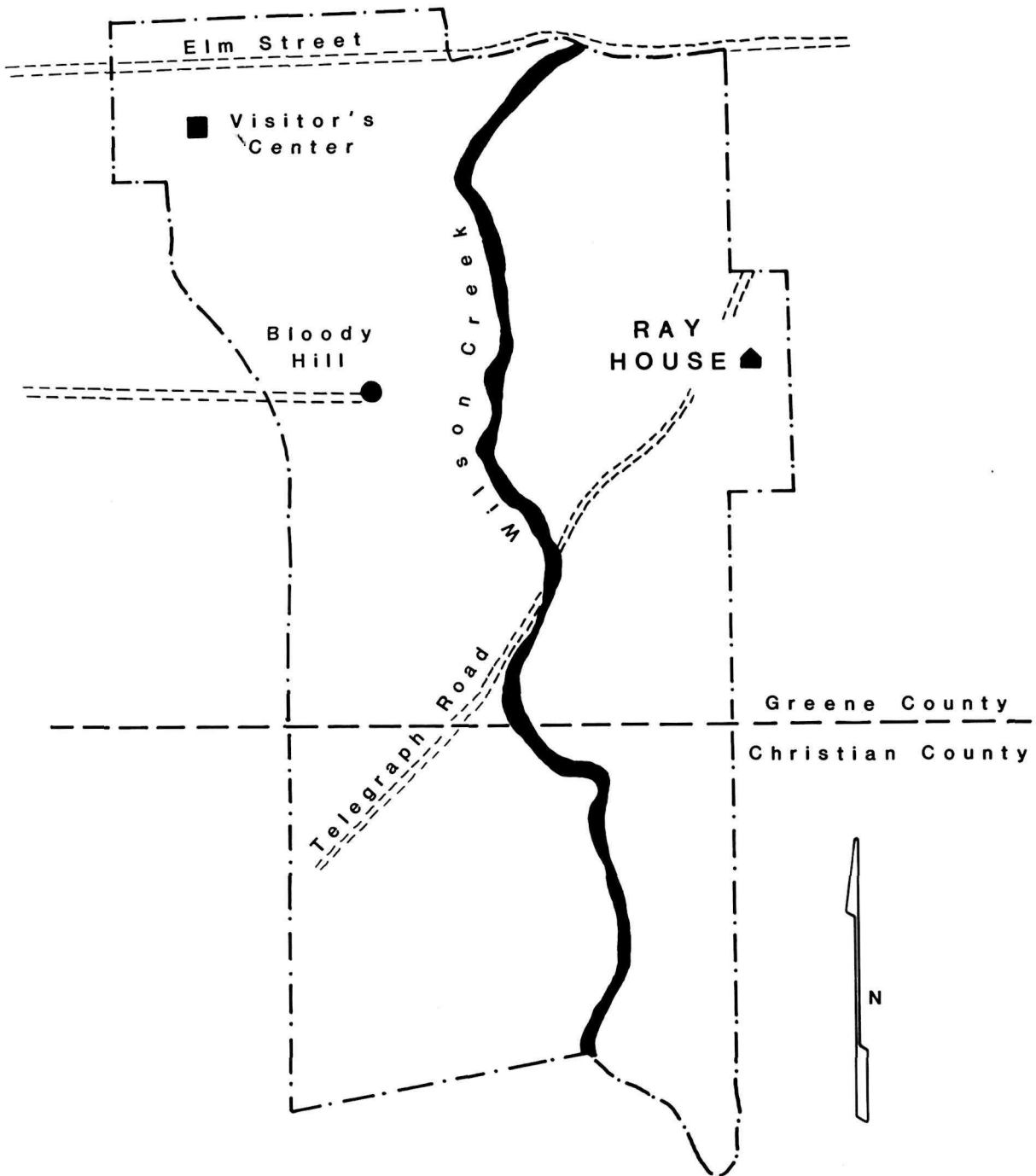


Archeological Survey and Testing
of the
Proposed Tour Road
Wilson's Creek National Battlefield,
Missouri



ARCHEOLOGICAL SURVEY AND TESTING OF THE PROPOSED TOUR ROAD,
WILSON'S CREEK NATIONAL BATTLEFIELD,
MISSOURI

by

Susan M. Monk

Midwest Archeological Center
Occasional Studies in Anthropology
Number 11

Series Editor

F. A. Calabrese

United States Department of the Interior
National Park Service
Midwest Archeological Center
Lincoln, Nebraska
1985

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ACKNOWLEDGEMENTS

Numerous individuals are responsible for the production of this report. These begin with the hard working field crew, both in March and October of 1983. Laboratory analysis was conducted by personnel at the Midwest Archeological Center including Melissa Connor, Doraine Bailey and Chris Riddle, with a special effort in the lithic analysis given by Randy Farmer and Mark Lynott. Thanks go to Debbie McBride and Nancy Hartman for the many photographs and maps included in this report. Marie Johnson is responsible for the final typing of this manuscript. Finally, the entire staff of the Midwest Archeological Center and the personnel at Wilson's Creek National Battlefield are thanked for their comments and assistance. Especially helpful was the parks' effort at marking/mowing the tour road right of way.

INTRODUCTION

Wilson's Creek National Battlefield is located in southwest Missouri approximately 180 miles southeast of Kansas City. The battlefield includes 1752 acres, which approximates the area of the battle which determined whether the north or south would gain control of much of the state of Missouri. The battle of Wilson's Creek took place on 10 August 1861 as a result of a confrontation between Union forces led by General Nathaniel Lyon and Confederate forces led by Major General Sterling Price, Generals Ben McCulloch and N. Bart Pearce (Bearss 1960). The Civil War battle is the primary emphasis of the park itself. However, Wilson's Creek contains a wealth of prehistoric information seldom examined throughout the history of the park.

The major purpose of the survey portion of the Phase II project was related to management concerns regarding the location and number of archeological sites to be affected by the proposed tour road construction. Subsequent to this basic objective is the desire to increase the archeological site inventory for the park, thereby increasing the data base of both prehistoric and historic sites at Wilson's Creek Battlefield.

The evaluation section of this Phase II work focused on the collection of data relating to the size, depth, content, condition and significance of individual site deposits. This information has been made available for management to aid in planning the final design of the tour road route.

This information together with previous studies will be used to better interpret past patterns of human adaptation in this region of southwestern Missouri. This data will aid the park in developing interpretative programs that would inform the public about the broad base of settlement history evident in the Wilson Creek drainage.

ENVIRONMENT

Wilson's Creek National Battlefield is located on the east and west sides of Wilson Creek valley. The topography of this region is generally rolling with steep slopes associated with the waterways. Physiographically, Wilson Creek is included in the Springfield Plateau of the western Ozarks. The Plateau is bounded on the north and east by the Missouri and Mississippi River valleys and extends south to the edge of the Arkansas River valley and west into northeast Oklahoma. This region has less relief than most other regions of the Ozarks and is thus called the Springfield Plateau (Sauer 1920:66).

The main aquatic feature in the park is Wilson Creek and its tributary Skeggs Branch of Shuyler Creek. At normal flow, Wilson Creek is approximately 30 to 35 feet wide and five to six feet deep. A mile south of the park, the creek becomes a tributary of the James River. Ground water consists of primary aquifers in limestone, dolomite and

sandstone formations (National Park Service 1976:II-10-12). A constant water supply is one factor that has allowed human occupation to become a year round activity in this region.

The climate of Missouri is midcontinental with a range in differences between temperature extremes in winter and summer from 40-54 degrees respectively (Chapman 1975:12). Annual precipitation in the Springfield area averages 42+ inches, with 41 occurring as rain and 1+ as snow. The average annual temperature is 56 degrees. Springfield on the average has a growing season of 199 days providing an adequate time for most agricultural crops (National Park Service 1976:II-9).

This region of the Ozarks is situated at the western limits of the eastern hardwood forest and is transitional into the westward savanna and prairie lands. The predominate forest taxon in the park is oak, occurring in several species including black, hickory, black jack, post, white, scarlet and northern red oak. The forest is classified as part of the oak-hickory climax vegetation (National Park Service 1976:II-1).

The Springfield Plateau consists of at least three primary environmental zones including floodplain, open woodlands and tall grass prairies (Steyermark 1959). Vegetation is variable in this area depending to a great deal on slope and soil type (Soil Survey of Greene and Lawrence County, Missouri).

The prairie and open woodlands in the past were the home of large animals including bison, elk, wolf, and black bear. The wooded areas contained white-tailed deer, fox, squirrel, cottontail rabbit, skunk, opossum and woodchuck. The floodplains supported beaver, mink, muskrat and otter (Sauer 1920:59). This area is not on any major flyway so there is a limited abundance of waterfowl such as ducks and geese. Various songbirds and large hawks inhabit the park. Local fish include catfish, carp, buffalo, bass, sunfish and sucker (Pflieger 1975). Present day pollution has greatly altered the natural habitats and densities of fish, reptile and amphibian populations.

REGIONAL CULTURE HISTORY

A brief overview of the regional culture history of southwestern Missouri will be given to place the archeological resources found in Wilson's Creek National Battlefield in an overall spatial and temporal perspective.

The earliest period found in Missouri is termed the Paleo-Indian Stage and has been described in detail elsewhere (Reagan et al 1978; Chapman 1975). Paleo-Indian projectile points are rare in the study area of southwestern Missouri. This stage existed basically from 12000-8000 B.C. (Chapman 1975) and is characterized by lanceolate projectile points. Frequently the points are in association with the remains of extinct big game animals. None of these remains to date have been found within Wilson's Creek National Battlefield.

The Paleo-Indian and Archaic transition is believed to coincide with a shift to environmental and climatic conditions similar to those of today and is generally accepted to have occurred between 8000 and 6000 B.C. The first complex associated with the Archaic is called the Dalton complex and appears to be transitional between Paleo-Indian and Archaic throughout a great deal of the southeast (Goodyear 1982). This complex is characterized by lanceolate or pentagonal projectile points with basal grinding and thinning. Gravers, burins, drills and adzes are also found. Artifacts attributed to the Dalton horizon have been found in some locations in the park boundaries (Bray 1967a, 1975; Helm 1980; Lynott 1981, 1982). Considerable testing in the Table Rock Lake area has provided large amounts of data regarding the Dalton occupation in southwestern Missouri (Chapman 1975).

The Middle Archaic substage (5000-3000 B.C.) is less understood but is considered to be represented by projectile point types especially Jakie and Table Rock Stemmed. Most of the data regarding this time period is from rock shelter excavations. Rodgers shelter in westcentral Missouri is an excellent example of settlement and subsistence during this phase of the Archaic (McMillan 1976).

The Late Archaic in the Ozarks is characterized by the appearance of a ground stone industry and a change in the style and material used in the making of projectile points (C. Price 1979). Sites representative of this time horizon are numerous and extensive in the Ozarks.

The Woodland stage is characterized by the earliest appearance of pottery and is termed by Chapman (1980) as the Prairie-Forest Potter Tradition. Early and Middle Woodland sites are scarce in the southwestern area of Missouri. Late Woodland sites (A.D. 400-900) are better known by their limestone and grit tempered pottery yet are only found in slightly more numbers than their earlier predecessors. Ceramic sites from the Woodland Stage are termed part of the Early James River ceramic complex as described by Douthit (1981).

The following Stage is termed Mississippian and is represented by artifacts including shell-tempered ceramics, Scallorn projectile points, side-notched, triangular and ovate arrow points and milling stones. These sites are often agricultural villages, with civic-ceremonial centers and a complex socio-political organization (Chapman 1980). The early Mississippian Stage in southwest Missouri has been termed the Lofton phase by Chapman (1980). This phase is named for the Lofton site at Stockton Reservoir northwest of Springfield. Evidence of the Middle and Late Mississippian period in southwestern Missouri is sparse.

During the beginning of the 18th century, the Osage and Missouri were occupants of western Missouri. In 1789 the Delaware and Shawnee moved into Missouri and exchanged hostilities with the Osage. The Osage then moved west onto the Plains while the Shawnee and Delaware were given reservations in southwest Missouri until being moved west in the mid 1800's (Chapman 1959).

The earliest white settlers to the southwest area of Missouri are believed to have come from Kentucky, Tennessee, North and South Carolina

during the early to mid 1800's (St. Louis : Western Historical Company 1883:125-130). In 1833, Greene County was organized and in 1838, the town of Springfield was incorporated.

The battle of Wilson's Creek which took place on 10 August 1861 was the most significant military battle of the war in western Missouri and has been described in depth by Bearss 1960.

PREVIOUS ARCHEOLOGICAL RESEARCH

The first archeological study of the National Battlefield was conducted in 1966 and focused on the portion of the park in Greene County (Bray 1967a). The fieldwork included survey and excavation primarily on features relating to the 10 August 1861 battle. Investigations on Bloody Hill were designed to locate and evaluate artifacts and features pertaining to the battle. This study also focused on excavation of the sinkhole on the west side of Bloody Hill and Gibson's Mill located on the east side of Wilson Creek. These investigations also conducted research into the location of the Gwinn house and the E.B. Short farm.

Additional archeological investigations were conducted in the northern portion of Wilson's Creek National Battlefield in 1967 (Bray 1967b). This study was a continuation of previous investigations and included further research at the Gibson house and Gibson's Mill. The 1967 investigations at the Short Spring site (23Gr250) were significant because they represent the first excavation of a prehistoric site at Wilson's Creek.

The next archeological investigations were in 1974 when Bray (1975) conducted additional survey and testing focusing on the southern half of the park, particularly the area within Christian County. Historic sites examined at this time included the Ray house, Sharp house, T.B. Manley house, C.B. Manley house, Manley Cemetery, the town of Wilson's Creek and a well used to bury soldiers following the battle.

The work was primarily surface survey with the exception of excavation at the proposed location of the Joseph Sharp farm. Bray was unable to definitely relocate the structure. There was evidence however of a later structure; the Steele farm occupying the investigated area.

The 1974-1975 study of prehistoric sites was limited to a pedestrian surface survey. Subsurface testing was conducted at only one site (23Gr248) and was limited to a single test pit.

In 1978, the Midwest Archeological Center conducted a brief survey of the area to be affected by the construction of a visitor's center. Construction monitoring of a nearby site (23Gr250) was conducted by Carolyn Helm (1980) of Southwest Missouri State University. A utility trench intersected the site and resulted in the collection of numerous lithic artifacts.

Investigations in 1981 and 1982 were aimed at inventory and evaluation of the archeological resources which may be affected by construction of a proposed tour road. Phase I archeological survey for

construction of a proposed tour road. Phase I archeological survey for the proposed tour road (Alternative A) was conducted by Jeffrey Richner of the Midwest Archeological Center in 1981. This reconnaissance survey together with systematic shovel tests located five prehistoric archeological sites along the southern extent of the roadway.

In 1982, the Midwest Archeological Center returned to Wilson's Creek and conducted subsurface testing of sites located along tour road alternative A (Lynott et al 1982) while initiating survey and site testing of Alternatives B and C. The main objective of this study was related to the collection and significance of individual sites. It was recommended that Alternative C will have the least impact upon archeological resources at Wilson's Creek and is likely to be the least expensive with regard to archeological mitigation.

Two periods of investigations in 1983 took place at the Ray house. Construction related activities necessitated archeological work done both inside and outside of the house. The March 1983 project under the direction of Susan Monk of the Midwest Archeological Center tested primarily along the foundation of the house which was the initial management concern (Monk 1983). The second project in November 1983 under the direction of Jack Ray of the Midwest Archeological Center tested primarily inside the house, under floorboards and in the fireplace.

Previous archeological research at Wilson's Creek has generally been aimed at the study of sites and features which pertain to the 1861 battle for which the park was established. The present work along the tour road route enables a better look at the prehistoric nature of the Wilson's Creek valley.

METHODS

Survey Reconnaissance

Sampling methods used during the survey portion of this study included a pedestrian survey reconnaissance of a 40m (ca 120 ft) corridor following the proposed route of the tour road. The corridor which was mowed in most areas by park personnel was covered with shovel tests in 10m transects (Figure 1) . These tests consisted of a shovel probe approximately 30cm wide and 30cm deep. The matrix from all tests was screened through 1/4 inch mesh. Positive shovel tests were marked with flagging tape and were revisited during the second phase of this project. All known sites in the vicinity of the right of way of the Phase II section of the proposed tour road were noted, and efforts were made to relocate these sites.

Test Excavation

23Gr245

Extensive sampling was initiated in the area of the proposed bridge which will cut through a large previously known prehistoric site



Figure 1. Phase 2 survey transect along the tour road right of way.

(23Gr245). Large scale ground disturbance is anticipated with the bridge construction, therefore 1x1m test units were placed throughout the area to be affected by the construction and adjacent proposed non-affected areas. The entire field was mapped with a transit and stadia rod producing both a plan and topographic map. Test units were dug with level one consisting of the natural stratigraphic plowzone and subsequent arbitrary levels dug in 10 cm increments. Units were excavated until sterile soil was encountered. All matrix was screened through 1/4 inch hardware mesh with a flotation sample taken from the plowzone of each unit. Soil samples were taken from each soil horizon for chemical analysis and particle size analysis.

Newly Located Sites

Potential scatters of lithic artifacts which were located during the survey and reconnaissance were revisited and intensive controlled shovel testing was undertaken to delimit site size and density. After the site's limits were determined, a map was made of the concentration. At least one 1x1m test unit was excavated at areas which proved to be actual concentrations of artifacts rather than isolated finds. The plowzone was removed as a unit (level 1), with subsequent levels usually dug in 10cm levels, unless soil stratigraphy could indicate natural levels. A flotation sample was also taken from each plowzone level. As with 23Gr245, soil samples were taken from each soil horizon subsequent to excavation. Permanent datums were left at sites whenever possible.

RESULTS

Survey

Work completed in October 1983 was conducted by a crew comprised of Elise Manning, Jeff Fine, Colleen Vaughn, John Northrip, Herb Beamer, Steve Daron, and Juliette Guda under the supervision of Melissa Connor and Susan Monk.

A total of 10 potential artifact concentrations, both historic and prehistoric were noted during the survey phase of this project. All of these areas were revisited for further investigation. Four of the ten potential site areas were found to be isolated find spots of artifacts and were not considered "sites", and consequently warrant no further investigation. The following is a list of the artifact concentrations identified during this study and comments regarding their evaluation.

Test Excavation

Located Sites (see Figure 2)

1) This artifact concentration is located on a large floodplain immediately north of Skeggs branch at the southern extent of the Phase II survey portion of the tour road. Shovel testing indicated that this appears to be a large prehistoric site. The excavated test unit produced

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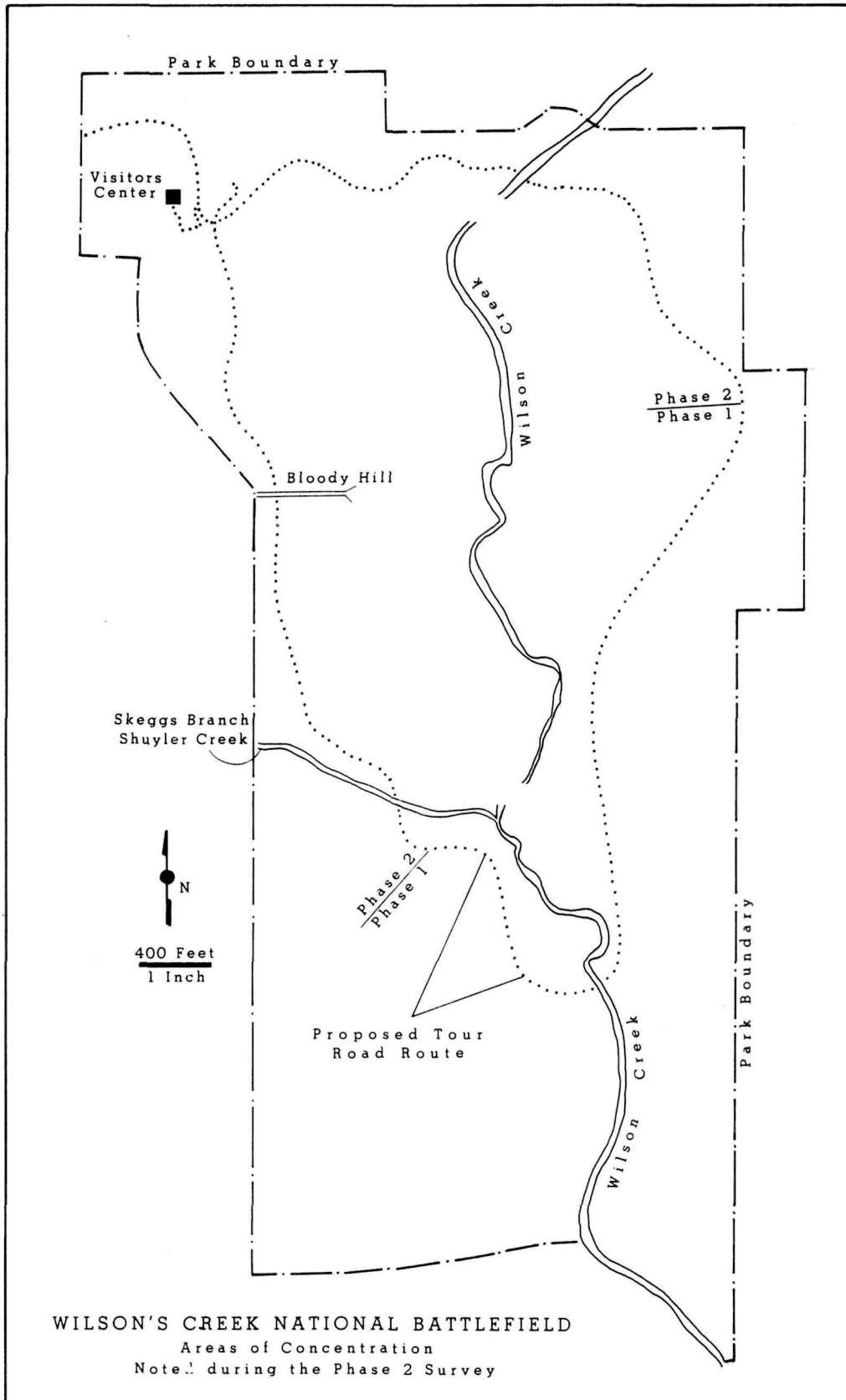


Figure 2. Located sites and areas of concentration
in the Phase 2 tour road survey.

lithic debris with at least one flake recovered below the plowzone. This site appears to have prehistoric cultural remains in an undisturbed context.

Chemical analysis and particle size analysis was conducted on two soil samples from test unit one, levels 1 and 2 showed an acidic pH between 6.6 and 6.9, organic matter of 1.4% and a low phosphorus and potassium level of 10 and 58 ppm respectively for level one. The soil was identified as a silt loam. Level 2 was a silty clay loam with 0.4% organic matter and phosphorus of 20 ppm and potassium of 77 ppm. Level one contained 23% clay and level two was composed of 32% clay. The richer ppm of chemicals in level two suggests a leaching down from level one. The low organic content, possibly the result of leaching suggests a paucity of cultural remains. The state of Missouri has assigned the site number 23Gr629 to concentration 1.

2) This was the location of a small scatter of prehistoric chipped stone debris. Intensive shovel testing indicated that this location is an isolated find and not an archeological site so no further excavation was attempted.

3) This concentration is west of an intermittent stream bed, northwest of concentration one (23Gr629). The eastern portion of the area is wooded; to the west the woods blend into a brushy and then a grassy plain. The original survey identified a light prehistoric lithic scatter. Further testing indicated that this may possibly be two concentrations; subsequently labeled A and B. The boundaries and site limits of each area were defined with further controlled shovel testing. One 1x1m test excavation unit was placed in each area of lithic concentration. Test unit one (area B) contained lithic debris in the top 20 cm, as did unit two in area A. Both concentrations contained a quantity of lithic material and indicate the possibility that the site has good contextual integrity (Figure 3). The state of Missouri has assigned 23Gr630 to concentration 3 and for the present time both areas are considered part of the same site until further testing proves otherwise (Figure 4 and 5).

One soil sample was analyzed for both chemical composition and particle size from test unit one, level 1. The pH level was 6.1 and phosphorus and potassium were low at 7 ppm and 63 ppm respectively. The slightly alkaline soil is a silt loam and contains 1.6% organic matter.

4) This area of concentration is located on the south side of the Bloody Hill turnout and was located on the original survey by several positive shovel tests containing lithic debris. Further shovel testing produced no additional artifacts, indicating that the scatter was very light and diffuse. No additional testing was conducted at this area, and the low density of artifacts do not warrant additional research.

5) This is an area where artifacts were collected from shovel tests located south of the Bloody Hill road, slightly below the crest on the south side of the hill. The original survey produced a small number of positive shovel tests. Subsequent intensive shovel probing indicated that this is a very low density lithic scatter rather than an artifact concentration. It was treated here as an artifact find-spot, and merited no further work.



Figure 3. Concentration 3, 23Gr630, test unit one, north wall profile.

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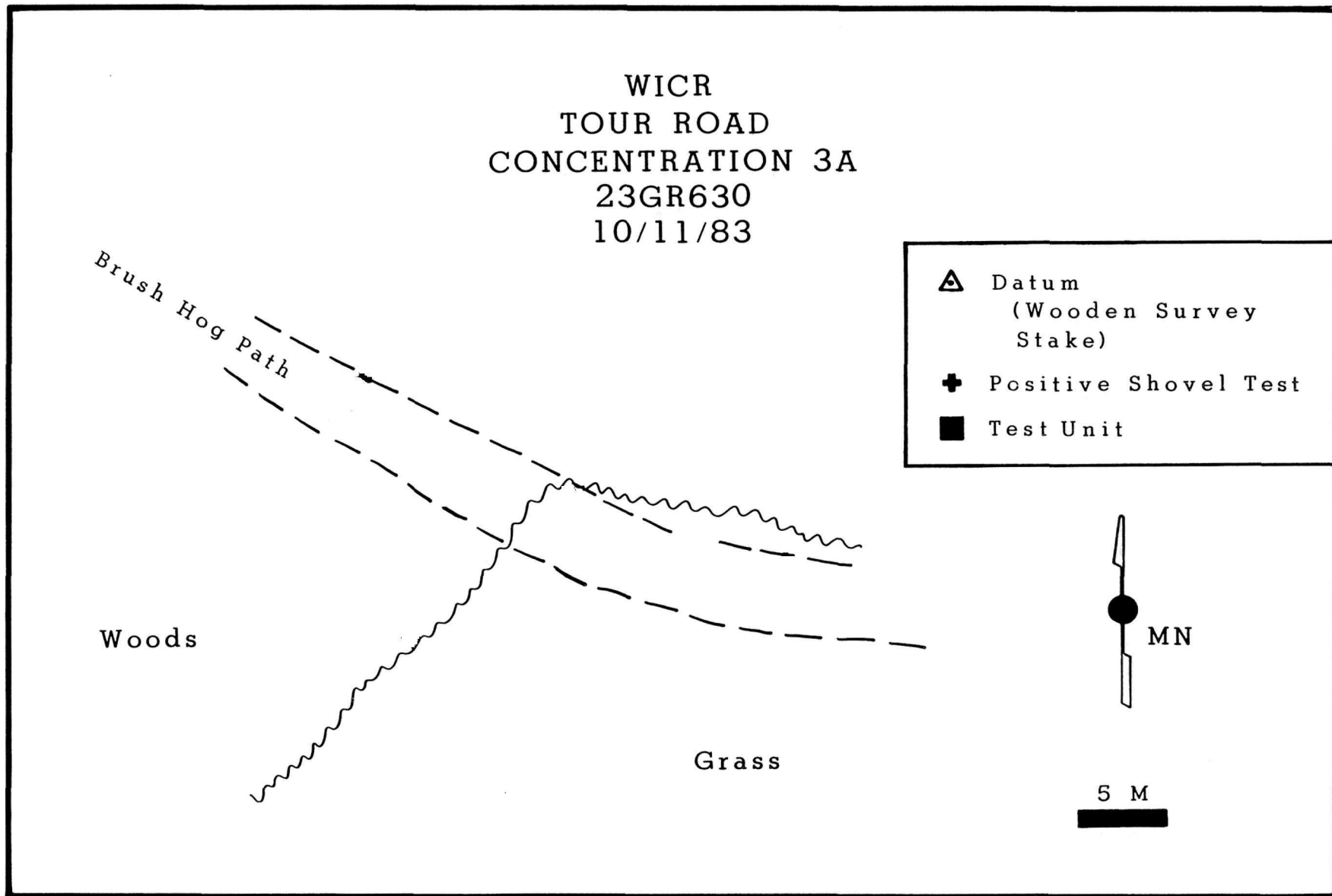


Figure 4. 23GR630, Concentration 3A.

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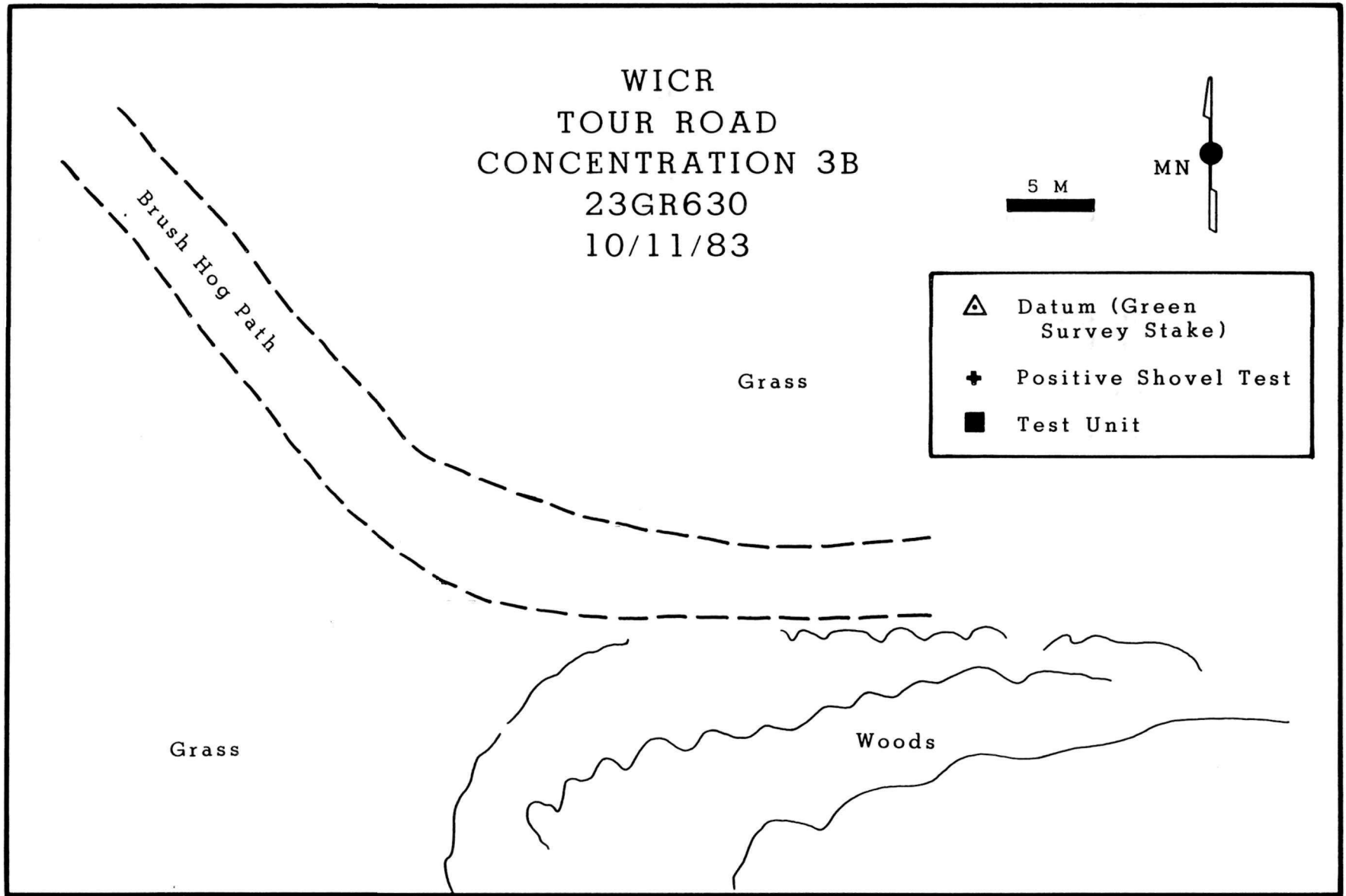


Figure 5. 23GR630, Concentration 3B.

6) Four positive shovel tests were encountered in an area located directly north of the Bloody Hill road. Further shovel testing indicated a light scatter of lithic debris located downslope along the hill. A 1x1m test unit was placed in the mowed path of the tour road right of way. The excavation unit contained no cultural material. Due to the low density of artifactual remains, this is considered another artifact find-spot, and warrants no further research other than monitoring during construction.

7) This is an area of prehistoric lithic debris located in a wooded area covered by mixed hardwoods with a dense secondary growth. Positive shovel tests during the survey indicate a possible concentration of artifacts in this locale. (Figure 6). Further shovel testing delimited the extent of the site. One test unit was excavated in this area and produced subsurface cultural material (Figure 7).

Soil chemistry and particle size analysis was completed on a sample from test unit one, level 1. The soil was acidic with a pH of 6.5 and had a high organic content of 2.6%, suggesting a possible cultural horizon. Phosphorus was very low with 5 ppm and potassium was medium with 93 ppm. The very low phosphorus level suggests a lack of subsurface cultural remains, however, when combined with the organic matter content offers the hope of finding evidence of cultural activity. This site apparently has good integrity and merits further research. The state of Missouri has assigned site number 23Gr631 to this concentration.

8) The original tour road survey found a series of lithic material in shovel tests beginning on the first terrace above Wilson Creek northeast to the hill leading to the second terrace. Subsequent shovel tests were dug in order to delimit site size and content. The western edge of this site is located along the slope going to the creek edge and the eastern limits could not be definitely determined, although it does not extend to the edge of the second terrace (Figure 8). The concentration of positive shovel tests is not located in the right of way of the proposed road however. Three 1x1m test units were excavated at this site in the proposed impact zone. Cultural material was concentrated in level one although a small number of artifacts extend below the plowzone.

Two soil samples were analyzed for chemical composition and particle size from test units one and two, levels one. Unit one soil contained a pH of 6.2 and organic matter of 1.4%. Phosphorus was low at 9 ppm, while potassium was medium at 103 ppm. The soil was classified as a silt loam. The unit two sample had a pH of 5.4 and organic content of 1.5%. Phosphorus was very low with 5 ppm and potassium was very high at 134 ppm. The soil was classified as a silty clay loam. The units are comparable in soil chemistry but differ in their clay content (23% and 34%) and the pH in unit two is more alkaline than unit one. While both units have a high organic matter content, the low phosphorus reading doesn't indicate a great possibility of subsurface cultural remains. This site is located directly across Wilson creek from 23Gr245 and will be altered by the proposed bridge across the creek. This site could perhaps be an extension of 23Gr245 or may represent an entirely different occupation. This site may possess good cultural integrity and has been assigned a Missouri state site number of 23Gr632.



Figure 6. 23Gr631, concentration seven.

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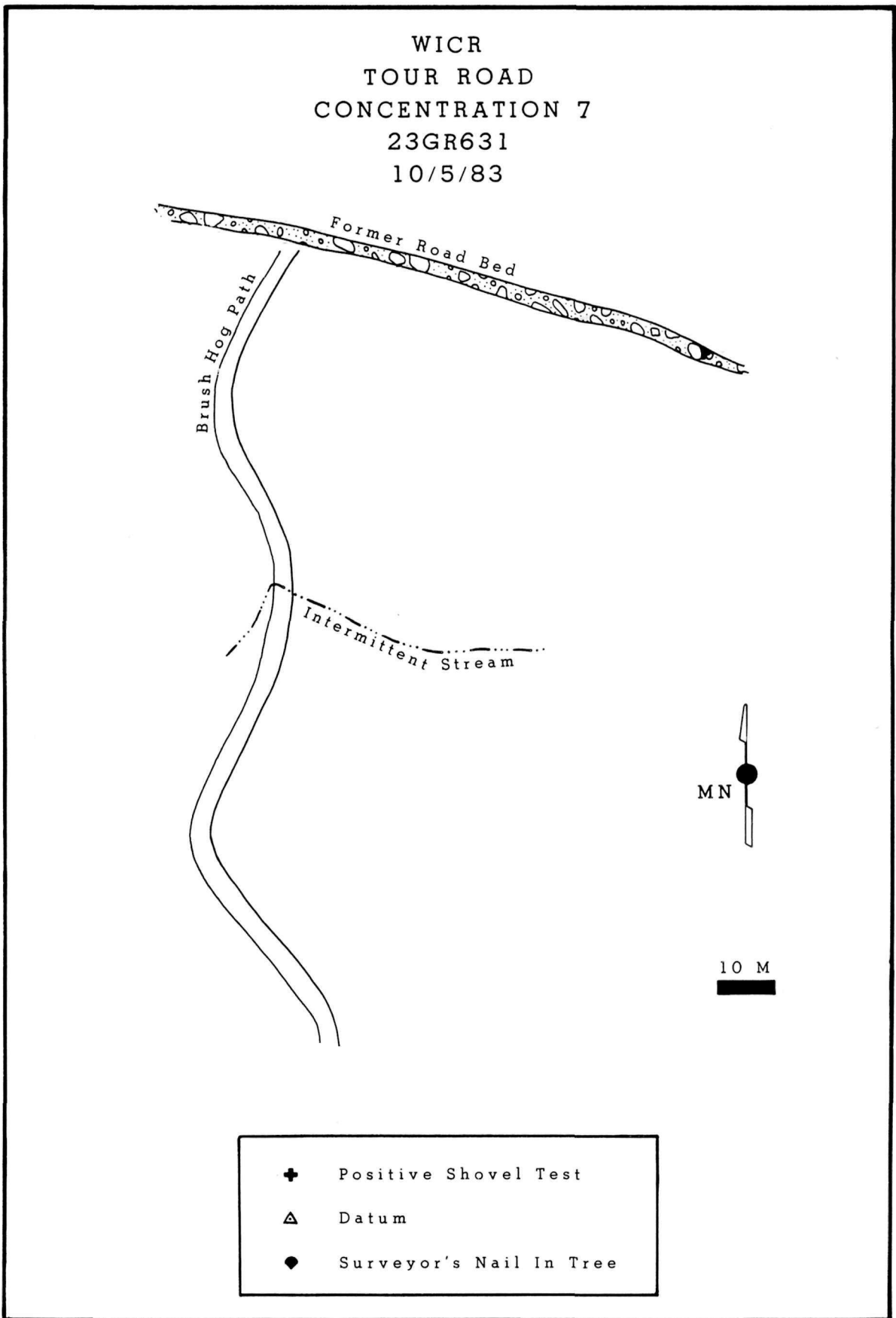


Figure 7. 23GR631, Concentration 7.

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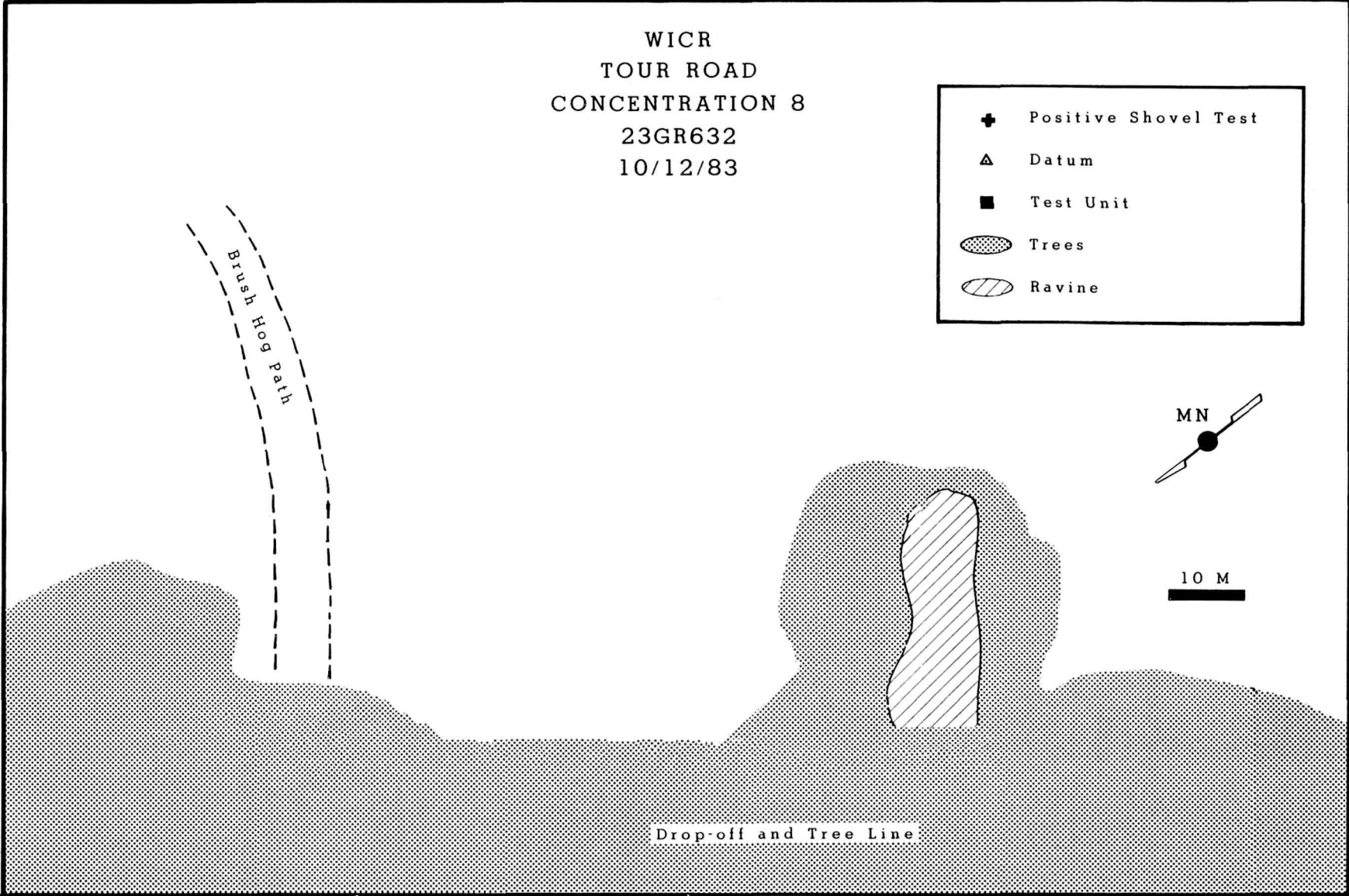


Figure 8. 23GR632, Concentration 8.

9) The original survey turned up several positive shovel tests in an area on a second terrace on the west side of Wilson creek. These positive probes were located east of the tree line on the edge of the terrace. Further shovel testing produced a single flake, indicating this is a light scatter that appears to be an extension of concentration 8 and is not actually a separate site. No further test units were excavated, and this area appears to contain limited cultural integrity and significance.

(10) Investigations in this area resulted in the recovery of a few historic artifacts in some of the shovel tests. Further testing revealed additional historic artifacts (brick, concrete block, glass, motor oil can) indicative of a recent origin for the scatter. Therefore no additional test units were undertaken here, and this site is considered too recent to provide meaningful information about the archeology of the park.

Two known sites were relocated during the survey. The first site (23Gr250) was minimally identified during initial shovel testing. Due to the disturbed nature of a portion of the site, along with past investigations (Helm 1980) no further work was conducted during this study. The second known site (23Gr245) encountered here will be discussed below. No other known prehistoric or historic sites were located in the tour road right of way.

23Gr245

This site is located on a broad floodplain at the northern extent of the park. This site was first examined by the Midwest Archeological Center in March 1983 after it had been freshly plowed and artifacts were very evident. At this time, only diagnostic artifacts such as projectile points and other tools were collected. The recovered assemblage indicated a long duration of occupation, with points styles ranging from Archaic to Mississippian time horizons. This site was relocated during the survey portion of this project with positive shovel tests appearing at the bottom of the rise at the western edge of the field (see Figure 9). Artifacts were recovered from shovel tests along the entire route of the proposed road in this area. In fact, judging by surface remains, the right of way of the road would have passed through the densest part of the site.

An on site meeting with MWAC and DSC personnel in December 1983 changed the alignment of the tour road, based upon suggestions recommended by MWAC, approximately 30 feet north of the original location which will hopefully avoid the heaviest portion of the cultural debris.

Initial work subsequent to the survey consisted of setting up a grid with 20m blocks surface collected for diagnostic tools (Figure 10). Flakes, non-diagnostic shatter and other lithic debris were left in place. No cultural material other than lithics were encountered. Again, the densest concentration of the site appears to be nearer the creek edge and

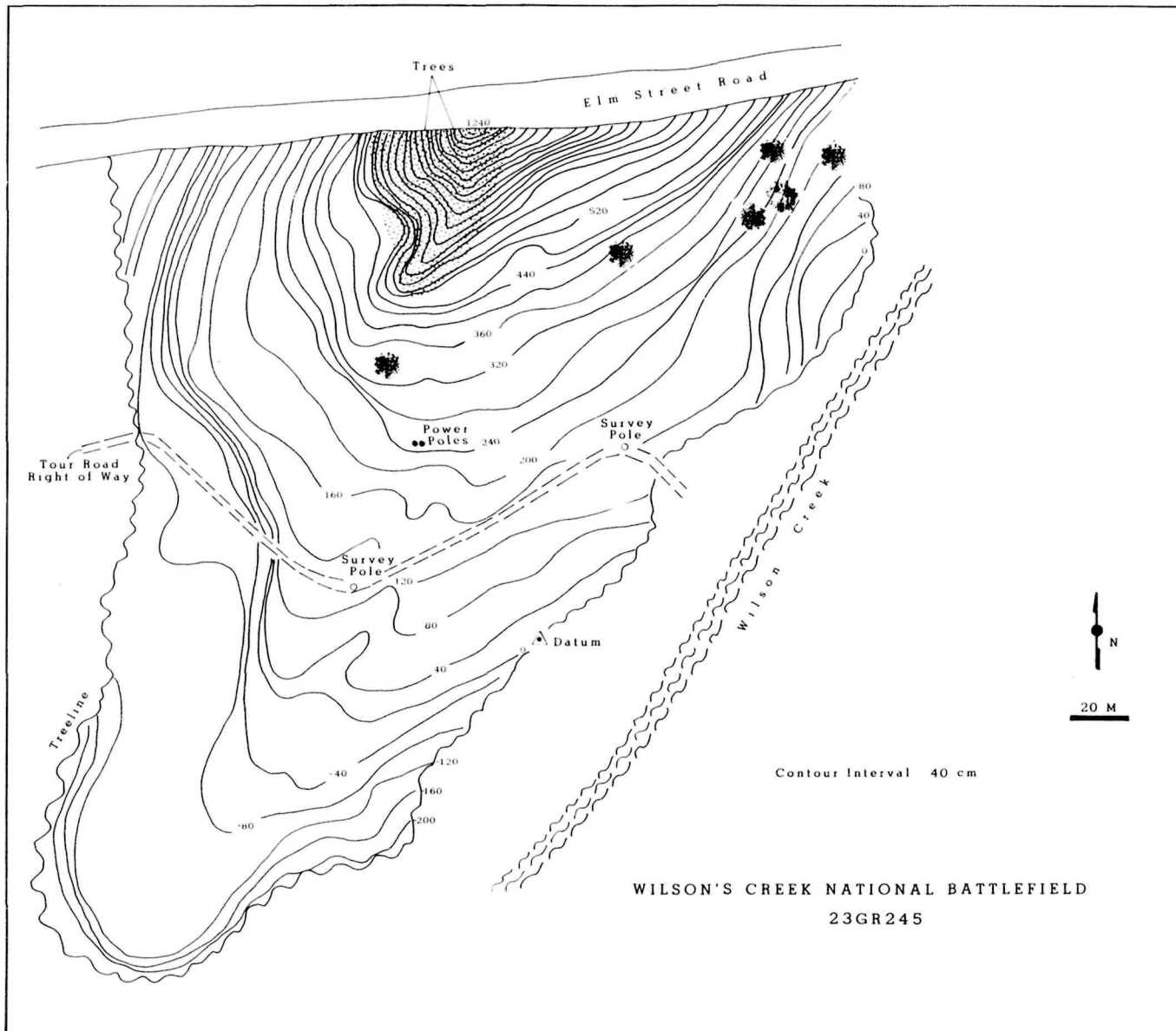


Figure 9. 23Gr245, topographic map.

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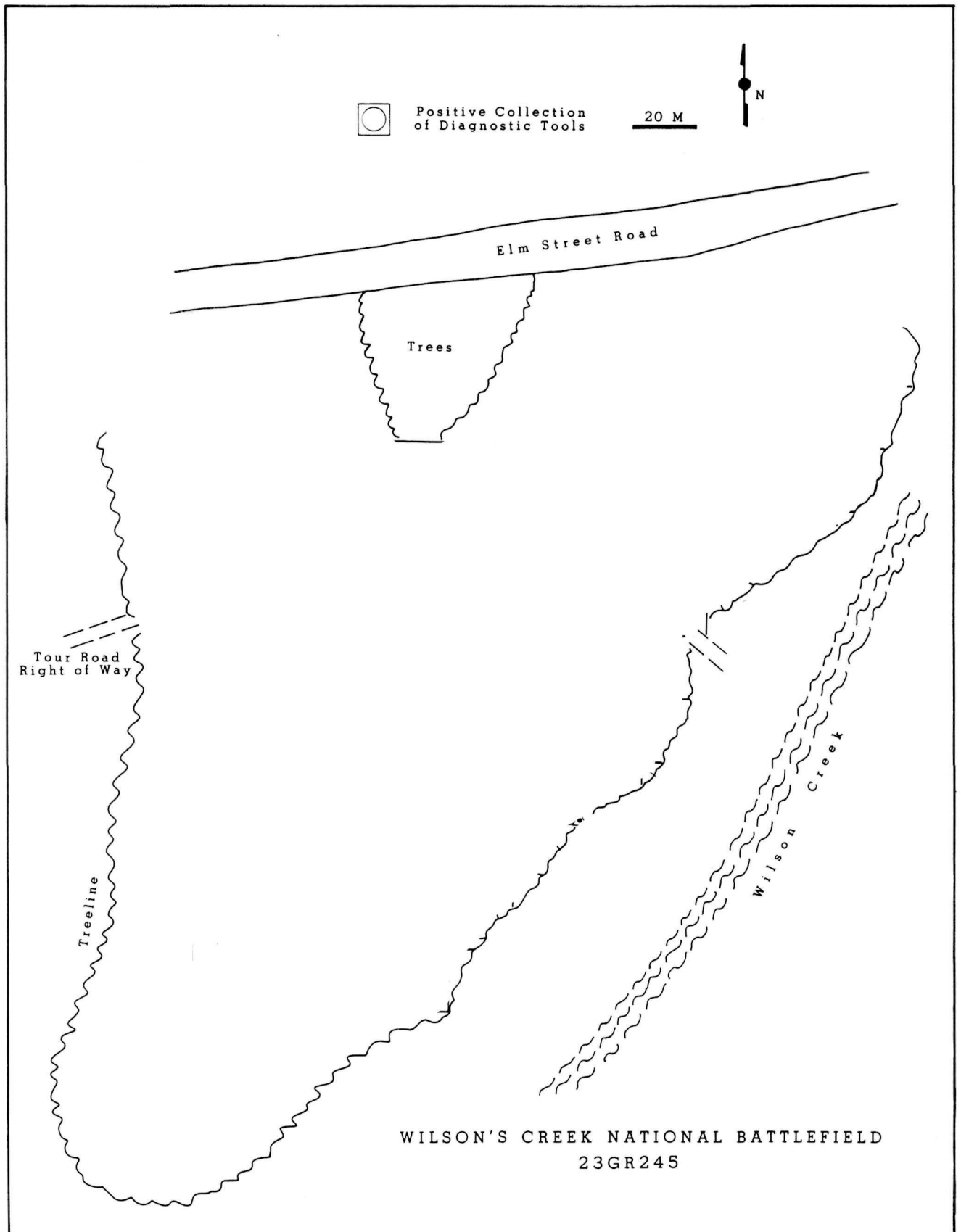


Figure 10. 23GR245, surface collection quadrants and number of diagnostic tools recovered.

not extending across the field toward Elm Street. At this point 14 test units (1x1m) were set in along the same grid and a map was made of the site with all topographic landscape features, both natural and cultural being mapped with a transit and stadia rod. Test unit locations were selected (Figure 11) to give an example of the distribution of cultural remains present at the site, together with an idea of the natural stratigraphy. Units were placed both within the proposed road right of way and scattered through the field, as many as time would allow. All units were excavated using the plowzone as level one. No remains were found once the subsoil consisting of dense concentrations of natural rock and clay were encountered. This layer of rock and clay varied a great deal across the site and ranged from about 30cm below surface to well below 135 cm (Figures 12 and 13).

Subsequent to excavation, profiles were drawn of a side wall from each of the 14 excavated units. The following Figures (14 - 18) show an example of the stratigraphy of the site based upon these in field observations. These profiles were done in order to examine the range of stratigraphy occurring across the field. While the profiles do give a good indication of individual excavation unit stratigraphy, the small amount of units dug at this large site does not allow a detailed discussion of site stratigraphy based upon soil profiles. Further work in the spring of 1984 at 23Gr245 will open up much more area and hopefully allow insight into the nature of the site. At this point, it appears the difference in profiles is due to flooding and variation in deposition of silt. Since Wilson creek is only about 40 m from portions of the site, those areas of the field closest to Wilson creek would theoretically receive greater alluviation than the areas which are more distant. As with the tested areas of lithic debris concentration, a flotation sample was taken from each plowzone level, with one unit taking samples from each level as a control. These samples were processed in a flotation machine and were examined for the possibility of cultural materials. Soil samples were taken from each stratigraphic level in each unit.

Soil chemistry and particle size analysis was conducted on nine samples from four test units scattered throughout the site. Unit 53N/49E is located in the right of way of the proposed bridge at the southern extent of the site (refer back to Figure 11). A sample taken from 20-30 cm has a pH of 6.4 and organic content of 1.0%. Phosphorus levels were very high at 89 ppm as was potassium with 238 ppm. The soil was classified as a silt loam. The high phosphorus level together with an above average organic matter content suggest a possibility of subsurface cultural features in this area.

Test unit 6S/OE had three samples analyzed ranging in depth from surface (level 1) to a depth of 32 cm. Level one had a soil pH of 6.3 and an unusually high organic matter of 3.8%. The phosphorus was the highest for all the samples run at 93 ppm and potassium was also very high at 224 ppm. The soil was a silt loam. Level 2 was also a silt loam with a pH of 6.4 and organic content of 1.0% Phosphorus and potassium were very high at 60 ppm and 168 ppm respectively. Level 3 had a lower pH level at 5.8

Site Locations have been removed from map in this electronic edition
in an effort to protect sensitive cultural resources.

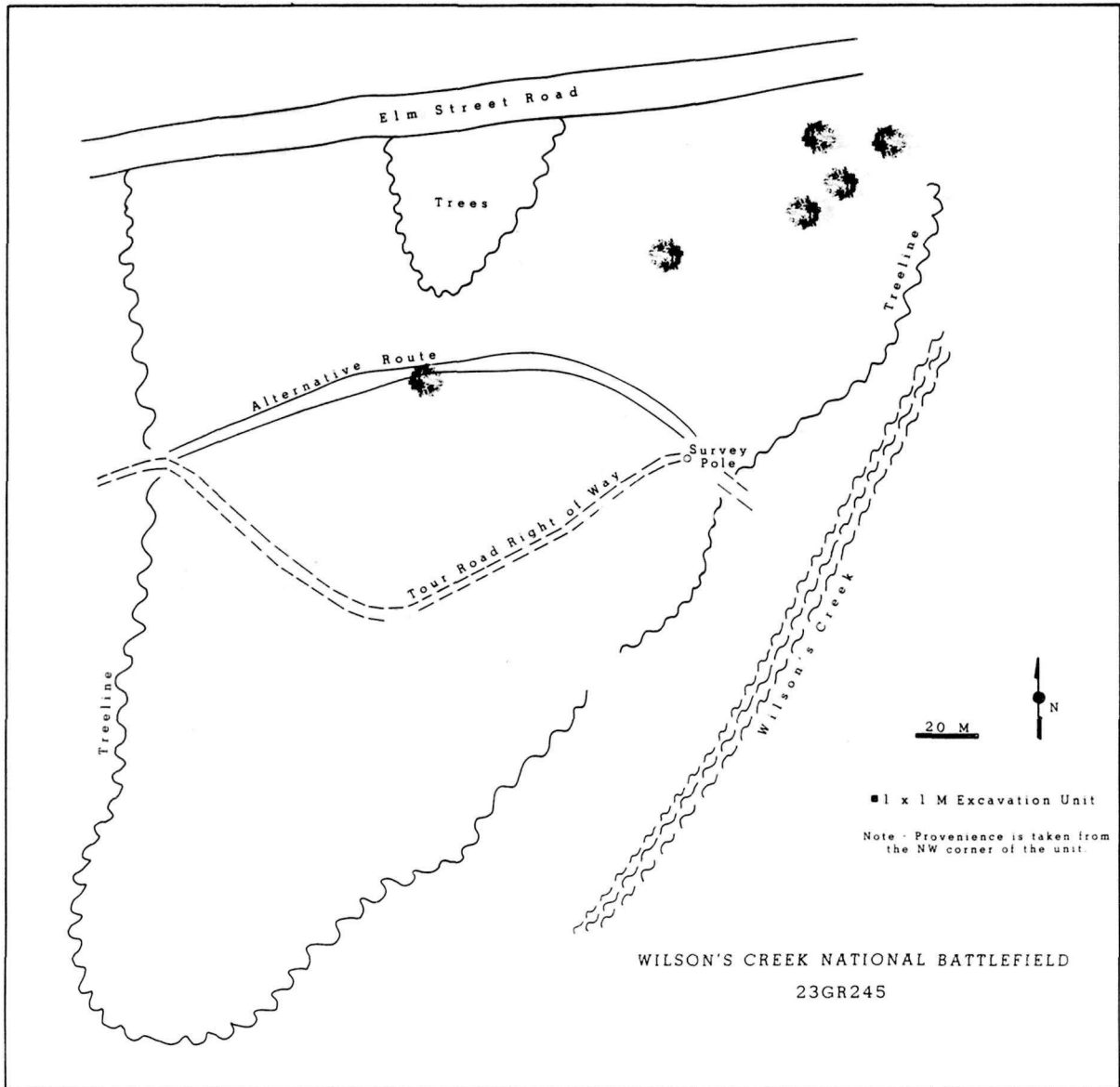


Figure 11. Excavation units at 23Gr245.

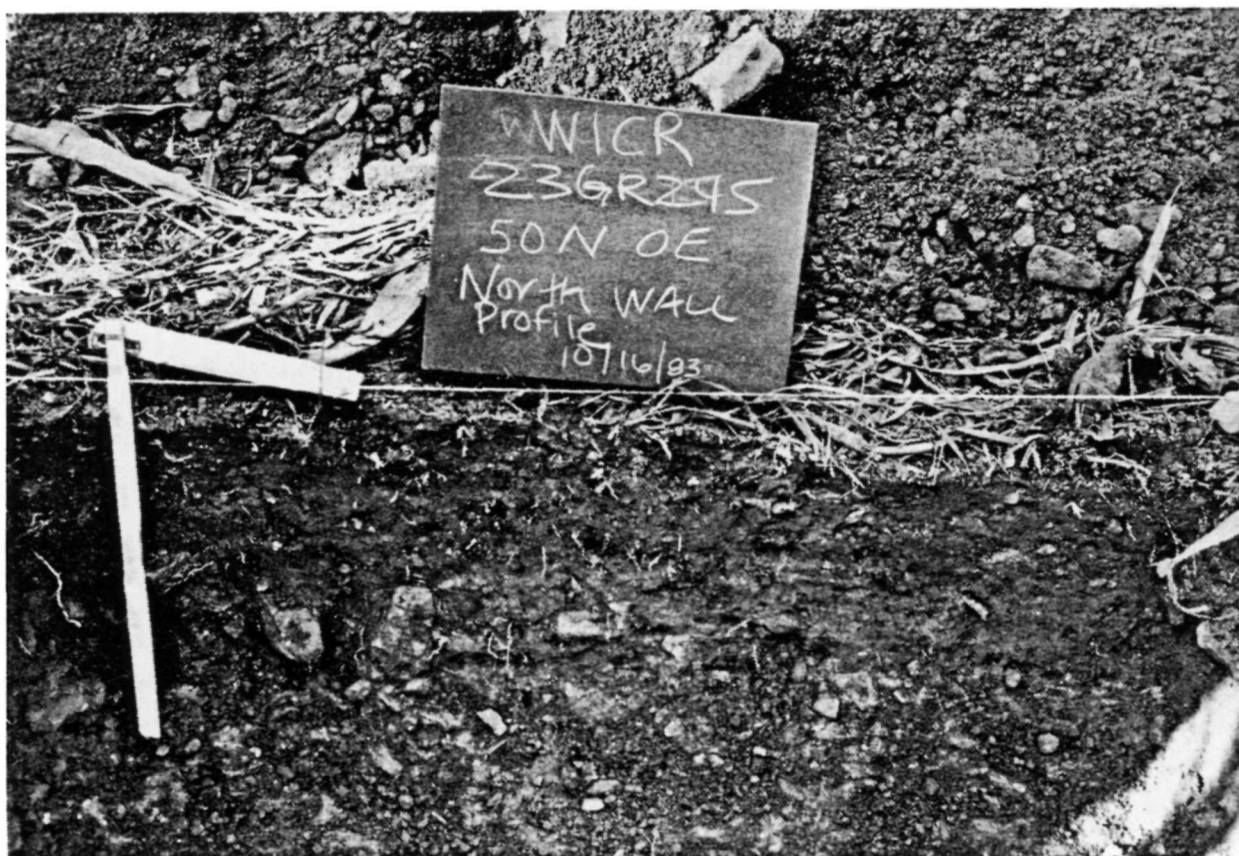


Figure 12. 23Gr245, north wall profile, 50N/0E.

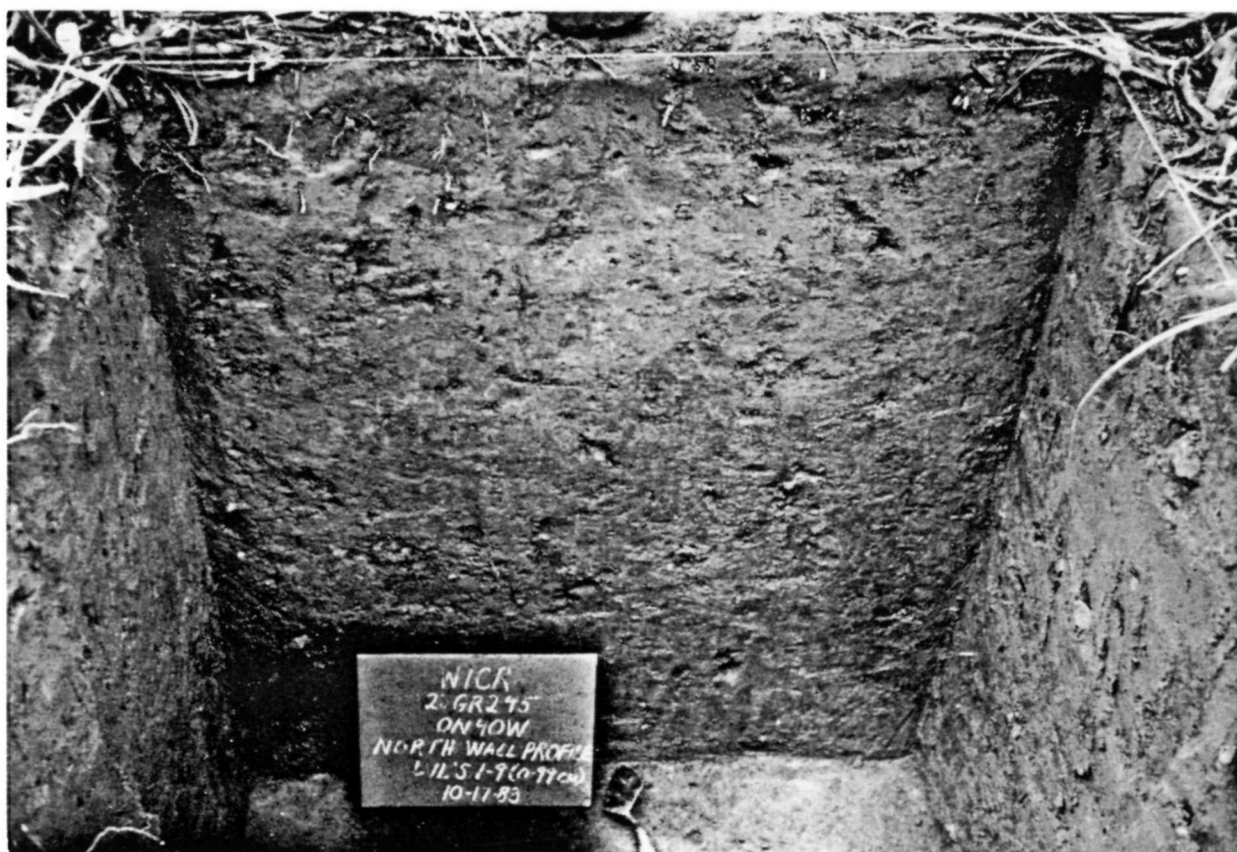


Figure 13. 23Gr245, north wall profile, ON/40W.

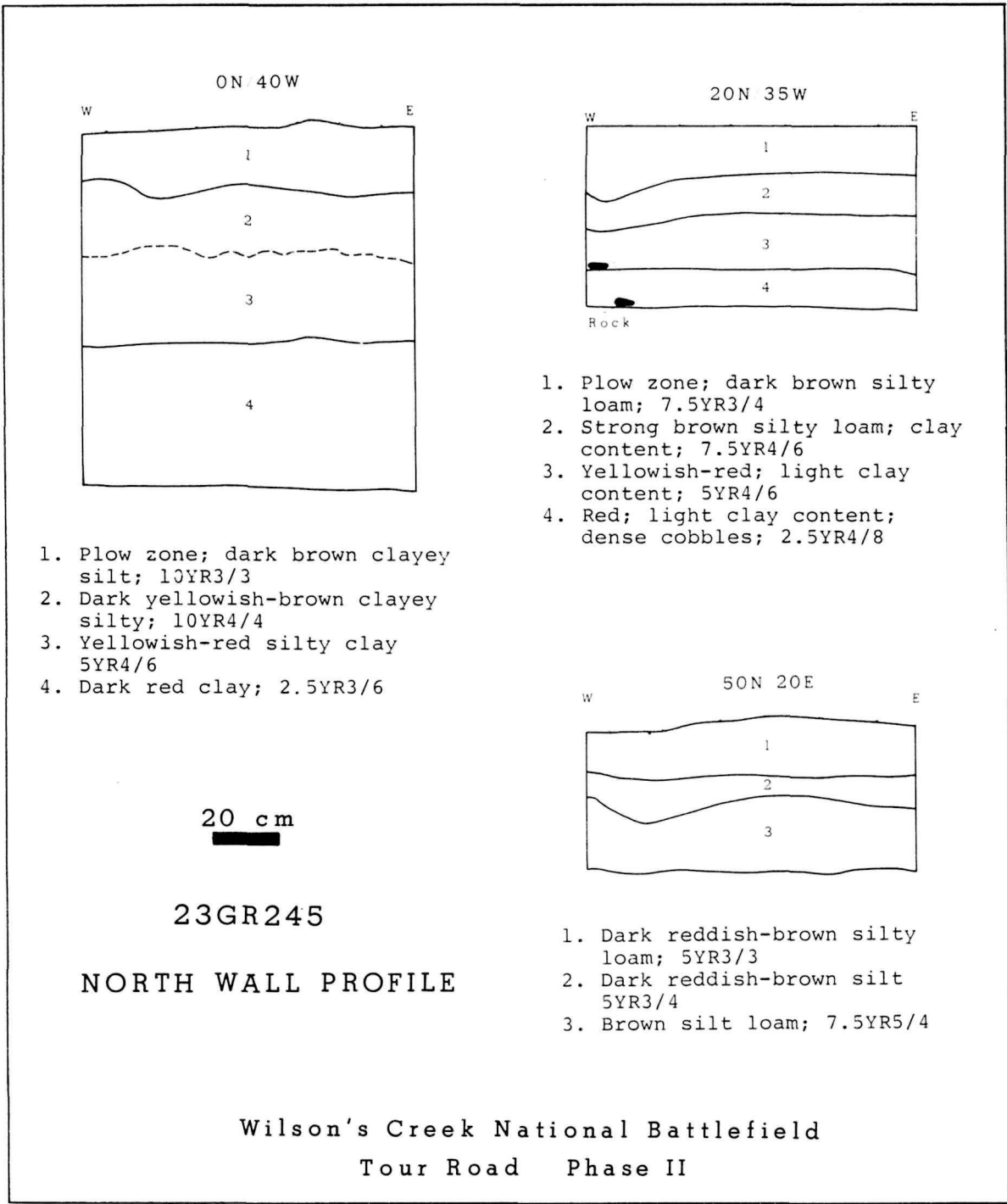


Figure 14. 23GR245, north wall profiles; ON/40W, 20N/35W, 50N/20E.

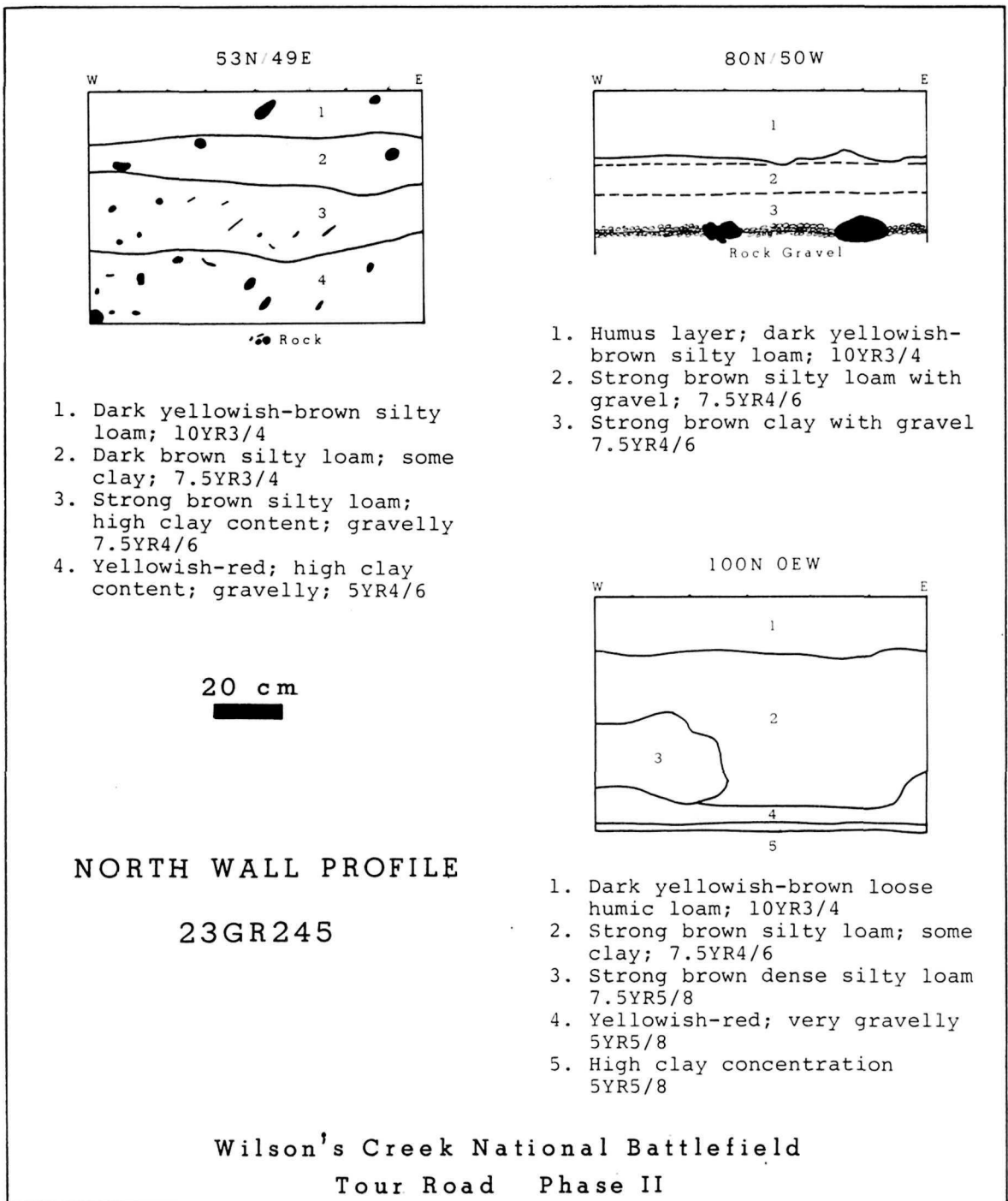


Figure 15. 23Gr245, north wall profiles, 53N/49E, 80N/50W, 100N/0E.

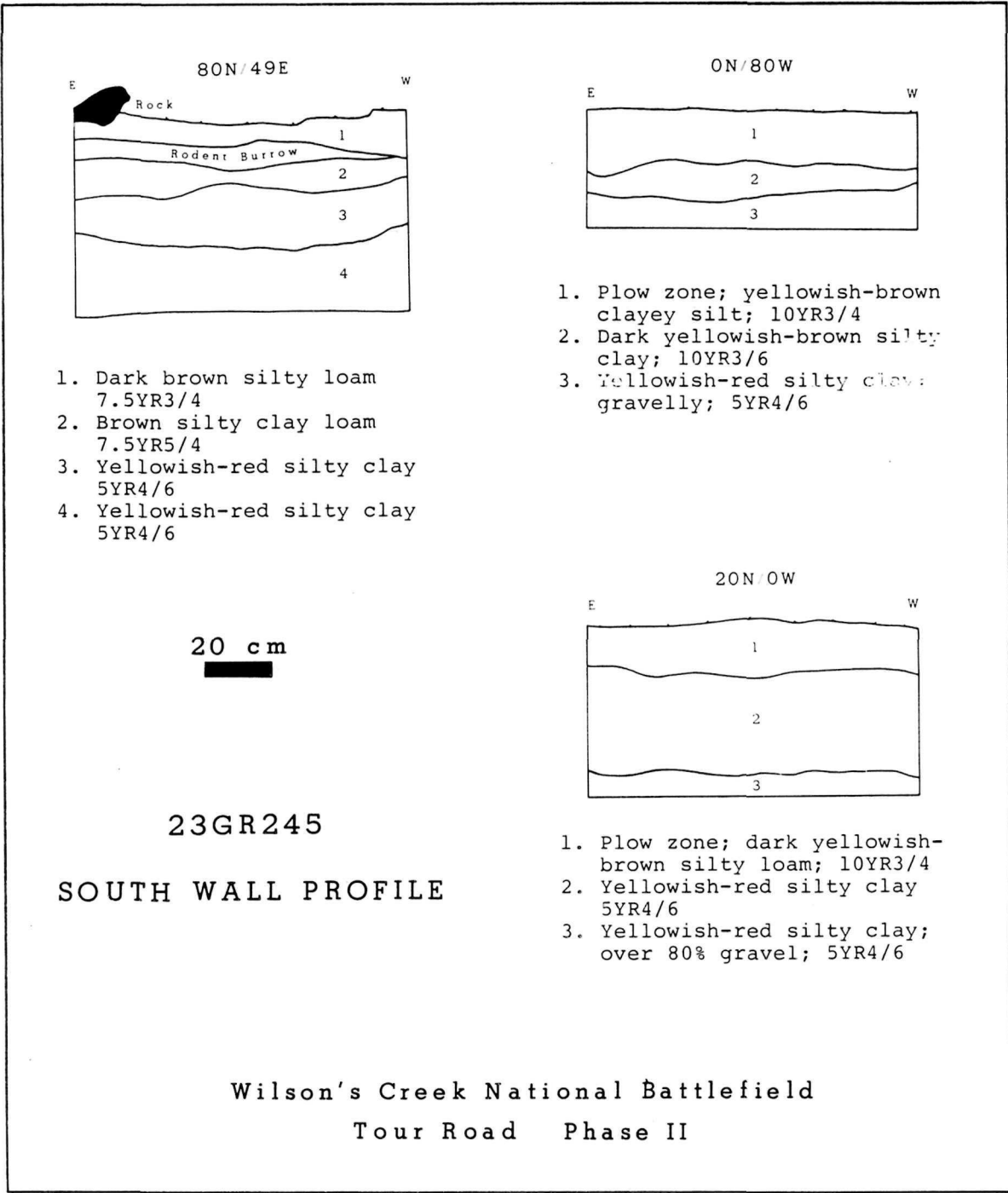
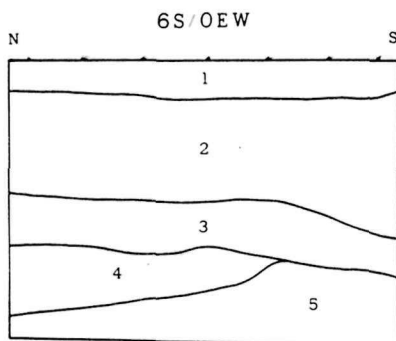
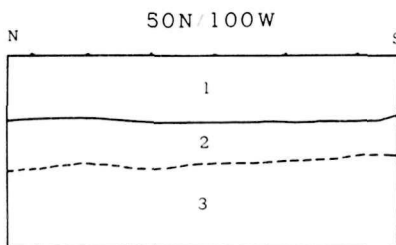


Figure 16. 23Gr245, south wall profiles, 80N/49E, 0N/80W, 20N/0W.



1. Dark brown humus layer
10YR3/3
2. Dark yellowish-brown silty loam; 10YR4/4
3. Dark yellowish-brown silty loam with gravel; 10YR3/4
4. Strong brown silty loam with chert/gravel; 7.5YR4/6
5. Yellowish-brown dense chert gravel; 10YR5/6



1. Dark yellowish-brown silty loam; 10YR3/6
2. Strong brown silty loam with chert/gravel; 7.5YR4/6
3. Strong brown very cherty silty loam; 7.5YR4/6

20 cm

EAST WALL PROFILE
23GR245

Wilson's Creek National Battlefield
Tour Road Phase II

Figure 17. 23GR245, east wall profiles:
6S/OE, 50N/100W.

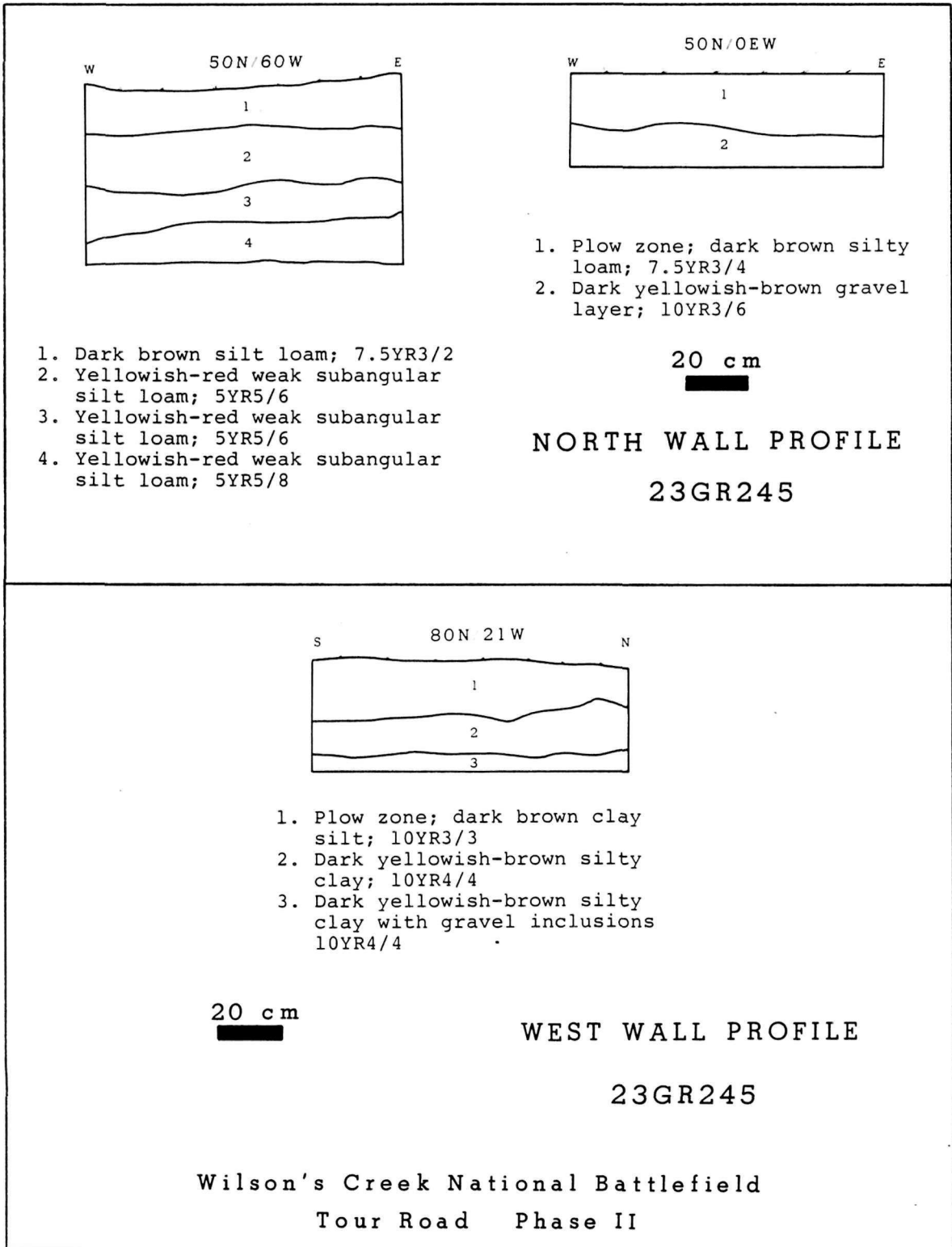


Figure 18. 23GR245: north wall profile, 50N/60W, 50N/OE; west wall profile 80N/21W.

and organic matter of 1.2%. Phosphorus was again very high at 51 ppm while potassium was high at 140 ppm. The high phosphorus together with high organic content offer good hope for intact cultural deposits being found (see Figure 19).

Unit 100N/0W was the source of two soil samples analyzed from levels 1 and 2. Level 1 was a silt loam and had a pH of 5.8 with a high organic matter content of 2.3%. Phosphorus was low at 10 ppm and potassium was high at 76 ppm. Level two was a silty clay loam with a pH of 6.2 and an organic matter content unlike level one at 0.6%. Phosphorus and potassium were similar to level one with 9 and 75 respectively.

Unit 50N/60W provided three samples which were analyzed and ranged from plowzone to 34 cm below surface. Level one contained a silt loam with a pH of 5.7 and an organic matter level of 1.2%. Phosphorus was low at 10 ppm and potassium was medium at 80 ppm. The level two sample had a pH of 5.8 and a low organic matter of 0.6%. Phosphorus was also low at 11 ppm and the potassium level was 89 ppm. The soil was a silty clay loam. Level 3 contained a silty clay loam with a pH of 5.8 and very low organic matter of 0.4%. The phosphorus level was high at 25 ppm and the potassium level was 101 ppm. The organic content of this level and level two combined with low phosphorus reading do not offer much hope in finding intact cultural remains below the plowzone in this unit. (Figure 20). Limited testing indicates that while a great portion of the artifacts are in the plowzone, the site's integrity is good and the possibility of locating subsurface features is high.



Figure 19. 23Gr245, east wall profile, 6S/0E.



Figure 20. 23Gr245, north wall profile, 50N/60W.

ARTIFACT ASSEMBLAGE

Historic Remains

A total of 261 historic specimens were recovered during survey and subsequent testing along the proposed Phase II tour road right of way (Figure 21). Sixty four (24.5%) were recovered from surface collections while 197 (75.5%) were found in subsurface testing including both controlled shovel tests and test excavations. The recovered assemblage was divided into five classes of artifacts to facilitate a descriptive analysis. A miscellaneous category contributed the largest amount of remains to the sample (n= 137, %=52.5), bottle glass consisted of 61 specimens for 23.3% of the total. Ceramics comprised 13.8% (n=36), while window glass (n=17) and nails (n=10) contributed 6.5% and 3.9% respectively.

The historic remains will be dealt with in a cursory manner with regard to distributional attributes, due to the limited historic assemblage and scattered proveniences. The five groups of artifacts listed above (ceramics, window glass, bottle glass, nails and miscellaneous) will be discussed below.

Ceramics

This category contains both refined (n=28, %=77.8) and unrefined wares (n=8, %=22.2). Plain whiteware was predominate with 25 specimens for over 89% of the refined earthenware sample. The remainder of the assemblage consisted of three whiteware sherds; one which contains an unknown decoration, one blue spongeware fragment and one decal overglaze decorated piece. The unrefined ceramic sample consists of seven specimens from large bowls or crocks and one terra cotta fragment with a blue/green glaze on the exterior surface.

Bottle Glass

A total of 61 fragments were recovered and are included in this category. Clear bottle glass body fragments with 20 specimens represent nearly 33% of the sample. This group was followed in number by milk glass fragments (n=10, %=16.4). The remainder of the sample consists of green, brown, amber, lime green and aqua bottle fragments. Three fragments of crown cap double bead finishes were collected along with four fragments from a Boyd lid and two aqua canning jar fragments. Five glass specimens were melted and four were not attributable to a bottle type or portion.

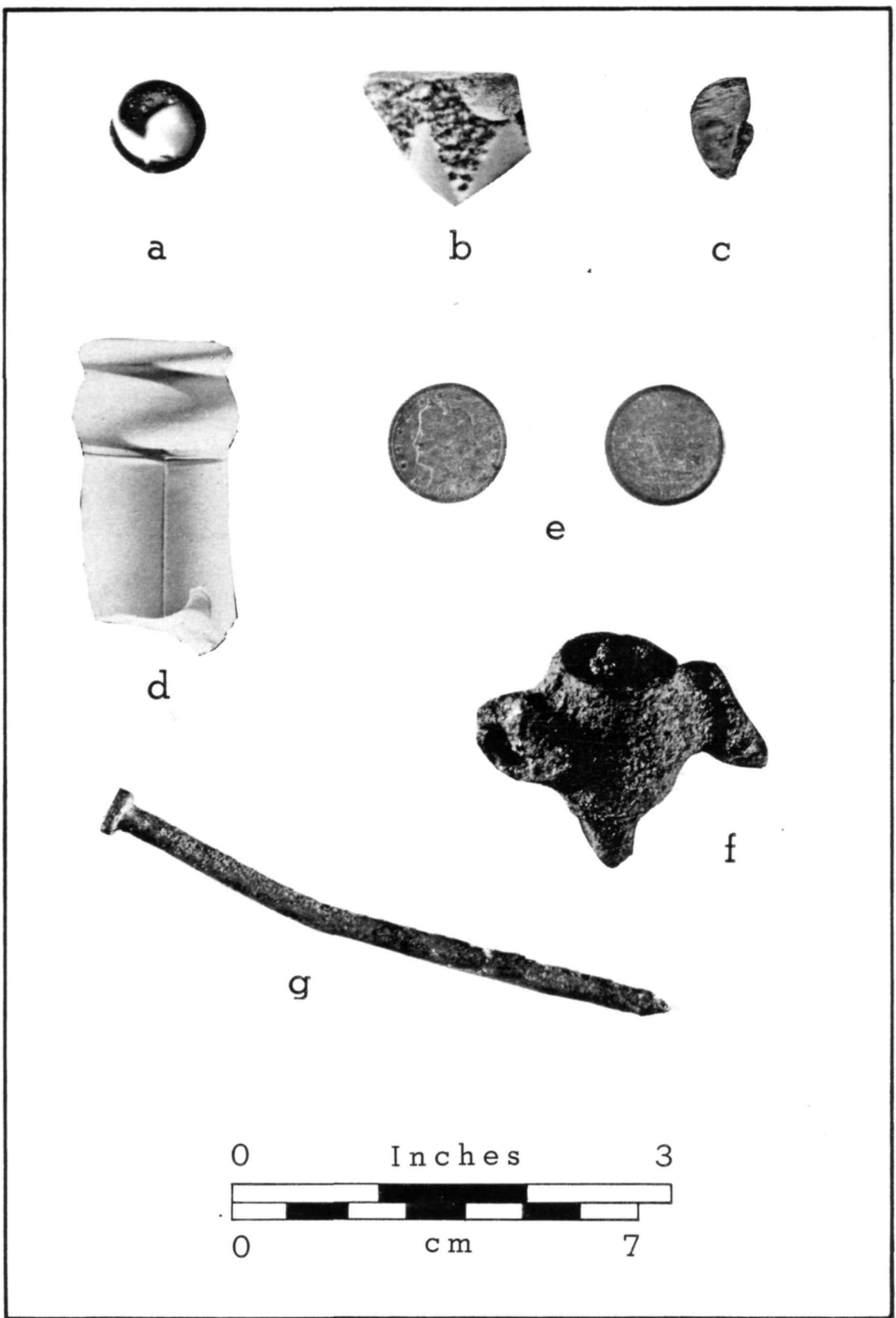


Figure 21. Historic artifacts recovered during the Phase 2 survey.

Window Glass

A total of 17 window glass fragments were recovered. This sample includes green (n=4), clear (n=10) and aqua (n=3). Measurements indicating thickness of glass attributable to approximate year of manufacture were not taken due to small sample size and scattered proveniences of the specimens.

Nails

Ten nails or portions thereof were recovered from both surface and subsurface testing. This sample consisted of three wire nail fragments and seven identifiable nails including (1) siding nail with tacking shield, (1) wire nail 20d, (1) wire nail 40d, (1) self sealing roofing nail-aluminum nail with plastic washer, (1) wire nail 4d, (1) badly rusted headless wire nail 10d, and (1) wire nail 8d. No cut nails were encountered, thus suggesting a 20th century period for the nail assemblage.

Miscellaneous

This category contains a wide range of items. Specimens includes a shell button fragment, asbestos siding fragments, numerous wire and metal objects, a machine made marble, unidentifiable bone and shell fragments and a can with a crimped seam and rims (sanitary can-1920 and later).

The recovered historic assemblage is represented primarily by 20th century farm and architectural items (e.g., wire nails, asbestos siding, sanitary tin can) however, a few items suggest that earlier time periods and domestic/personal items are also represented. The one blue spongeware decorated ceramic is indicative of an early to mid 19th century (1840's-1850's) (Price 1982) occupation and was located at 23GR245 from surface collection quad 140N/80E. Also from this quad were numerous (9) whiteware specimens together with one whiteware fragment with a raised rim and unknown underglaze decoration, indicating a turn of the century manufacture. The personal and domestic items include among others a shell button, and milk glass fragments.

Overall, the recovered historic assemblage indicates the possibility of historic structures and dumps in the northern section of the park. No evidence of a dense historic scatter or occupation were encountered in the Phase II survey, but rather the recovered assemblage represents an accumulation of scatters over time.

Prehistoric Remains

Artifacts were catalogued by raw material and morphology into the following categories.

Lithic Debris

A total of 5135 pieces of lithic debris were recovered during the Phase II survey and evaluation. Of these, 3451 (67.2%) of the specimens are non-diagnostic shatter with the remaining 1684 consisting of flaking debris.

23Gr245 contributed 1429 lithic flakes, 23Gr629 (n=18), 23Gr630 (n=5), 23Gr631 (n=16), 23Gr632 (n=34), and the remaining 182 are from shovel tests and concentrations. Of these flakes, plain platforms consist of 433 specimens for 25.8% of the sample, cortex platforms contribute 41 specimens for 2.4%, faceted platforms represent 10.1% of the sample (n=171), crushed platforms contribute 830 specimens for 49.3% of the assemblage and finally biface thinning flakes make up 12.4% of the entire sample (n=209).

Only 12 specimens (.7%) of the analyzed flaking debris contained 100% cortex on its surface, 102 specimens (6.0%) exhibited 1-99% cortex, and 93% of the entire sample contained 0% cortex. The lack of cortical flakes and preponderance of interior (non-cortex flakes) suggests an overall later phase in lithic reduction throughout the study area.

Non-diagnostic shatter was recovered from all tested locations and contributed 3451 specimens to the lithic assemblage. The shovel test transects contributed 490 specimens, 23Gr245 contained 2665 specimens, 23Gr629 had 34, 23Gr630 with 41, 23Gr631 contributed 48, and 23Gr632 was made up of 152 specimens. Concentration 10 consisted of one specimen, concentration 9 had seven, concentration 6 contributed 11 and concentration 5 had two non-diagnostic shatter specimens.

For ease of discussion, the following section will contain a description of recovered lithic debris according to provenience.

Shovel Test Transects. A total of 490 specimens of non-diagnostic shatter were recovered during the shovel test phase of the project. This includes both shovel tests associated with the survey reconnaissance together with controlled shovel testing at areas of concentration.

One hundred and seventy seven flakes were recovered from shovel tests and represent all of the five platform types. These are as follows: plain platforms (n=42, %=23.7), cortex (n=1, %=0.5), faceted (n=17, %=9.6), crushed (n=95, %=53.6), and biface thinning platforms (n=22, %=12.4). The minimum flake length (measured on complete and not proximal flakes) was 0.03 cm and the maximum length was 6.67 cm. There was a total of 11 heat altered flakes (6.2% of the total) and 166 non heat treated specimens. Of the 177 flakes, 95.4% (n=169) contained 0% cortex on the surface, six specimens (3.3%) contained 1-99% cortex and only two specimens for 1.1% of the sample exhibited 100% cortex. In terms of distributional data this sample is sparse in that it contains artifacts from throughout the

northern section of the entire park. This sample is in keeping with the remainder of the samples in that the predominate amount of artifacts recovered are from the interior portions of flaking debris and contain little or no cortex.

23Gr629. A total of 34 specimens of non-diagnostic shatter were recovered during shovel testing and subsequent test excavation at this site. Eighteen flakes were recovered with a minimum flake length of .06 cm and maximum length of 3.24 cm. Seventeen of these flakes contained 0% cortex for 94.4% of the total sample with only one flake containing 1-99% cortex on the surface. Of the 18 recovered flakes, eight contained plain platforms (44.4%), one had a cortex platform (5.5%), one with a faceted platform (5.5%), seven with a crushed platform (38.8%) and finally one with a biface thinning platform (5.5%). Only one flake (5.5%) exhibited heat alteration with the remaining 17 showing no evidence of heat treatment. In contrast to the shovel test sample, 23Gr629 contained an almost even amount of plain and crushed platform flakes (8 and 7 respectively). The shovel tests contained crushed platforms in almost 2 1/2 times that of plain platforms.

23Gr630. Non-diagnostic shatter from this site contained 41 specimens both from shovel testing and subsurface excavation. Five flakes were recovered with a minimum flake length of .92 cm and maximum length of 1.82 cm. These specimens were considerably smaller than those from 23Gr629. All of the flakes appeared non heat altered. Two specimens contained plain platforms for 40% of the total sample, one specimen was a cortex platform (20%), and the last two contained crushed platforms (40%). Four flakes were recovered subsurface and consist of two flakes and two proximal flakes. Surface collection yielded one proximal flake. All five of the specimens contained 0% cortex, again in keeping with the pattern of interior flaking debris being predominately recovered.

23Gr631. A total of 48 non-diagnostic shatter specimens were recovered from survey and evaluation at 23Gr631. Sixteen flakes were recovered with a minimum flake length of .09 cm and maximum flake length of 6.79 cm. Of these 16 flakes, seven are plain platforms for 43.7% of the total, one specimen contains a faceted platform (6.2%) and 8 contain crushed platforms (50%). All of the flake specimens contain 0% cortex and follow the general overall pattern for other sites. Also, all 16 specimens contain no evidence of heat alteration.

23Gr632. A total of 152 non-diagnostic shatter specimens were recovered from testing at this site. Another 34 flake specimens were also recovered. Six of these contained plain platforms (17.6% of the total), one had a cortex platform (2.9%), two were faceted (5.8%), 21 were crushed (61.7%) and only four were biface thinning flakes (11.7%). Thirty one of the specimens contain 0% cortex with 2 specimens containing 1-99% cortex and 1 specimen containing 100% cortex. Other than the specimens recovered from shovel testing, no other site contained specimens with 100% cortex on the surface. Following the pattern of remains from the shovel tests and 23Gr631 and 23Gr245, this site contained a sample composed predominately of crushed platform preparation flaking debris.

23Gr245. This site contained the largest recovered lithic assemblage of any site tested during this Phase II study. A total of 2372 non-diagnostic shatter specimens were recovered from surface and subsurface testing at 23Gr245. Surface collections yielded 293 of these remains. A total of 1429 flakes were recovered from testing on this site. Plain platforms were represented by 367 specimens for 25.6% of the total. Cortex platforms consisted of only 37 specimens for a mere 2.5% of the sample. Faceted platform specimens totaled 146 and represented 10.2% of the assemblage. Crushed platform specimens dominated the sample with 697 specimens for 48.7% of the total recovered assemblage. Finally biface thinning platforms totaled 182 for 12.7% of the sample. Following the pattern of other sites tested, 1327 specimens or 92.8% of the total contained 0% cortex, 93 remains (6.5%) contained 1-99% cortex and only 9 specimens (.6%) contained 100% cortex on its surface. Of the 1429 flakes, 4.9% (n=71) showed evidence of heat alteration while 1358 were non heat altered. The minimum flake length for all non proximal flakes was .03 cm with the maximum flake length 8.3 cm. This sample contained the greatest maximum flake length recovered during the Phase II project.

Concentration 5. Two pieces of non-diagnostic shatter were recovered at this site. Another two specimens of lithic flaking debris were also recovered. Both of these specimens were non heat treated and contained faceted platforms with 0% cortex. The minimum flake length was 0.1 cm with the maximum length 1.16 cm.

Concentration 6. Eleven pieces of non-diagnostic shatter were recovered during testing at this site. One plain platform proximal flake was also recovered. This specimen contained 0% cortex and was not heat altered.

Concentration 9. Seven non-diagnostic shatter fragments were collected during shovel testing in this area. One faceted platform flake with 0% cortex was also recovered. This non heat altered flake had a length of 0.76 cm.

Concentration 10. One non-diagnostic shatter fragment was recovered during shovel testing. One faceted platform proximal flake was also recovered. This flake had 0% cortex and was non heat altered.

The following section will deal with the diagnostic tools recovered during the Phase II survey and evaluation. Due to their more limited numbers each site or concentration will not be discussed separately (as above) but rather proveniences will be discussed within the tool category.

Cores

A total of 12 cores were recovered from investigations at 23Gr245 (n=11) and 23Gr632 (n=1). Five of the cores exhibited single platforms, five with double platforms and two with multiple platforms (see Figure 22). All cores were weighed with a total mean weight of 192.9 g. The specimens from 23Gr245 were all recovered during controlled surface collection while the specimen from 23Gr632 was from shovel test transect 11/322 (Figure 23 e). All of the cores were made of the locally available Burlington chert.

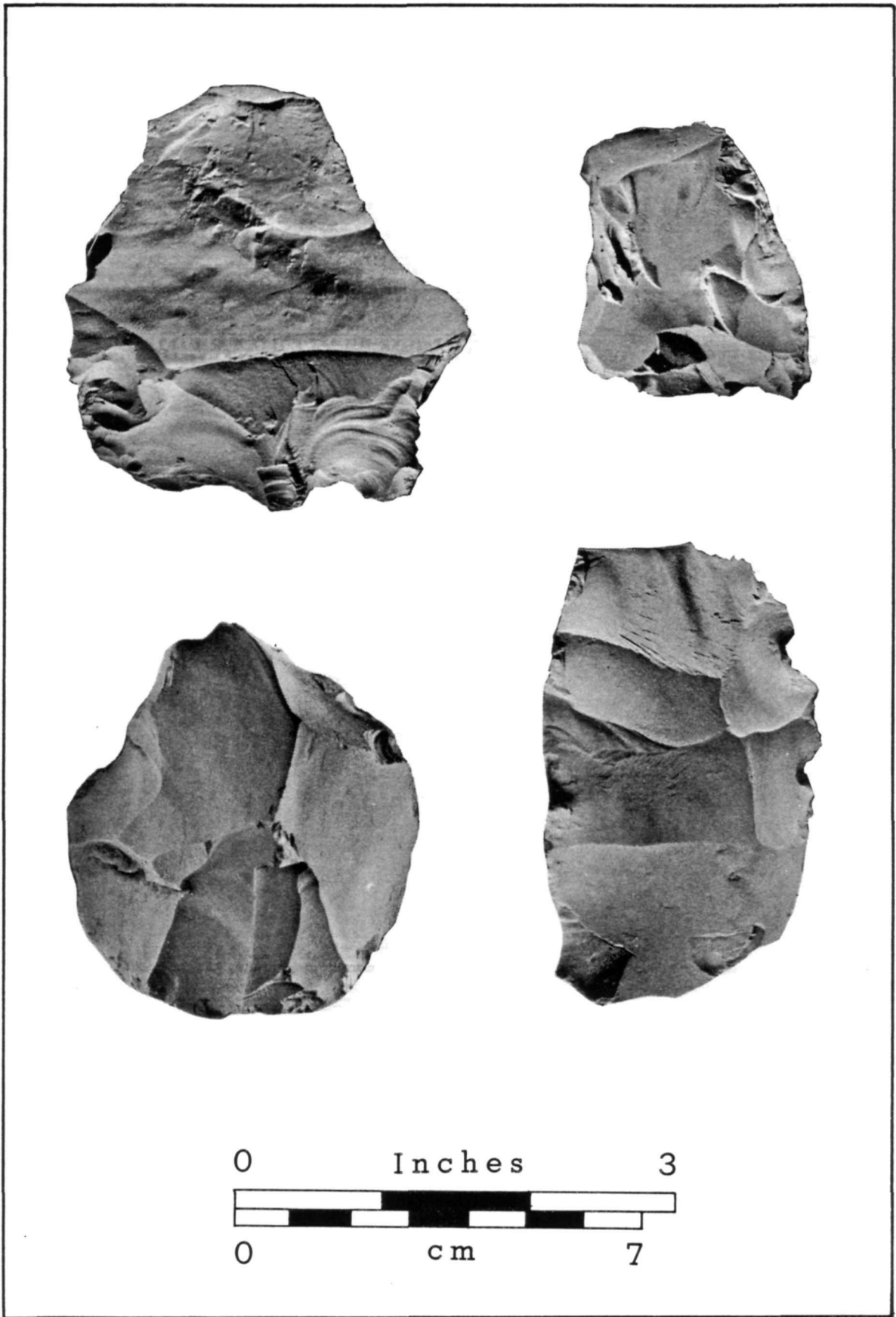


Figure 22. Cores recovered from 23Gr245.

Bifaces

A total of 92 bifaces were identified from the recovered sample. Following a general biface reduction scheme (Skinner and Gallagher 1974; Lynott 1974, 1980; Raab, Cande, Stahle 1979), this group was divided into roughouts (n=15, %=16.3), blanks (n=35, %=38) and preforms (n=42, %=45.6). Seventy one specimens (77% of total) were recovered from controlled surface collection at 23Gr245. Subsurface excavations at this site provided 18 specimens for 19.5% of the total. Other areas yielded two (2%) of the total from surface collections and one specimen (1%) from subsurface testing.

Roughouts. Fifteen roughout specimens were recovered from the October 1983 fieldwork representing 16.3% of the total biface assemblage. Included in this sample are six white cherts, four gray and five (pink and glossy) heat altered remains.

Twelve of the specimens (80%) are broken, while only three (20%) are complete bifaces. All specimens were weighed and had a minimum weight of 20 g and maximum weight of 330 g. The mean weight was 74.9 g.

Surface collection at 23Gr245 yielded 13 roughout specimens for nearly 87% of the entire sample (Figure 24). One specimen was recovered from subsurface testing at the same site. Site 23Gr630 yielded one specimen from subsurface excavations (Figure 23a).

Blanks. A total of 35 blanks were recovered, with 29 (83%) being broken and six (17%) complete specimens. All specimens were weighed with a mean weight of 31 g and minimum of 3 g and maximum of 123 g.

Twenty seven (77.1% of total) were recovered from controlled surface collection at 23Gr245. Subsurface remains at this site contributed six specimens (17.1%) (Figure 25). Concentration nine surface collection yielded one blank for 2.8% of the assemblage (Figure 26). Shovel test transect (4/308) contributed 2.8% (n=1) of the entire collection (Figure 27a).

Twenty (57%) of all specimens were white chert, four (26.6%) were predominately gray in color, while five (33.4%) were pink indicating heat treatment.

Preforms. Forty two preforms were recovered from surface (n=31, %=73.8) and subsurface (n=11, %=26.2%) testing at 23Gr245 (Figure 28). Nineteen of the specimens were of a white material, probably Burlington chert (45%), seven from gray (16.6%) and 16 (38%) showed evidence of heat treatment.

All of the preform specimens were broken and none were recovered elsewhere than site 23Gr245. All specimens were weighed with a mean weight of 4.6g and minimum weight of less than one g and maximum weight of 17 g.

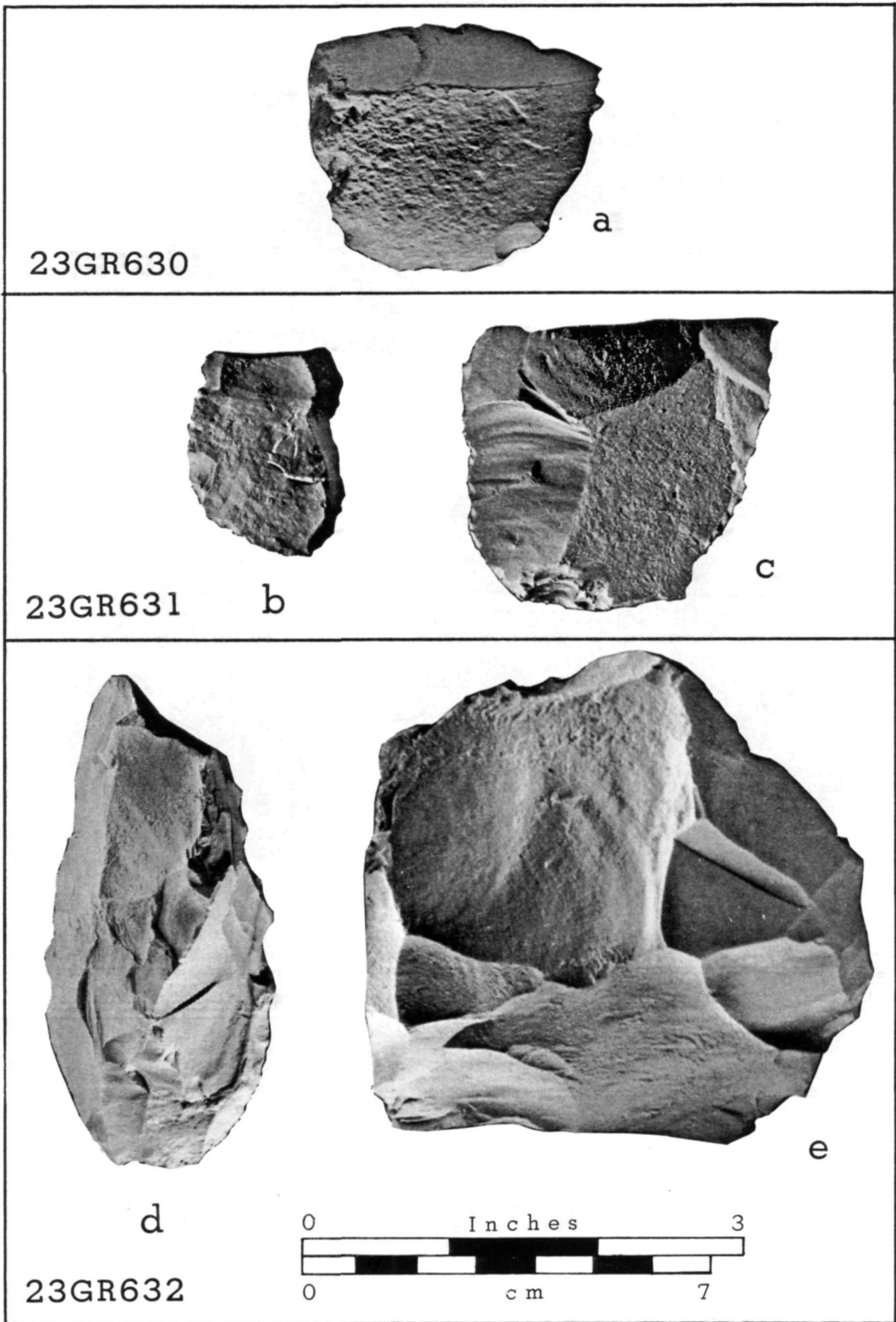


Figure 23. Artifacts recovered from 23Gr630, 23Gr631 and 23Gr632.

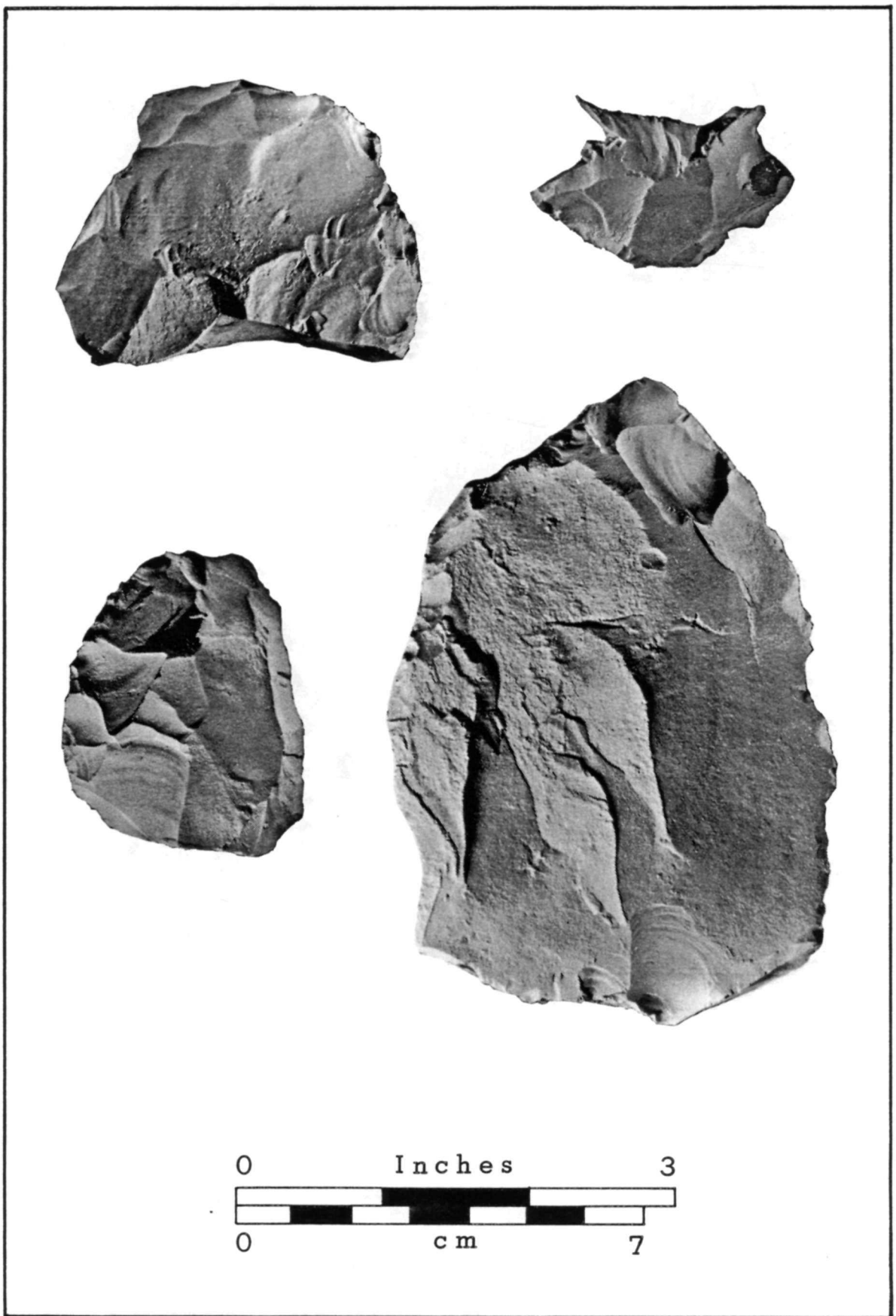


Figure 24. Biface roughouts recovered from 23Gr245.

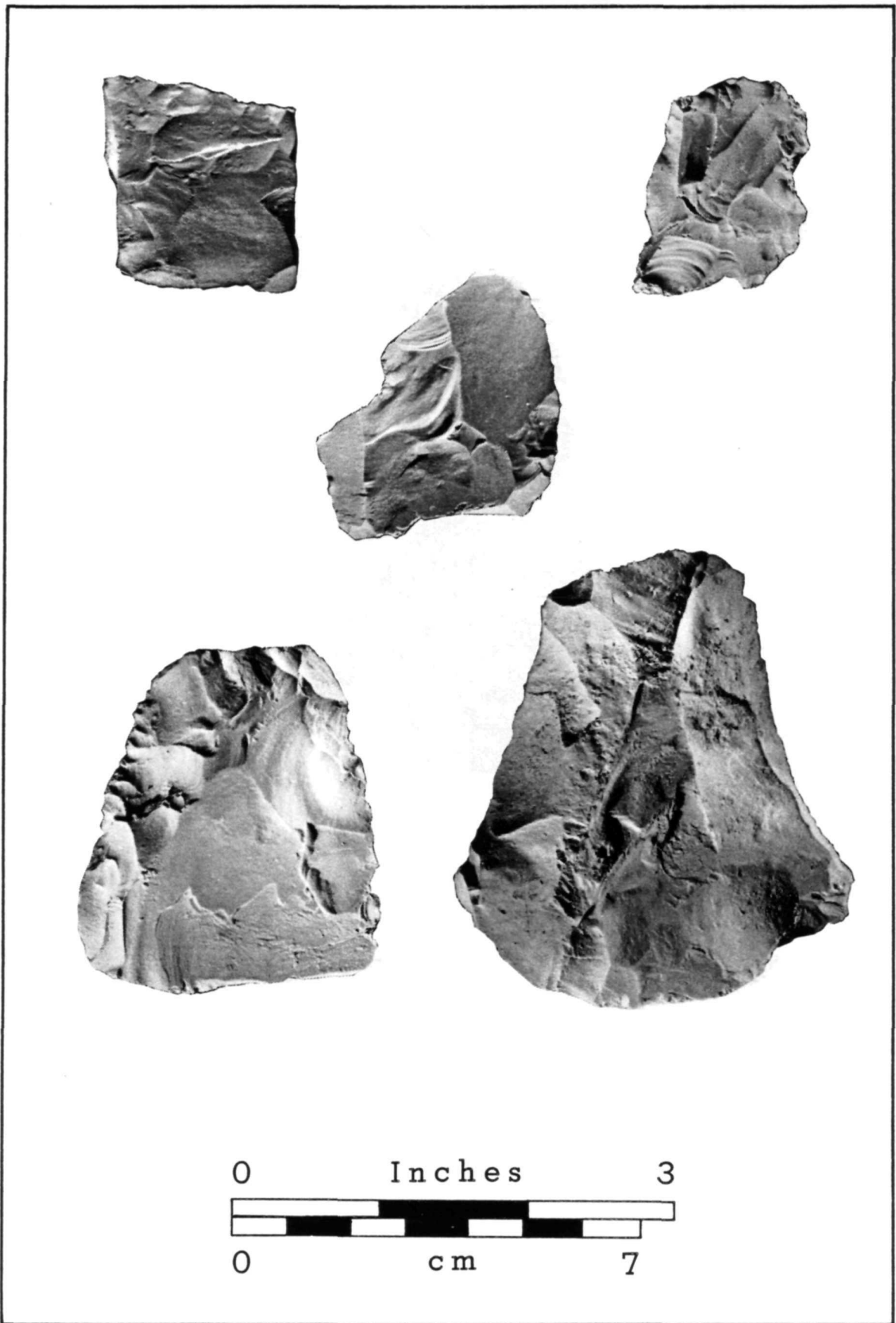


Figure 25. Biface blanks recovered from 23Gr245.

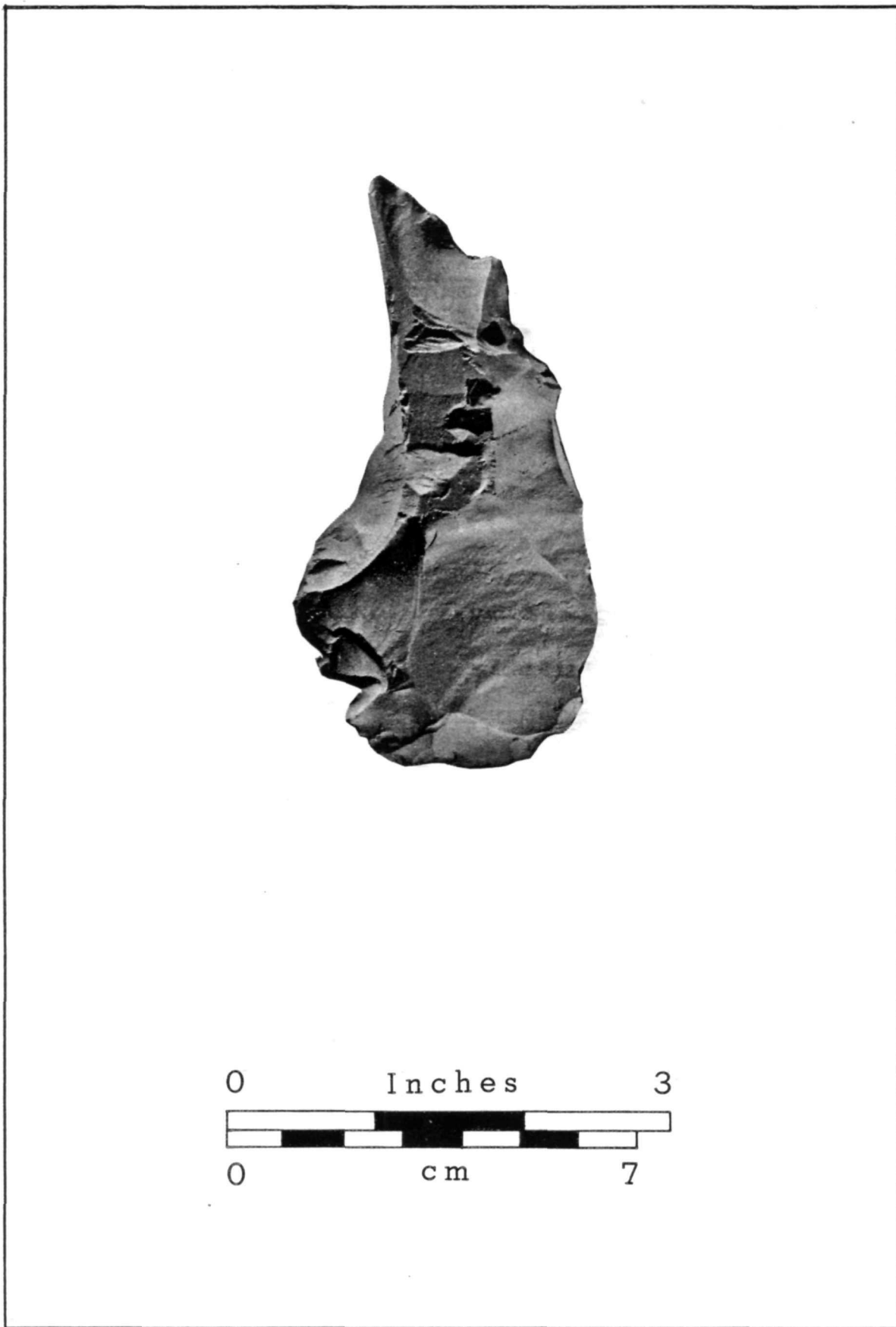


Figure 26. Biface blank recovered from concentration nine.

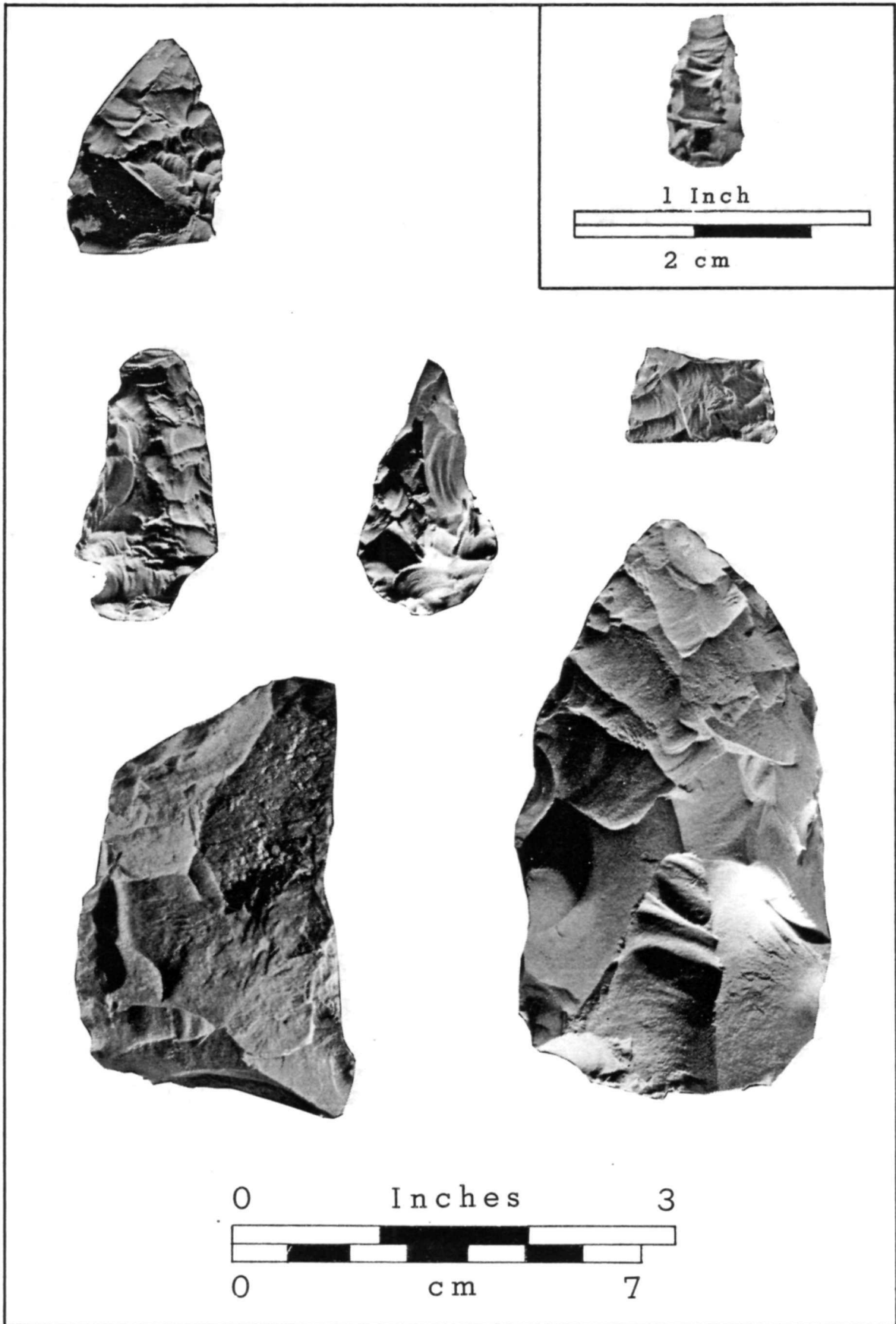


Figure 27. Artifacts recovered from shovel test transects.

Projectile Points

A total of 52 projectile points were recovered from fieldwork at 23Gr245 (n=50) and shovel test transects (n=2) (see Figures 27d and 29). Eight of these specimens were complete (15.4% of total), while 44 (84.6%) specimens were broken. All complete specimens were weighed and measured with a maximum length of 4.4 cm, and minimum length of 1.3 cm. The maximum weight was 10 g and the minimum weight was less than one gram. Eighteen of the specimens in this assemblage (34.6%) show evidence of heat treatment.

Subsurface testing yielded seven projectile points at 23Gr245 (13.4% of total assemblage) while surface collection contributed 43 specimens for nearly 83% of the collection. Two specimens were recovered from shovel tests.

Fifteen basic point type categories were assigned to the recovered assemblage and are summarized in the following table.

Table 1. Projectile Points from 23Gr245.

POINT TYPE & NO SPECIMENS	% and # BROKEN	% and # WHOLE
Contracting Stem (4)	4 (7.7%)	0
Side Notched (6)	2 (3.9%)	4 (7.7%)
Shallow Side Notched (3)	3 (5.8%)	0
Corner Notched (13)	11 (21.1%)	2 (3.8%)
Dalton (3)	3 (5.8%)	0
Indet. Point Base (4)	4 (7.7%)	0
Notched Point Fragment (1)	1 (1.9%)	0
Point Blade Fragment (6)	6 (11.5%)	0
Scallorn (2)	1 (1.9%)	1 (1.9%)
Possible Lanceolate Base Frag (1)	1 (1.9%)	0
Straight Stem (1)	1 (1.9%)	0
Corner Notched, Expanding Stem (2)	1 (1.9%)	1 (1.9%)
Indet. Point Fragment (3)	3 (5.8%)	0
Expanding Stem (1)	1 (1.9%)	0
Triangular (2)	2 (3.9%)	0

Twenty four of the recovered specimens have been assigned to a cultural historical affiliation, based upon morphological characteristics. These include Dalton (3), Archaic ? (1), Early-mid Archaic (1), Late Archaic (1), Late Archaic-Woodland (10), Woodland - Late Woodland (4), Late Woodland-Early Mississippian (2), and Scallorn-Mississippian (2). All of the specimens were recovered from testing at 23Gr245. Two (8.3 %) were found in subsurface excavations. One Dalton point base was recovered from excavation unit 50N/20E, level 3. This assemblage indicates the long duration of occupation in the Wilson Creek Valley, most specifically at 23Gr245. The deep (level 3) find of the Dalton base indicates the possibility of intact cultural remains/features at this site.

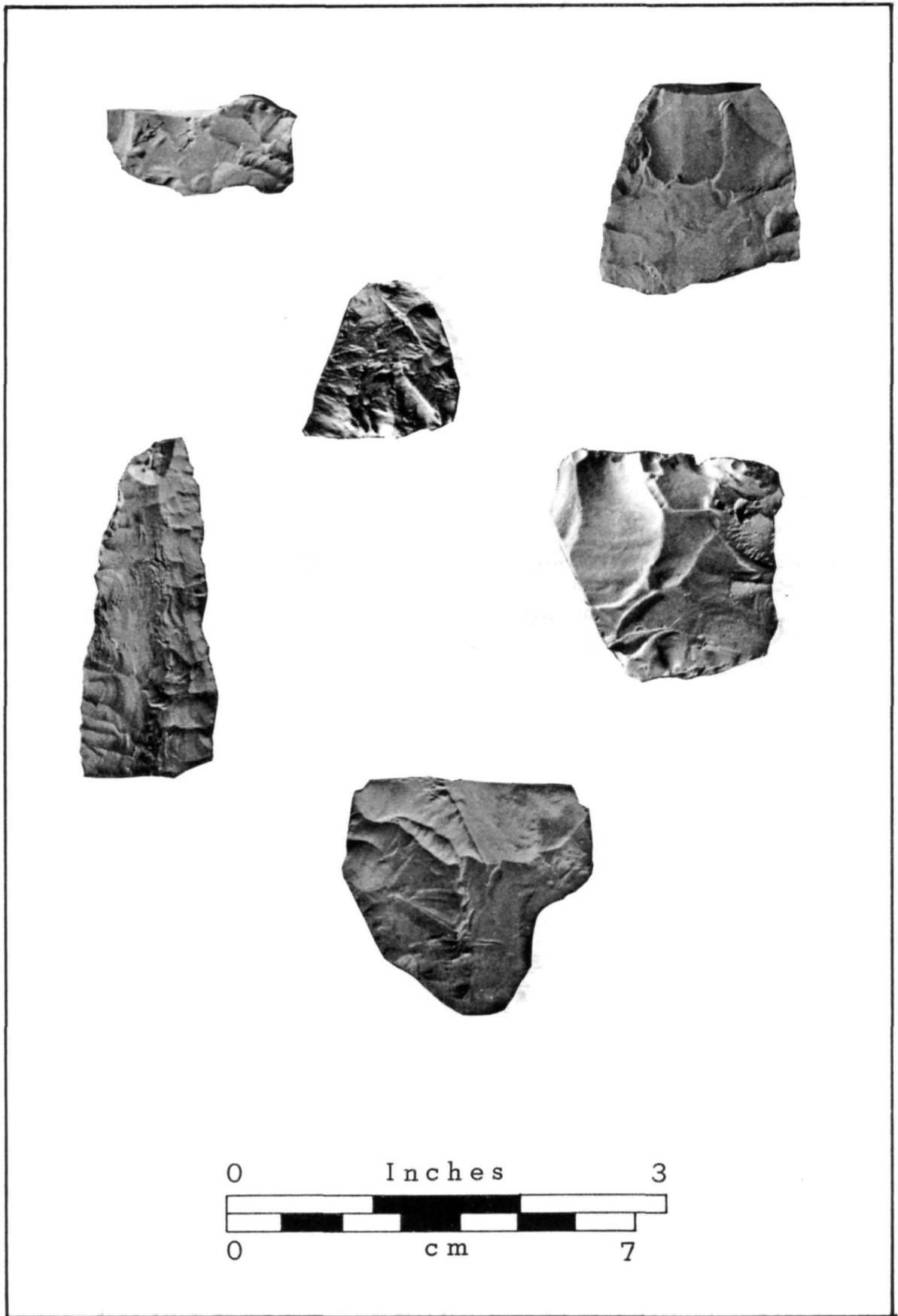


Figure 23. Biface preforms recovered from 23Gr245.

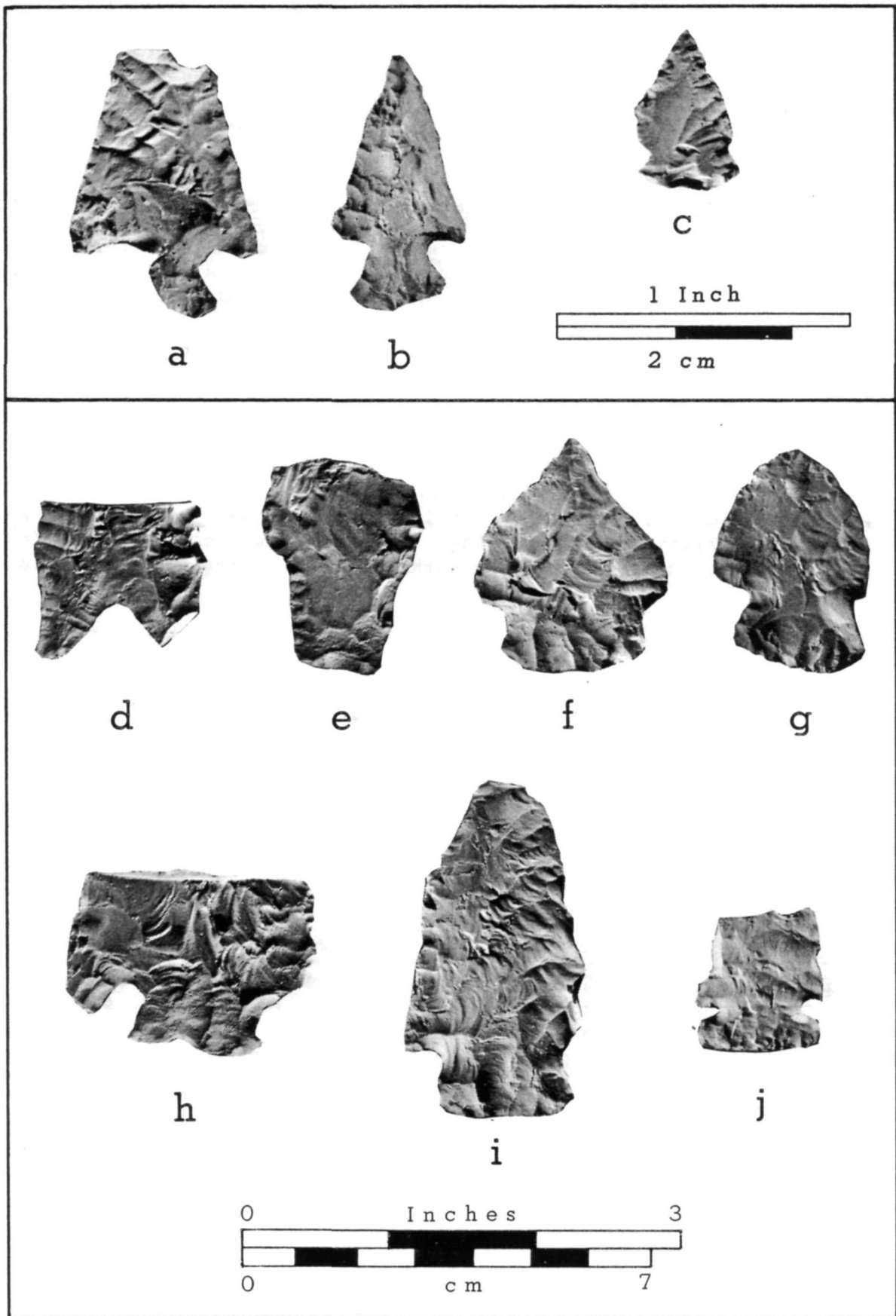


Figure 29. Projectile points recovered from 23Gr245.

Graver/Perforator

One specimen from this category (Figure 27e) was recovered in a shovel test transect (1/333). This complete white Burlington chert specimen exhibits bifacial retouch, with a rounded base and has a length of 4.3 cm and weight of seven grams.

Drill

One drill tip fragment was recovered from shovel test transect 2/369. This specimen was a bifacially retouched white Burlington chert fragment and weighed less than one gram (Figure 27c).

Scrapers

Two scraper fragments were recovered from 23Gr245 (Figure 30a, f). Specimen one is from unit 80N/49E, level 3 (30-40 cm). This specimen is a miscellaneous scraper with retouch on the distal end. The proximal end is missing and the specimen is made on an interior flake. This piece showed signs of heat treatment and weighed 1 g. The second specimen is also a miscellaneous scraper with retouch, again made on an interior flake with the proximal end missing. This specimen weighed 14.9g.

Retouched Pieces

A total of 24 retouch flakes were recovered during the 1983 fieldwork. Eighteen of these (50% of the total) were recovered from 23Gr245. Of these 18 specimens, 12 were found in the controlled surface survey (67%) and six were located in subsurface units (23% of 23Gr245 total). See Figure 30.

Shovel test transects contributed four retouch specimens for 16.6% of the total assemblage. Two located sites provided the remainder of the assemblage. 23Gr631 provided one specimen for 4.2% of the total (Figure 23b). The final specimen was recovered at 23Gr632 and also contributed 4.2% to the total sample (Figure 23d).

Of the 24 retouch flakes recovered, only 33.3% (n=8) specimens showed any evidence of heat treatment. Fifteen (62.5% of total) were bifacially retouched while nine (37.5%) were unifacially worked. All specimens were weighed separately with a maximum weight of 96 g, minimum weight of less than 1 g and mean weight of 15.1 g.

Groundstone

Two fragments of groundstone were recovered from surface collection at 23Gr245 (Figure 31). Survey quad 0N/60W contributed one mano fragment. The second specimen was recovered during the March 1983 surface collection and is a hammerstone/mano fragment, definitely battered on one side.

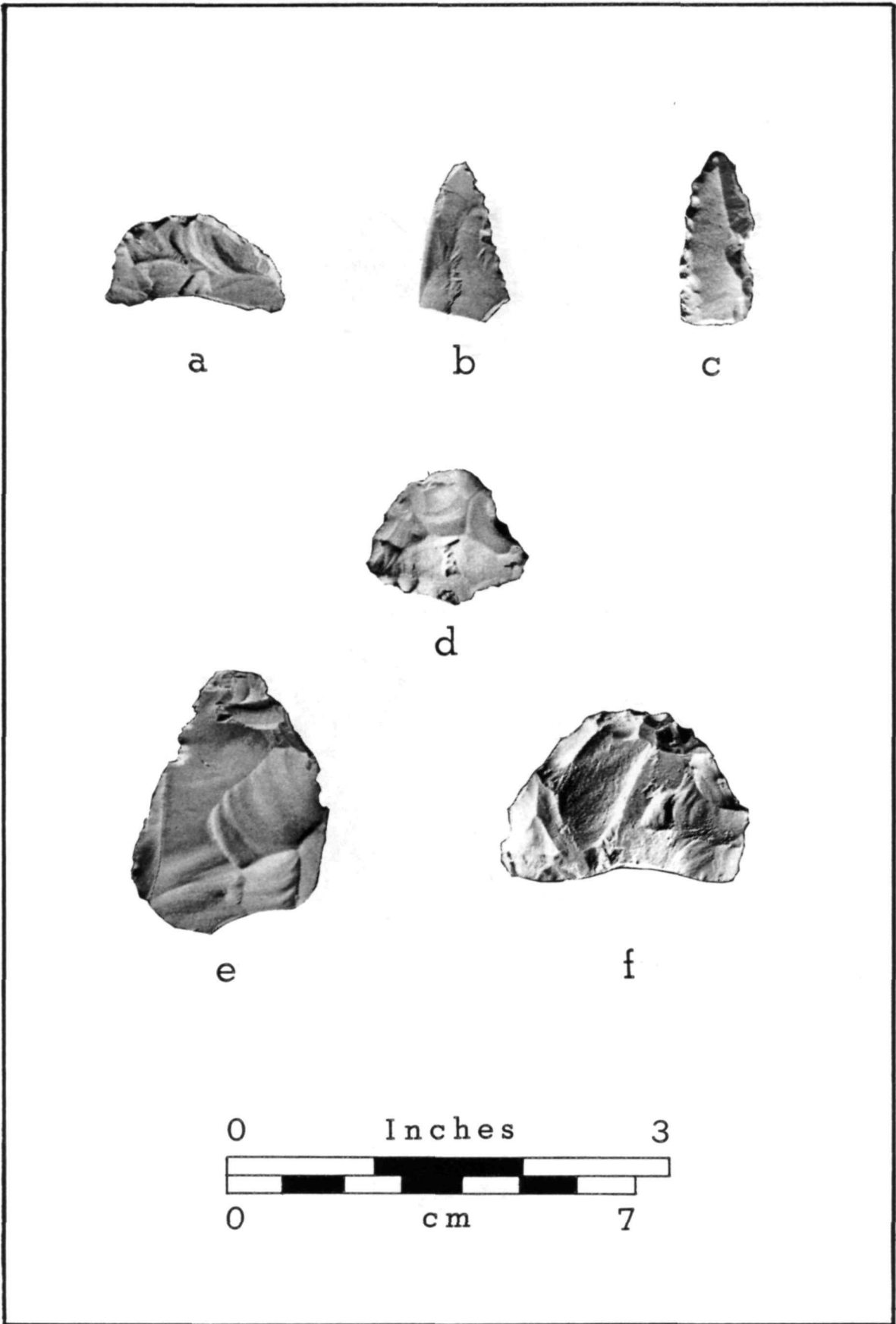


Figure 30. Flake tools recovered from 23Gr245.

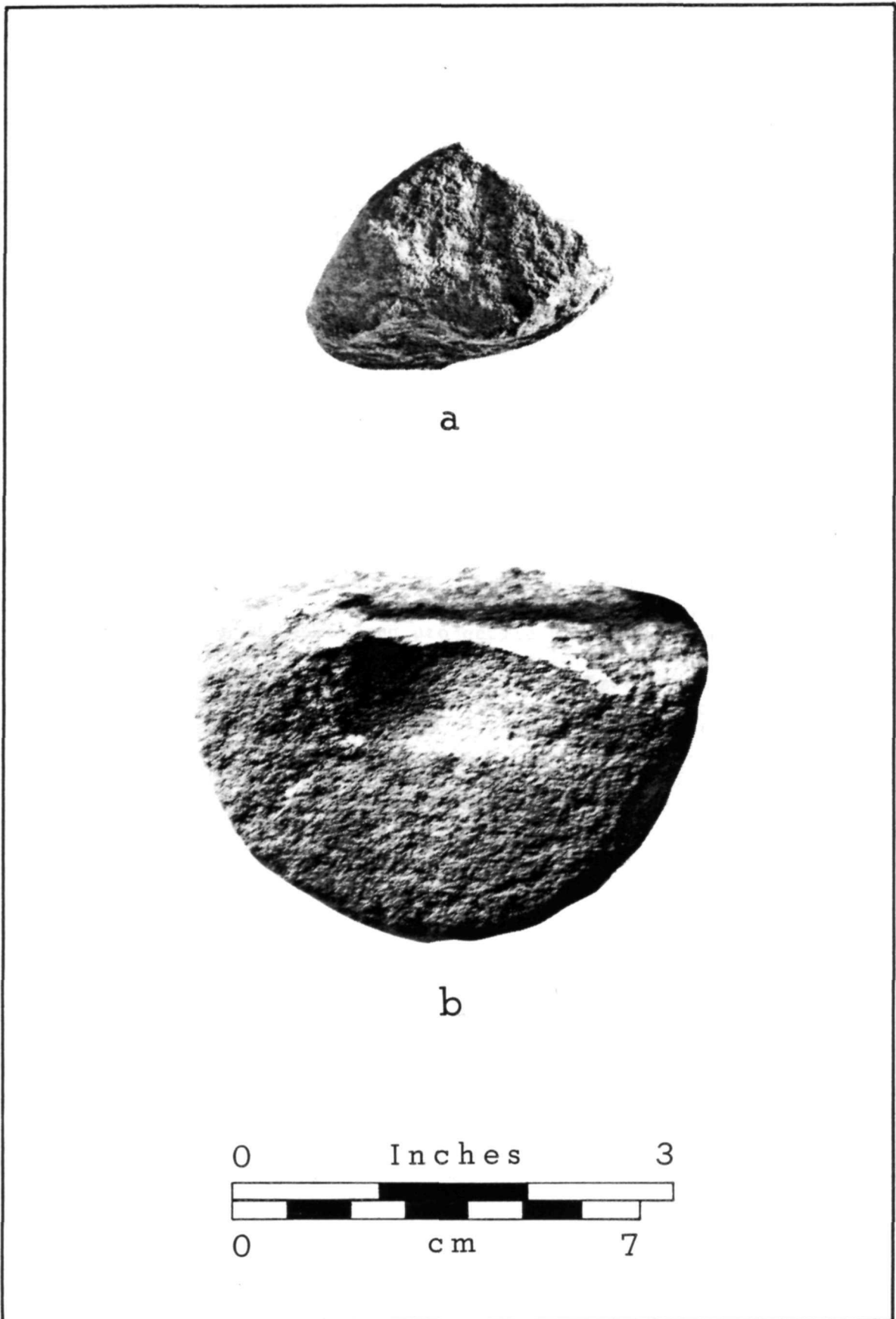


Figure 31. Groundstone recovered from 23Gr245.

Summary

In brief, a total of 1429 lithic flakes were recovered from 23Gr245, 18 from 23Gr629, five from 23Gr630, 16 from 23Gr631, 34 from 23Gr632 and 182 from shovel tests and concentrations. Of these 1684 flakes, plain platforms represent 25.8% of the total sample (n=433), cortex platforms contribute 41 specimens for 2.4%, faceted platforms make up 10.1% (n=171), crushed platforms represent 49.3% (n=830), and finally biface thinning flakes make up 12.4% of the entire sample, (n=209).

Approximately 93% of the analyzed flakes (n=1684) contained 0% cortex (n=1570), 102 specimens (6.0%) exhibited 1-99% cortex, and only 12 specimens (.7%) contained 100% cortex.

Non-diagnostic shatter (nds) was collected from all tested areas and represented the bulk of the recovered lithic debris. The shovel test transects contributed 490 specimens, 23Gr245 contributed 2665 specimens, 23Gr629 (n=34), 23Gr630 (n=41), 23Gr631 (n=48), and 23Gr632 (n=152). The concentrations contributed the following amount of lithic debris: concentration 10 (1), concentration 9 (7), concentration 6 (11), and concentration 5 (2).

Another 186 pieces of diagnostic lithic material were recovered during the survey reconnaissance and subsequent testing. These included cores, bifaces, retouched pieces and projectile points. The small amount of cores and roughout bifaces together with the large amount of interior or secondary flakes suggests a later stage of manufacture in the lithic process occurring at the tested sites. This data combined with the number of finished tools and complete lack of fire cracked rock points to the finishing process of lithic manufacture and temporary nature of sites being represented along Wilson Creek. The sites tested in October of 1983 ranged from small lithic scatters along intermittent streams and secondary drainages to possible larger village sites along Wilson Creek. Although a difference in spatial and temporal affiliation was noted, similarities between tool types and stages of manufacture were apparent.

SUMMARY AND CONCLUSIONS

Work in October 1983 on the Phase II section of the tour road completed the survey and evaluation of this project, and has brought the northern section of the proposed road to the same level of investigation as the southern Phase I portion.

Sampling methods ranged from a pedestrian reconnaissance survey of a 40 m corridor along the right of way of the proposed road to subsurface testing of the located archeological sites. The major purpose of the survey portion of the project was related to management concerns regarding the location of archeological sites, possibly affected by the proposed road construction. The evaluation portion of the project focused on the collection of data relative to the depth, content, condition, size and significance of individual sites. This was the case in all known and unknown sites alike.

A total of 10 possible areas of artifact concentrations were located during the survey. Subsequent testing indicated four of these are not archeological sites, and this report refers to them as isolated finds. Four of the other archeological concentrations appear to be sites with the possibility of intact deposits possessing good integrity.

The first of these newly located sites is 23Gr629. This site is located on a large floodplain immediately north of Skeggs branch at the southern end of the park. Testing indicated this is a large prehistoric scatter, possibly with an undisturbed context. Little is known about the nature of sites located along secondary drainages and 23Gr629 may add further to this data base, especially upon completion of salvage work in 1984. At the present time, it appears that this probably served as a seasonal field camp occupied for short periods of time.

23Gr630 is located west of an intermittent stream, adjacent to 23Gr629. Testing indicated a prehistoric lithic scatter with the possibility of good contextual integrity. As with 23Gr629, this site has an unknown temporal span and cultural affiliation. Upon further excavation this site may yield information regarding regional settlement systems away from larger bodies of water. As with the last site, 23Gr629, this site probably served as a seasonal base camp. The possibility exists that both sites are related to each other, both temporally, as well as spatially.

23Gr631 is a concentration area of prehistoric lithic debris located in a wooded area covered by mixed hardwoods with a dense secondary growth. Testing produced evidence of limited subsurface cultural material, yet enough lithic debris was recovered to warrant further examination. It is anticipated that this site will not produce numerous subsurface features or large amounts of artifacts, rather this will help in understanding the ordinary, small lithic scatter, used possibly as a seasonal camp or knapping station, removed from a secondary drainage.

Site 23Gr632 is located along the terrace and slope adjacent to Wilson creek, directly across from 23Gr245. Recovered remains indicate the possibility that these two sites are related both temporally as well as spatially. At the present time, very little is known regarding this site to reliably discuss its cultural placement. However, the recovered assemblage indicates this is a large habitation site with the possibility of intact features being recovered in the spring of 1984. The small recovered lithic assemblage indicates the predominance of locally procured Burlington chert. Recent tree removal conducted by the park staff has resulted in part of the site being disturbed.

Four other areas of concentration were located during the survey phase of this project and are considered isolated finds and warrant no further research. All of these areas contain minimal amounts of lithic debris, and follow the general pattern of remains from the later stages of lithic manufacture.

Site 23Gr250 was encountered during the survey but was not tested during the evaluation phase due to previous work in the area. This site appears to be an early Archaic seasonal base camp (Lynott 1981).

Available data indicates that initial stages of lithic reduction were not important at this locale, with the focus of this camp on later stages of lithic manufacture. Buried sites relating to the Dalton time horizon, such as 23Gr250, are important links in understanding the stages of prehistory. Especially interesting from a regional perspective is the examination of prehistoric sites located along secondary drainages in southwestern Missouri. These biological areas have received little focus in the past and much work is needed to synthesize the differences between these sites and those located along larger rivers and creeks. Site 23GR250 is a good example of a site not visible on the surface, located only by subsurface examination. Information gleaned from work at this site may help provide a model to locating and understanding other such sites in this region. Work in the spring of 1984 will focus on artifact collection and distribution of remains recovered from this buried site.

Site 23Gr245 received intensive sampling due to the large-scale ground disturbance which is anticipated with the road and bridge construction. This large prehistoric site has produced an artifact assemblage indicating a long duration of occupation, with projectile point styles ranging in age from Archaic to Mississippian time horizons. The recovered artifacts from this site include nearly 4000 pieces of lithic debris and 186 diagnostic tools. This site represents the largest concentration of recovered prehistoric artifacts within Wilson's Creek Battlefield. Lithic remains generally appear to be products of the final stages of manufacture with most flakes being primarily interior containing little or no cortex. This site has many qualities of a village or base camp, and is unique among the prehistoric sites identified to date, within the park. It is probable that many activities other than chert knapping took place at this site. In all probability, this area was also used for heat treatment of lithic material as well as plant and animal food processing. A major objective of the excavations in spring 1984 will be to locate subsurface features and datable items such as ceramics and charcoal.

Lithics were the only group of cultural remains encountered during this project, no fire cracked rock, ceramics or floral or faunal specimens were found. The lack of fire cracked rock parallels the small number of heat treated lithics encountered. A thorough discussion of the recovered sample has been presented. In brief, it appears that all of the sites tested yielded data relating to a later stage of manufacture of diagnostic tools. The large percent of 0% cortex flakes recovered from all sites together with other information, including small number of cores and rough bifaces supports this idea. Heat treatment was also not prevalent at any of these sites, and crushed platforms were the predominate platform preparation type recovered on the flaking debris. Burlington chert available from local sources was the predominate material recovered, indicating a reliance on a readily available substance.

This project has allowed a cursory look at select areas in the park as well as a more detailed look at numerous ecological niches evident in the Wilson Creek drainage. An obvious difference between the small seasonal lithic scatter located along secondary drainages and the larger possible base camps along Wilson creek has been witnessed in this project. Future work will greatly aid in our regional understanding of past occupations located along waterways in southwestern Missouri. Subsequent

to management concerns is the objective of increasing the archeological site inventory for the park and increasing the data base of prehistoric sites at Wilson's Creek National Battlefield.

It is anticipated that final salvage through mitigation will begin on 2 April 1984 and continue through 1 June 1984.

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