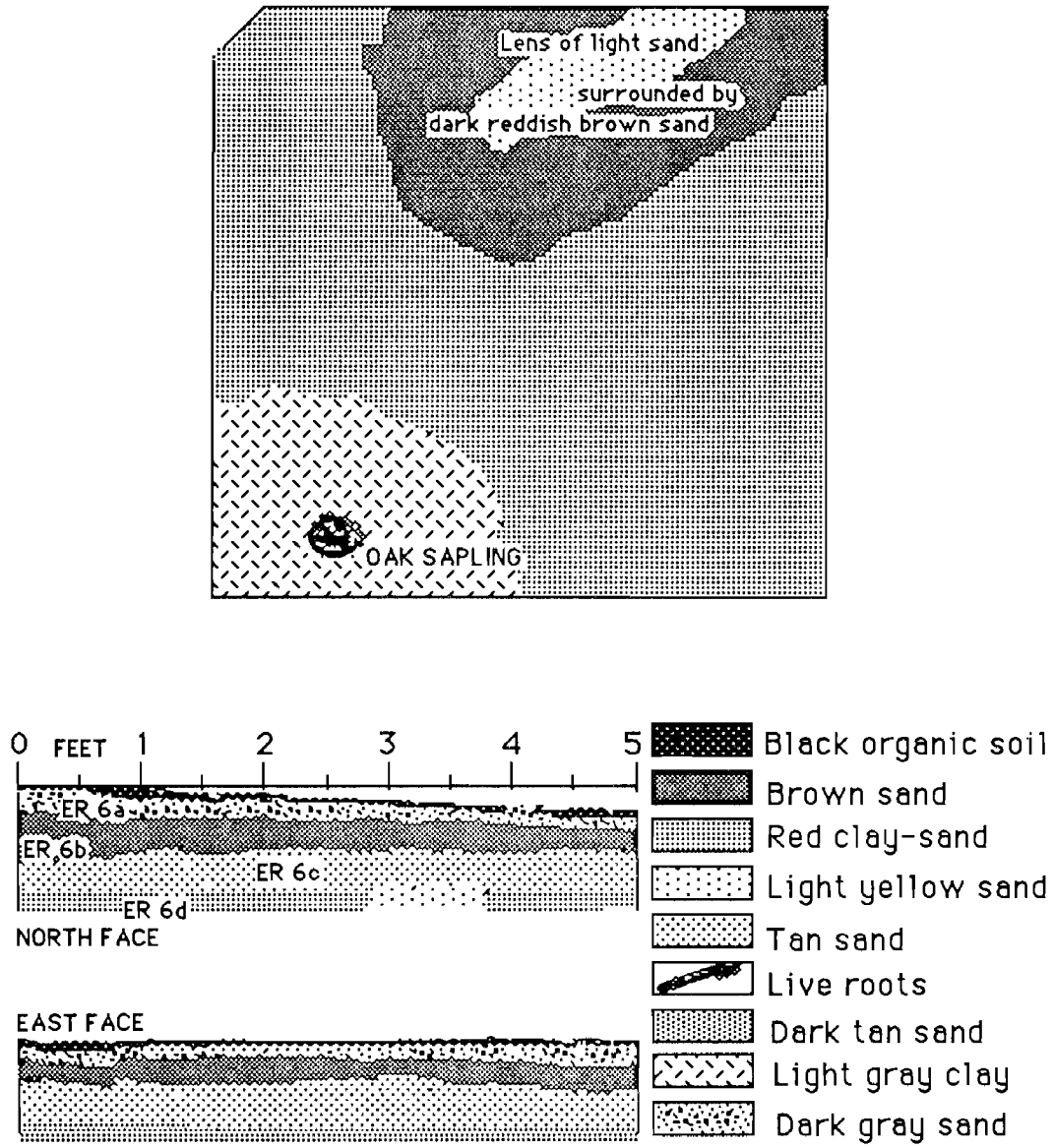


FIGURE 11: Plan and profiles of Unit 6

UNIT 6:

The sixth test unit was opened on the east side of the line with its northwest corner 130 feet from the zero point. At the bottom of the leaf mold lay a coil of steel fence wire apparently *in situ.* Much of the north half of the unit was a soft depression, apparently resulting from a recently-rotted tree. The northwest corner of the unit could not be excavated because of a root intrusion, and there was a sizable sapling in the southwest quadrant.

ER 6: No artifacts were found in the thin upper layer of leaf mold and sand.

ER 6a (85-12-41): Instead of black soil blending into dark tan or brown within the first few inches, this unit exhibited a layer of sandy gray topsoil, one to three inches deep. A similar gray sand stratum was found in upper parts of units to the north as well.

ER 6c (85-12-43, 85-12-44, 85-12-45): The tan sand layer that underlay the gray sand was quartered. The stratum showed evidence of historic period occupation in the form of a small piece of iron. This level was opened to a depth where patches of the reddish clayey sand began to appear.

ER 6d (85-12-46): The transition layer between the tan sand and the reddish clayey sand below produced one small flake of white quartz.

Artifacts: From top to bottom, this unit bears evidence of post-contact activities, probably agricultural. The gray sand layer may be a deflated field surface, and the bits of iron may have penetrated the soil through cultivation. Units 5-6-7-8 were the least productive of prehistoric artifacts.

UNIT 7:

The seventh unit was opened on the left of the base line, between 150 and 155 feet from the zero point. There was a depression in the north side of the unit, perhaps an old stump hole, but not an eroded gully.

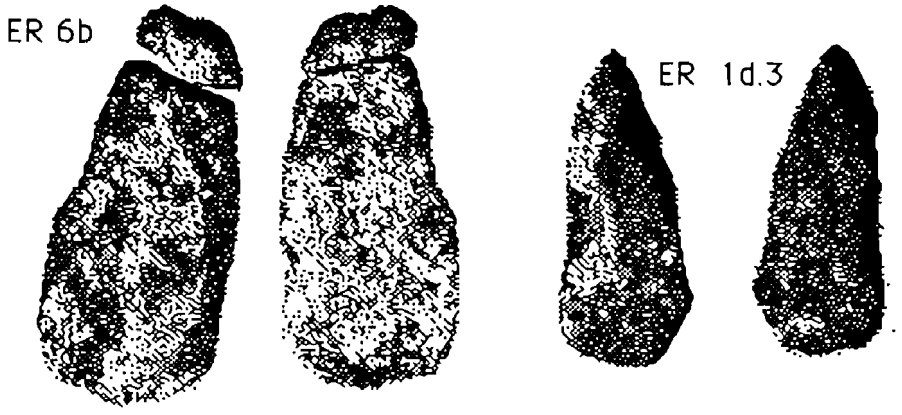


FIGURE 12: These two objects were made from an extremely soft gray shale-like material that has weathered almost to the extent of obliterating all evidence of working. The object to the left was broken during excavation. Several fragments of similar tools were found on the site.

ER 7: The top layer of leaf mold and humic sand was thin, as it had been in Unit 6.

ER 7a (85-12-47): The well-defined layer of dark gray topsoil was again present, up to four inches thick in places.

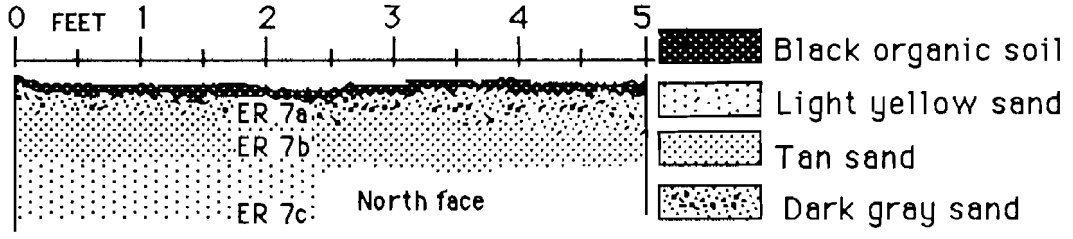


FIGURE 13: Profile of Unit 7

ER 9b

FIGURE 14: Both specimens are broken, with the break at the bottom. The object on the left is the tip of a larger red chert implement, bifacially worked from a flake. The gray flint object on the right is worked only on the face shown at left.

ER 7b (85-12-48, 85-12-49, 85-12-50, 85-12-51) The lowest artifact-bearing stratum was a layer of tan sand. Lying on the bottom of this layer were many small pieces of iron, most of them in the second quarter, all lying at the same level low in the stratum.

ER 7c: One quarter was opened into the next layer, which was very light yellow sand streaked with redder clayey sand. Since no artifacts were found, and since the sand resembled sterile subsoils elsewhere in the site, excavation stopped with one quarter at this level.

Artifacts: Most numerous of the artifacts were the tiny iron objects, the longest only 3 cm. long. They were found lying on the same level, as if they had been scattered there, at the bottom of the cultural material. They may be tacks or pieces of fine wire, but they are too badly deteriorated for visual identification .

UNIT 8:

The eighth unit lay to the east of the baseline, between 180 and 185 feet from the zero point. At this point, the topography to the east is flatter, and the woods are more open, indicating that the unit is near the edge of the old field. Fence wire is evident among the nearby trash.

ER 8 (85-12-52): The surface layer of humus merged into a very thin layer of the gray sand, together totalling an inch or less. In this thin surficial layer were found four objects of human origin.

ER 8a (85-12-53): A layer of tan sand immediately below the gray sand contained a cut nail and a piece of a chert core at very nearly the same depth, indicating that the soil had been plowed at some time in the past.

ER 8b (85-12-54) The final artifact-bearing level was a layer where the tan sand gave way to the subsoil below. This layer was shovel-shaved to an arbitrary square bottom in the hope that it would reveal plow scars or other evidence of agriculture. No definite plow scars could be identified. The subsoil was reddish clayey sand on the north and yellow sand on the south, almost exactly bisecting the unit.

Artifacts: Obviously quite recent pieces of window and bottle glass indicate that this unit lies in an area that has been used during the present century. The window glass was clear, thick, plate glass, and the bottle glass was brown beverage bottle.

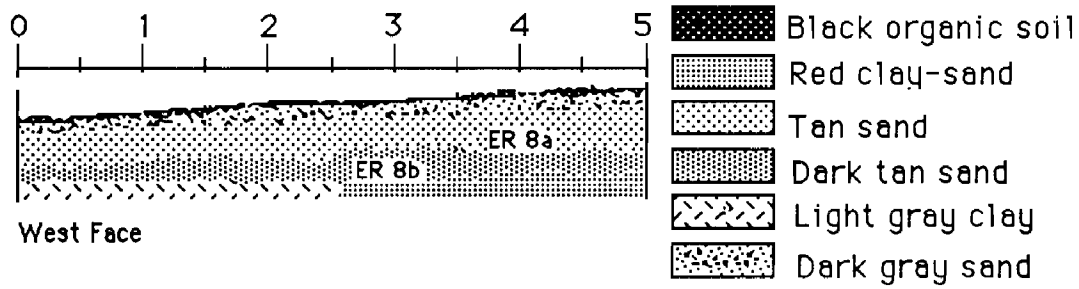


FIGURE 15: Profile of Unit 8

UNIT 9:

The final unit on the straight-line transect was also opened to the east of the base line, between 200 and 205 feet north of the zero point. To the west of this unit was an apparent field boundary mound.

ER 9 (85-12-55): The surface layer consisted of leaf mold, roots, and a layer of gray sand between one and three inches thick.

ER 9a (85-12-56): The tan sand underlying the gray layer was arbitrarily subdivided and the entire unit was taken to a level about six inches below the highest surface elevation.

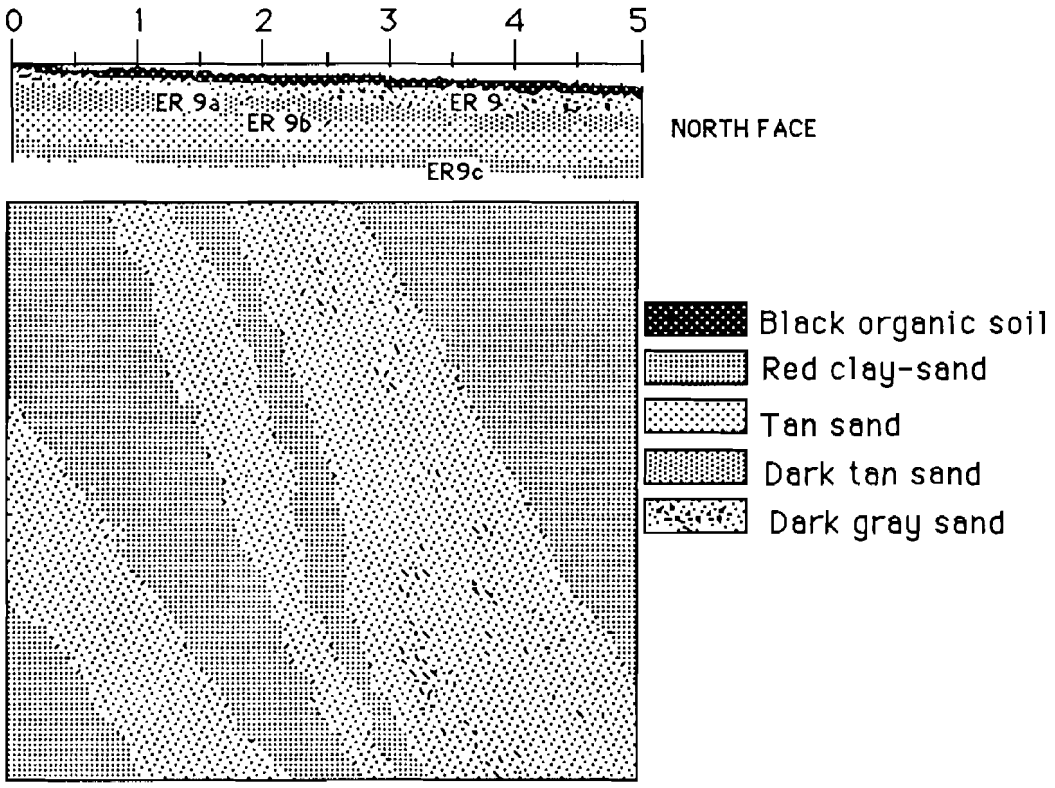


FIGURE 16: Plan and profile of Unit 9

ER 9b (85-12-57): The lower plowzone layer was somewhat lighter in color, and richer in prehistoric artifacts, but it also contained modern debris all the way to its bottom. Excavation of ER 9b stopped when a mottled layer was reached.

ER 9c (85-12-58): Below the plowzone was a transitional zone overlying the reddish clayey sand subsoil. This zone is manmade, consisting of plow scars cut into the natural horizon below. Only a few very small prehistoric artifacts were found in the streaks.

UNIT 10:

Selection of a tenth unit was reserved for the last phase of the project, when the investigators could be expected to have a better idea of areas where questions might remain unanswered. In

consultation with the DelDOT archæologist, therefore, the authors sited the tenth test unit between 35 and 40 feet west of the base line, and between 195 and 200 feet from the zero point. On the profile drawing, Figure 19, the tenth unit is represented incorrectly for purposes of graphic clarity as if it lay along the transect. It can be conceived as a right-angled extension of the transect. This location was chosen because it lies at the brow of the bluff and inside the terrace feature that the investigators had tentatively identified as a road. The efficacy of this locality as a hunting site was evident from the existence of a modern deer stand next to this unit.

ER 10 (85-12-59): The layer of fine, dusty, gray soil was about five inches deep over the entire unit. The few artifacts included both historic and prehistoric materials.

ER 10a: A layer of light tan sand underlay the gray surface layer. This level was quartered, and the first quarter was commenced. After digging through nine inches of this level without encountering a single artifact, the authors determined that the level probably is sterile natural soil.

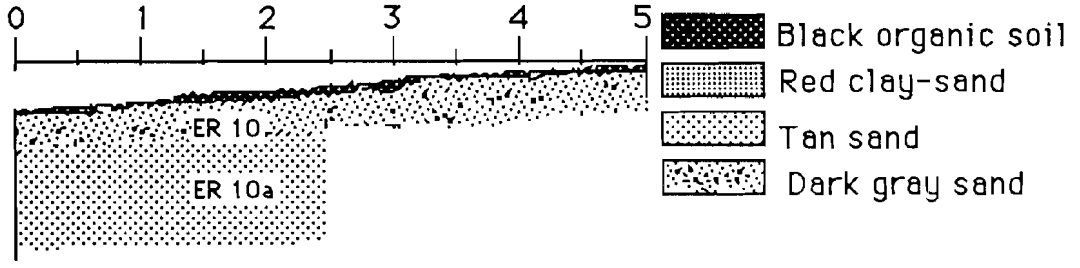


FIGURE 17: Profile of the north face of Unit 10

3. INTERPRETATION

From the evidence provided by these excavations, it is possible to sketch a history of this site that spans several thousand years. The most remarkable fact is that land use here has not changed since the Archaic period. It was then, and still is, a good hunting stand but not a particularly good campsite. The prehistoric artifacts from the site include some toolmaking debris in the form of a few large flakes and core fragments, but no collections of large numbers of fire-broken rocks that would indicate cooking hearths.

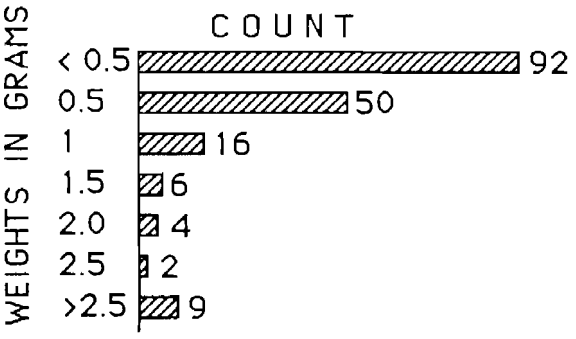


FIGURE 18: Histogram of the weight distribution of chert, flint, jasper, quartz, and quartzite pieces found on the site.

Most common were the tiny chips and flakes that ordinarily resulted from the finishing or reworking of edged tools. Four projectile points are represented in the collection from the twelve units excavated here, but only one is complete. None are blanks or unfinished implements. All the artifacts from the present test are tabulated in Table 2. Artifacts from the earlier test are listed in Appendix 3. It should be noted that artifacts were weighed to the nearest half a gram, and that the lightest category, under a half-gram, was arbitrarily listed as weighing a tenth of a gram for purposes of this table.

Because they were the preferred materials for tools, cryptocrystalline silicates, quartz, and quartzite were selected for further analysis. The artifacts were tabulated by weight. Sandstone and other sedimentary rocks were excluded.

Table 1 is a tabulation of the two types of silicate materials by weight and location. Even without further analysis, it is obvious from this table that smaller pieces were found on the south end of the site near the promontory more frequently than elsewhere.

TABLE 1

Distribution of cryptocrystalline silicate objects

UNIT:	1	2	3	4	5	6	7	8	9	10
GRAMS:										
Under .5	19	24	24	8	3	1	1	1	7	1
.5	10	8	11	2	1	1	1	1	7	2
1.0	4	3	1	2						
1.5	1	2				1				
2.0					1				1	
2.5					1				1	
Over 2.5	1	2		2				1	1	

Distribution of quartz and quartzite objects

UNIT:	1	2	3	4	5	6	7	8	9	10
GRAMS:										
Under .5	2						1			
.5	1	1	1				1		2	
1.0	1	1	1						3	
1.5							2			
2.0			2							
2.5										
Over 2.5									2	

Units 2 and 3, which provided the bulk of the recovered material, also provide an excellent view of the surrounding woods and swamp. The bulk of prehistoric activity on the site took place on this promontory.

The distribution of cryptocrystalline silicate, quartz, and quartzite objects by weight clearly is not a normal distribution (Figure 18). Instead it is bimodal, strongly favoring tiny chips of less than a half gram in weight. The second mode is greater than two grams, and includes large flakes, irregular chunks of broken rock, and spent core. One might expect a normal distribution of weight among the lithic material on a site where a full range of stoneworking tasks was performed over a long period of time, such as a base camp. The distribution of weights on this site suggests that complete or nearly complete tools were brought here and sharpened, finished, or refined. The near absence of medium-size fragments, coupled with the relative scarcity of cores and large unmodified flakes further reinforces the suggestion that tools were maintained or finished, but not made, at this site. Exactly such activities could be expected on a hunting stand.

The foregoing assumptions are postulated on the basis of this one site. However, clues to site use in the remote past are scarce enough that a factor as discrete and relatively immutable as the distribution of the weights of lithic material should not be overlooked as a possible tool for site use analysis. Assembling distributions of the weights of lithic materials from a statistically valid range of sites would permit meaningful hypotheses to be developed and useful inferences to be drawn. Since small sites seldom contain significant numbers of diagnostic artifacts, it probably would be useful to analyse most closely the remains that are most plentiful, and to seek methods for extracting the maximum information content from minimum collections.

The horizontal distribution of artifacts across the site should fairly reflect the distribution of prehistoric activities, since excavation units 1-9 are virtually a single trench down the spine of the ridge. Figure 18 combines a topographic cross-section with a line graph of the concentration of stone materials. There was a remarkable correlation between topographical elevation and the number of pieces of worked or broken stone, even though less than three feet separates the surface elevations of the highest and lowest units.

More interesting, perhaps, is the suggestion implicit in Table 1 that while both the promontory and the base of the ridge were nodes of activity, they had somewhat different functions, or periods of occupation, or both. Table 1 shows that a majority of the tiny chips weighing a half gram or less were concentrated in the units on the promontory, while a preponderance of the larger pieces were found in the units nearest the base of the ridge.

One must observe a caveat that the units north of Unit 5 contained evidence of cultivation. Plowsoil was found in these units. While it was not deep, the presence of a scattering of historic artifacts below prehistoric ones is proof that the prehistoric site's stratigraphic integrity in these units has been distrubed. Nonetheless, the northerly units contained a clearly different mix of larger and smaller artifacts than did the units on the promontory.

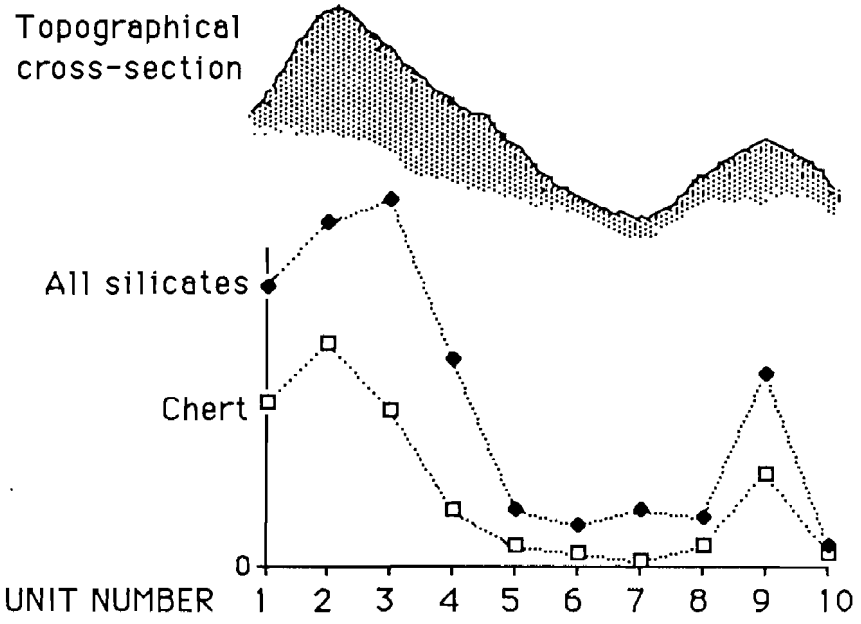


FIGURE 19: The distribution of silicate materials (chert, flint, jasper, quartz, quartzite) correlated with elevations on the site.

4. RECOMMENDATIONS

The site probably has yielded all the data that it is capable of adding to the body of archæological knowledge. Further excavations would increase the quantity in the sample, but probably would not increase our knowledge of either prehistoric or historic Delawareans.

At its south end, the site possessed remarkable integrity. Units 1-4, and tests 6 and 7 of the earlier survey, probably recovered 25% of the intact site fragment.

Because it represents a virtually verbatim confirmation of the accepted models for prehistoric settlement in this part of Delaware, the site cannot be said to contribute significant new information. Therefore, this site is not eligible for inclusion in the National Register.

TABLE 2: Denney Road Site Artifact Inventory

CAT 85-12-	ER	MATERIAL	COLOR	Wght (gm)	Long (cm)	Wide (cm)	DESCRIPTIVE NAME
1	1	sand, clay	ochre	3.5	2.5	1.7	Concretion or burnt clay nodule
2	1a	chert	red	0.5	1.5	1.2	Flake
		flint	black	0.2	0.5	0.6	Retouch flake or broken tip
		chert	red	5	2.4	1.8	Possible fire broken chunk
		sandstone	gray	120	5.8	3.6	Flake
		sandstone	gray	1	1.8	1.4	Spall
3	1b	sandstone	gray	335	7.6	8	Cobble with one round face
		sandstone	gray	5.5	2.1	1.8	Spalled with some reddening
		sandstone	gray	4.5	3.3	2	Chip
		sandstone	gray	1	2.2	0.8	Chip with cortex on one side
		chert	red	0.5	1.4	1.1	Flake
		chert	red	0.2	1.4	0.6	Flake
		chert	yellow	0.1	1	0.8	Chip
		jasper	yellow	0.1	1.3	0.8	Flake
		quartz	white	2	2.2	1.5	Retouched chip
		flint	black	0.25	1.5	1.3	Flake
		flint	black	0.25	2	7	Flake
		chert	yellow	1	2.5	1.8	Utilized flake with cortex
		chert	brown	0.25	1.2	0.8	Flake fragment
		chert	red	0.1	1	0.8	Flake
		chert	brown	0.1	1	0.7	Flake fragment
		chert	red	0.5	1.7	0.7	Thick chip
		chert	red and yellow	1	2.7	1.4	Utilized flake
		flint	black	0.5	1.5	1.3	Flake
		quartzite	tan	1	2.1	1.7	Chip
		chert	tan	0.1	0.8	0.7	Flake
		quartzite	white	0.1	1.1	1	Chip
		chert	yellow	0.5	1.8	1.5	Flake
		chert	red	0.2	1.2	0.7	Yellow band on one side
		chert	red	1.5	2.2	1.1	Possible fire broken chunk
		sandstone	gray	2.5	2.5	1.8	Chip with much reddening
		sandstone	tan	10.5	2.8	1.4	Chunk with much reddening
		sandstone	gray	6	3.5	2.3	Chip
		sandstone	gray	105	6.7	6.4	Spalled with some reddening
		sandstone	gray	25	3.5	3	Spalled with some reddening
4	1c	chert	red	0.1	1	0.7	Chip with white exterior
		flint	black	0.1	1	1	Flake

CAT 85-12-	ER	MATERIAL	COLOR	Wght (gm)	Long (cm)	Wide (cm)	DESCRIPTIVE NAME
5	1d.1	chert	yellow	0.1	1.1	0.7	Rough thick flake
		chert	white calcined	0.1	1.1	0.8	Flake calcined white after manufa
		flint	grey	0.1	1.4	0.9	Flake fragment
6	1d.2	flint	brown	0.5	1.6	1.2	Flake with cortex
		flint	black	0.5	1.4	0.9	Utilized flake
		quartzite	tan	0.6	2	1	Chip of cortex
7	1d.3	shale	brown	4	4.5	2	Object of unknown origin
		chert	red	0.1	1.2	0.5	Flake
		quartz	clear and white	0.5	1.2	0.8	Chip possibly reworked
		quartzite	brown	0.1	1.1	0.8	Chip
8	1d.4	sandstone	tan	210	8	7.5	Battered cobble
		chert	yellow	0.1	1.2	0.8	Flake
		flint	gray	0.1	1.7	1	Cortex flake
		chert	red	0.1	2	1	Flake of irregular shape
9	1e	chert	red	1	2.2	1.6	Irregular-shaped flake
		chert	yellow	0.5	1.7	0.8	Rough thick flake
		chert	yellow	0.5	1.5	1	Rough thick flake
		chert	red	0.5	1.7	1.5	Flake with white area
		flint	gray	1	2.3	1.5	Utilized flake
10	2	chert	yellow	0.5	1.5	0.8	Flake fragment
		chert	red	0.1	1	0.5	Flake with white area
11	2a	oyster shell	white	8	6	4	Oyster shell
		chert	red	0.1	1.3	1	Utilized flake
		chert	red	0.1	1.5	1	Gray exterior spalled off
		chert	red	0.1	1	0.8	Chip
		chert	red	0.1	1	0.7	Flake with white area
		chert	red	0.1	1.4	0.5	Chip
		chert	red and yellow	1	2.6	1.5	Flake with cortex
		chert	red and yellow	0.5	1.5	1	Flake
		chert	yellow	0.1	1	0.9	Flake
		flint	grey	0.1	1.2	0.7	Flake
		flint	grey	0.1	1	0.5	Flake fragment
		chert	red	0.1	1.4	0.8	Flake with gray calcined area
		sandstone	grey	2.5	2.2	1.8	Chip or spall
		quartz	white	2.5	2.5	1.5	Irregular chip
		quartz	clear	0.1	0.9	0.6	Chip
		quartz	clear	0.5	1.5	1.2	Chip

CAT 85-12-	ER	MATERIAL	COLOR	Wght (gm)	Long (cm)	Wide (cm)	DESCRIPTIVE NAME
11	2a	chert	red	3	2	1	Chip with white portion
		chert	yellow	0.1	1	0.3	Flake fragment
		flint	brown	0.5	1.4	0.8	Flake fragment
		flint	grey	0.1	1.1	0.5	Flake fragment
		chert	yellow	0.1	1	0.7	Flake with cortex
		chert	brown	0.1	1.5	1	Flake
		chert	yellow	0.5	1.6	1.2	Flake fragment
		chert	red	0.1	1.2	0.6	Flake fragment
		chert	red	0.1	1	0.5	Flake fragment
		chert	red	0.1	1	0.4	Chip
		chert	red	0.1	1.1	1	Chip
		chert	red	0.1	1.1	0.5	Flake
		chert	red	0.5	2	1.2	Flake
		quartz	clear crystal	9	3	2.2	Pebble with flakes removed
		chert	red	1	2.2	1.1	Flake of cortex
12	2b	chert	red	1.5	2.1	1.3	Flake with cortex adhering
		chert	red	1	1.7	1.4	Flake with cortex adhering
	2b.1	quartz	clear	1	1.8	1.1	Flake off cortex of pebble
		chert	white	0.1	1	0.5	Flake fragment calcined
13	2b.2	quartz	clear	4	3.2	2	Flake off cortex of pebble
		quartz	clear	0.5	1.5	0.8	Flake
		chert	white	0.1	0.5	0.5	Flake fragment calcined
14	2b.3	oyster shell	white	0.5	2.5	2.1	Oyster shell fragment
		flint	black	1	2	1.3	Flake with cortex adhering
		sandstone	yellow	1	2.2	1.2	Chip
15	2b.4	argillite	gray	0.5	1.6	1.2	Utilized flake with break
		chert	red	3.5	2.6	1.7	Pebble cortex
		chert	red	1.5	2.2	1.1	Pebble cortex
		quartzite	tan	1.5	2.5	1.5	Flake fragment
		quartzite	tan	1	2.2	0.7	Flake fragment
		flint	gray	0.1	1	0.5	Flake fragment
		chert	red	0.5	1.5	0.8	Pebble cortex
		pottery	brown	3.5	2.7	1.6	Prehistoric pottery
		sandstone	deep red	320	9	5	Iron-rich chunk
		sandstone	deep red	10	2.7	1.5	Iron-rich chunk
16	2c.1	flint	gray	0.5	1.5	0.7	Chunk of cortex
17	2c.3	chert	red	0.1	0.9	0.7	Flake fragment

CAT 85-12-	ER	MATERIAL	COLOR	Wght (gm)	Long (cm)	Wide (cm)	DESCRIPTIVE NAME
17	2c.3	chert	red	0.5	2	1.8	Utilized flake
		quartz	clear	0.1	0.7	0.6	Flake fragment
		chert	tan	0.1	1	0.5	Flake fragment
		quartz	clear	0.1	0.7	0.5	Flake fragment
18	2d.2	quartz	white	0.1	1.2	0.5	Flake
19	3	quartzite	tan	2	2.4	1.8	Flake with cortex
		chert	orange	0.1	1.2	0.8	Flake
20	3a	jasper	yellow	4.5	3.5	2.5	Biface
		sand,clay	ochre	1	2	1	Concretion or burnt clay nodule
		chert	bony yellow	0.5	1.3	1	Cortex flake possibly of red
		chert	red	0.5	1.5	0.8	Flake fragment
		flint	gray	0.1	0.8	0.4	Flake
		quartz	white	0.1	1.2	0.5	Flake
		flint	black	0.1	1.2	0.5	Flake
		chert	tan, red	0.5	1.5	1.2	Utilized flake
		sand,clay	ochre	0.5	1.5	0.6	Concretion or burnt clay nodule
		sand,clay	ochre	0.5	1.5	1	Concretion or burnt clay nodule
		sandstone	brown	28	3.6	2.5	
		sand,clay	ochre	1.5	2	1.2	Concretion or burnt clay nodule
21	3b.1	sand, clay	ochre	4.5	2.5	2	Concretion or burnt clay nodule
		quartz	red	0.5	1.8	1	Flake
		chert	brown, gray	0.1	0.9	0.9	Flake from cortex
		quartz	white	0.5	1.2	0.8	Chip
		sand, iron	rusty	2	2.1	1	Nodule of iron-rich sandstone
		flint	gray	0.5	1.8	1.1	Flake
22	3b.2	sand, clay	ochre	3	2.2	1.6	concretion or burnt clay nodule
		sand, clay	ochre	1	1.5	1.1	concretion or burnt clay nodule
		quartz	white	0.5	1.7	1	Flake
		sand, clay	ochre	1.5	1.7	1.5	concretion or burnt clay nodule
		sand, clay	ochre	1.5	1.5	1.2	concretion or burnt clay nodule
		sand, clay	ochre	1	1.7	1.5	concretion or burnt clay nodule
23	3b.3	chert	red	1	2.7	1.5	Utilized flake
		chert	tan	0.5	1.5	1	Flake
		chert	tan	0.5	1.4	1	Flake
		quartzite	pink	3	3.1	1.6	Utilized cortex chip
		flint	gray	0.1	1.5	0.7	Flake
		flint	gray	0.1	1.1	1	Chunk

CAT 85-12-	ER	MATERIAL	COLOR	Wght (gm)	Long (cm)	Wide (cm)	DESCRIPTIVE NAME
23	3b.3	quartzite	gray	0.5	1.3	1	Chip
		flint	gray	0.1	1.6	0.5	Flake
		quartz	white	1	1.8	1.4	Chunk with cortex suriviving
		chert	tan	0.1	1	0.8	Flake
		chert	tan	0.1	1.1	0.8	Flake
		chert	brown	0.1	0.8	0.8	Flake fragment
		chert	red	0.1	1	0.5	Flake
		chert	brown	0.5	1.3	0.8	Flake
24	3b.4	sand, clay	ochre	2	2.7	1.7	Concretion or burnt clay nodule
		flint	gray	0.1	1.2	1	Chunk
		chert	red	0.5	1.3	1.1	Chunk
		sand, clay	ochre	2	2.2	1.5	Concretion or burnt clay nodule
		sand, clay	ochre	1.5	2.1	1.3	Concretion or burnt clay nodule
25	3c.1	chert	tan	0.1	1	1	Flake with band of white
		quartz	white	0.5	1.8	0.7	Flake
		quartz	white	0.1	0.8	0.8	Flake fragment
		flint	gray	0.1	0.8	0.7	Flake
		chert	tan	0.1	1	0.5	Flake fragment
		flint	black	0.1	1	0.8	Flake
26	3c.2	sand, clay	ochre	0.5	1.2	1	Concretion or burnt clay nodule
		chert	red with white	0.1	0.8	0.8	Flake
		chert	red	0.1	1.2	0.9	Flake
		chert	red	0.1	1.3	0.8	Flake
27	3c.3	flint	black	0.1	1.7	1	Flake fragment
		quartzite	gray	2.5	3	1.5	Chip
28	3c.4	quartzite	gray, pink	3	3	1.5	Chip with cortex
		chert	tan	0.1	1.1	0.8	Flake
29	3d.1	quartzite	pink	1	1.7	1.2	Stem of a projectile point
		chert	tan	0.1	0.8	0.5	Flake
		flint	gray	0.5	1.4	1.1	Flake heavily battered
		chert	red	0.5	2.5	1.6	Flake worked on one edge
		chert	red	0.1	1.2	0.8	Cortex flake
		flint	gray	0.1	0.8	0.7	Flake
		flint	black	0.5	1.1	0.7	Flake
		quartz	white	0.1	0.8	0.8	Chip of irregular shape
		quartz	white	2.5	2.7	1.5	Flake heavily used
		quartz	white	0.1	1.5	0.6	Flake

CAT 85-12-	ER	MATERIAL	COLOR	Wght (gm)	Long (cm)	Wide (cm)	DESCRIPTIVE NAME
30	4	chert	red	5	3.3	2	Scraper on a pebble cortex
		quartz	white	0.5	1.5	1	Chip
		lead	gray	2	1	0.6	.22 calibre spent bullet
31	4a	chert	brown	1	2.2	1	Tip of a projectile point
		flint	gray	0.1	0.8	0.8	Flake
		flint	brown	0.1	1.1	1	Flake
		flint	gray	0.1	0.8	0.6	Flake
		sand, clay	ochre	2	2	1	Concretion or burnt clay nodule
		quartz	clear	0.1	1	1	Chip
		quartz	white	2	2	1	Chunk
		quartz	white	0.5	1.5	0.8	Chip
		quartz	white	0.1	1.2	0.7	Chip
		quartz	white	0.1	1.1	0.8	Chip
		quartz	white	0.1	1.2	1	Chip
		quartz	white	0.1	1	0.8	Chip
		quartz	white	0.1	1.2	0.7	Chip
		quartz	white	2	2	1	Chunk
		quartz	white	3	3	1.5	Chunk
		quartz	clear	2.5	2.5	1.4	Chip
		flint	gray	0.1	1.2	0.7	Flake
		flint	gray	0.1	0.8	1	Flake
		flint	gray with white	0.5	1.5	1	Flake
		chert	tan	0.1	1	1	Flake
		chert	red	3	2.6	2.3	Chip
		chert	tan	0.5	1.7	1.2	Flake
32	4b.1	flint	gray	0.1	1.1	0.8	Flake
33	4b.2	chert	tan	6	3	1.5	Chunk of pebble cortex
		chert	tan and red	0.1	1.1	0.7	Flake fragment
		quartz	white	0.1	1	0.8	Flake
34	4b.4	chert	red	1	2	1.6	Flake on cortex
		quartz	white	1	1.7	1.2	Chunk
35	5a.1	sandstone	gray	17.5	3	2	Chunk
36	5a.3	sandstone	gray	170	7	7	Cobble fragment
37	5b.1	argillite	gray	6.5	3	3	Chunk
		quartz	white	0.5	1	1	Flake
		quartz	white	0.5	1.6	0.8	Flake
		flint	black	2.5	3	2	Utilized cortex flake

CAT 85-12-	ER	MATERIAL	COLOR	Wght (gm)	Long (cm)	Wide (cm)	DESCRIPTIVE NAME
37	5b.1	flint	black	2	2.3	2	Utilized cortex flake
38	5b.2	slate	gray	0.5	2	0.8	Chip
		chert	brown	0.1	0.8	0.7	Flake fragment
		chert	brown	0.1	0.8	0.7	Flake fragment
		chert	red	0.1	1	0.6	Chip of cortex
39	5b.3	jasper	brown	1.5	3	1.7	Utilized flake
40	5b.4	chert	red, tan	0.5	1.8	1	Flake adjacent to cortex
		quartz	white	0.5	1.3	1	Flake
41	6a	sandstone	gray	95	5.8	4.2	Broken cobble
		slate	red	0.5	2	1.8	Flake
42	6b	slate	red	6	3.8	2.2	Flake
		sandstone	gray	1	1.5	1.3	Chunk
		iron	rusty	0.5	1.8	0.8	Piece of wire
		slate	gray	13	5.5	2.5	Weathered blade
		flint	gray	0.1	1.1	0.8	Flake
		quartz	white	1	2.3	1.1	Broken utilized flake
		chert	tan	1.5	2	1.2	Chunk of pebble
		chert	tan	0.5	1.6	1.1	Chunk of pebble
43	6c.2	sand, clay	ochre	1.5	1.7	1.2	Concretion or burnt clay nodule
		argillite	gray	0.5	1.4	0.9	Flake
44	6c.3	sandstone	red, gray	17.5	3.5	3	Irregular chunk
45	6c.4	iron	rusty	0.5	2	0.2	Tack or wire fragment
		sandstone	gray	8	3.5	2.1	Chunk
		quartz	pink	1.5	1.5	1	Chunk
46	6d	quartz	white	0.5	1.5	1	Flake
47	7a	iron	rusty	0.5	2.2	0.2	Tack or wire fragment
		quartzite	pink	0.1	0.9	0.7	Flake
		flint	black	0.1	1.1	0.8	Flake
		quartzite	pink	1.5	2.5	1.3	Flake
		sandstone	pink	4	3	2.3	Chip
		quartzite	gray	2	3	1.3	Flake
48	7b.1	sandstone	gray	50	4	4	Chunk
		chert	tan	0.5	1.8	1	Cortex flake
		quartz	white	0.5	1.5	1	Chip
		quartzite	gray	0.5	1.4	1	Flake
		iron	rusty	0.1	1	0.2	Wire
		iron	rusty	0.1	1.5	0.2	Wire

CAT 85-12-	ER	MATERIAL	COLOR	Wght (gm)	Long (cm)	Wide (cm)	DESCRIPTIVE NAME
49	7b.2	quartzite	brown	1.5	2	1.5	Chip
		iron	rusty	0.5	2	0.2	Wire
		iron	rusty	0.5	2	0.2	Wire
		iron	rusty	0.5	1.8	0.2	Wire
		iron	rusty	0.1	1.5	0.2	Wire
		iron	rusty	0.1	1.6	0.2	Wire
		iron	rusty	0.1	1.1	0.2	Wire
		iron	rusty	0.1	1.1	0.2	Wire
		iron	rusty	0.1	1.1	0.2	Wire
		iron	rusty	0.1	1.4	0.2	Wire
		iron	rusty	0.1	1.5	0.2	Wire
		iron	rusty	0.5	1.5	0.2	Wire
		iron	rusty	0.5	2	0.2	Wire
		iron	rusty	0.5	2	0.2	Wire
		iron	rusty	0.5	2.2	0.2	Wire
		sand, clay	ochre	1	1.7	0.8	Concretion or burnt nodule
		iron	rusty	0.5	3	0.2	Wire
50	7b.3	iron	rusty	0.5	2.3	0.2	Wire
		iron	rusty	0.1	1	0.2	Wire
51	7b.4	sandstone	pink	150	7.5	3	Chunk
		sandstone	pink	9.5	4	3	Chunk
52	8	sandstone	gray	50	4	3	Chunk of rounded cobble
		chert	red	0.1	1.1	0.8	Flake
		sandstone	pink	8.5	4	3	Fire broken spall
		jasper	pink	0.5	1.8	1.3	Flake
53	8a	chert	red	6	3	2.5	Core fragment
		sandstone	pink and gray	10	4	3	Chunk
		quartz	white	3.5	2.5	2	Chip
		chert	tan	0.5	1.2	1	Flake
		glass	brown	1.5	2.6	1.5	Bottle fragment
		glass	clear	1.5	2.1	2	Window glass
		jasper	tan	0.1	1.2	0.6	Flake
		slate	gray	0.5	1	1	Chip
		slate	gray	3	3.5	1.8	Flat piece
		sandstone	pink	40	5.5	3.2	Chunk
		iron	rusty	5.5	6.5	0.5	Cut nail
		iron	rusty	0.1	1.5	0.2	Wire

CAT 85-12-	ER	MATERIAL	COLOR	Wght (gm)	Long (cm)	Wide (cm)	DESCRIPTIVE NAME
54	8b	quartz	clear	0.5	2	0.9	Chip
		sandstone	gray	6.5	3	2.5	
		Quartz	white	90	6	4	Pebble with peck marks
		sandstone	gray and pink	50	6	3	Fire broken rock with cortex
		quartz	clear	0.5	2	1	Chip
		jasper	tan and red	1	2.2	1.3	Flake
55	9	Quartz	clear	1.5	2	1.5	Flake
		iron	rusty	1	4.5	0.2	piece of wire
		glass	clear	1.5	4	0.9	Thick plate glass
56	9a	iron	rusty	1.5	3	0.2	Two joined wire pieces
		quartzite	red and gray	1	2	1	Flake
		chert	brown	0.1	1.4	1	Flake
		quartzite	red and gray	1	2	1.2	Flake
		quartz	white and clear	0.5	1.4	1	Flake
		chert	tan, white, gray	2	2	1.7	Cortex flake of a pebble
		chert	brown	0.1	1.2	0.8	Flake fragment
57	9b	chert	red	0.5	1.5	1	Point of bifacial tool
		chert	red	0.5	2	0.9	Flake
		quartzite	tan	11	4.3	2.1	Broken bifacially worked chunk
		quartz	white	0.5	1.5	0.8	Chip
		iron	rusty	3	1.3	1	Cap nut or finial
		quartzite	gray	6	3	1.6	Chunk
		quartzite	gray	0.5	1.5	1.1	Chip
		chert	red	0.1	1.1	1	Flake streaked with white
		flint	black	0.1	1.3	0.8	Flake
		quartzite	pink	0.5	1.5	1.1	Flake
		quartzite	gray	1	2	1.5	Chip
		iron	rusty	0.5	1.2	1.2	Sheet metal
		slate	gray	3.5	3	2.5	Apparently worked fragment
		quartz	clear	0.5	1.5	1	Chip
		chert	red	3.5	2.1	1.9	Chunk
		chert	red	0.5	1.6	0.8	Flake with white cortex
		chert	gray	2.5	2.5	1.6	Broken unifacial flaked tool
		chert	tan	0.5	1.8	0.8	Flake
58	9c	flint	black	0.1	1.4	1.3	Flake
		quartz	clear	1.5	2.1	1.3	Chip
		chert	red	5.5	3.5	1.5	Irregular and granualr stone

CAT 85-12-	ER	MATERIAL	COLOR	Wght (gm)	Long (cm)	Wide (cm)	DESCRIPTIVE NAME
58	9c	chert	red	0.5	2	1.5	Flake streaked with white
		chert	red	0.5	2	1.5	Flake
59	10	glass	clear	1	3	1.2	Vessel glass fragment
		flint	gray	0.1	1.1	0.9	Flake in cortex
		sandstone	gray	7	3.2	2	Chunk
		chert	tan and gray	0.5	1.5	1	Flake fragment
		iron	rusty	1.5	6	0.2	Wire
		chert	tan	0.5	1.5	1.5	Flake