

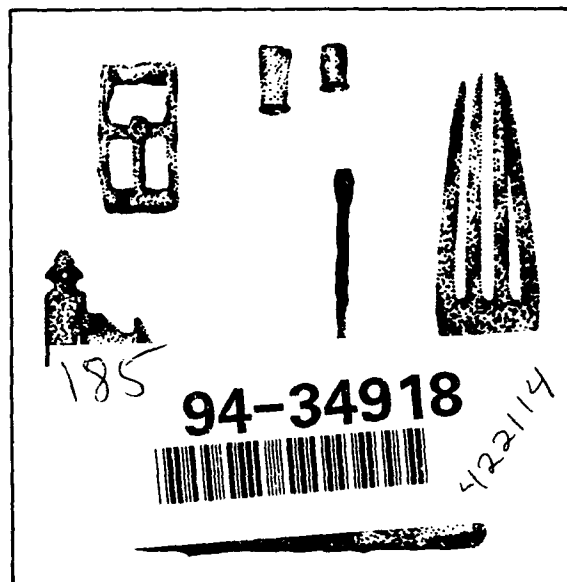
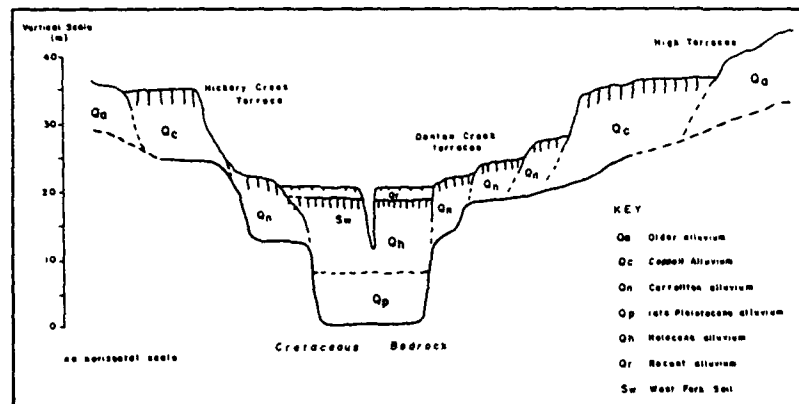
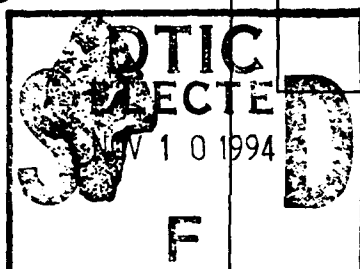
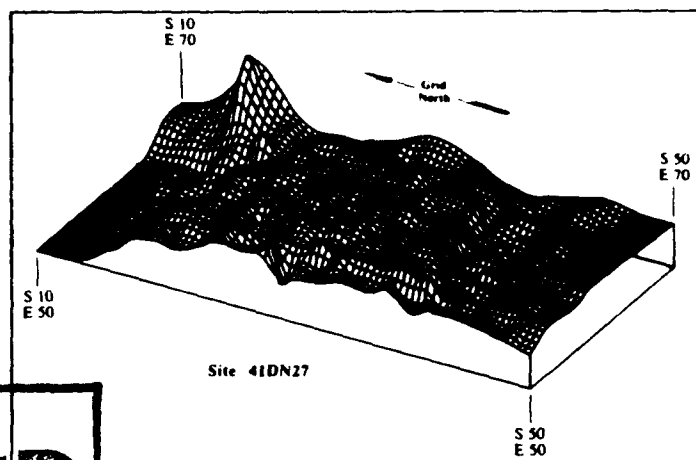
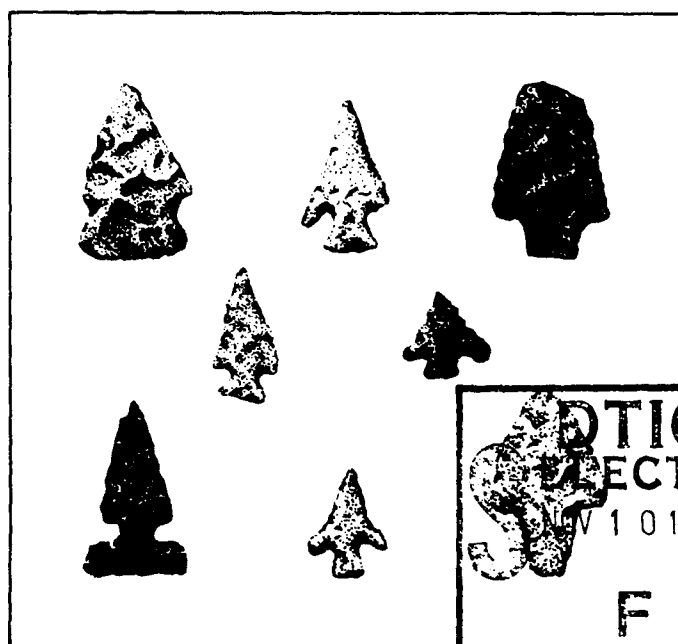
ARCHAEOLOGICAL TESTING OF THE LEWISVILLE LAKE SHORELINE, DENTON COUNTY, TEXAS

AD-A286 069



BY

KENNETH LYNN BROWN AND SUSAN A. LEBOWITZ



US Army Corps of Engineers
Fort Worth District

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**ARCHAEOLOGICAL TESTING OF THE
LEWISVILLE LAKE SHORELINE
DENTON COUNTY, TEXAS**

by

KENNETH LYNN BROWN AND SUSAN A. LEBO

**With contributions by George Brown, C. Reid Ferring,
H. Gill-King, Stephen A. Lohse, Bruce Mergele,
and Bonnie C. Yates**

**Institute of Applied Sciences
University of North Texas
Denton, Texas 76203**

**Submitted in Partial Fulfillment of
Contract Number DACW63-86-C-0098
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**C. Reid Ferring, Ph.D.
Principal Investigator**

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ABSTRACT

The periphery of Lewisville Lake, Denton County, Texas, was surveyed in 1986-1987, the results of which were reported in Lebo and Brown (1990). Twenty-three prehistoric and 16 historic sites, including one multicomponent site (41DN392) were approved for testing. This work has been conducted by the Institute of Applied Sciences, University of North Texas, as part of contract No. DACW63-86-C-0098 with the Fort Worth District, U.S. Army Corps of Engineers. The purpose of this report is to summarize the character and significance of the archaeological sites tested during 1988, and to provide recommendations concerning necessary additional work to mitigate the adverse effects of the proposed pool raise on these sites and to further substantiate the eligibility of specific sites for nomination to the National Register of Historic Places. To accomplish this goal, each site is described, including its context and content, and summary statements concerning our assessment of each site's potential archaeological significance and National Register eligibility.

MANAGEMENT SUMMARY

Archaeological testing was conducted at 23 prehistoric and 16 historic sites within the 522-ft and 532-ft elevation contours of Lewisville Lake in Denton County, Texas. This work was conducted by the Institute of Applied Sciences, University of North Texas, in the spring of 1988. The project was funded by the U.S. Army Corps of Engineers, Ft. Worth District, as part of Contract DACW63-86-C-0098. Principal Investigator for the project was Dr. C. Reid Ferring, Project Manager was Bonnie C. Yates, and Project Directors were Dr. Kenneth Lynn Brown (prehistoric) and Ms. Susan A. Lebo (historic).

Site assessments for National Register eligibility were based on data recovered concerning site integrity, context, and content. These data were obtained through test excavations involving a combination of archaeological, geological, and environmental methods and techniques. Shovel test pits, hand-excavated test pits, backhoe trenches, machine scraping, and magnetometer surveys were utilized to recover surface and subsurface information on site integrity, age, depositional history, faunal, floral, and artifact assemblages and features.

Test excavations indicated that five of the prehistoric sites and three of the historic sites warranted additional investigations. These eight sites exhibit potential National Register eligibility, and avoidance was determined impossible because the land will be affected by the pool raise planned for Lewisville Lake by controlled releases from the new reservoir, Lake Ray Roberts, which is 15 miles upstream.

ACKNOWLEDGEMENTS

The authors would like to thank the many people who helped to accomplish the Lewisville Lake testing. These people include Historic Field Director, George Brown; Historic Field and Laboratory Assistant, Bruce Mergele; Prehistoric Crew Chiefs; Bob Skiles and Dianne Lehman-Turck. Considerable thanks go to our crew members who did an outstanding job conducting test excavations and laboratory work. They include Chris Brown, Marie Brown, Robert Cast, Wanda Cast, Cliff Dorsett, Steve Gaither, Lilly Gholston, Tammie Green, Brian Ham, Carin Horn, Steven Hunt, Kim Jindra, Susie McClure, Carole Medlar, Loral Myers, Kate Ray, Eric Roberts, LeeAnna Schniebs, John Mark Sheppard, Betty Lee Stringer, Tom Turk, and Ken Vandersteen.

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We would also like to thank Dr. Brooks Ellwood, University of Texas at Arlington, and his staff who conducted the magnetometer surveys at both the prehistoric and historic sites. The final magnetometer maps were computer generated by Tom Nelson at the Institute of Applied Sciences, UNT.

The Ft. Worth District, U.S. Army Corps of Engineers is thanked for their continuing concern and support for cultural resources in Texas. We would also like to thank the Texas Historical Commission for their helpful comments during the course of the project.

CHAPTER 1

INTRODUCTION AND ENVIRONMENTAL OVERVIEW

by

C. Reid Ferring and Bonnie C. Yates

Introduction

This report describes the results of test excavations at 23 prehistoric and 16 historic sites on the periphery of Lewisville Lake, Denton County, Texas. This work has been conducted by the Institute of Applied Sciences, University of North Texas, as part of contract DACW63-86-C-0098, with the Ft. Worth District, U.S. Army Corps of Engineers (USACE). The purpose of this report is to summarize the character and significance of the archaeological sites that were test excavated and recommendations for mitigation at those sites determined eligible for the National Register. To accomplish this goal, we describe individual sites, indicate their context and content, provide summary statements of the testing methods and results, and our recommendations for mitigation.

The survey conducted by UNT in 1986 and 1987 (see Lebo and Brown 1990) represents the first fully intensive archaeological survey of the Lewisville Lake area. Minor surveys of the reservoir area were conducted by Stevenson (1949) of the then-called Garza-Little Elm Reservoir. Later, Nunley (1973) surveyed parts of the same area. Cliff and Moir (1985) surveyed the Wynnwood Park area, in the southeastern portion of the present Lewisville Lake margin. Results of these surveys are discussed in Lebo and Brown (1990). Following the 1986-1987 survey, 23 prehistoric sites and 16 historic sites were recommended for test excavations. Based on the survey results, these sites contained evidence that indicated they may be eligible for nomination to the National Register of Historic Places. Test excavations were recommended to assess further their eligibility.

The Lewisville Lake area (Figure 1.1) is ideally positioned for archaeological research. On the Elm Fork of the Trinity River, the reservoir encompasses the confluences of several major tributaries, including Hickory Creek and Little Elm Creek. The reservoir also straddles the ecotone of the Cross Timbers with the Blackland Prairie. Geographically and ecologically, therefore, this area is important with respect to prehistoric and historic archaeological resources. Its proximity to Dallas and the diversity of landform/soils associations are significant with respect to occupations in the historic period. Lastly, the position of Lewisville Lake relative to other recent or ongoing archaeological investigations at regional lakes (e.g., Ray Roberts, Joe Pool, Lavon, Cooper) is important in terms of anticipated comparative analysis of archaeological records in different geographic-environmental settings in the North Texas region.

Environmental Setting

Lewisville Lake is situated on the Elm Fork of the Trinity River, in southern Denton County, Texas (see Figure 1.1). In terms of its larger regional setting, this area is best considered one of transition from prairies in the west to forested areas in

the east. Fenneman (1938) places this part of Texas in the West Gulf Coastal Plain Province, albeit very near the eastern edge of the Central Lowlands Province. Perhaps appropriate to our views, Hill (1901:62) considers this a distinct geographic region. Pertinent to archaeological considerations is the central location of the study area relative to the Southern Plains and the East Texas forests. With respect to climate, landforms, vegetation, and faunas, this area exhibits elements of the east and west. As a zone of ecological

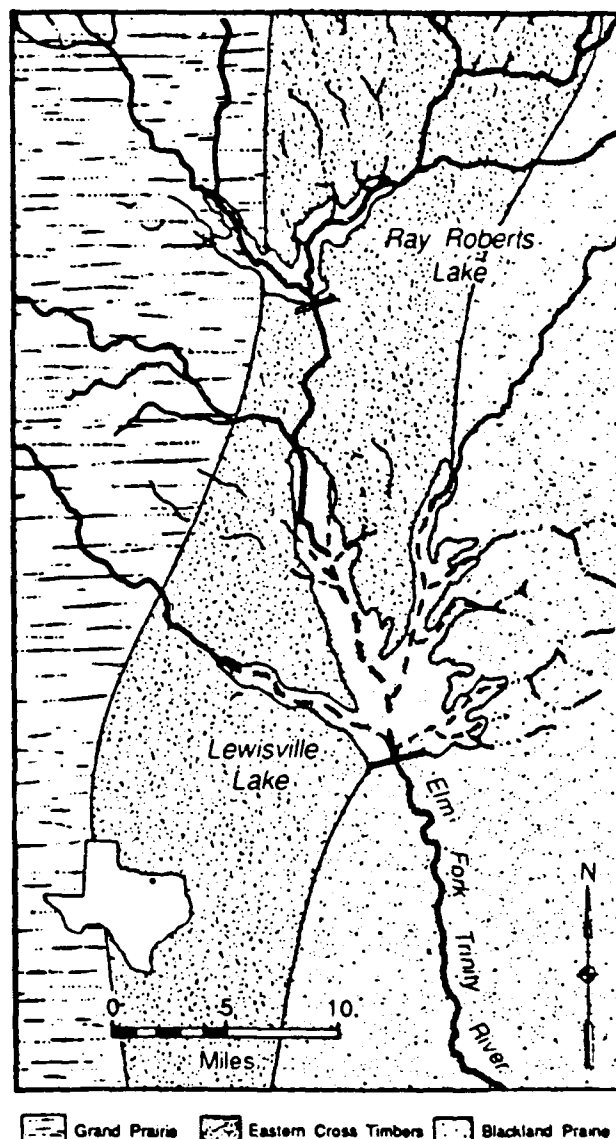


Figure 1.1 Location and environmental setting of the Lewisville Lake project area in northcentral Texas.

transition, this area should have been sensitive to climatic change.

With respect to Holocene culture history, this part of Texas has long been regarded as a crossroads, at times exhibiting locally distinctive cultural traditions and at others showing strong cultural influences from flanking culture areas. To investigate the cultural and ecological aspects of the archaeological record here, it is imperative to consider its geographic position, its ecological character, and the role of paleo-environmental change with respect to local adaptive strategies and contacts with neighboring culture groups. These broad issues are considered in the Ray Roberts-Lewisville research design (Ferring and Lebo 1988).

Climatic

The climate of the Upper Trinity River Basin is humid and subtropical. Average annual precipitation is about 80 cm (31.5 inches), with peak rainfall months of April, May, and September (Ford and Pauls 1980). Summers are hot and often windy, while winter months are characterized by relatively mild conditions interrupted by periodic "northers." These arctic fronts bring very cold temperatures and sometimes snow, sleet, or ice storms. Periodic droughts are also characteristic of this region. Figures 1.2 and 1.3 show the daily mean maximum and minimum temperatures for each month and mean precipitation for each month.

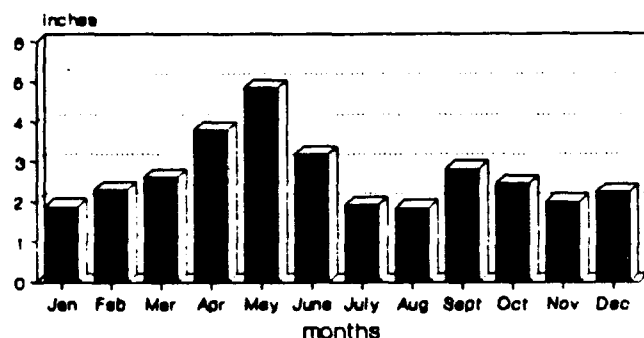


Figure 1.2 Monthly average precipitation for Denton County (adapted from Ford and Pauls 1980:88).

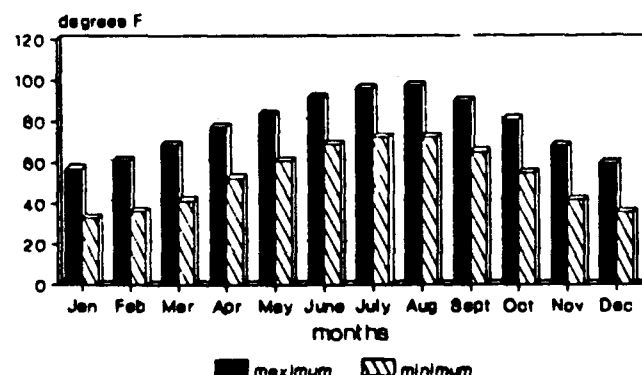


Figure 1.3 Monthly average maximum and minimum temperatures for Denton County (adapted from Ford and Pauls 1980:88).

Vegetation

Vegetation in the Upper Trinity River basin is edaphically controlled today. Calcareous clayey soils on Cretaceous limestones, marls, and cherts are associated with prairies. Sandy and loamy soils on Cretaceous sandstones are associated with upland oak-hickory forests known as the Cross Timbers. In the study area, the Woodbine Group sandstones and shales control the distribution of the Eastern Cross Timbers (Dyksterhuis 1948). Immediately to the west is the Grand Prairie. To the immediate east of the Eastern Cross Timbers is the Blackland Prairie. The distinct boundary between the Eastern Cross Timbers and the Blackland Prairie bisects Lewisville Lake (see Figure 1.1). Since the plant and animal resources of these two biotic zones are different, the ecotone in the Lewisville Lake area probably offered optimal territories for hunter-gatherer and horticultural economies in the past (Yates and Ferring 1986). Prikryl (1987) has described shifts in Archaic and Late Prehistoric site locations that suggest differential use of the Cross Timbers and Prairies during the late Holocene. Likewise, this area was favored in the historic period for its excellent farming and grazing potential.

Quaternary Geology by C. Reid Ferring

Geologic factors pertinent to archaeological testing in the project area include types and ages of landforms, stratigraphy of late Quaternary sediments, and topographic-soils relationships pertinent to site preservation and site exposure. The geologic units exposed around Lewisville Lake include Cretaceous bedrock and Quaternary deposits. Because of past stream gradients, the alluvial sediments exposed along the reservoir shore are older in the southern (downstream) portion of the survey area. Late Quaternary sediments also include colluvial and eolian deposits.

Bedrock lithology and structure have strongly influenced the development of landforms in the Upper Trinity River drainage basin. Around Lewisville Lake, the Upper Cretaceous Woodbine Formation and the Eagle Ford Shale crop out. The different lithologies of these formations correlate with different landforms and different settings for late Quaternary sedimentation and site formation environments.

The Woodbine Formation crops out in the western part of the area, flanking the Hickory Creek, upper Elm Fork and upper Little Elm Creek drainages. The two resistant sandstone members of the Woodbine, separated by the Lewisville shale member, have been eroded into hills with moderate relief. The eastern valley margin above the confluence with Little Elm Creek is the most notable topographic feature; this escarpment is moderately dissected. Sandy late Quaternary alluvial fans have developed in the alluvial valley adjacent to major gullies that drain the western slope of the escarpment. Deep, well-drained sandy soils form on the Woodbine; these soils support the oak-hickory forests of the eastern Cross Timbers.

The Eagle Ford Shale is less resistant to erosion than the Woodbine. These shales crop out in the eastern part of the survey area, flanking the lower Little Elm valley and the eastern margin of Lewisville Lake south to the dam. Quaternary terrace deposits veneer the Eagle Ford in most areas around Lewisville Lake. In contrast to the western lake margin, the eastern margin is deeply dissected, and the

reservoir has drowned several large creek valleys that formed on the Eagle Ford Shale. Otherwise, the eastern margins of the lake are very level. The clayey shales and the surmounting Quaternary alluvium weather to form poorly drained, calcareous clay loam to silty clay loam soils with thick A-horizons. These soils supported a native prairie and were probably undesirable for habitation until Euro-American settlement when their agricultural potential could be exploited.

Development of drainage networks has largely followed bedrock lithology. The consequent drainage of the study area, the Elm Fork Trinity, and also Hickory Creek are superposed across the Woodbine Sandstone. Little Elm Creek is the principal tributary to the Elm Fork Trinity in the study area. It is a subsequent stream, fed by several obsequent streams that drain the White Rock (Austin Chalk) escarpment, east of Lewisville Lake.

The alluvial stratigraphy and geomorphology of the Upper Trinity River Basin has been the subject of recent study and new formal lithostratigraphic and morphostratigraphic terminology has been proposed (Ferring 1986b, 1986d, in press). Inset below higher terraces of middle to early Pleistocene age are late Quaternary landforms and sediments (Figure 1.4). The most prominent geomorphic feature is the Hickory Creek Terrace, formerly the Lewisville or "T2" terrace of Crook and Harris (1957) and Slaughter et al. (1962). This terrace extends along most of the eastern portion of the

reservoir, and in a few places on the southern part of the western shore. The alluvial fill of the terrace, named the Coppel Alluvium was formerly described as the "Hill, Shuler and Richards formations" (Slaughter et al 1962). Rancholabrean faunas from this alluvium are poorly dated, with estimated ages from Sangamon to middle Wisconsin (Ferring 1986d, 1987). Fill from this terrace was reported to be the context of the Lewisville Clovis site (Crook and Harris 1957) yet the alluvium is much too old for this claim.

Inset below the Hickory Creek Terrace are younger Late Pleistocene terraces, informally named the Denton Creek terraces.

These have sandier fill than the Coppel Alluvium, and these terraces are not as continuous as the Hickory Creek. The Denton Creek terraces formed during a period of valley incision, and all are Pleistocene in age. All of the latest Pleistocene and Holocene alluvium is below the floodplain. Thus archaeological sites that are in situ in alluvium are all below the floodplain of the Trinity and its major tributaries.

Alluvial fan and colluvial deposits are common along the Woodbine escarpment in the northern part of the study area. These accumulated during the late Quaternary and apparently during at least part of the Holocene. Although these depositional environments and sediments are not well known, they appear to be good settings for archaeological site preservation.

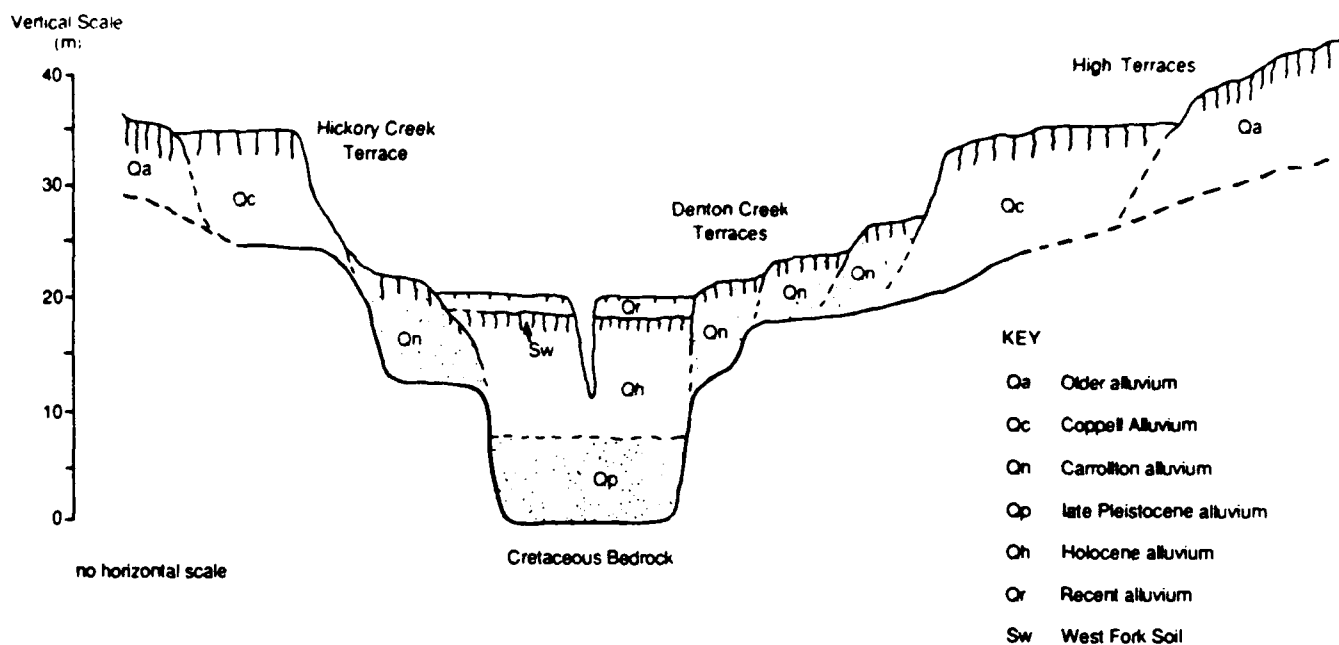


Figure 1.4 Diagrammatic cross section of the Elm Fork Trinity River Valley.

CHAPTER 2

PREHISTORIC RESEARCH DESIGN, METHODS, AND PREVIOUS INVESTIGATIONS

by

Kenneth Lynn Brown

The field methods employed during testing were designed to address the questions and hypotheses outlined in the Research Design (Ferring and Lebo 1988) and to determine whether sites met criteria for a recommendation of nomination to the National Register of Historic Places. An overview of the research design is presented here that structured the archaeological investigations.

Research Design

The issues addressed include: (1) patterning of site locations relative to landforms, hydrologic factors, soils, and vegetation; (2) site size; (3) chronological framework based on temporally diagnostic artifacts; (4) seriation and comparison of assemblages with other cultural sequences; and (5) site formation processes. These analyses will require very specific kinds of data, including but not limited to: (1) a well-defined stratigraphic framework for the Pleistocene and Holocene sediments in the project area, (2) a geomorphic model of landforms in the project area integrated with the stratigraphy, (3) evidence of past environments, including pollen, molluscs, vertebrates, and soils, (4) site-location data base fully integrated into the geologic framework as well as the biogeographic framework, (5) a chronology of the sites, (6) data on site activities: distribution of tools, cores, debitage, bones, and ceramics, and (7) evidence of external contacts and intersite cultural affiliations: tool and ceramic styles. The result will be a spatial-temporal model of adaptive strategies and cultural evolution (Ferring and Lebo 1988).

Methods

Field Methods

Attempts were made to determine site boundaries more precisely than was done during reconnaissance and survey. Backhoe trenches (BHT) were first dug across site areas to help elucidate the horizontal and vertical extent of cultural remains. A representative profile of 1 to 2 m was drawn of each BHT. Second, a Cartesian Coordinate Grid was superimposed over the site with the use of a transit and a site datum was established. Site datums consisted of circular brass markers set into concrete with the site number stamped into them. Third, based on results of the BHTs, 1x1-m test pits (TP) were placed in areas of the site that appeared to contain cultural remains in primary context and in areas where trenches were not dug, in order to help delimit site boundaries. At site 41DN392, the TPs measured 1x0.5-m (see Chapter 8).

TPs were dug in arbitrary 10-cm levels beginning at the highest corner of each pit. All deposits were either dry screened or water screened through quarter-inch hardware

cloth, fine screened, or floated. With the exception of sites 41DN20 and 41DN372, all deposits were dry screened or floated. At site 41DN20, the only deposits fine screened were from the northwest 50x50-cm quad of TP 5, levels 5-13 and the southeast 50x50-cm quads in TPs 6-17 at site 41DN372. Flotation samples were taken from all features. Proton magnetometer surveys were conducted on portions of sites 41DN27, 41DN381, and 41DN392 (see Chapter 8). As a result of these surveys several subsurface magnetic anomalies were discerned. For selected anomalies, 1x1-m pits were dug to determine their origin.

All features were mapped and photographed. Soils and stratigraphic profiles were drawn for each TP. Excavations continued in each TP until either the B-horizon or bedrock was encountered and/or artifacts were no longer present, or the water table prohibited further excavation. Site maps were made with the aid of a theodolite. At sites where cultural remains appeared to be in primary context and/or where questions arose regarding the integrity of the cultural remains, geologic investigations were conducted to help elucidate the nature of the deposits. BHTs and TPs were backfilled after all data were collected and recorded.

Laboratory Methods

Laboratory procedures consisted of washing, sorting, identifying, and recording artifact data on computer coding forms. Artifact coding was performed in the same manner as had been done at Ray Roberts Lake. The coding forms, both for unit and attribute coding of artifacts, are the same as those used for Ray Roberts Lake. Unit coding records the types of artifact classes found in each level/quad of each unit. Attribute coding records specific details of artifacts by type. Uniformity in data recording will allow intersite analyses between the two lake areas. Flotation samples were processed through a modified SMAP float barrel (Watson 1976). Appendix A describes the artifact typology used and associated coding forms.

Previous Archaeological Investigations

Prikryl (1987) provides a summary of previous archaeological investigations along the lower Elm Fork of the Trinity River. Investigations in the project area have been conducted by various institutions and organizations. Among these are the Smithsonian Institution (Stephenson 1949, 1950; Stanford 1982), the Dallas Archaeological Society (Crook and Harris 1957, 1958, 1961), the Richland Archaeological Society (Nunley 1973), and the University of North Texas (Lebo and Brown 1990). Individuals who have conducted and/or reported on investigations within the area

include Harris (1950, 1951a, 1951b), Barber (1966, 1969), Barber and Lorrain (1984), and Yates (1984).

The following is a summary of previous archaeological investigations located within or near the Lewisville Lake project area. The earliest reported archaeological investigations near Lewisville Lake were in the 1930's (Harris 1936, 1939, 1940). In the early 1940's several reports of investigations along the Elm Fork of the Trinity River were published (Conger 1940, Harris 1940, 1949; Harris and Hatzenbuehler 1949).

Krieger's Culture Complexes and Chronology in Northern Texas (1946) describes archaeological remains in surrounding regions but none from Lewisville Lake (Prikryl 1987:48). The earliest professional archaeological investigations in the area were conducted by the Smithsonian Institution River Basin Surveys (RBS). After the field survey, Stephenson (1949) reported 27 prehistoric sites in the Lewisville Lake (formerly called Lake Dallas and Garza-Little Elm Reservoir) project area (Prikryl 1987:49-50). At least three sites (41DN5, 41DN6, and 41DN12) were subsequently tested, but Stephenson never published results of these investigations (Prikryl 1987:51).

After the Smithsonian Institution RBS were completed, Harris published reports on his collections from several sites. Among the more important sites Harris described are 41DN353 (Harris 1950:21-22), 41DN28 (Harris 1951a), and 41DN6 (Harris 1951b). One of the most controversial sites was the Lewisville Site, 41DN72, a Paleoindian site located near the dam. The Lewisville Site was reported by White in 1952 during a paleontological survey of the lake. Excavations at the site by the Dallas Archaeological Society resulted in recovery of

late Pleistocene fauna in association with only a few stone artifacts of human manufacture, most notably a Clovis projectile point associated with one of the 21 burned features that were excavated. Radiocarbon dates derived from the features yielded dates greater than 37,000 years BP (Crook and Harris 1957, 1968). Because of the extreme radiocarbon dates for Clovis, a controversy arose as to whether the features were of human design. The site became inundated before the controversy was resolved.

Additional work was conducted at the Lewisville Site in 1979 and 1980 during a severe drought that lowered the lake level enough to expose the site for excavation. The Smithsonian Institution conducted the investigations. Charred material submitted for radiocarbon dating was determined to be lignite coal rather than charcoal. It yielded a date similar to the previous dates from the site (Stanford 1982; Schiley et al. 1985). Results of the 1979 and 1980 investigations at the site by the Smithsonian Institution have not been published.

During the 1960s, reports on two sites at Lewisville Lake were published. These were the Irish Farm Site (41DN62) (Barber 1966) and Hackberry Site (41DN57) (Barber 1969). The storage pits and associated artifacts excavated at the Hackberry Site were typical of the Henrietta Focus (Prikryl 1987:62). An archaeological survey of portions of the Lewisville Lake shoreline was conducted in 1973 by the Richland Archaeological Society (Nunley 1973). Nunley (1973) described 50 sites that were located on or near the shoreline. In 1984 a human burial was found eroding along the shoreline at the Hackberry Site (41DN57) (Barber and Lorrain 1984; Yates 1984).

CHAPTER 3

PREHISTORIC ARCHAEOLOGICAL BACKGROUND

by
Kenneth Lynn Brown

Lynott (1977) and Prikryl (1987) have developed syntheses of prehistoric cultures located in northcentral Texas. Prikryl (1987) has developed a synthesis for the lower Elm Fork of the Trinity River. His synthesis is summarized here because it is the most recent interpretation of the prehistory of the Lewisville Lake area.

Paleoindian (ca. 11,000-8,500 BP)

Evidence of Paleoindian occupation in the Lewisville Lake area comes primarily from surface finds of Clovis, Dalton, Plainview, Midland, San Patrice, Golondrina, and Scottsbluff projectile point types (Prikryl 1987:150-152). The Lewisville Site (41DN72) is one of only two Paleoindian period sites that have been systematically excavated (Crook and Harris 1957, 1958, 1961; Stanford 1982) in the area. Excavations have recently been conducted at the Aubrey Clovis site (41DN479), which have yielded large quantities of lithic and faunal remains (Ferring 1989:9-11). It is generally believed that a nomadic lifeway based on a generalized hunting and gathering subsistence economy was practiced by the Paleoindians of northcentral Texas (Prikryl 1987:153). Table 3.1 lists sites within the project area that may have Paleoindian occupations.

Table 3.1

Sites with Possible Paleoindian Occupations

From Prikryl (1987)		This Volume
41DN5	41DN55	None
41DN6	41DN72	
41DN10	41DN354	
41DN11		

The paleoecological conditions of northcentral Texas during the Paleoindian period is poorly understood with most information derived from adjacent regions. It is believed that there were reductions in woodland and parkland habitat during the late glacial and early postglacial periods. These changes resulted in increases in open grassland. Low human population density and high mobility are believed to have been characteristic of this period. Small groups probably moved over large areas in pursuit of large grazing animals. It would have been an adaptive advantage for small human populations to be mobile and flexible in composition (Lynott 1981:101). With climatic patterns changing to more xeric conditions, then it may be expected that herds of large grazing animals would have been attracted to sources of water. These water sources would most likely be good candidates for the occurrence of Paleoindian occupations. In addition to the hunting of large grazing animals, a more diffuse hunting and gathering

subsistence is indicated from Horn Shelter No. 2 in Bosque County (Forrester 1985).

The number of late Paleoindian styles of projectile points increases substantially. This is believed to represent an increase in local Paleoindian populations in association with increases in grassland habitat. There may have been a slight reduction in group mobility, but this did not change their size and flexible composition (Lynott 1981:101).

Early Archaic (ca. 8,500-6,000 BP)

The Early Archaic period is poorly understood in northcentral Texas. It is believed that a major change in the paleoecology at the end of the Paleoindian period produced conditions similar to those of the Late Prehistoric period. These changes included expansion of the upland prairies and hardwood forests along the floodplains of major drainages. On the floodplains, subsistence was probably based on a diffuse hunting and gathering strategy, while a bison hunting economy was prevalent on the prairie uplands (Lynott 1981:103).

The more xeric climatic patterns that began during the late Pleistocene probably continued. Grasses were probably dominant between 9,000 and 5,000 BP (Prikryl 1987:156). Like the preceding Paleoindian period, peoples assigned to the Early Archaic are believed to have continued a nomadic lifeway based on a diffuse subsistence pattern with no discernible territorial boundaries (Prikryl 1987:160). Evidence of Early Archaic period occupations comes primarily from surface finds of the Angostura and early split-stemmed projectile point types (Prikryl 1987:112, 158-161). Table 3.2 lists sites within the project area that may have Early Archaic occupations.

Table 3.2

Sites with Possible Early Archaic Occupations

From Prikryl (1987)		This Volume
41DN3	41DN36	41DN20
41DN6	41DN40	
41DN10	41DN49	
41DN11	41DN354	
41DN28		

Middle Archaic (ca. 6,000-3,500 BP)

The Middle Archaic period is also poorly understood in northcentral Texas. It is believed that the subsistence economy focused on the oak-hickory forests found along the floodplains of major drainages. The subsistence economy was

diffuse and included a wide variety of available resources. Settlement patterns were aligned with these exploitation areas. It is believed that initially small social groups moved over large territories. However, as scheduling of hunting and gathering became more efficient, the size of territories became smaller. During certain seasons, it became possible for small social aggregates to coalesce without exhausting local resources. During times of food stress, these larger groups would disperse (Lynott 1981:104).

It is believed that the grasslands supported a bison hunting economy that may have employed surrounds and drives. Social organization and sizes for the bison hunting economies changed little from the Paleoindian period, with large territories and group mobility (Lynott 1981:104).

During this period, at approximately 4,500 BP, the area may have had an increase in the oak savanna at the expense of the grasslands (Prikryl 1987:162). Evidence of Middle Archaic period occupations comes primarily from surface finds of the Carrollton, Morrill, Wells, and Bazal Notched group of projectile points (Prikryl 1987). The occurrence of specific diagnostic projectile points at the end of this period may represent the beginnings of regionalization that are hypothesized by Lynott (1977:158) (Prikryl 1987:162). Previous literature has assigned the Carrollton Focus to the Middle Archaic period (Crook and Harris 1952:38; Lynott 1977:82). Table 3.3 lists sites within the project area that may have Middle Archaic occupations.

Table 3.3

Sites with Possible Middle Archaic Occupations

From Prikryl (1987)		This Volume
41DN5	41DN36	41DN20
41DN6	41DN49	
41DN11	41DN354	

Late Archaic (ca. 3,500-1,250 BP)

Most evidence for the presence of Late Archaic occupations is based on the surface recovery of Gary, Dallas, Trinity, Godley, Ellis, Elam, Edgewood, and Yarbrough projectile point types. These projectile point types suggest cultural affinities with areas to the north and east (Prikryl 1987:166). The development of the West Fork Paleosol during the latter part of the Late Archaic period may reflect a wetter environment (Ferring 1987:51). An expansion of the Eastern Cross Timbers would have provided a larger mast crop for consumption by humans and game animals (Prikryl 1987:170). Table 3.4 lists sites within the project area that may have Late Archaic occupations.

The climate during the Late Archaic period is believed to have been similar to that encountered by the earliest European explorers. Subsistence in the upland prairie continued to focus on bison procurement with some use of the riverine faunal and floral resources. Along major drainages, the subsistence economies became more efficient in use of local floodplain resources. This efficiency was probably related to better scheduling and exploitation technologies. Settlements coincided with the abundant resources, with favorite sites being repeatedly used over long periods of time. Intergroup conflict was minimal and social and economic pressures from outside the region were not significant. There

are indications that seasonal coalescing of social groups intensified, particularly within the eastern Blackland Prairie (Lynott 1981:105).

The first signs of semi-sedentism occur in the form of large pits that are believed to represent community ceremonial structures. These pits, referred to as Wylie Focus pits, appear to have been used over a long period of time for a variety of functions (Bruseth and Martin 1987:267-284).

Table 3.4

Sites with Possible Late Archaic Occupations

From Prikryl (1987)		This Volume	
41DN1	41DN47	41DN4	41DN374
41DN3	41DN49	41DN21	41DN377
41DN4	41DN51	41DN20	41DN381
41DN5	41DN52	41DN27	41DN384
41DN6	41DN55	41DN37	41DN386
41DN8	41DN58	41DN40	41DN392
41DN10	41DN59	41DN372	41DN442
41DN11	41DN353		
41DN12	41DN354		
41DN28	41DN355		
41DN36			

Late Prehistoric I (ca. 1,250-750 BP)

Major technological changes, i.e., the introduction of ceramics and the bow-and-arrow, occurred during Late Prehistoric I (Prikryl 1987:173). In addition, maize made its first appearance in the region, suggesting it was either being grown here or being acquired through trade (Peter and McGregor 1987:9.15). Important animal resources included deer, rabbit, and turtle (Prikryl 1987:177).

Scallorn, Rockwall, Catahoula, and Alba arrowpoint types are diagnostic of Late Prehistoric I (Prikryl 1987:133). Prikryl (1987:174) maintains that most are made of quartzite, although chert was used more frequently to make arrowpoints during the latter half of the period. Quartzite was preferred for expanding stemmed arrowpoints (earlier point style), while chert was more commonly used for the manufacture of rectangular stemmed arrowpoints (later point style). Late Prehistoric I ceramics are tempered with grog and bone. Some exhibit decorations similar to those found on Early Caddoan types from east Texas sites (Prikryl 1987:173-174). Table 3.5 lists sites within the project area that may have Late Prehistoric I occupations.

Table 3.5

Sites with Possible Late Prehistoric I Occupations

From Prikryl (1987)		This Volume	
41DN1	41DN49	41DN4	41DN372
41DN3	41DN51	41DN26	41DN381
41DN4	41DN52	41DN27	41DN384
41DN5	41DN58	41DN40	41DN386
41DN8	41DN59		
41DN10	41DN353		
41DN11	41DN354		
41DN12	41DN355		
41DN28			

During the Late Prehistoric I period, there was a movement of Caddoan groups from eastern Texas into the prairies and Cross Timbers. Along with these movements was the introduction of ceramic and bow-and-arrow technologies. This resulted in new subsistence techniques and the first definite signs of intergroup conflict in the form of skeletal remains exhibiting evidence of violent deaths. The occurrence of differential mortuary practices and multiple burials indicates nonegalitarian social organization in the eastern portion of northcentral Texas. In the western prairies and central Brazos River basin, the social structure was a continuation of that during the Late Archaic period. Subsistence in Western prairies continued to focus on bison hunting while composition of social groups, which were still egalitarian, was flexible (Lynott 1981:105).

Late Prehistoric II (ca. 750-250 BP)

During the Late Prehistoric II period the occasional incursions of Caddoan peoples into the prairies resulted in a shift in subsistence and settlement patterns of the previously nomadic bison hunting groups. Subsistence became focused on riverine habitats with more sedentary settlements along the major drainages. Bison were hunted on a more opportunistic basis rather than by the previous continual nomadic pursuit. The increased sedentism resulted in more focal subsistence strategies. These adaptations are believed to be the result of internal population growth and external population pressure from more eastern Caddoan groups (Lynott 1981:106).

In conjunction with more emphasis on riverine habitats, there also occurred the use of horticultural economies. The horticultural economies vary between river drainages, with all of the local groups continuing to utilize locally available faunal and floral resources. There appears to be a decrease in Caddoan influences during this time, with local groups developing more structured internal social organizations. This resulted in a decrease in the use of nonlocal lithic raw materials in the manufacture of stone tools. The development of nonegalitarian social organization of local groups during the Late Prehistoric II period is believed to be a response to both internal population growth and external pressures by more eastern Caddoan groups during the Late Prehistoric I period (Lynott 1981:106-7).

A change to a more xeric climate at approximately 1,000 BP, as evidenced by the end of the development of the West Fork Paleosol at 41CO141, is believed to have continued during the Late Prehistoric II period. The presence of bison remains at archaeological sites in the region following an absence in earlier periods is thought to be additional evidence for a more xeric climate since bison exhibit a preference for short grasses. Most evidence for the presence of Late Prehistoric II period occupations is from surface finds of Washita, Harrell, and Fresno arrowpoint types (Prikryl 1987:177-8). Also, the recovery of a bison tibia digging stick tip and two bison scapula hoes from 41DN57 at Lewisville Lake suggests a subsistence economy based partially on horticulture (Barber 1969).

One of the pottery types of the Late Prehistoric II period is Nocona Plain which is a shell-tempered ware with plain interiors and exteriors. Prikryl (1987:179) indicates much of the pottery Stephenson (1949) described as Nocona Plain is actually tempered with bone, fossil shell, and crushed

limestone. Table 3.6 lists sites within the project area that may have Late Prehistoric II period occupations.

Table 3.6

Sites with Possible Late Prehistoric II Occupations

From Prikryl (1987)		This Volume	
41DN1	41DN28	41DN2	41DN372
41DN3	41DN49	41DN4	41DN381
41DN4	41DN51	41DN26	41DN386
41DN5	41DN52	41DN27	41DN387
41DN6	41DN57	41DN37	41DN446
41DN8	41DN58	41DN40	
41DN10	41DN353		
41DN11	41DN354		
41DN12	41DN355		

Historic Native American Period (ca. 250-100 BP)

No Historic Native American sites are reported within the Lewisville Lake project area (Prikryl 1987:182). No known sites contain a cultural inventory that represents the shift from indigenously manufactured materials to those indicative of Native American trade with Euro-Americans. This period is, therefore, a major gap in the archaeological record for the Lewisville Lake area. Table 3.7 lists sites in this volume that have Historic Period occupations attributed to Euro-American settlement. In most cases, the historic occupations have disturbed the prehistoric occupations.

Euro-American influences on indigenous groups of northcentral Texas is poorly understood. The relationship of prehistoric economic, technological, and settlement patterns to Euro-American influences requires substantial study (Lynott 1981:107).

Table 3.7

Sites with Undetermined and Historic Occupations (This Volume)

Undetermined		Historic	
41DN369	41DN447	41DN2	41DN378
41DN378	41DN448	41DN27	41DN384
41DN436		41DN37	41DN387
		41DN40	41DN392
		41DN372	41DN446
		41DN377	41DN447

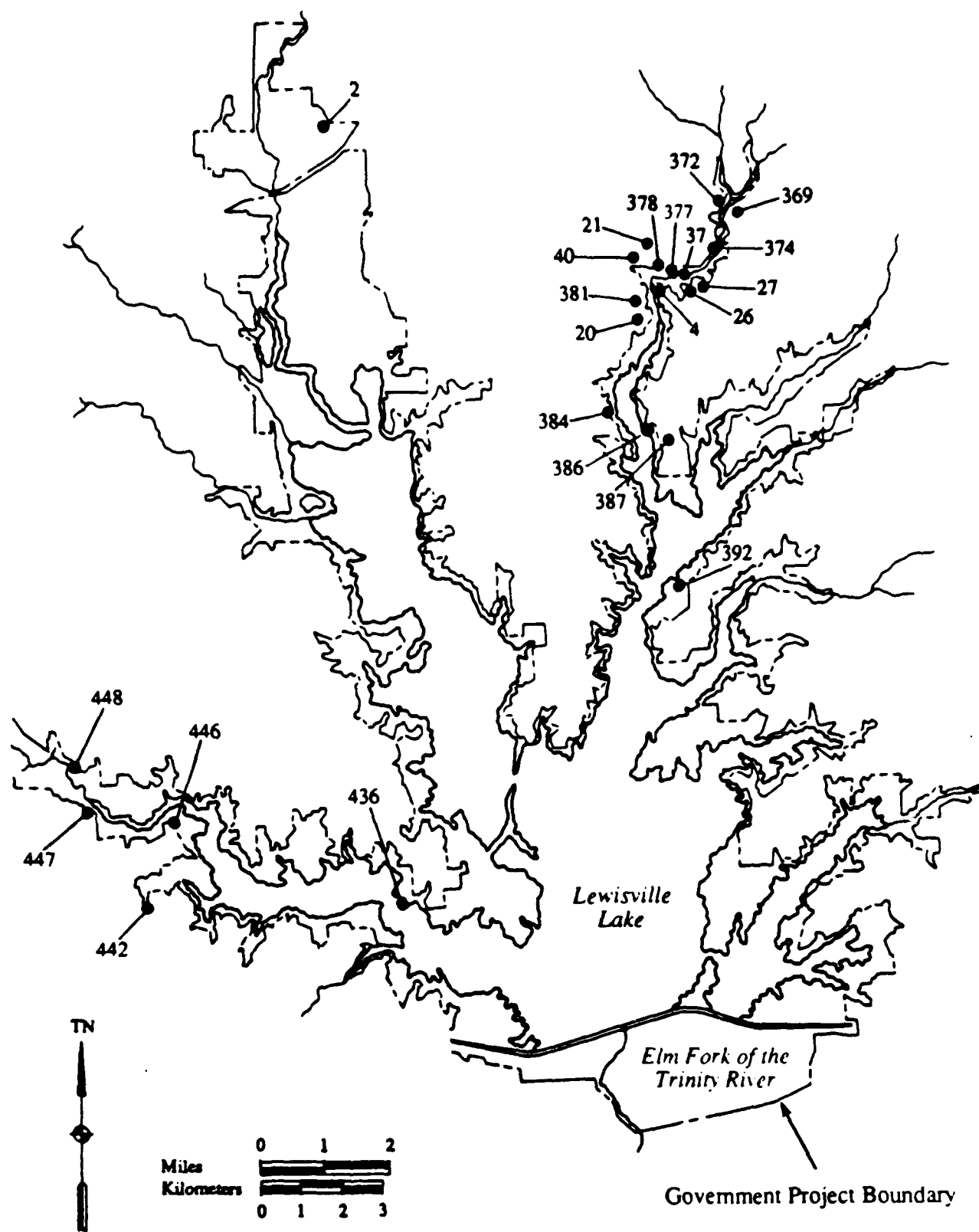


Figure 4.1 Project map showing the general location of prehistoric sites.

CHAPTER 4

PREHISTORIC SITE DESCRIPTIONS

by

Kenneth Lynn Brown, Bonnie C. Yates,
and H. Gill-King

Introduction

A total of 23 sites with prehistoric components were tested for determination of significance and eligibility for nomination to the National Register of Historic Places (Figure 4.1). Site 41DN392 is reported in Chapter 8 because it had both historic and prehistoric components tested for eligibility. The 22 sites reported in this chapter contain prehistoric occupations attributed to the Early Archaic through Late Prehistoric Periods. The level of effort for testing at these sites varied according to site location and size.

Sites were divided into two groups according to minimum testing levels specified in the Scope of Work (U.S. Army Corps of Engineers, Scope of Work, 1988) (Table 4.1). Recommendations for level 1 testing, for group 1 sites, consisted of a minimum of five 1x1-m test pits (TP) per site with an average backhoe expenditure of one-half day per site. Recommendations for level 2 testing, for group 2 sites, consisted of a minimum of three 1x1-m TPs per site with an average backhoe expenditure of one-quarter day per site. Level 2 testing was to approximate three-quarters of the work effort of level 1 testing.

Table 4.1

Testing Status for Prehistoric Sites

Group 1 Sites		Group 2 Sites	
41DN4	41DN377	41DN2	41DN381
41DN26	41DN378	41DN20	41DN384
41DN27	41DN386	41DN21	41DN387
41DN40	41DN442	41DN37	41DN436
41DN374	41DN446	41DN369	41DN447
		41DN372	41DN448

Three of these 22 sites, 41DN369, 41DN387, and 41DN442, required backhoe trenches (BHTs) only. Sites 41DN21, 41DN37, 41DN374, 41DN377, 41DN378, 41DN381, 41DN384, 41DN436, and 41DN448 were to have BHTs excavated first in order to help elucidate the nature of the cultural deposits. The level of effort of manual excavation was to be determined after examination of the BHTs. In this manner, the level of effort could be adjusted for each site depending upon the professional judgement of the Principal Investigator and prehistoric Project Archaeologist.

Site Descriptions

Descriptions of sites and results of testing are according to the numerical order of the site number. Site numbers are assigned according to the Smithsonian trinomial numbering

system. The "41" in the designation is for the state of Texas. The letters "DN" designate Denton County, and the last series of digits refers to the sequential site numbers recorded within the county. Collectively, these trinomials are also called "TARL Numbers" after the Texas Archeological Research Laboratory at the University of Texas (Austin) which is responsible for bestowing the next available number to a reported site in a given county. Several abbreviations are used within the site descriptions. These include "STPs" for shovel test pits, "TPs" for test pits, "BHTs" for backhoe trenches, "bs" for below surface, and "surf" for surface.

41DN2

Map Quad
Elevation above MSL
Vegetation
Previous Research

Green Valley 7.5', #3397-141
530-540 ft
Grass, brush
Stephenson 1948b, Newman and Brown 1990

Cultural Affiliation
Size

Late Prehistoric II, Historic
Area 1 30x30 m
Area 2 20x40 m
Area 3 10x10 m

Recommendations

No further work

Description: Site 41DN2 is situated at the interface of the sandy uplands and the floodplain of the Elm Fork of the Trinity River (Figure 4.1). Stephenson (1948b) originally recorded the site. He reported the recovery of several pottery sherds of which some appeared to be of Mexican and Mississippian types. Personnel from University of North Texas (UNT) relocated the site on the occurrence of a diffuse surface scatter of lithic debris on rodent backdirt piles (Newman and Brown 1990). Subsequent testing indicates the site environs have not been conducive to the preservation of shallowly buried cultural remains. The upper portions of the interface have been subjected to extensive erosion, while the lower portions have been subjected to alluvial and colluvial processes. Because the site occurs on private and public lands, it was divided into three areas for testing (Figure 4.2).

Testing: Area 1, located on public lands southeast of Area 2 and south of Area 3 (Figure 4.2), is situated on a sandy rise that contained a light surface scatter of prehistoric and historic material (Figure 4.3). Testing in Area 1 consisted of several widely dispersed BHTs and five 1x1-m TPs. The TPs were excavated to depths 40-60 cm bs. Very little prehistoric material was recovered. Artifacts recovered included both prehistoric and historic debris (Table 4.2). The only diagnostic prehistoric artifact from Area 1 was a Perdiz arrowpoint from TP 3, level 3.

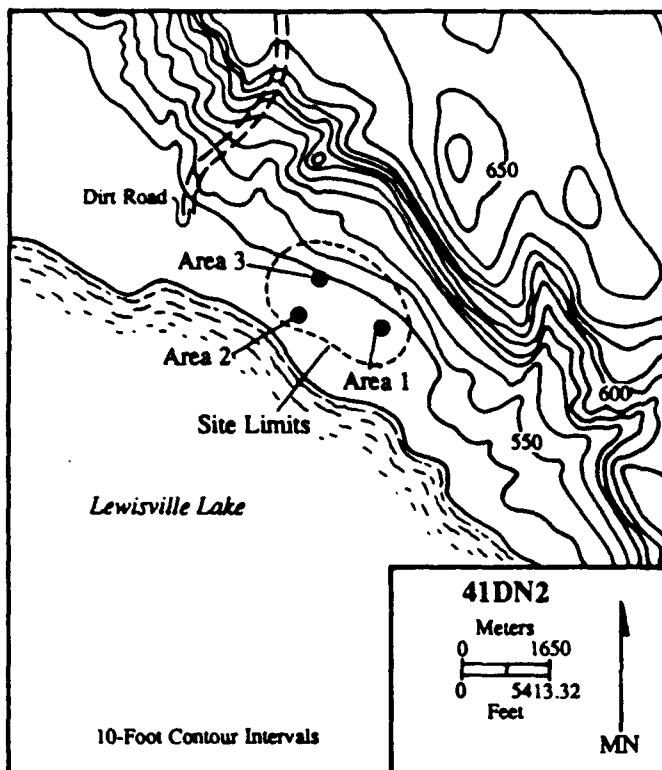


Figure 4.2 Map showing the general location of the three areas at site 41DN2.

A plowzone was discernible 20-30 cm below surface (bs) (Figure 4.4). Historic debris from Area 1 included plastic bottle fragments, whiteware dating to the latter part of the nineteenth and early part of the twentieth centuries, bottle glass, and horse/mule shoe nails. Results from testing indicated Area 1 has mixed prehistoric and historic components (Figure C.1a).

Table 4.2

Artifacts Recovered From Site 41DN2, Area 1¹

TP	Material			Artifact Categories							
	C	Q	T	AP	DP	Ce	ID	UB	BB	S	H
1	2	3						1			10
2	4	5					3	5			14
3	2	7		1							5
4	2	5						2	2		3
5	3	1						1	1		1
Surf.	4	2									

¹ C=Chert; Q=Quartzite; T=Tool; AP=Arrow point; DP=Dart point; Ce=Ceramic; ID=Identified bone; UB=Unburned bone; BB=Burned bone; S=Shell; H=Historic.

Area 2, located on public lands northwest of Area 1 and west of Area 3 (Figures 4.2 and 4.5), is situated on a gentle sandy slope that is bisected north/south by a fence marking the COE boundary. This area was chosen for testing because it was adjacent to Area 3, located on private land, which did have a light surface scatter of prehistoric cultural remains. Testing in Area 2 consisted of three BHTs and five 1x1-m TPs (Figure 4.5). The TPs were excavated to depths 60-80 cm bs.

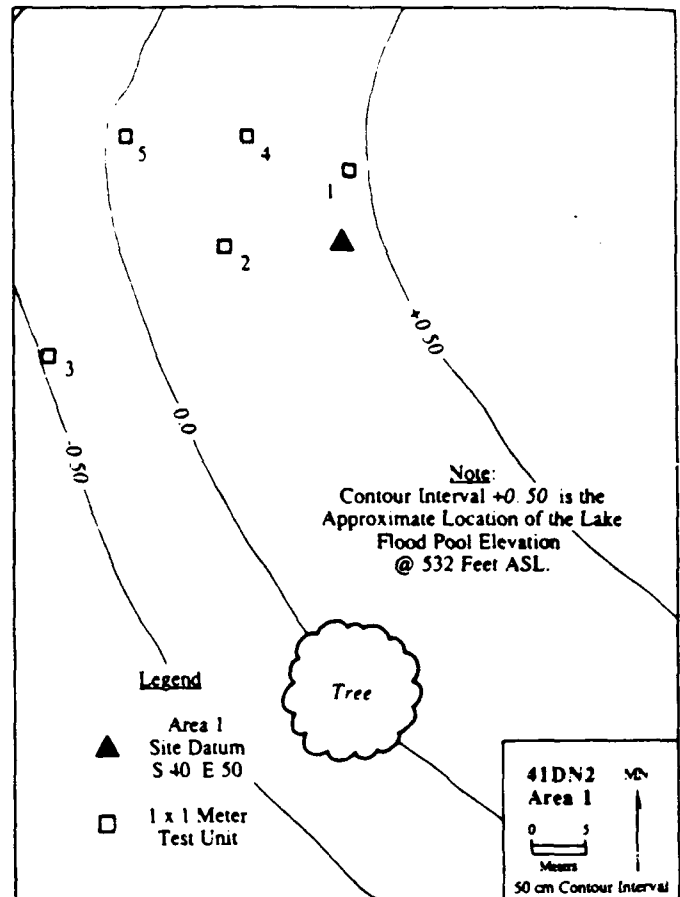


Figure 4.3 Map of Area 1, 41DN2. (Contour line +0.50 approximates the 532-ft flood pool elevation.)

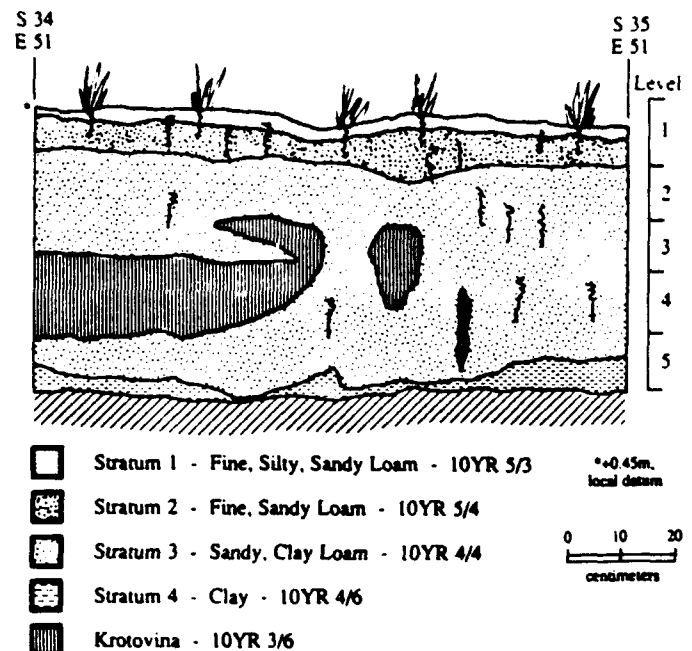


Figure 4.4 Profile of east wall of TP 1, Area 1, site 41DN2.

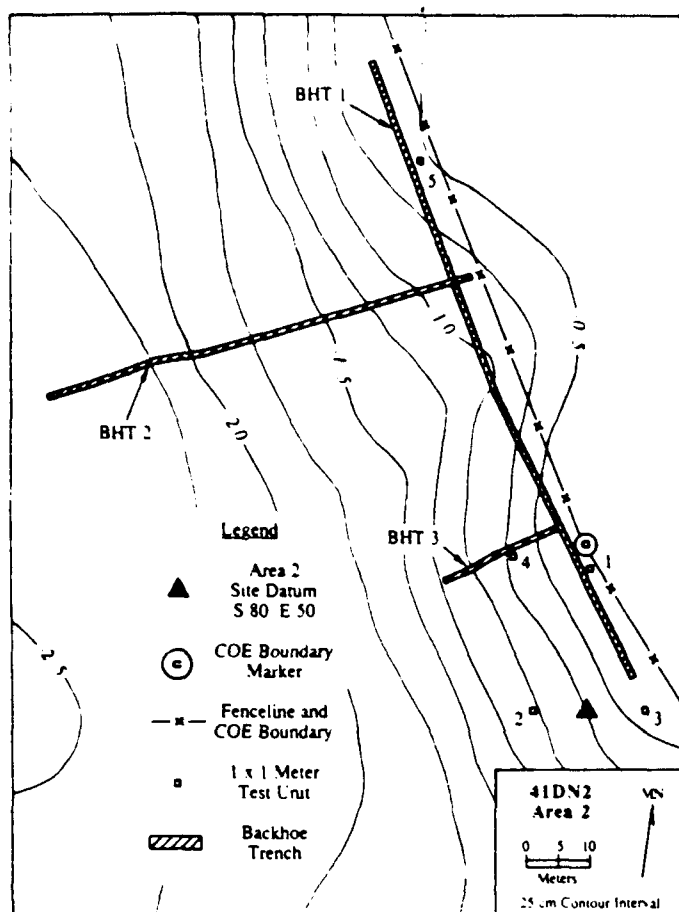


Figure 4.5 Map of Area 2, 41DN2. (Contour line -1.0 approximates the 532-ft flood pool elevation.)

Most of the artifacts, primarily flakes, were from depths greater than 20 cm bs. The top of a buried plowzone was 20-50 cm bs (Figure 4.6). Diagnostic prehistoric artifacts consisted of a Fresno arrowpoint from TP 4 level 3 (Figures 4.7 and C.1b). Other stone tools included an endscraper, one uniface, two cores, and four utilized flakes (Table 4.3). Material above the buried plowzone is attributed to alluvial/colluvial deposition.

Table 4.3

Artifacts Recovered From Site 41DN2, Area 2¹

TP	Material		Artifact Categories								
	C	Q	T	AP	DP	Ce	ID	UB	BB	S	H
1	5	5						1	1		
2	4	3						3			
3	5	12	1								
4	9	6	5	2							
5			1								
BHT			1								
Surf.			1								

¹ C=Chert; Q=Quartzite; T=Tool; AP=Arrow point; DP=Dart point; Ce=Ceramic; ID=Identified bone; UB=Unburned bone; BB=Burned bone; S=Shell; H=Historic.

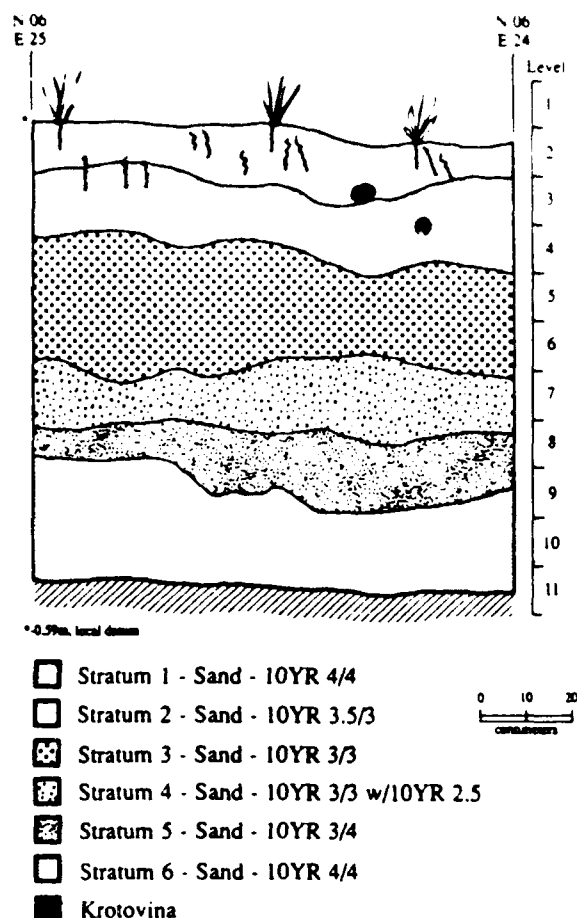


Figure 4.6 Profile of the south wall of TP 5, Area 2, site 41DN2.

Results of testing indicated cultural remains in Area 2 occurred in recent alluvium/colluvium and a buried plowzone. The cultural remains are no longer in primary context.

Area 3, which is on private land (Figures 4.2 and 4.8), is located north of Area 1 and east of Area 2. This part of the site occurs on a gentle sandy slope. Parts of the field are heavily dissected by erosion. This area of the site has a very thin surface scatter of lithic debris. Testing in Area 3 consisted of ten 1x1-m TPs excavated to depths 40-110 cm bs. Eight contiguous TPs (TPs 2, 4-10) were placed in an area that appeared to contain remains in primary context. No BHTs were excavated because of landowner constraints.

Results of testing in TP 2 indicated the uppermost 30-40 cm was recent colluvium with a mixture of both prehistoric and historic material. Consequently, the uppermost 30 cm was discarded from the adjacent TPs. Artifacts occurred at a low frequency (Table 4.4). The deposits suggested a series of colluvial episodes (Figure 4.9).

Prehistoric diagnostic artifacts recovered from Area 3 included a Bonham arrowpoint from TP 5, level 5 (Figures 4.7 and C.1c) and the base of a second arrowpoint. Twelve pottery sherds include a portion of a flat-bottomed vessel. All sherds have plain exteriors and interiors. Most of the pottery appears to be tempered with shell, but other tempering materials include sand/shell and sherd/shell/bone. Some have no discernible temper. Other tools include cores, a resharpening flake, a retouched flake, and utilized flakes. Historic items recovered were pieces of wire.

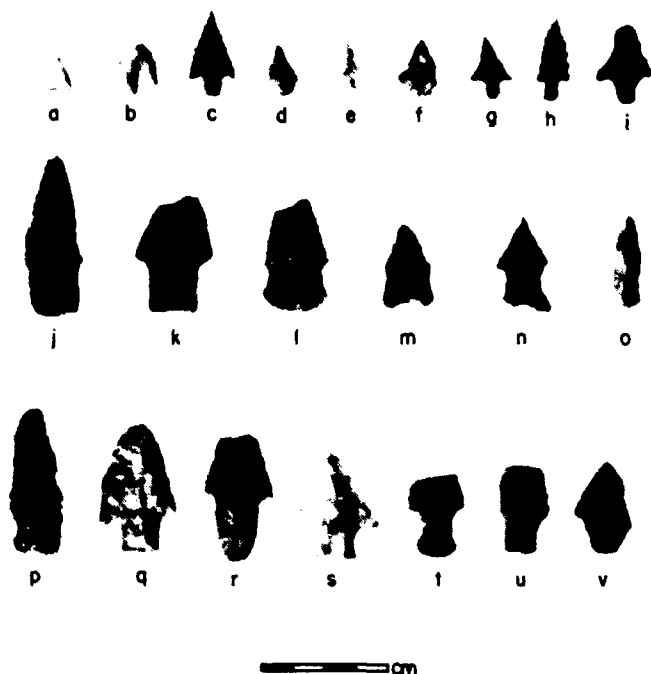


Figure 4.7 Projectile Points from 41DN2, 41DN20, and 41DN26. Key (site #/TP #/level #): a. 2/4/3; b. 2/3/3; c. 2/5/5; d. 26/10/5; e. 26/9/2; f. 26/10/3; g. 26/7/5; h. 26/BHT 1; i. 26/1/1; j. 20/4/9; k. 20/6/6; l. 20/2/9; m. 20/5/8; n. 20/2/7; o. 20/2/7; p. 26/4/8; q. 26/10/7; r. 26/4/10; s. 26/1/3; t. 26/BHT; u. 26/4/7; v. 26/8/2.

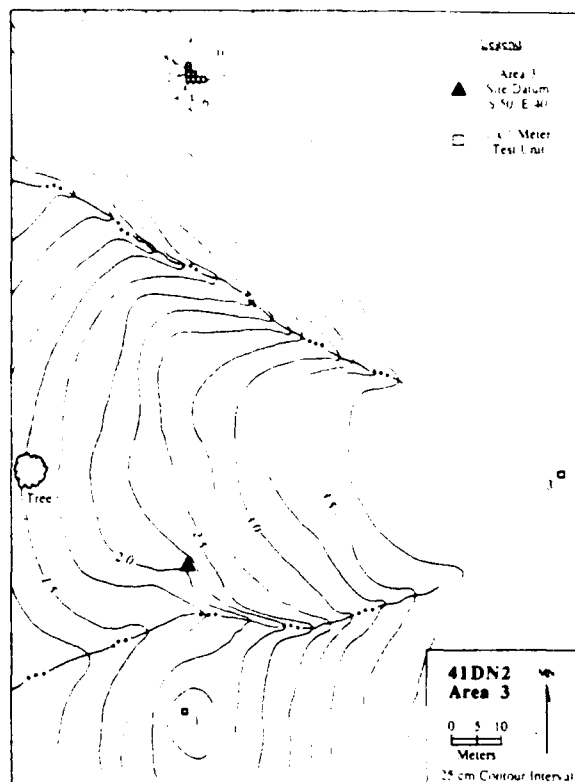


Figure 4.8 Map of Area 3, 41DN2. (Contour line 3.0 approximates the 532-ft flood pool elevation.)

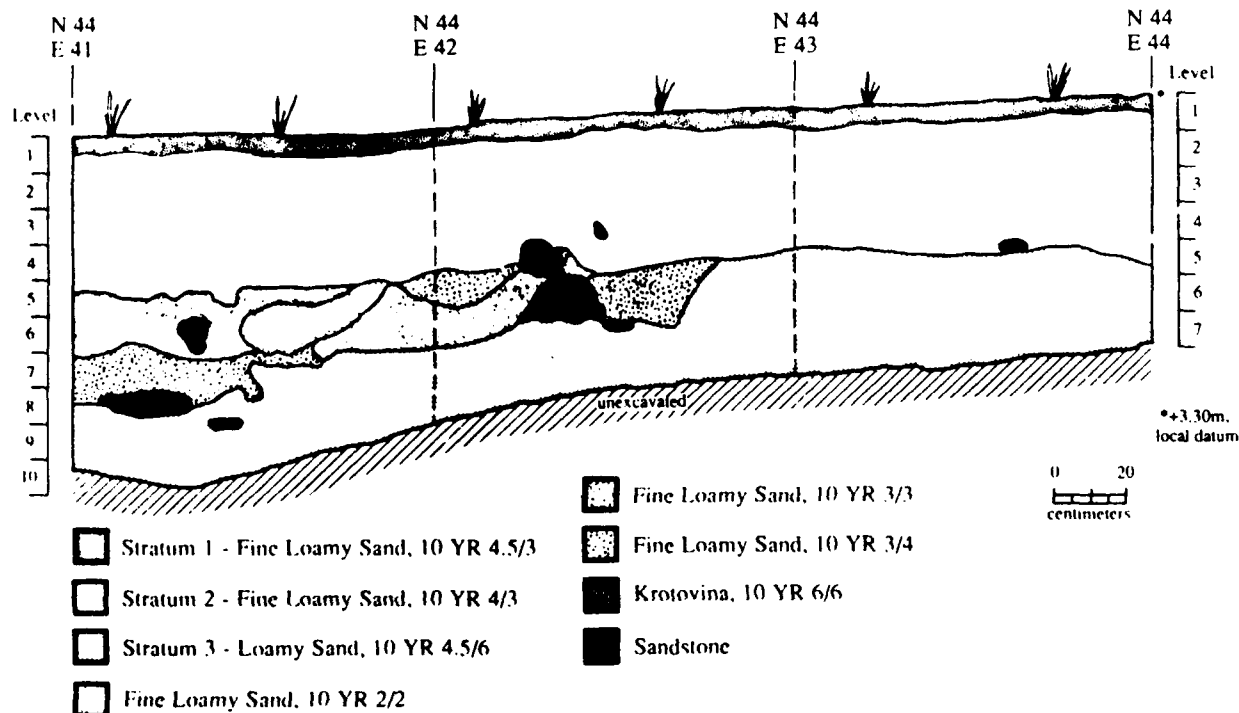


Figure 4.9 Profile of test pits, Area 3, site 41DN2.

Table 4.4

Artifacts Recovered From Site 41DN2, Area 3⁷

TP	Material		Artifact Categories								
	C	Q	T	AP	DP	Ce	ID	UB	BB	S	H
1		1									
2	4	4				1				2	
3	2	4									
4	3	2				3		1			
5	5	7	1	2		3		3	1	1	
6	1	3				2				1	8
7	7	1				3					
8	7	3						1			
9	3	1									1
10	25	6						1			1
Surf.	2	2									

⁷ C=Chert; Q=Quartzite; T=Tool; AP=Arrow point; DP=Dart point; Ce=Ceramic; ID=Identified bone; UB=Unburned bone; BB=Burned bone; S=Shell; H=Historic.

A total of 27 bones were recovered from the three areas tested. The identified bones were from Area 1, TP 2, level 4 and consist of pig foot bones that are associated with the historic occupation of this portion of the site.

Recommendations: The site has been severely disturbed. Prehistoric remains in primary context, if they occur, are on private land above the flood pool. Therefore, no further work is recommended for this site, nor is it recommended for nomination to the National Register of Historic Places.

41DN4

Map Quad Little Elm 7.5', #3396-223
 Elevation above MSL 535-550 ft
 Vegetation Grass
 Previous Research Stephenson 1948b, 1949, 1950; Nunley 1973; Newman and Brown 1990
 Cultural Affiliation Late Archaic, Late Prehistoric I, Late Prehistoric II
 Size 60x60m
 Recommendations No further work at this time

Description: Site 41DN4 is located on a high upland sandy ridge at the confluence of Little Elm and Running Branch creeks (Figure 4.1). The site (Figure 4.10) was originally reported by Stephenson (1948b, 1949, 1950) as having a dense surface scatter of projectile points, scrapers, and pottery. The site was relocated by Nunley (1973) who noted a midden stain with associated shell, bone, lithic debris, scrapers, drills, cores, and pottery.

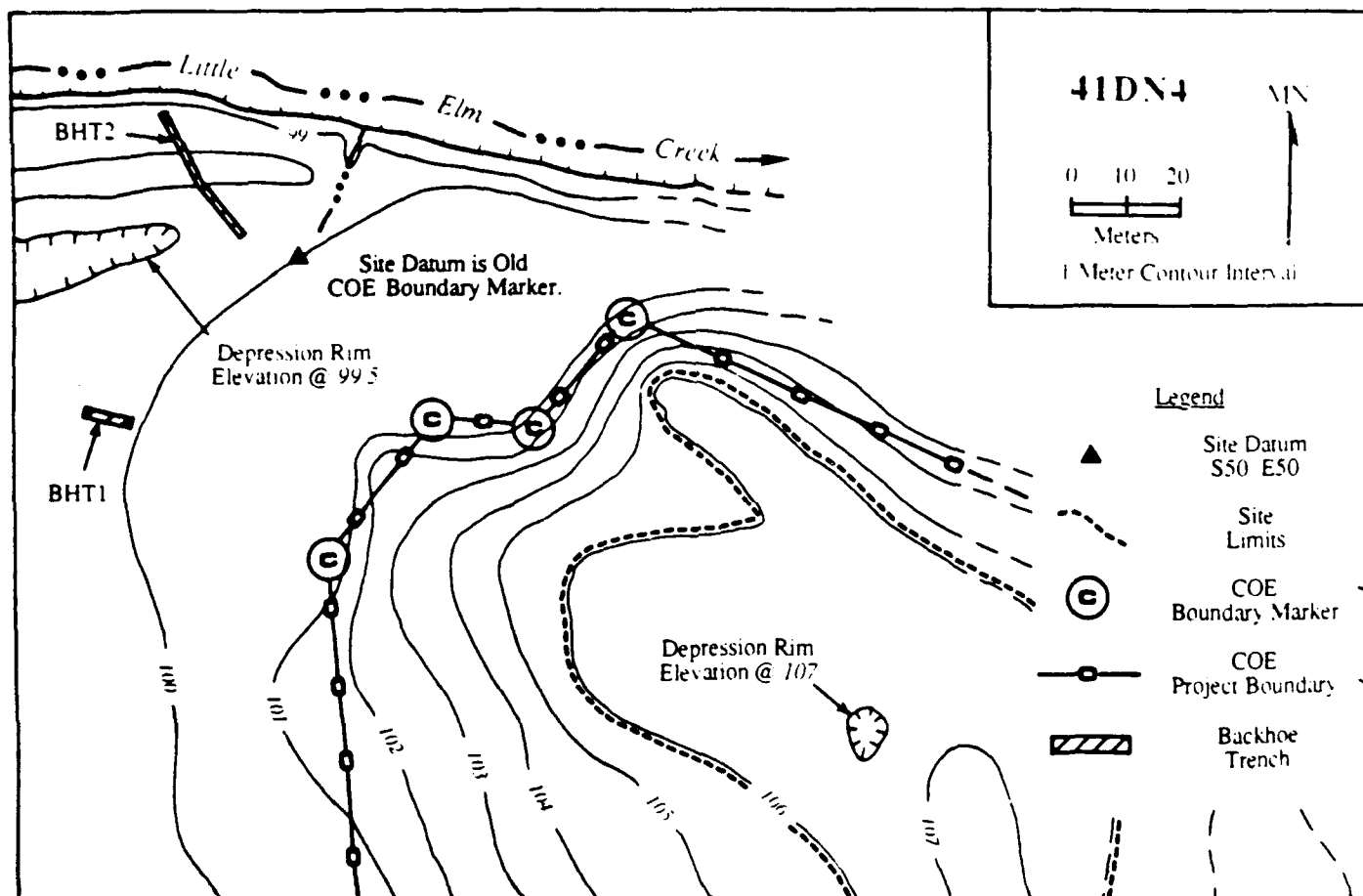


Figure 4.10 Map of site 41DN4. (Contour line 101 approximates the 532-ft flood pool elevation.)

Personnel from UNT relocated the site and excavated 17 STPs placed along three transects. A large number of artifacts were collected from the surface and from the STPs (Newman and Brown 1990). Reexamination of the site indicated the entire site occurs on private land.

Testing: Testing consisted of two BHTs placed on the floodplain of Little Elm Creek. The floodplain, which is property of the COE, is northwest of the ridge upon which the site is located. The BHTs were excavated as close as possible to the COE boundary. No cultural remains were discerned in the BHTs. The site appears to occur only on the highest part of the sandy ridge which is private land. The landowner would not permit any form of testing on his property.

Recommendations: Because no evidence of cultural remains was noted on public lands, no further work is recommended for 41DN4 at this time. If, however, the site comes under the jurisdiction of the COE in the future, it would be worthwhile to conduct formal investigations. Given the absence of formal testing on the site, 41DN4 is not recommended for nomination to the National Register of Historic Places at this time.

41DN20

Map Quad	Little Elm 7.5', #3396-223
Elevation above MSL	520-530 ft
Vegetation	Grass
Previous Research	Nunley 1973; Newman and Brown 1990
Cultural Affiliation	Early Archaic, Middle Archaic
Size	20x50m
Recommendations	Excavation

Description: Site 41DN20 is located on a sandy terrace slope at its interface with the Little Elm Creek floodplain (Figure 4.1). The site was originally reported during the Nunley (1973) survey as having a midden stain with associated fire-cracked rock (FCR), bone, and lithic debris. Personnel from UNT relocated the site. Some of the eighteen STPs placed along three transects yielded lithic debris. The COE boundary traverses the center of the site in a north-south direction with the western part occurring on private land.

Testing: Testing consisted of four BHTs and six 1x1-m TPs (Figure 4.11). TPs were excavated to depths of 90-140 cm bs. Four TPs were contiguous, forming a 2x2-m unit. A thin darkened stain was observed in BHT 1 and the 2x2-m unit (Figure 4.12). Results of testing indicated the stain may not be cultural since most artifacts occurred stratigraphically below it. Matrix from levels 5-13 of the northwest 50x50-cm quadrant of TP 5 was fine screened.

The artifact assemblage consisted almost entirely of lithic debris and stone tools. TPs yielded 10-20 pieces of chert and quartzite debitage from each 10-cm level (Table 4.5). Bottle glass was recovered from the fine-screened matrix of TP 5, level 12 (Figure C.21).

Projectile points include (Figure 4.13):

TP 2,	level 7:	Fairland/Gower dart/spear point
		Refugio dart/spear point
	level 9:	Trinity/Godley dart/spear point

TP 4,	level 3:	base of dart/spear point
	level 9:	Morrill/Gary dart/spear point

TP 5,	level 8:	Gower dart/spear point
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TP 6,	level 6:	Bulverde/Morrill dart/spear point
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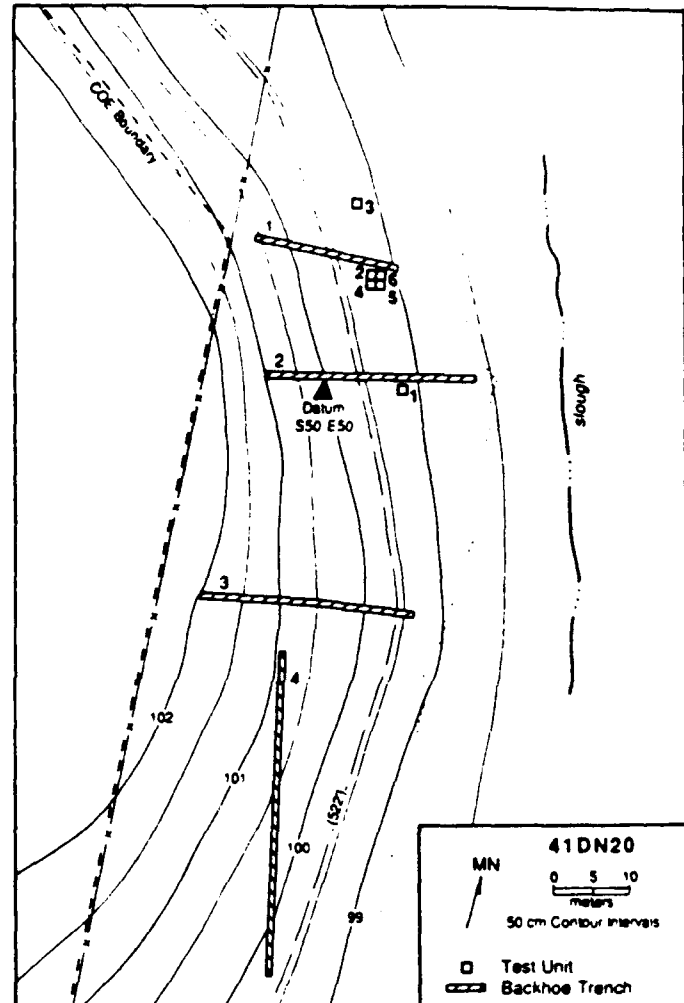


Figure 4.11 Map of site 41DN20.

Chipped stone tools include retouched flakes, utilized flakes, a sidescraper, a stemmed knife, and bifacially flaked preforms. The artifact assemblage suggested Early to Late Archaic occupations.

The site location, on a sandy slope, has not been conducive to preservation of organic remains. Results of testing indicated a very low occurrence of preserved faunal and floral remains. Only three pieces of scrap bone were recovered from five test units at 41DN20.

Recommendations: Because of the antiquity of the site, it is recommended that a larger sample of remains be obtained by excavation. A study of lithic technostylistic patterns could be undertaken to determine patterns of lithic reduction, style, and uses of local versus nonlocal raw materials, thus addressing research hypotheses in the Research Design (Ferring and Lebo 1988).

Table 4.5

Artifacts Recovered From Site 41DN20^{1,2}

TP	Material		Artifact Categories								
	C	Q	T	AP	DP	Ce	ID	UB	BB	S	H
1	45	60									
2	45	53	1		3						
3	52	88	3					1			
4	53	57	5		2						
5	86	57	5		1		1	1	1		1
6	35	50	3		1						

¹ C=Chert; Q=Quartzite; T=Tool; AP=Arrow point; DP=Dart point; Ce=Ceramic; ID=Identified bone; UB=Unburned bone; BB=Burned bone; S=Shell; H=Historic.

² Counts include material recovered from fine-screened samples.

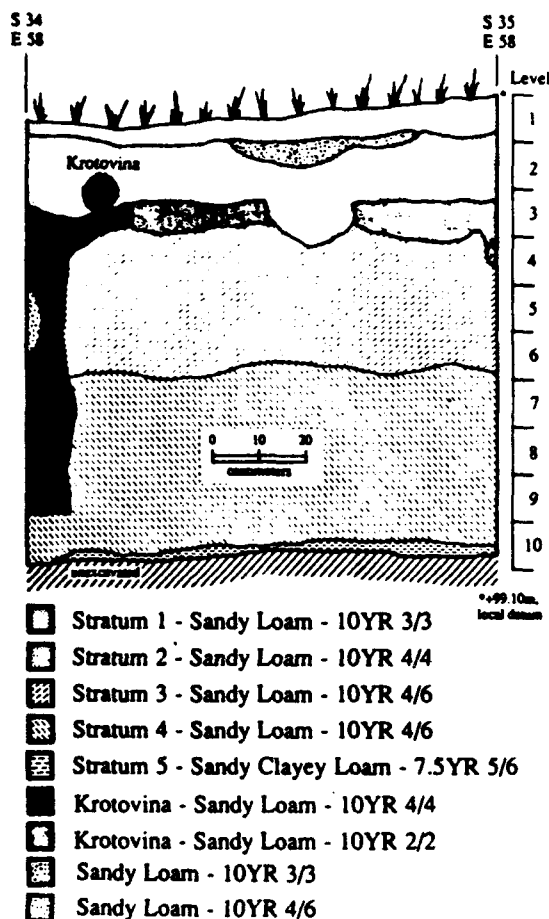


Figure 4.12 Profile of the east wall of TP 6, 41DN20.

The context and topographic setting of the site requires geomorphic study of its formation processes. The occurrence of bottle glass from TP 5, level 12 needs to be accounted for in terms of site formation processes. A detailed geomorphic study may lead to better insight concerning the general paucity of known Middle Archaic sites in the region. Therefore, the site is recommended for nomination to the National Register of Historic Places.

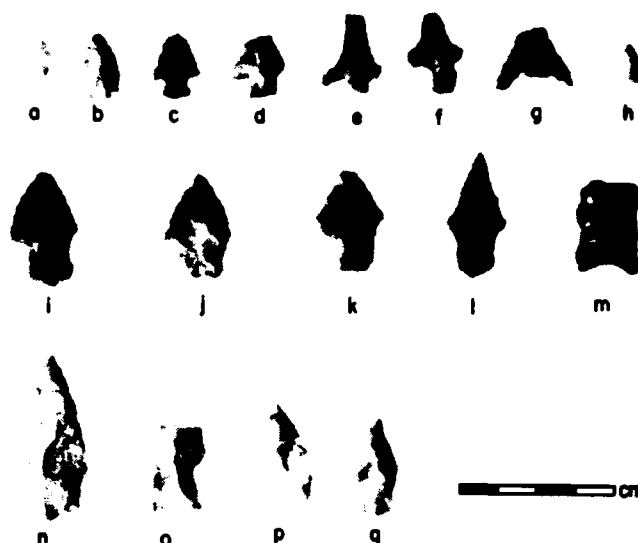


Figure 4.13 Projectile points from 41DN20, 41DN27, 41DN37, and 41DN40. Key (site #/TP #/level #): a. 20/6/3; b. 27/8/2; c. 27/6/3; d. 27/2/1; e. 27/2/3; f. 27/3/3; g. 41DN27; h. 40/2/11; i. 27/5/4; j. 27/8/6; k. 27/1/5; l. 27/1/2; m. 37/1/2; n. 40/4/6; o-q. 41DN40.

41DN21

Map Quad
Elevation above MSL
Vegetation
Previous Research

Little Elm 7.5', #3396-223
530-550 ft
Grass
Nunley 1973; Newman and Brown 1990
Cultural Affiliation
Size
Recommendations

Description: Site 41DN21 is located on a moderate sandy slope of an upland ridge (Figure 4.1). The site is adjacent to the floodplain of Running Branch Creek and is in an area characterized by prominent upland ridges and associated slopes. The site was originally reported during the Nunley (1973) survey. Personnel from UNT relocated the site, and a surface grab collection was made. Some of the 22 STPs placed along six transects yielded lithic debris and flecks of charcoal (Newman and Brown 1990).

Testing: Testing consisted of two BHTs and one 1x1-m TP (Figure 4.14). The TP was excavated 100 cm bs (Figure 4.15) at which depth the water table was encountered. A few flakes were recovered from each level (Figure C.2b) (Table 4.6). The higher elevations of the site (i.e., 530-540 ft AMSL) have been disturbed by erosion and colluvial/aeolian processes. No tools or organic remains were observed. No diagnostic artifacts were recovered. The only possible tool was a utilized flake from BHT 2.

Recommendations: Site 41DN21 occurs on private land. The absence of cultural integrity of the artifacts and the low artifact density indicates the site does not warrant further investigation. The site is not recommended for nomination to the National Register of Historic Places.

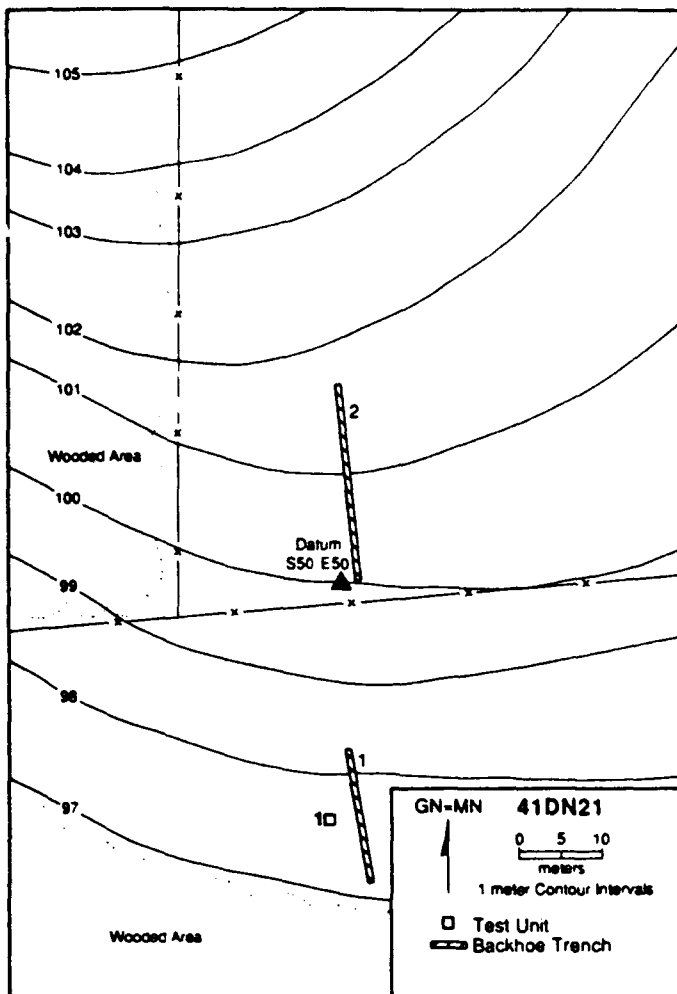


Figure 4.14 Map of site 41DN21.

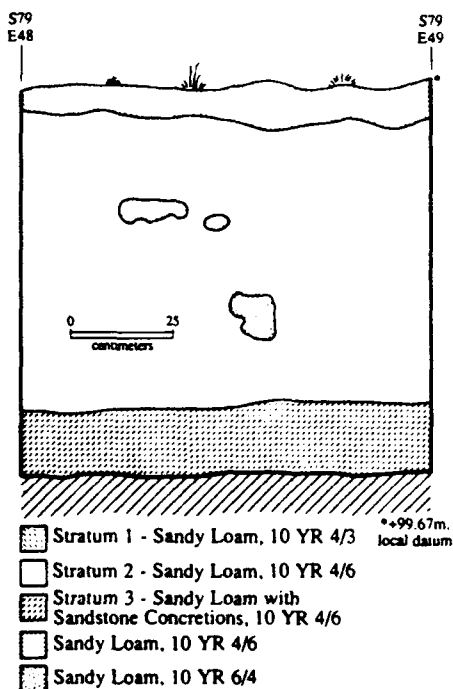


Figure 4.15 Profile of the north wall of TP1, 41DN21.

Table 4.6

Artifacts Recovered From Site 41DN21¹

TP	Material		Artifact Categories								
	C	Q	T	AP	DP	Ce	ID	UB	BB	S	H
1	11	15									
BHT 2			1								

¹ C=Chert; Q=Quartzite; T=Tool; AP=Arrow point; DP=Dart point; Ce=Ceramic; ID=Identified bone; UB=Unburned bone; BB=Burned bone; S=Shell; H=Historic.

41DN26

Map Quad	Little Elm 7.5', #3396-223
Elevation above MSL	530-550 ft
Vegetation	Grass
Previous Research	Nunley 1973; Newman and Brown 1990
Cultural Affiliation	Late Archaic, Late Prehistoric I, Late Prehistoric II
Size	40x50 m
Recommendations	Excavation

Description: Site 41DN26 is located on a gentle sandy slope adjacent to the Little Elm Creek floodplain (Figure 4.1). The channel of Little Elm Creek borders the north edge of the site. The site was originally recorded during the Nunley (1973) survey and was assigned to the Henrietta focus based on the recovery of pottery, projectile points, flakes, and a midden-stained soil. The site was relocated by personnel from UNT, and a surface grab collection was made. A few of the 14 STPs placed along three transects yielded subsurface artifacts. The site has been disturbed by rodent burrowing and past cultivation activities (Newman and Brown 1990).

Testing: Testing consisted of four BHTs and 11 1x1-m TPs (Figure 4.16). TPs were excavated to depths 50-150 cm bs (Figure 4.17). Cultural remains, occurring primarily in the uppermost 60 cm (Figure C.2c), included large quantities of lithics and fauna in addition to some ceramics (Table 4.7). The prehistoric assemblage represents a Late Prehistoric occupation with a possible Late Archaic component occurring at the contact between the bedrock and overlying deposits.

Projectile points recovered include:

- TP 1, level 1: Alba arrowpoint
- level 3: Edgewood dart/spear point
- level 4: broken arrowpoint
- TP 4, level 7: Dallas dart/spear point
- level 8: Trinity dart/spear point
- level 10: # 1 Gary dart/spear point
- TP 5, level 4: broken arrowpoint
- TP 7, level 5: Hays arrowpoint
- TP 8, level 2: # 8 Gary dart/spear point
- TP 10, level 1: Bonham arrowpoint

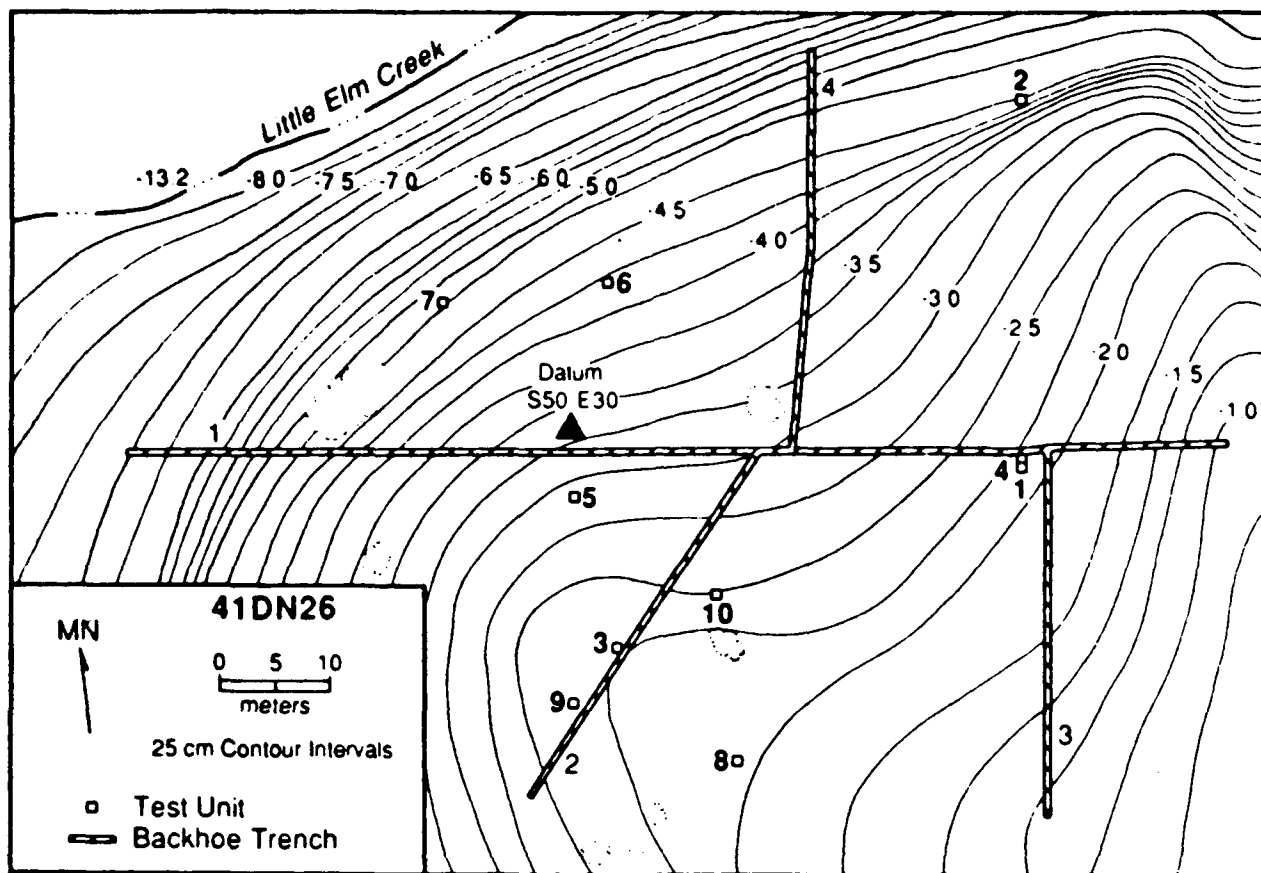


Figure 4.16 Map of site 41DN26.

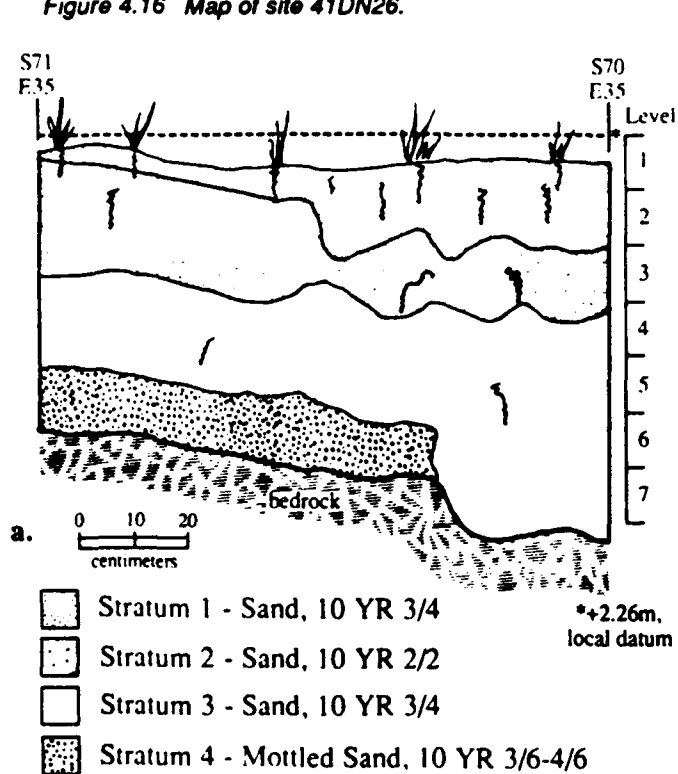


Figure 4.17a Profile of west wall of TP 3, 41DN26.

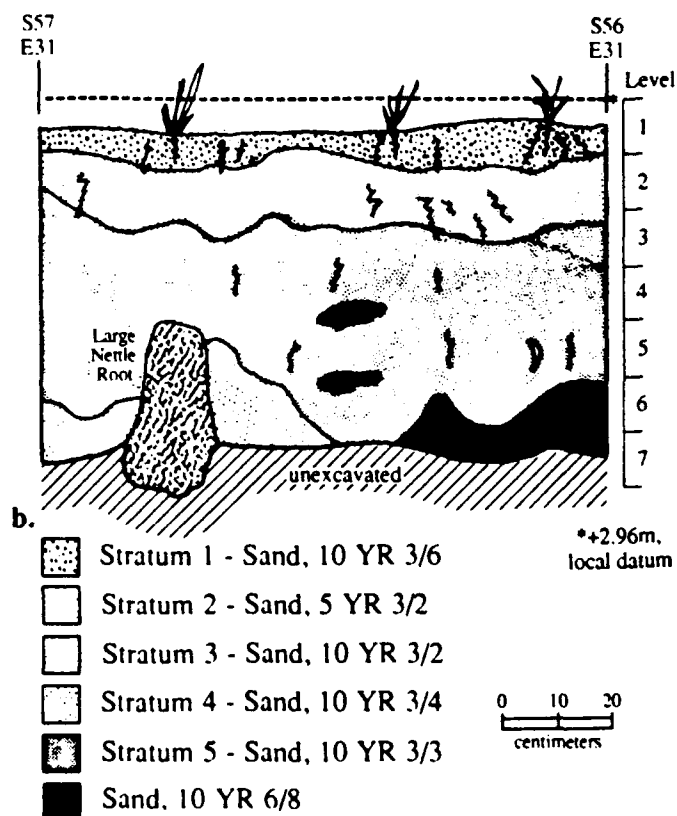


Figure 4.17b Profile of west wall of TP 5, 41DN26.

- level 3: Alba arrowpoint
 level 5: Clifton arrowpoint
 level 7: Bulverde dart/spear point

A total of 68 lithic tools were recovered during testing (Table 4.7). One specimen from BHT 2 was a complete basin-shaped sandstone metate. The metate was in an area that appeared to have a midden stain. Lithic tools consisted of end scrapers, knives, drills, retouched flakes, and utilized flakes. Eight pottery sherds were recovered, all of which are Nocona Plain. The sherds have plain exteriors and interiors. Seven sherds are tempered with crushed shell, and one is tempered with sand.

Historic items consisted of skeet fragments, a 22-cal. lead bullet, a piece of barbed wire, and bottle glass. This material occurred within the discernible plowzone.

Table 4.7

Artifacts Recovered From Site 41DN26¹

TP	Material		Artifact Categories								
	C	Q	T	AP	DP	Ce	ID	UB	BB	S	H
1	31	71	4	2	1		4	9			
2	33	61	1				1	6	13		1
3	22	63	6				23	68	36	1	
4	25	37			3		1	7	2		
5	13	30	4	1			2	23	4		
6	43	94	10			2	40	151	40		
7	24	55	2	1			41	31	5	21	2
8	28	53	8		1	1	1	25	31		
9	5	31	3			4	6	15	4	1	
10	27	50	13	3	1		3	10	15		2
11	8	12	2				8	22	6	1	
BHT	1	1	15	1	3	3	3	6	2	1	
Surf.	29	53									

¹ C=Chert; Q=Quartzite; T=Tool; AP=Arrow point; DP=Dart point; Ce=Ceramic; ID=Identified bone; UB=Unburned bone; BB=Burned bone; S=Shell; H=Historic.

A total of 663 bones, of which 21% were identified, were recovered during testing (Table 4.8). The identified vertebrates consist primarily of turtle shell fragments (44%) and large mammal elements (44%). At least three large mammals are represented in this assemblage: white-tailed deer, pronghorn, and possibly bison. Only teeth and foot bones were positively identified as deer and were recovered most frequently from TP 6. The remainder of the elements listed in Table 4.8 as deer compare well to white-tail deer but are difficult to distinguish in fragmentary condition from remains of pronghorn, a similar ungulate. These elements represent nonmeaty body parts such as skull and lower legs, which is suggestive of on-site butchering. The positively identified pronghorn element is also a foot bone. Elements larger than deer/pronghorn compare well in size with bison but are listed in Table 4.8 as cow/bison/elk because of their fragmentary state and lack of diagnostic features.

Of the small animals in the assemblage, the rodents are probably intrusive. The rabbits, however, are generally considered small game when recovered in an archaeological context. Only the single element (a radius) from the larger lagomorph had been burned; no cut marks were noted. The

canid element was too fragmentary to assess species but may indicate the presence of domesticated dog. The fish remains are unburned and may be incidental to the cultural remains.

Table 4.8

Identified Vertebrates from 41DN26

Taxon	Provenience	NISP ¹
Gar (<i>Lepisosteus</i> sp.)		
	BHT	1
Indeterminate fish		
	TP 7, Lv. 6	1
Box turtle (<i>Terrapene</i> sp.)		
	TP 3, Lv. 3	1
	" Lv. 8	1
	TP 6, Lv. 9	1
	" Lv. 11	3
	TP 7, Lv. 6	1
	" Lv. 7	1
	TP11, Lv. 3	1
Indeterminate turtle		
	TP 3, Lv. 3	2
	" Lv. 4	1
	" Lv. 6	2
	TP 6, Lv. 5	3
	" Lv. 7	3
	" Lv. 8	1
	" Lv. 9	1
	" Lv. 10	7
	" Lv. 11	1
	TP 7, Lv. 3	2
	" Lv. 5	6
	" Lv. 6	12
	" Lv. 7	3
	" Lv. 8	3
	" Lv. 9	2
	TP 8, Lv. 4	1
	TP 9, Lv. 1	2
	" Lv. 3	1
Cottontail (<i>Sylvilagus floridanus</i>)		
	TP 6, Lv. 7	1
	" Lv. 9	1
Swamp/Jackrabbit (Lagomorpha)		
	TP 3, Lv. 3	1
Pocket gopher (<i>Geomys bursarius</i>)		
	TP 7, Lv. 6	1
Pocket mouse (<i>Perognathus</i> sp.)		
	TP 7, Lv. 7	2
Dog/Coyote (Canidae)		
	TP 6, Lv. 10	1
White-tailed deer (<i>Odocoileus virginianus</i>)		
	TP 1, Lv. 7	1
	TP 3, Lv. 1	1
	" Lv. 4	1
	" Lv. 5	6
	" Lv. 6	3
	" Lv. 7	1

	TP 5,	Lv. 1	1
	TP 6,	Lv. 6	1
	"	Lv. 7	1
	"	Lv. 9	2
	"	Lv. 10	6
	"	Lv. 11	2
	"	Lv. 12	2
	TP 7,	Lv. 3	1
	"	Lv. 4	1
(tool)	"	Lv. 5	1
	"	Lv. 6	1
	"	Lv. 8	2
	TP 9,	Lv. 3	1
	TP10,	Lv. 3	1
(tool)	"	Lv. 4	1

Pronghorn (*Antilocapra americana*)

TP 6,	Lv. 7	1
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Cow/Bison/Elk (*Artiodactyla*)

TP 1,	Lv. 7	1
TP 5,	Lv. 4	1
TP 9,	Lv. 1	1
BHT	1	
TP10,	Lv. 6	1
TP11,	Lv. 2	4
"	Lv. 3	3
BHT	2	2

Large mammal

TP 1,	Lv. 7	1
"	Lv. 8	1
TP 2,	Lv. 8	1
TP 3,	Lv. 3	1
"	Lv. 4	1
TP 4,	Lv. 1	1
TP 7,	Lv. 8	1
TP 9,	Lv. 2	1
BHT	1	1
BHT	2	1

Medium mammal

TP 6,	Lv. 9	2
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1 NISP=Number of identified specimens.

Two small bone tool fragments were also recovered. They appear to have been manufactured from deer-size metapodials, and both are differentially burned. The site has potential to yield appreciable quantities of vertebrate food remains and additional indicators of bone tool manufacture and use. Mussel shell recovered includes 25 valves.

The prehistoric component has had minimal disturbance. There is a discernible plowzone (Figure 4.17) which is confined to the uppermost 20-25 cm. Rodent burrowing is evident. The excellent preservation of organic remains, in addition to a relatively high density of lithic and ceramic artifacts, makes 41DN26 one of the more important sites within the project area. The site can yield new information regarding the late prehistoric environment, faunal and floral resources available to the indigenous cultures, subsistence strategies and butchering patterns, charcoal for radiocarbon dates of associated material culture such as ceramic and projectile point styles, inter- and intrasite activity patterns, and elucidation of prehistoric social and trade networks based on lithic sources, projectile point styles and ceramic styles.

Recommendations: Results of testing at 41DN26 indicated the presence of a relatively well-preserved Late Prehistoric component. Organic remains are well preserved for acquiring faunal and botanical data and radiocarbon dates. Although no features were discerned during testing, it is likely that features occur within their primary context. The presence of large quantities of a diverse group of artifacts suggests a variety of activities were performed at the site. The authors believe 41DN26 can yield significant new information regarding the Late Prehistoric occupation and environment of northcentral Texas. Therefore, it is recommended that large-scale excavations be conducted at the site to recover a larger sample of Late Prehistoric data to answer questions addressed in the Research Design (Ferring and Lebo 1988). The site is recommended for nomination to the National Register of Historic Places.

41DN27

Map Quad	Little Elm 7.5', #3396-223
Elevation above MSL	530-540 ft
Vegetation	Grass, brush, trees
Previous Research	Nunley 1973; Newman and Brown 1990
Cultural Affiliation	Late Archaic, Late Prehistoric I, Late Prehistoric II, Historic
Size	50x80 m
Recommendations	Excavation

Description: Site 41DN27 is located on a sandy terrace slope near the Little Elm Creek floodplain (Figure 4.1). The creek is approximately 20 m north of the site. The site was originally recorded during the Nunley (1973) survey as having a midden-stain containing flakes, a dart point, bone, and historic debris. The site was relocated by personnel from UNT. A surface grab collection was made, and 15 STPs were placed along three transects, with several yielding subsurface materials. The site has been disturbed by rodent burrowing and past cultivation activities. The northern portion has been destroyed by a buried high pressure gas pipeline. The recovery of several historic items suggests a historic occupation has occurred on or near the vicinity of the site (Newman and Brown 1990).

Testing: Testing consisted of seven BHTs and ten 1x1-m TPs (Figure 4.18). TPs were excavated to depths 30-90 cm bs (Figures 4.19 and C.3a). In addition to the BHTs and TPs, a proton magnetometer survey was conducted over two 20x40-m areas of the site (Figure 4.20). Several subsurface magnetic anomalies were discerned, but much of the survey area was disrupted by the presence of the buried high pressure gas pipeline in the northern portion of the site.

Three features were discerned in the BHTs, and two were discerned during excavation of TPs. Of these five features, only three were partially excavated during testing. Feature 1, located in TP 4, levels 6, 7, and 8, was a rock hearth with associated burned earth. Feature 2, located in TP 6, level 7, was also a rock hearth. Feature 3, located in TP 5, level 3, was a dark soil stain that contained two human molars. An attempt was made to excavate a part of a fourth feature that was discerned in the east wall of BHT 1. The feature appeared to be a darkened basin-shaped stain that extended slightly into the B-horizon. TP 2 was placed near the feature, but no evidence of the feature was observed. The last feature appeared to be another small rock hearth in the north wall of BHT 4 near TP 5.

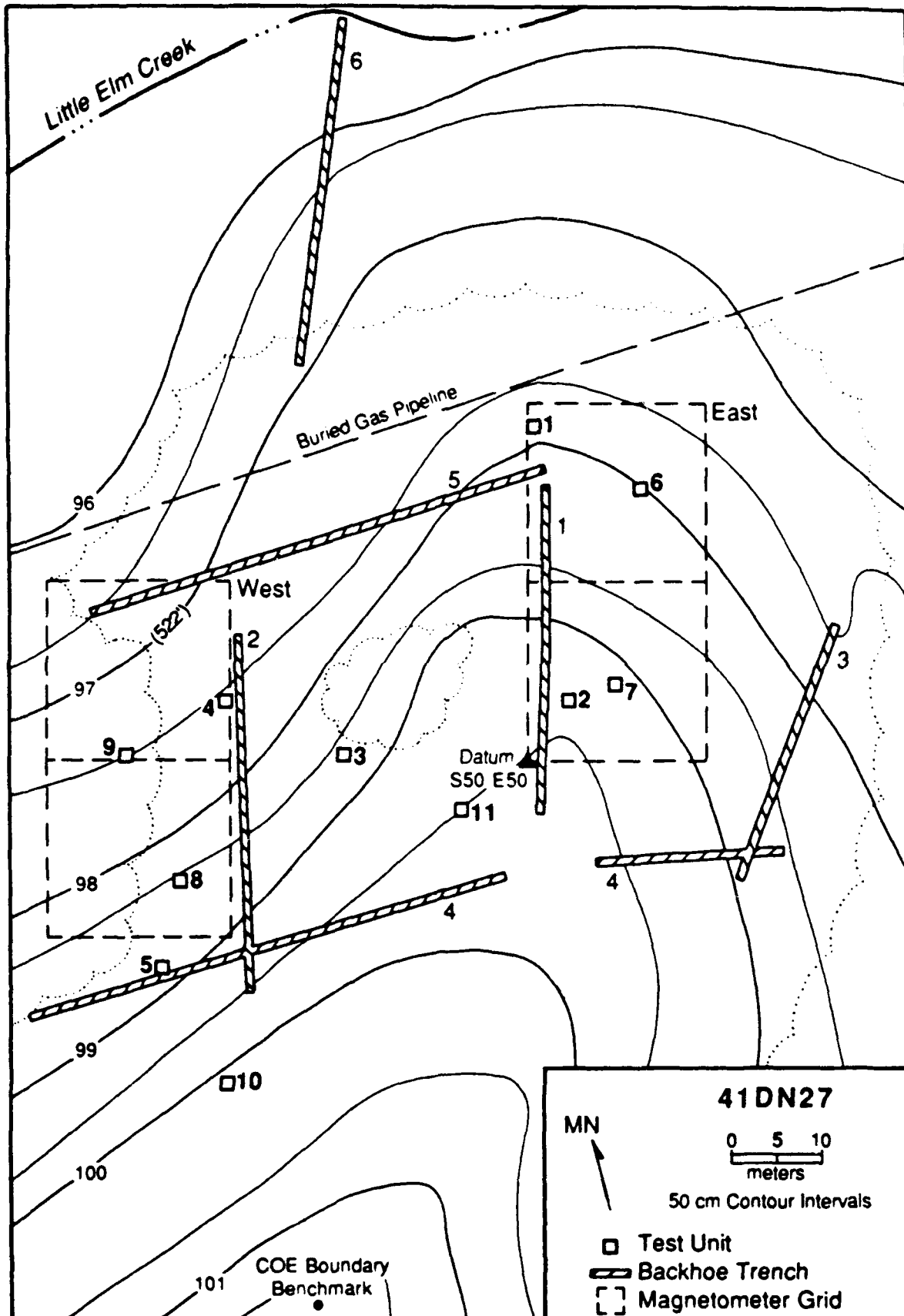


Figure 4.18 Map of site 41DN27.

This feature was not excavated during testing because it appeared to be similar to the other rock hearths.

Projectile points include:

TP 1, level 2: Kent dart/spear point
level 4: broken dart/spear point
level 5: Langtry/Carrollton dart/spear point

TP 2, level 1: Livermore arrowpoint
level 3: Livermore arrowpoint

TP 3, level 3: Livermore arrowpoint
level 4: broken dart/spear point

TP 4, level 6: Yarbrough dart/spear point
level 7: broken dart/spear point

TP 5, level 3: broken dart/spear point
level 4: Palmillas dart/spear point
level 5: broken arrowpoint

TP 6, level 3: Scallorn, Hays arrowpoints

TP 8, level 2: Fresno arrowpoint
level 6: Palmillas dart/spear point

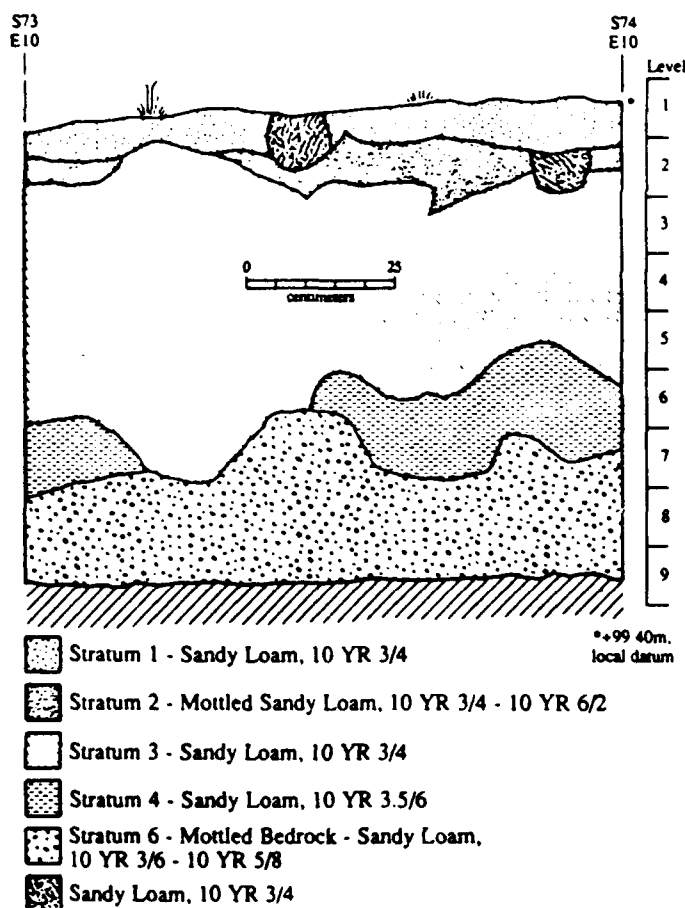


Figure 4.19 Profile of the east wall of TP 5, 41DN27.

A total of 16 stone tools were recovered during testing. One was from BHT 5, and the other 15 were from TPs (Table 4.9). Most of the tools were retouched flakes. Ceramics

include 19 sherds, all Nocona Plain, of which 13 are tempered with crushed shell, two are tempered with sand, one is tempered with sand and shell, and three have no discernible temper. All of the sherds have plain exteriors and interiors. One sherd, from TP 5, level 2, has a possible slip.

Historic artifacts recovered during testing included pieces of thin metal, wire, barbed wire, a 30-cal. shell, whiteware, bottle glass, and fiber and plastic wadding for shotgun shells. All of the historic items were recovered from levels 1, 2, and 3. The datable materials are assigned dates to the latter part of the nineteenth and early part of the twentieth centuries.

Table 4.9

Artifacts Recovered From Site 41DN27^{1,2}

TP	Material		Artifact Categories								
	C	Q	T	AP	DP	Ce	ID	UB	BB	S	H
1	30	53	1		4	1	8	52	15		4
2	50	62		2		2	19	56	11	2	2
3	36	71			1		13	76	7	1	1
4	27	104	3		2	1	13	123	24		3
5	23	72	1	1	1	6	14	112	11		3
6	38	111	4	2		2	12	131	15		2
7	20	54	3			2	2	16	11		1
8	22	69	3	1	1	1	9	93	12	2	32
9	6	18				3	1	12	5		3
10	3	3									4
BHT		1	1					10	3		
Surf.	2	3		1		1					

¹ C=Chert; Q=Quartzite; T=Tool; AP=Arrow point; DP=Dart point; Ce=Ceramic; ID=Identified bone; UB=Unburned bone; BB=Burned bone; S=Shell; H=Historic.

² Counts include material recovered from fine-screened samples.

A total of 881 bones were recovered of which 11% were identified (Table 4.10). For the vertebrate sample from TPs, 34% represent turtle, and 64% represent deer or larger mammals. The turtle remains are primarily shell fragments, and five are burned. White-tailed deer and bison are positively identified among the large mammalian remains. Deer and deer-size elements represent complete carcasses, with meaty and nonmeaty elements included, suggesting on-site butchering. No more than one individual of each species is indicated. Dismembering or filleting cut marks were noted on three elements.

Table 4.10

Identified Vertebrates from 41DN27

Taxon	Provenience	NISP ¹
Box turtle (<i>Terrapene</i> sp.)	TP 1, Lv. 6	1
	TP 2, Lv. 3	1
Indeterminate turtle	TP 1, Lv. 4	2
	Lv. 8	1
	TP 2, Lv. 2	1
	" Lv. 3	10
	" Lv. 4	1

	•	Lv. 5	1
	TP 3,	Lv. 3	1
	TP 4,	Lv. 3	1
	TP 5,	Lv. 3	1
	TP 6,	Lv. 2	3
	•	Lv. 3	1
	•	Lv. 5	1
	•	Lv. 6	3
	•	Lv. 7	2
	TP 7,	Lv. 1	1
	TP 8,	Lv. 3	1
Indeterminate rodent			
	TP 4,	Lv. 7	1
	•	Lv. 8	2
White-tailed deer (<i>Odocoileus virginianus</i>)			
	TP 1,	Lv. 3	1
	•	Lv. 6	1
	•	Lv. 7	1
	TP 2,	Lv. 4	1
	•	Lv. 6	1
	TP 3,	Lv. 3	1
	•	Lv. 5	2
	•	Lv. 6	2
	•	Lv. 7	3
	TP 4,	Lv. 6	2
	TP 5,	Lv. 4	1
	•	Lv. 8	1
	TP 6,	Lv. 2	1
	TP 8,	Lv. 3	4
	•	Lv. 6	1
	BHT A		3
	BHT 1		4
	BHT 4		1
Bison (<i>Bison bison</i>)			
	TP 4,	Lv. 6	1
	TP 8,	Lv. 7	1
Cow/Bison/Elk (<i>Artiodactyla</i>)			
	TP 2,	Lv. 3	1
	TP 3,	Lv. 1	1
	•	Lv. 2	1
	•	Lv. 5	1
	TP 4,	Lv. 2	3
	•	?	1
	TP 5,	Lv. 2	3
	•	Lv. 3	5
	•	Lv. 7	1
	TP 6,	Lv. 6	1
	TP 7,	Lv. 2	1
	TP 8,	Lv. 3	1
	TP 9,	Lv. 2	1
	BHT 1		1
Large mammal			
(1 tool)	TP 1,	Lv. 3	1
	TP 2,	Lv. 2	2
	TP 3,	Lv. 6	1
	TP 4,	Lv. 6	1
	•	Lv. 7	1
	TP 8,	Lv. 2	1
	BHT 4		1

1 NISP=Number of identified specimens.

Based on tooth wear, the deer was about 5 years old at death. The bison specimens consist of two second phalanges. Additional large mammal elements have been assigned to the cow/bison/elk category due to their nondiagnostic character. One bone tool fragment was recovered, but it was too fragmentary to assess species or element. Additional work at this site is warranted because of the paucity of human subsistence-related bison remains recovered in the region and the potential of this site for yielding additional bison remains. Mussel shell recovered from TPs include six valves.

Two human molars were from TP 5, level 5. The teeth consist of a right lower mandibular first and second molars with intact crowns and partial roots. Both teeth show occlusal attrition with the first molar more worn than the second (5 and 4+, respectively). Interproximal wear facets are noted where the teeth articulate with concavity on the second molar side and convexity on the first molar. The first molar measures mesiodistally 10.0 mm, buccolingually 10.1 mm, and the cingulum-crown is 6.1 mm. The second molar measures mesiodistally 10.0 mm, buccolingually 9.9 mm, and the cingulum-crown is 6.0 mm. The individual is believed to be a male based on tooth size.

Pitting and extreme cusp attrition is consistent with other Late Prehistoric samples from the area. This pattern is consistent with greater use of the anterior cheek teeth and the general dietary characteristics established for similar samples in the same culture area. Each tooth exhibits two hypoplastic enamel lines probably resulting from periods of protein deficiency between 5-10 years of development. The thickness of the root walls in proportion to the diameter of the marrow cavity indicates a dentally mature individual.

Recommendations: Results of testing indicate well-preserved Late Prehistoric and possibly Archaic components occur at site 41DN27. Well-preserved features and organic remains indicate the site can yield new information regarding subsistence strategies and butchering patterns, environmental reconstruction, lithic tool technology and use-wear, social and trade networks based on lithic sources and styles, and inter- and intrasite activity patterns. Therefore, we recommend that excavations be conducted at 41DN27 to acquire a larger sample of data to address some of the research goals stated above and in the Research Design (Ferring and Lebo 1988). The site is recommended for nomination to the National Register of Historic Places.

41DN37

Map Quad	Little Elm 7.5', #3396-223
Elevation above MSL	535-545 ft
Vegetation	Grass, brush
Previous Research	Nunley 1973; Newman and Brown 1990
Cultural Affiliation	Late Archaic, Late Prehistoric II, Historic
Size	30x30 m
Recommendations	No further work

Description: Site 41DN37 occurs on a sandy upland ridge and adjacent slopes overlooking the Little Elm Creek floodplain (Figure 4.1). Most of the site area was covered with recent trash. The site also contains a twentieth century occupation as evidenced by the presence of four cement foundation piers and remains of a collapsed storm cellar. The

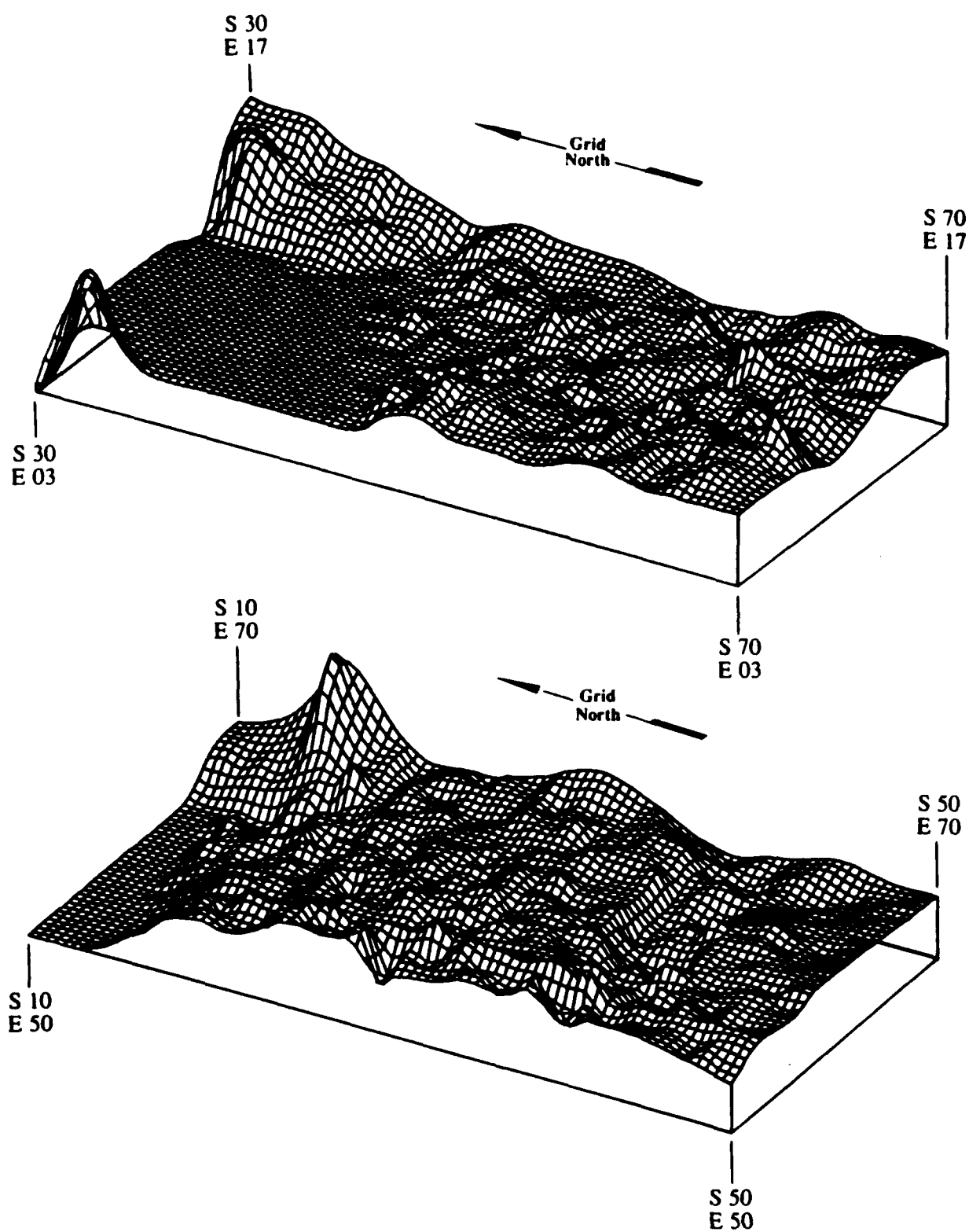


Figure 4.20 Magnetometer maps of site 41DN27.

site was originally recorded by Nunley (1973). It was relocated by personnel from UNT in 1987 at which time a diffuse surface scatter of lithic debris was observed in an eroded dirt trail that traversed the northeast portion of the site. Several of the 16 STPs placed along four transects yielded lithic and historic debris (Newman and Brown 1990).

Testing: Testing consisted of two perpendicular BHTs excavated across the center of the site and 16 1x1-m TPs. The BHTs were 30 m and 45 m long (Figure 4.21). BHT 1 was oriented north-south across the top of the ridge while BHT 2 was oriented east-west and was excavated from the top to the bottom of the ridge. Additional short BHTs were excavated on the floodplain of Little Elm Creek below the site. No cultural horizons, features, or artifacts were discovered in the BHTs.

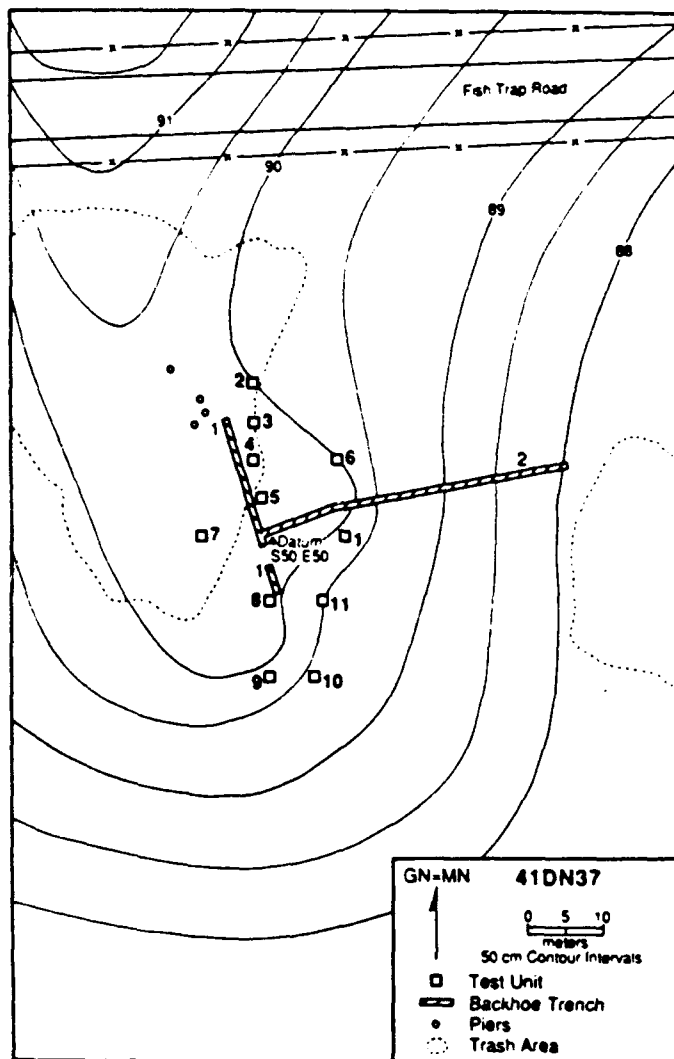


Figure 4.21 Map of site 41DN37.

The 16 1x1-m TPs were arbitrarily placed across the site in areas that appeared least disturbed by historic activities. TPs were excavated 30-140 cm bs in 10 cm levels because of the absence of discernible stratigraphy (Figure 4.22). A diffuse scatter of lithic debris was noted in all TPs (Figure C.3b) (Table 4.11).

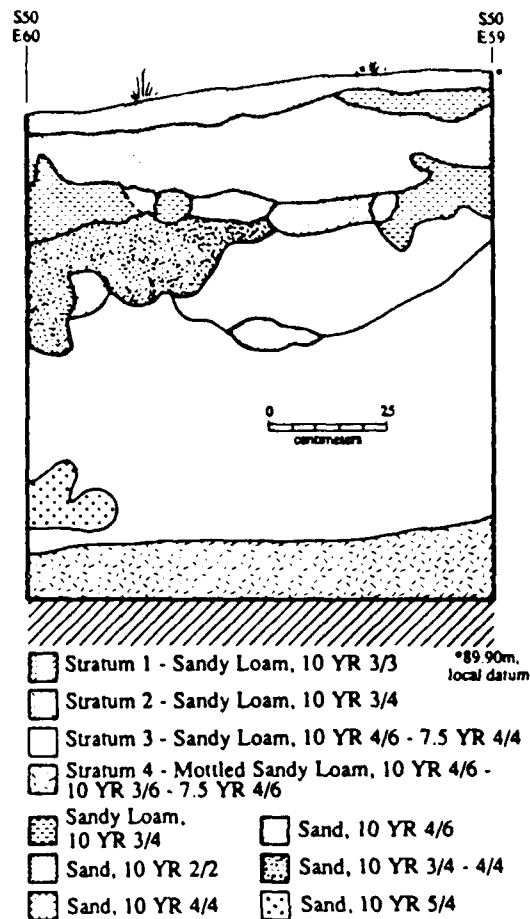


Figure 4.22 Profile of south wall of TP 1, 41DN37.

Culturally diagnostic artifacts included three dart/spear points. One was recovered from TP 1, level 2. It is lanceolate shaped with a concave base and ground edges. It has a lateral break through its midsection. An Edgewood point was recovered from TP 9, level 5, and the base of a Gary point was recovered from TP 6, level 3. A total of 12 other stone tools were recovered that include a hammerstone, a graver, large choppers, and retouched flakes (Table 4.11).

Results of testing from TPs 1-11 indicated all prehistoric remains in the north part of the site were in association with historic material. The depth of the B-horizon was 30-60 cm bs. A total of 287 historic items were recovered from TPs 1-11. Most of the historic material consisted of earthenware, stoneware, bottle glass, table glass, window glass, wire nails, roofing, tin cans, a spark plug, an engine part, a 4-hole bakelite button, a 22 cal. bullet, cork fragments, bolts, valve stem, eye bolt, aluminum material, iron strap metal, a horseshoe, and a piece of lead. TPs 8 and 11 yielded historic items from levels 1-6 while more shallow TPs (e.g., 2, 3, 4, and 5) had historic items found in every level that contained prehistoric remains.

TPs 12-17 (TP 16 was not excavated) were placed south and west of TP 11, which contained a partial human cranium from level 10. TPs 12, 13, and 14 were contiguous with TP 11 in order to ascertain the presence of a human burial. Because results of TPs 1-11 indicated historic remains occurred in the uppermost 50 cm, the uppermost 50 cm of TPs 12-17 was

removed without screening. Subsequent levels were excavated in 10-cm levels and dry screened.

TP 12, placed west and adjacent to TP 11, revealed a human burial, Feature 1, occurring 96-116 cm bs. The burial was in a state of poor preservation, and a pit was not detected. The burial consisted of cranial fragments, and it had been placed at the base of the A-horizon. Large boulders were encountered in the vicinity of the burial and in TP 15. Matrix in the immediate vicinity of the burial was collected for fine screening. Prior to their removal, the project's physical anthropologist was brought to the site and measurements were taken while in situ. The skeletal material was then removed and cleaned at the field laboratory. No culturally diagnostic artifacts or charcoal were found associated with the burial.

The human remains recovered from Feature 1 consist of portions of the right parietal (seven fragments reconstructed with a surface area of approximately 105 sq cm and a mass of 48 g), the left temporal squama and petra (three fragments at approximately 67 sq cm having a combined mass of 32 g), and seven morphologically nondescript vault fragments, presumably from the left parietal, frontal, and occipital bones (from 1-6 sq cm, approximately 5 g total). The fragments are light brown to tan in color and are stained and etched with rootlets and microrootlets. The fragments are crumbly and have a specific gravity of 1.07-1.14.

Table 4.11

Artifacts Recovered From Site 41DN37¹

TP	Material		Artifact Categories								
	C	Q	T	AP	DP	Ce	ID	UB	BB	S	H
1	17	26	2		1		38	1			8
2	4	2									44
3	5	2									14
4	16	19	2		1		1		1		24
5	11	8	1				1	2			15
6	27	16			1		1				20
7	8	13									152
8	12	16	1					1			
9	14	9	1		1			1			
10	3	6									2
11	6	19	4								8
12	4	16					17	1			
13	2	3	1					50			
14	5	11									
15	2	3									
16 ²											
17	4	8									
Fe. 1		9									

¹ C=Chert; Q=Quartzite; T=Tool; AP=Arrow point; DP=Dart point; Ce=Ceramic; ID=Identified bone; UB=Unburned bone; BB=Burned bone; S=Shell; H=Historic; Fe. 1=Feature 1.

² TP 16 was not excavated.

Based on (1) the condition of the sutural margins, (2) the depth of vascular markings by tributaries of the middle meningeal artery, and (3) the degree of wear on the left mandibular fossa, the remains are judged to belong to an individual of middle life. This is supported by the cross-

sectional appearance of diploe and the tables of the skull at several points (tables:diploe=1:1). The small size of the left mastoid pyramid and the insertion of the posterior root of the left zygomatic arch anterior to the meatus imply that the sex is female. No pathology is noted in the specimens.

Faunal remains include 38 bones representing the remains of a pocket gopher (*Geomys bursarius*) from TP 1, level 7, a hypoplastron fragment of a box turtle from TP 5, level 4, an ethmoid fragment of a frog/toad skull from TP 5, level 5, and a large mammal vertebra fragment with saw marks from TP 4, level 2. Also recovered were 17 bones of a single toad from levels 9-10 in TP 12. Unidentified bone consisted of one burned and 56 unburned fragments.

Results of testing indicate the site area consists of unconsolidated silty sand that has permitted vertical movement of cultural material, both historic and prehistoric, throughout the deposits. In the north half of the site, all prehistoric remains are found associated with historic material indicating extreme disturbance of the prehistoric deposits by an early twentieth century occupation and recent trash disposal. Historic material is found associated with prehistoric remains to a depth of greater than 50 cm bs in the south part of the site where the collapsed storm cellar is located. Prehistoric remains in the south part of the site that do not occur with historic material are near the contact between the overlying silty sand, which contains large boulders, and the clayey B-horizon. There are no subsurface prehistoric cultural horizons in primary context, and charcoal and bone preservation is very poor. It is unlikely that well preserved human burials occur with associated culturally diagnostic remains.

Recommendations: The sandy matrix of the site has not been conducive to the preservation of organic remains. Results of testing indicate the prehistoric remains are no longer in primary context. The historic occupation has destroyed the integrity of the prehistoric occupation. No further work is recommended for 41DN37. The site is not recommended for nomination to the National Register of Historic Places.

41DN40

Map Quad	Little Elm 7.5', #3396-223
Elevation above MSL	540-550 ft
Vegetation	Grass, brush, trees
Previous Research	Nunley 1973; Newman and Brown 1990
Cultural Affiliation	Late Archaic, Late Prehistoric I, Late Prehistoric II, Historic
Size	30x50m
Recommendations	No further work

Description: Site 41DN40 is located on a prominent ridge and adjacent sandy slopes overlooking the floodplain of Running Branch Creek (Figure 4.1). The site occurs on private land, and its elevation is above any immediate danger of the planned water level at Lewisville Lake. The site was originally reported by R.K. Harris in the Nunley (1973) survey as having a dense and extensive surface scatter of lithic debris, choppers, scrapers, and projectile points. The site was relocated by personnel from UNT. A surface collection of prehistoric and historic artifacts was made. Five shovel tests were placed on the eastern slope of the ridge nearest the area

that would be affected by the planned water rise of Lewisville Lake (Newman and Brown 1990).

Culturally diagnostic artifacts recovered from this site include a Perdiz arrowpoint, four Trinity dart/spear points, and a Godley dart/spear point. These point types are oftentimes associated with Late Archaic and Late Prehistoric period occupations. Other artifacts recovered include one biface, one basal fragment of a dart/spear point, one retouched flake, and 21 pieces of debitage. Historic artifacts collected include one refined earthenware sherd and three stoneware sherds dating between 1850 and 1910.

Testing: Testing consisted of eight BHTs and six 1x1-m TPs. Testing revealed the presence of deeply buried prehistoric and historic cultural remains. TPs were excavated 50-130 cm bs. Early twentieth century historic remains were found in association with both Archaic and Late Prehistoric artifacts to a depth of 100 cm and 120 cm in TPs 2 and 3, respectively. Site stratigraphy was best perceived in TPs 2 and 3 (Figures 4.23 and 4.24) which indicated several episodes of eolian deposition.

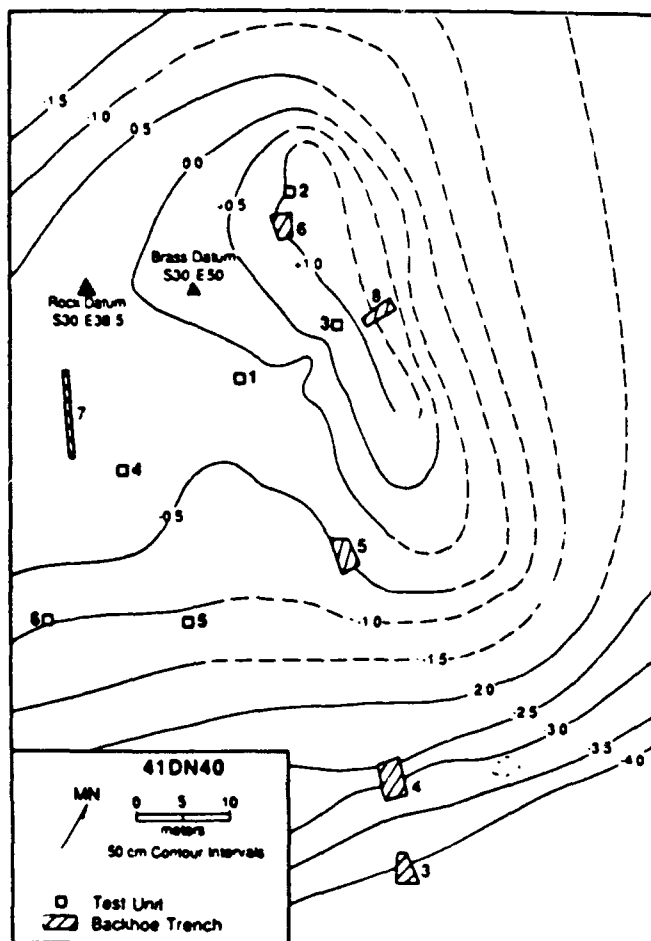


Figure 4.23 Map of site 41DN40.

All of the artifacts from TPs 2 and 3 were recovered from depths greater than 50 cm bs. The vertical distribution of artifacts from TPs 2 and 3 correspond with two discernible stratigraphic units (Figure C.4a) that represent more stable ground surfaces. The vertical distribution of artifacts from TPs downslope from TPs 2 and 3 indicate surface erosion and

vertical displacement of cultural remains (Figure C.4b). Substantial eolian deposition has occurred on the ridge top since the early twentieth century. Results of testing indicated prehistoric artifacts are no longer in their primary context.

Prehistoric diagnostic artifacts include a Keota arrowpoint from level 11 in TP 2, fragments of broken dart/spear points from level 1 in TP 1, level 6 in TP 4, and level 3 in TP 6. Projectile points recovered from the surface include Edgewood, Kinney, and Pedernales dart/spear points. Other chipped stone tools include knives, a thumbnail scraper, adzes, retouched flakes, and utilized flakes (Table 4.12).

Historic remains include metal fragments, whiteware, bottle glass, an iron bracket, and a lead pointer. These items were found in association with prehistoric remains.

Faunal remains totaled 18 bones of which six were identified. Pig and bovid/cervid comprised the identified faunal remains, but numbered only five elements. Most of the pig elements came from TP 3, level 9 and consisted of cranial, dental, foot, and scapular fragments.

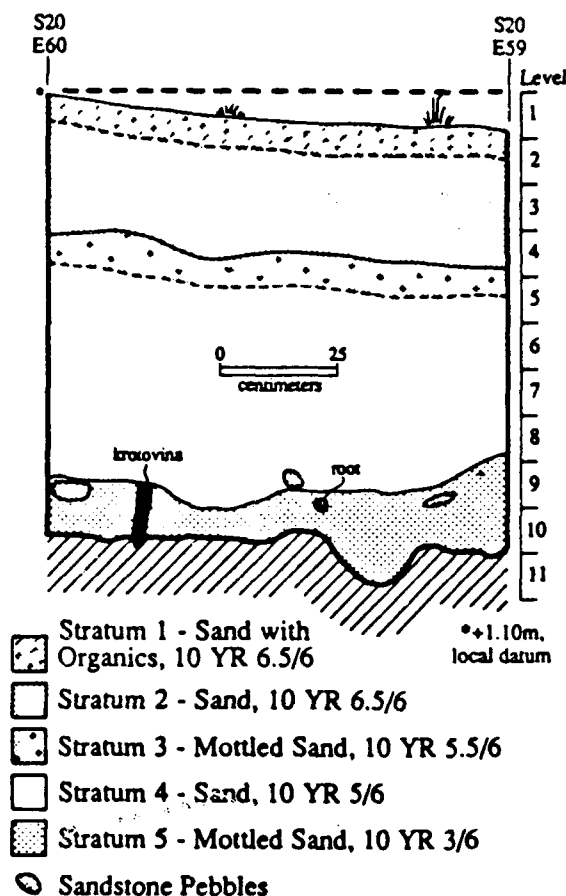


Figure 4.24 Profile of south wall of TP2, 41DN40.

The articular end of the scapula exhibited a dismembering cut mark. Another pig scapula fragment was recovered from a BHT. One enamel fragment from TP 1 level 3 is ascribed to the cow/bison/elk category. These modern domesticates are from areas of disturbance at the site.

Table 4.12

Artifacts Recovered From Site 41DN40¹

TP	Material		Artifact Categories								
	C	Q	T	AP	DP	Ce	ID	UB	BB	S	H
1	40	73	5		1		1		1		4
2	2			1				9	2		5
3	14	39					4	4	1		14
4	37	84			1						1
5	49	58	1								
6	34	67	2		1				1		
BHT		1	1				1				
Surf.	5	5	7	1	3						

¹ C=Chert; Q=Quartzite; T=Tool; AP=Arrow point; DP=Flint point; Ce=Ceramic; ID=Identified bone; UB=Unburned bone; BB=Burned bone; S=Shell; H=Historic.

Recommendations: Site 41DN40 occurs on private land and is not immediately endangered by the proposed rise in the water level of Lewisville Lake. In addition, results of testing indicated both prehistoric and historic occupations have been severely disturbed by recent eolian activity. The sandy matrix has not been conducive to the preservation of cultural remains in primary context. Therefore, no further work is recommended. Site 41DN40 is not recommended for nomination to the National Register of Historic Places.

41DN369

Map Quad Little Elm 7.5', #3396-223
 Elevation above MSL 525-530 ft
 Vegetation Grass
 Previous Research Newman and Brown 1990
 Cultural Activities Not known
 Size 20x20 m
 Recommendations No further work

Description: Site 41DN369 is located on a low linear ridge between two sloughs on the floodplain of Little Elm Creek (Figure 4.1). The creek channel is approximately 0.5 km west of the site. The site was originally recorded as consisting of a single chert flake and mussel shell fragment in a fallow field. Three auger holes placed on the ridge did not yield any subsurface cultural material. Because of the site's location on the floodplain, it had the potential of having deeply buried cultural deposits. It is for this reason that the site was originally recommended for testing (Newman and Brown 1990).

Testing: Testing consisted of one BHT placed between the two sloughs and parallel with the ridge (Figure 4.25). The BHT was excavated to a depth of 180 cm bs. No cultural remains were discerned. Deposits consisted of homogeneous alluvial clays (Figure 4.26). An adjacent cultivated field was examined for surficial evidence of cultural remains, but results were negative. The occurrence of the flake and mussel shell on the surface may be attributed to flooding. The effects of flooding were noted by the destruction of a new fence at the northern portion of the two sloughs.

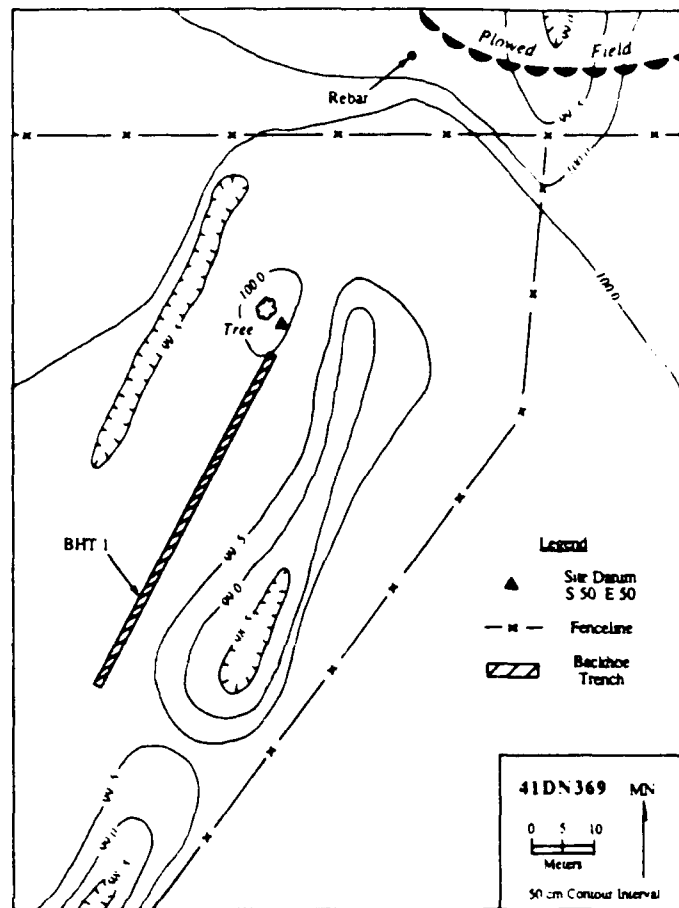


Figure 4.25 Map of site 41DN369.

Recommendations: The absence of cultural remains on the surface and in the walls of the backhoe trench suggest the flake and mussel shell found during the initial reconnaissance are attributable to flooding. Therefore, no further work is recommended for 41DN369. The site is not recommended for nomination to the National Register of Historic Places.

41DN372

Map Quad Little Elm 7.5', #3396-223
 Elevation above MSL 525-540 ft
 Vegetation Grass, brush, trees
 Previous Research Newman and Brown 1990
 Cultural Affiliation Late Archaic, Late Prehistoric I, Late Prehistoric II, Historic
 Size 40x50m
 Recommendations Excavation

Description: Site 41DN372 is located on a knoll and adjacent slope on the uplands (Figure 4.1). The site is adjacent to the steep bank of Little Elm Creek near its confluence with Pecan Creek. A ravine is located approximately 100 m south of the site. The knoll, which has a large pecan tree in its center, consists of silty clays and has numerous rodent burrows. The site was originally noted as having diffuse surface scatter of lithic and historic debris occurring in rodent backdirt piles. A historic occupation was nearby based on the occurrence of large quantities of historic remains within a localized area of the knoll. A few of the 12

STPs placed along three transects yielded subsurface lithic debris (Newman and Brown 1990).

Testing: Testing consisted of five BHTs and 17 1x1-m TPs (Figure 4.26). TPs were excavated to depths of 20-130 cm bs (Figures 4.27 and 4.28). Because of the extensive testing, deposits were water screened to facilitate excavation. In addition to waterscreening using 1/4-inch hardware cloth, a sample of matrix was fine-screened to recover very small artifacts and organic remains. The fine-screened samples were recovered from the southwest 50x50-cm quad for all levels within TPs 6-17. The matrix from the northwest 50x50-cm quad of TP5 for levels 5-13 was fine screened, along with all feature fill that was not collected for flotation. The results of fine-screening indicated large quantities of small cultural debris were present within the deposits.

The BHTs revealed several burned rock features and helped elucidate the nature of the knoll. The knoll appears to be a midden that is 130 cm thick. Organic remains are well-preserved and large quantities of lithics occur throughout the midden (Table 4.13) (Figure 4.29).

A historic disturbance was detected in TPs 7, 15, and 16 (Figure 4.28). This disturbance, designated Feature 3, consisted of a historic excavation through the midden deposit and into the underlying B-horizon. The matrix within this disturbance contained large quantities of historic debris (Table 4.13).

Feature 1, discerned in TP 8, appeared to be a dispersed rock hearth. The feature was first recognized at the base of level 7 and continued through level 9. Feature 2, discerned in TP 10, was a rock hearth. The feature was first recognized in level 3 and continued through level 5. Feature 4, discovered in TP 13, appeared to be a dispersed rock hearth.

The feature was first recognized at the base of level 4 and continued through level 5. Features 1 and 4, consisting of dispersed burned rock, may not represent individual features but rather a continuous scatter of burned rock over a large part of the site.

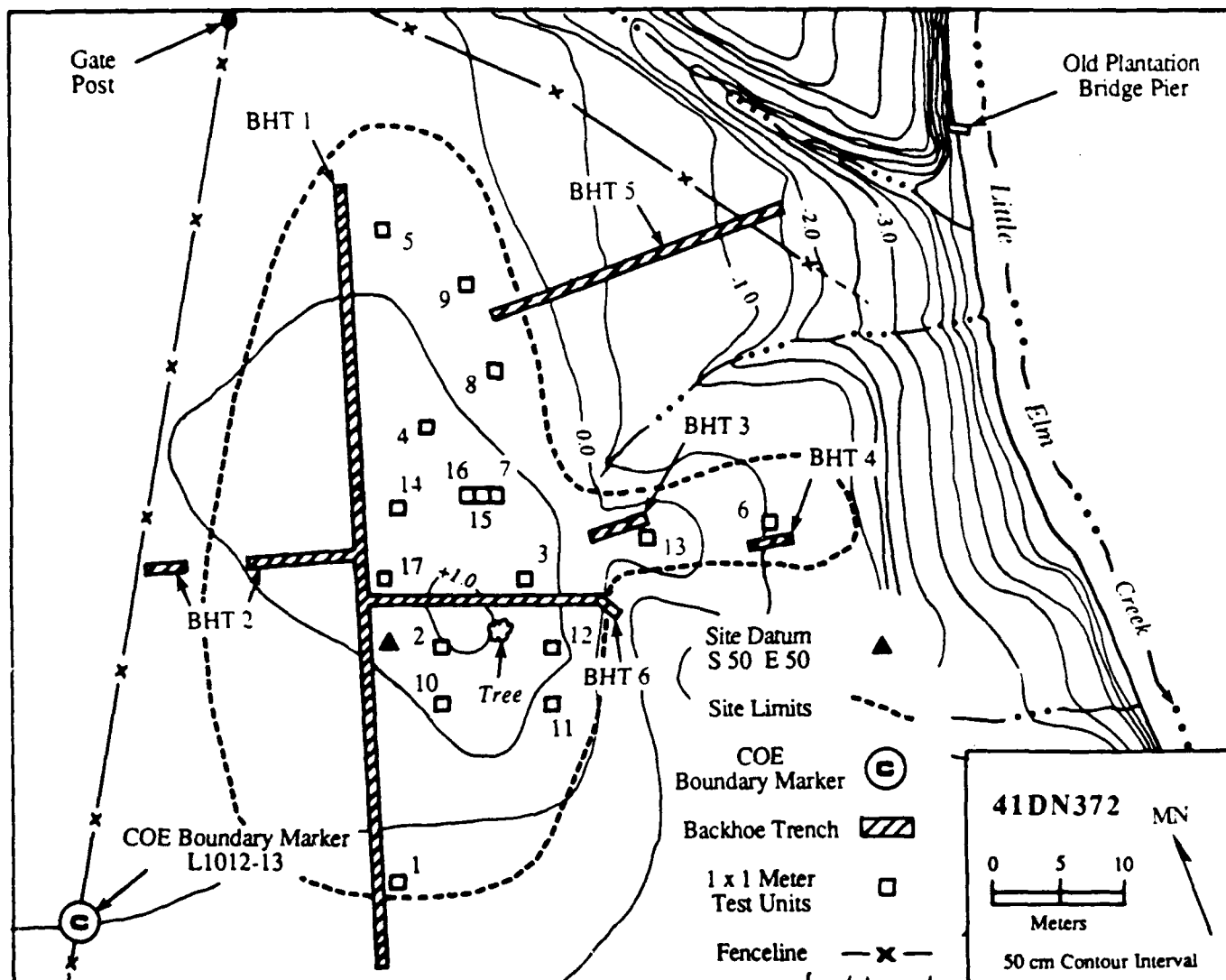


Figure 4.26 Map of site 41DN372.

Projectile points include (Figure 4.30):

TP 1,	level 1:	broken dart/spear point
TP 2,	level 3:	broken arrowpoint
	level 4:	broken arrowpoint # 3 Gary dart/spear point
	level 5:	broken dart/spear point
	level 6:	Bonham arrowpoint
TP 3,	level 3:	Bassett arrowpoint broken dart/spear point
	level 7:	broken dart/spear point
	level 8:	# 3 Gary dart/spear point
TP 4,	level 2:	broken arrowpoint
	level 4:	broken arrowpoint
	level 9:	broken dart/spear point
TP 7,	level 3:	broken arrowpoint
TP 8,	level 5:	Travis dart/spear point, # 27 lanceolate dart/spear point
	level 6:	broken arrowpoint
	level 8:	Toyah arrowpoint Dallas dart/spear point
TP 9,	level 2:	Scallorn arrowpoint
TP 10,	level 2:	Perdiz arrowpoint
TP 11,	level 2:	Alba arrowpoint
TP 12,	level 2:	broken arrowpoint
	level 3:	broken arrowpoint
	level 4:	Pedernales dart/spear point
	level 5:	broken dart/spear point
TP 13,	level 4:	Trinity dart/spear point broken dart/spear point
TP 14,	level 4:	Alba arrowpoint
	level 7:	Bonham arrowpoint
TP 15,	level 10:	# 1 Gary dart/spear point broken dart/spear point
	level 11:	Kent dart/spear point
TP 16,	level 5:	broken arrowpoint
	level 7:	Hays arrowpoint
TP 17,	level 2:	broken arrowpoint
	level 4:	broken arrowpoint # 13 arrowpoint

A total of 130 stone tools were recovered. Tools include scrapers, knives, bifaces, unifaces, retouched flakes, resharpening flakes, and cores. One pecked and ground stone maul was also recovered.

Prehistoric ceramics total 68 sherds of which 46 are tempered with crushed shell, 14 have sand and crushed shell temper, three have shell/grit/ bone temper, two have crushed shell and bone temper, one has crushed bone temper, and two have no discernible tempering material. One sherd from TP 2, level 5, has a coil break indicating coiling as the method of manufacture.

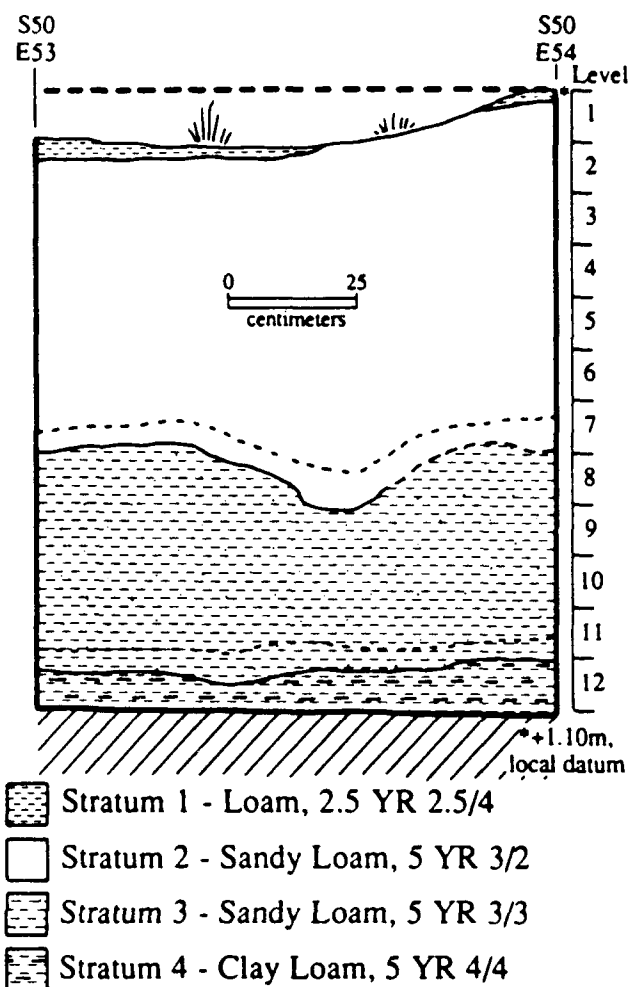


Figure 4.27 Profile of north wall of TP 2, 41DN372.

A total of 248 historic items were recovered from the TPs of which 210 (85%) were from Feature 3 in TPs 7, 15, and 16. Most of the other 38 (15%) historic items were from the first three levels within the other TPs. Historic items were tin can fragments, pieces of wire, fence staples, and some bottle glass. Remains from firearms include a 32-cal. rimfire cartridge (dated to 1867-1902), a percussion cap, and a lead bullet. With the exception of the 32-cal. cartridge, none of the material can be assigned an approximate date. The landowners, the Redfarns, informed the author about the historic occupation of the site, which involved a man who had lived in a dugout along the bank of the Little Elm Creek until approximately the time of World War II. The dugout may be associated with Feature 3. Many of the historic items may be associated with this occupation.

A total of 13,170 bones were recovered during testing (Table 4.13). A large sample of 2,633 identified elements is presented in Appendix B. The identified portion of this assemblage exhibits high species diversity. Thirty taxa identified to family, genus, or species have been recorded. Although turtle shell and rodent remains dominate the sample, fully 20% of the identified bones are from mammals deer-size or larger. Clearly these large mammals supplied the bulk of the meat protein, but the smaller mammals and nonmammals represented in this testing assemblage are valuable for the environmental information they reveal about the site. Four different species of aquatic turtle are represented, but box

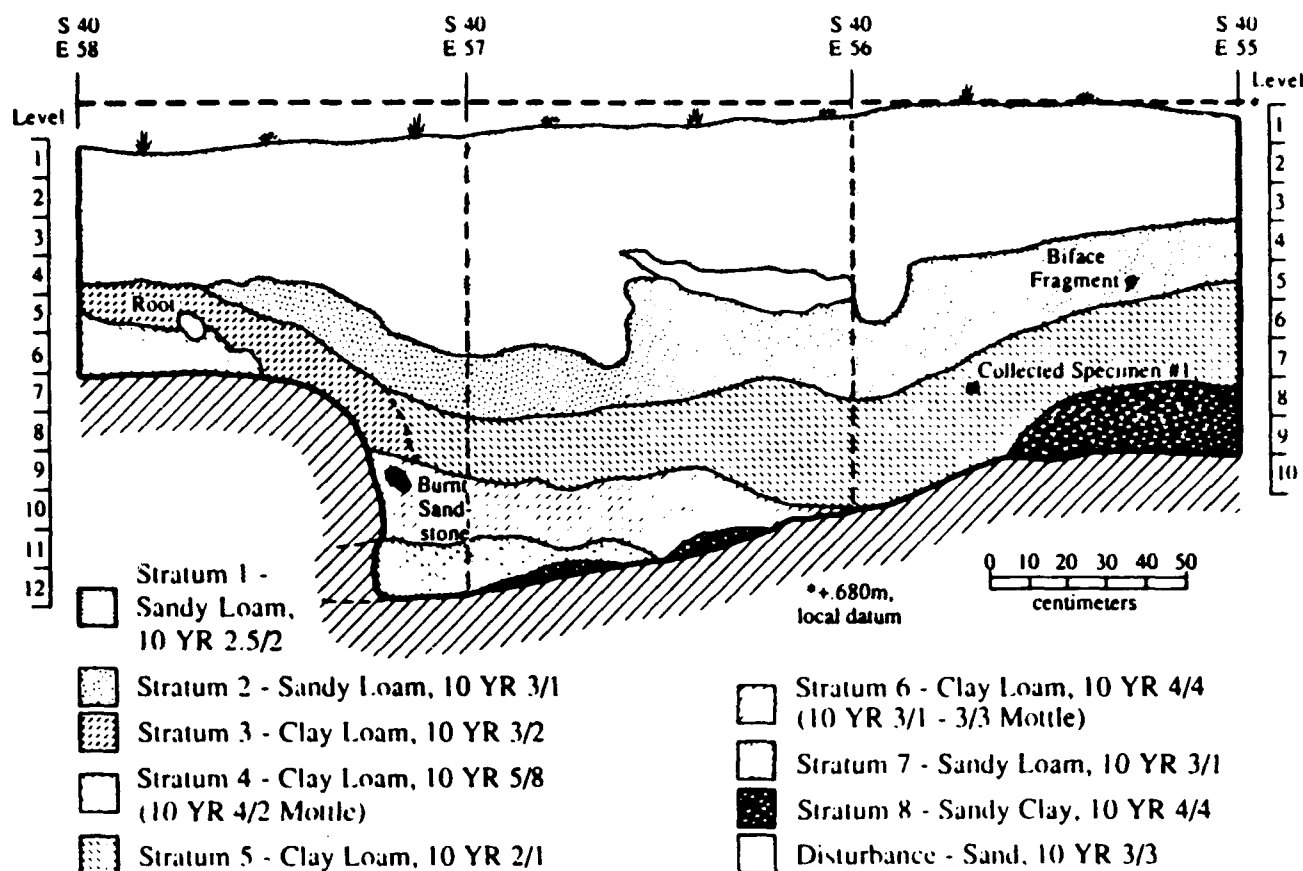


Figure 4.28 Profile of Feature 3 at 41DN372.

turtle has the highest minimum number of individuals (3). The diversity of fish species further suggests heavy exploitation of the riverine environments; however, only 12 mussel valves were recovered.

Other faunal remains indicate full use of the available habitats. Six of the seven species of rodents on the list (Appendix B) may be intrusives since most of them are fossorial, as is the armadillo, a recent edentate invader to North Texas. Beaver, however, is an aquatic rodent still found in the Trinity bottoms today. Cottontail, skunk, and jack rabbit are consistent with ecotonal situations found in the project area as well.

Based on this large and diversified faunal assemblage, the potential for this site to answer questions regarding local animal resources is considered high. Historic contamination of the faunal assemblage is believed to be low. No domesticated species were identified, and no bones had evidence of sawing.

Table 4.13

Artifacts Recovered From Site 41DN372^{1,2}

TP	Material		Artifact Categories								
	C	Q	T	AP	DP	Ce	ID	UB	BB	S	H
1	5	22	2		1				11	2	
2	81	334	8	3	2	12	218	333	152	2	1

Table 4.13 continued

TP	C	Q	T	AP	DP	Ce	ID	UB	BB	S	H
3	78	255	8	1	3	3	186	393	92	1	3
4	32	110	6	2	1		17	87	34		1
5	14	35						1			
6	61	85	3				37	152	127		5
7	117	299	5	1		2	101	264	408	1	15
8	158	314	7	2	3		282	623	477		3
9	73	165	5	1			37	179	122		3
10	248	518	15	1		15	286	548	664		1
11	99	229	6	1		3	141	334	315	1	3
12	166	313	13	2	2	1	488	728	682	7	1
13	194	379	7		2		239	412	436		
14	181	433	7	2	1	13	105	361	323		10
15	203	450	5		3	7	141	425	398		153
16	140	426	9	2		3	182	301	383		42
17	254	539	10	3		9	168	322	442		7
BHT	7	26	9		1		3	2	1		
Surf.	26	104	5	1	2		2	3			

¹ C=Chert; Q=Quartzite; T=Tool; AP=Arrow point; DP=Dart point; Ce=Ceramic; ID=Identified bone; UB=Unburned bone; BB=Burned bone; S=Shell; H=Historic.

² Counts include material from fine-screened samples.

Recommendations: Results of testing at 41DN372 indicate the presence of Late Archaic and Late Prehistoric occupations. The knoll that comprises most of the site consists of a midden containing large quantities of organic and

lithic remains associated with a prehistoric occupation. The presence of a variety of artifact types indicates many different activities were performed at the site.

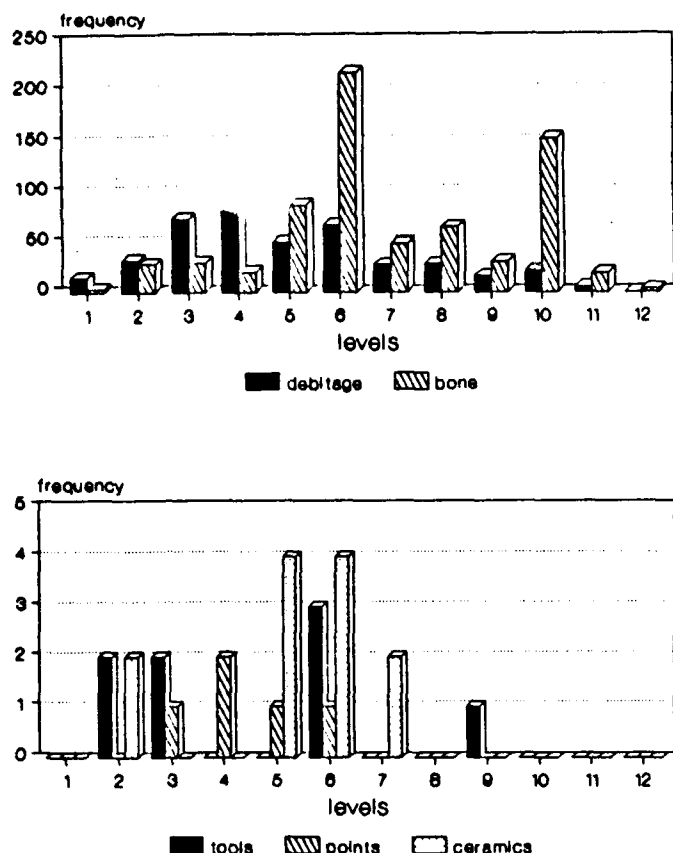


Figure 4.29 Distribution of artifacts in TP2, 41DN372.

The least-disturbed part of the midden appears to be the southern portion of the knoll. The presence of well-preserved features and organic remains in primary context, in addition to large quantities of artifacts, indicates 41DN372 can yield important new information regarding human adaptations in northcentral Texas during the past 3,000 years. The well-preserved organic remains will provide data for radiocarbon dating, subsistence strategies, butchering techniques, and environmental reconstructions. The large quantity of lithic debris will provide information about social and trade networks and stone tool technology. The intact features, in conjunction with the artifacts, will permit intrasite analyses of activity areas. Therefore, it is recommended that site 41DN372 be excavated to address some of the problems stated above and in the Research Design (Ferring and Lebo 1988). The site is recommended for nomination to the National Register of Historic Places.

41DN374

Map Quad
Elevation above MSL
Vegetation
Previous Research

Little Elm 7.5', #3396-223
530-540 ft
Grass
Newman and Brown 1990

Cultural Affiliation
Size
Recommendations

Late Archaic
20x70m
No further work

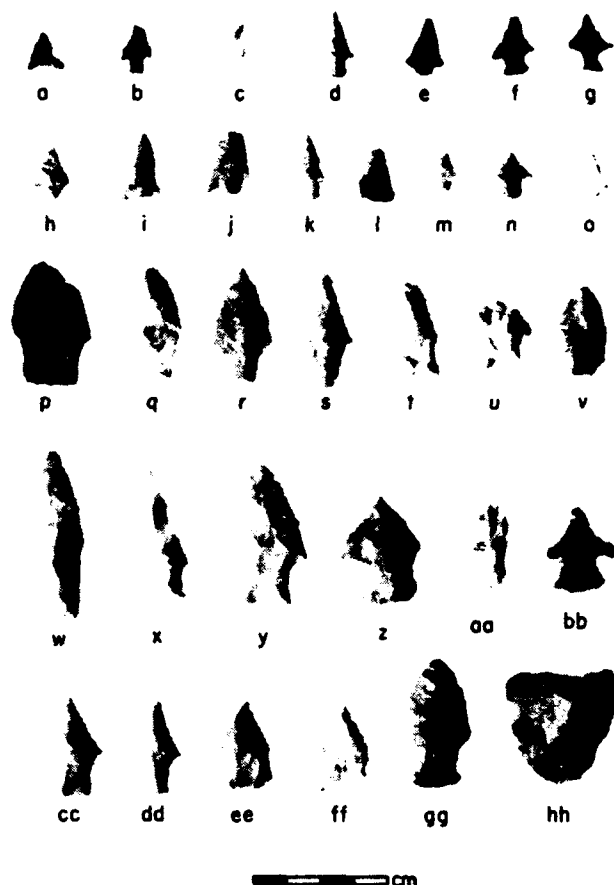


Figure 4.30 Projectile points from 41DN372, 41DN374, 41DN381, 41DN386. Key (site#/TP#/level#): a. 372/8/8; b. 372/11/2; c. 372/2/4; d. 372/16/7; e. 372/4/2; f. 372/9/2; g. 372; h. 372/14/7; i. 372/7/3; j. 372/16/5; k. 381/1/1; l. 381/4/5; m. 381/3/3; n. 381/9/1; o. 386; p. 372/15/11; q. 372/BHT 1; r. 372; s. 372/2/4; t. 372/13/4; u. 372/12/4; v. 372/8/8; w. 381/5/9; x. 386; y. 381/5/11; z. 381/7/10; aa. 386; bb. 381/5/3; cc. 381/5/5; dd. 381/10/9; ee. 381/5/6; ff. 381/5/9; gg. 374/BHT 1; hh. 372/2/2.

Description: Site 41DN374 is located on an upland ridge west of the Little Elm Creek floodplain (Figure 4.1). Parts of the site have been destroyed by trenching and scraping activities associated with a nearby gravel quarry. The remaining relatively intact area occurs on both sides of a large trench (BHT 7) that bisects the site in an east-west direction (Figure 4.31). This trench is a dragline pit associated with the quarrying activities. It is in the walls of this trench that cultural remains were observed. Therefore, for the sake of clarity, it is referred to as BHT 7.

This site was originally discovered as having a diffuse surface scatter of lithic debris and tools. Tools included a Clearfork Gouge and two dart points that are typologically similar to Godley and Ensor types. Several of the 22 STPs placed along five transects yielded subsurface lithic debris (Newman and Brown 1990).

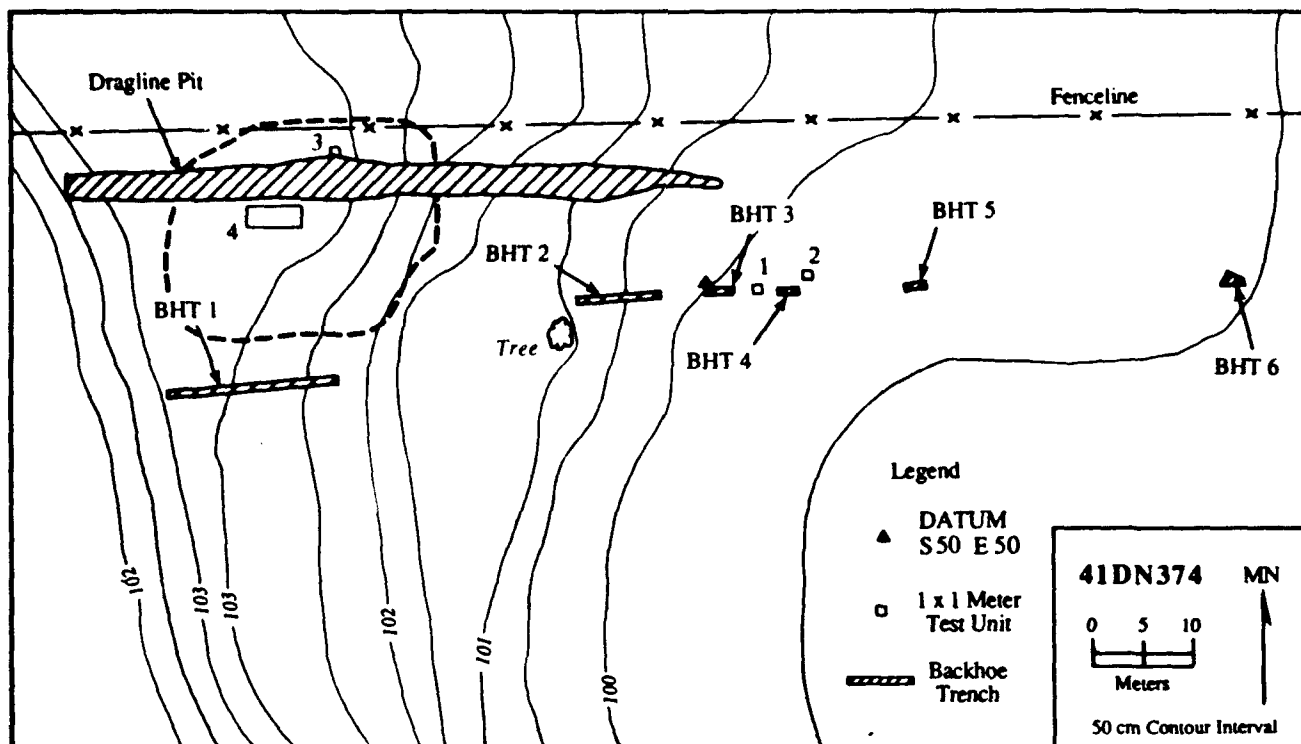


Figure 4.31 Map of site 41DN374. (Contour line 100.5 approximates the 532-ft flood pool elevation.)

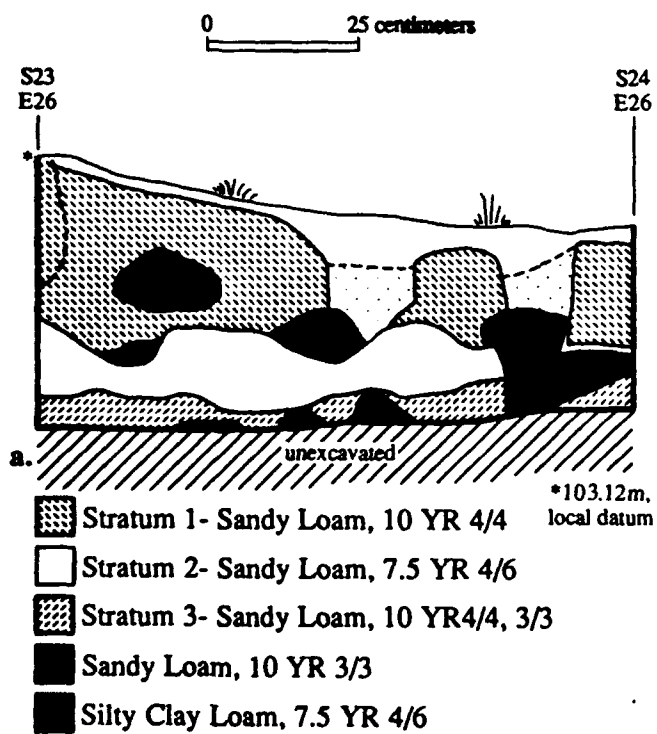


Figure 4.32a Profile of east wall of TP 3, 41DN374

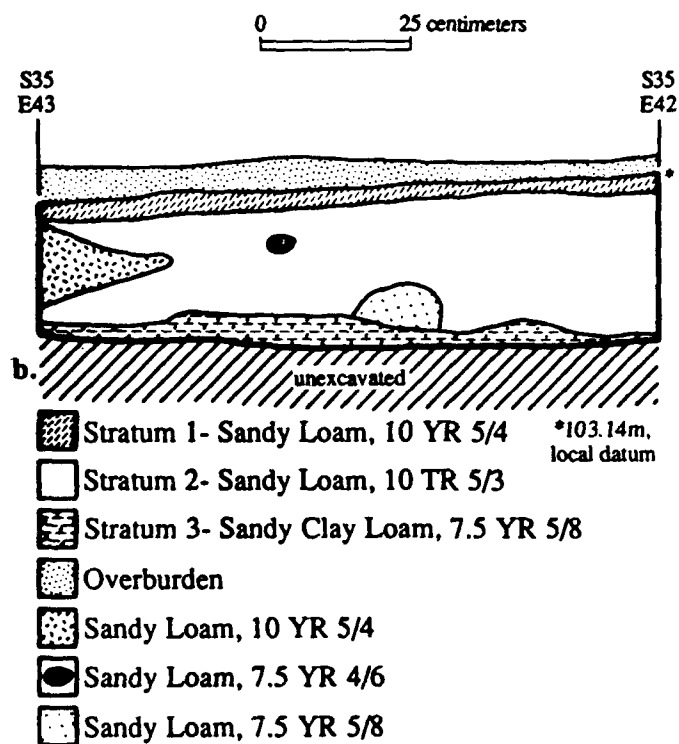


Figure 4.32b Profile of south wall of TP 4, 41DN374.

Testing: Testing consisted of six BHTs and 16 1x1-m TPs (Figure 4.31). TPs were excavated 10-50 cm bs. Based on results of digging TPs 1 and 2, artifacts recovered from the interface of the slope and floodplain are attributed to colluvial deposition. It was determined that the area of the site with some cultural integrity occurred on private land at a higher elevation. Consequently, 14 TPs were excavated within a 4x11-m area where cultural remains were believed to be in primary context. This area was selected on the basis of results from TP 4 and examination of the profile in the adjacent trench (BHT 7). All overlying deposits consisting of recent fill were removed, exposing the original ground surface. Testing results indicated a very low artifact density that is confined to the uppermost 30 cm of the original ground surface (Figures 4.32 and C.5a). Most artifacts recovered consist of quartzite and chert flakes.

Diagnostic artifacts consist of a single Trinity dart/spear point recovered from the profile of BHT 7. Fragments of two dart/spear points were also recovered from TPs 4 and 15. Also recovered was a hammerstone from BHT 1. A total of two bones, both identifiable, were recovered. The bones are a turtle shell fragment from TP 10 level 4 and a large mammalian vertebral fragment from TP 3 level 2.

Table 4.14

Artifacts Recovered From Site 41DN374^{1,2,3}

TP	Material		Artifact Categories									
	C	Q	T	AP	DP	Ce	ID	UB	BB	S	H	
2		4									1	
3	3	12					1					
4	6	7			1							
6	3	9										
8	1	5										
10	2	7					1					
12	2	2									1	
14	4	7										
15		4			1							
39	1	5										
41	2	2										
43	3	1										
45	1	6										
47		1										
BHT			1		1							

1 C=Chert; Q=Quartzite; T=Tool; AP=Arrow point; DP=Dart point; Ce=Ceramic; ID=identified bone; UB=Unburned bone; BB=Burned bone; S=Shell; H=Historic.

2 TPs 5, 7, 9, 11, 13, 16-36, 38, 40, 42, 44, and 46 were not excavated.

3 TPs 1 and 37 were sterile.

Recommendations: Results of testing indicate the site area with remains in primary context is located on a ridge on private land. That part of the site will not be in immediate danger from the planned water level rise of Lake Lewisville. The site has been severely disturbed, a large part having been destroyed by gravel quarrying activities. Therefore, no further work is recommended for 41DN374. The site is not recommended for nomination to the National Register of Historic Places.

41DN377

Map Quad	Little Elm 7.5', #3396-223
Elevation	530-545 ft
Vegetation	Grass, brush
Previous Research	Newman and Brown 1990
Cultural Affiliation	Late Archaic, Historic
Size	30x30m
Recommendations	No further work

Description: Site 41DN377, located on private land, is on a gentle sloping sandy terrace edge that is adjacent to the Little Elm Creek and Running Branch Creek floodplain (Figure 4.1). The confluence of Little Elm and Running Branch creek is approximately 200 m south of the site. The site was originally noted as an area having a diffuse scatter of lithic and historic debris occurring in rodent backdirt piles. Several of the 19 STPs placed along five transects yielded additional subsurface prehistoric lithic and historic debris (Newman and Brown 1990).

Testing: Testing consisted of three BHTs and four 1x1-m TPs (Figure 4.33). The TPs were excavated to 50-80 cm bs (Figure 4.34). Early twentieth century historic remains were found in association with the prehistoric artifacts. The part of the site occurring at lower elevations (e.g., 530-535 ft) has been destroyed by a buried high-pressure gas pipeline.

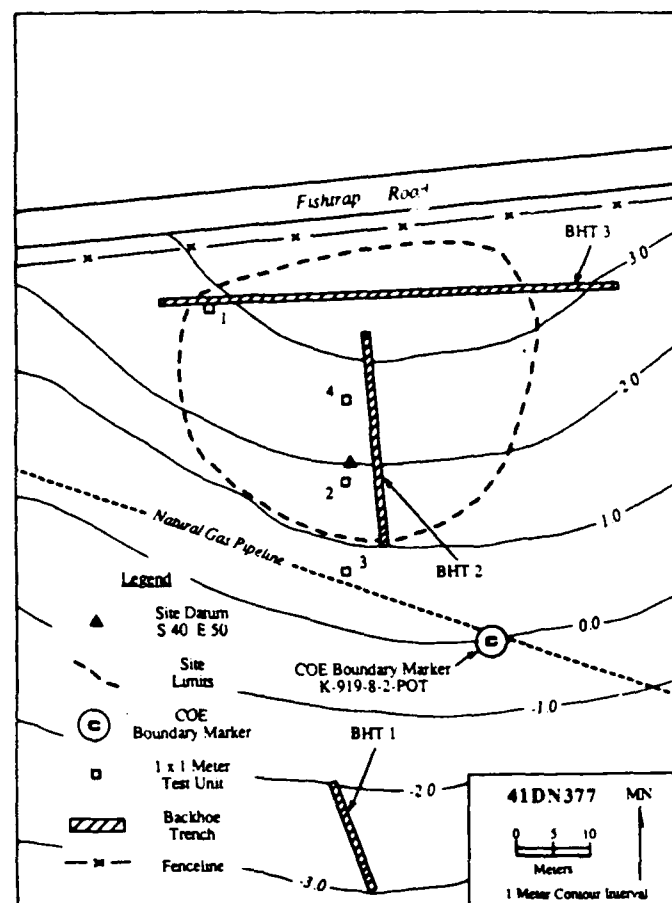


Figure 4.33 Map of site 41DN377. (Contour line 0.0 approximates the 532-ft flood pool elevation.)

The part of the site occurring at higher elevations (e.g., 535-545 ft AMSL) is on private land and has been severely disturbed by a twentieth century occupation. TP 3 (Figure C.5b) was inadvertently placed over the buried pipeline resulting in a greater density and vertical distribution of flakes than in the other three TPs. The soil profile for TP 3 was mottled as a result of the digging and backfilling of the pipeline trench.

Prehistoric diagnostic artifacts recovered include a broken dart/spear point from TP 2, level 3 and a Clear Fork Gouge from TP 2, level 2. Other tools include a thumbnail scraper, an endscraper, biface resharpening flakes, retouched flakes, and utilized flakes. A total of eight bones were recovered of which two are identifiable. Historic remains include tin can fragments, metal fragments, whiteware, and bottle glass.

Table 4.15

Artifacts Recovered From Site 41DN377¹

TP	Material		T	Artifact Categories							
	C	Q		AF ¹	DP	Ce	ID	UB	BB	S	H
1	1	1	2								11
2	11	17	3		1				1		1
3	19	32	4				1	1	4		1
4	7	7	2				1				2

¹ C=Chert; Q=Quartzite; T=Tool; AP=Arrow point; DP=Dart point; Ce=Ceramic; ID=Identified bone; UB=Unburned bone; BB=Burned bone; S=Shell; H=Historic.

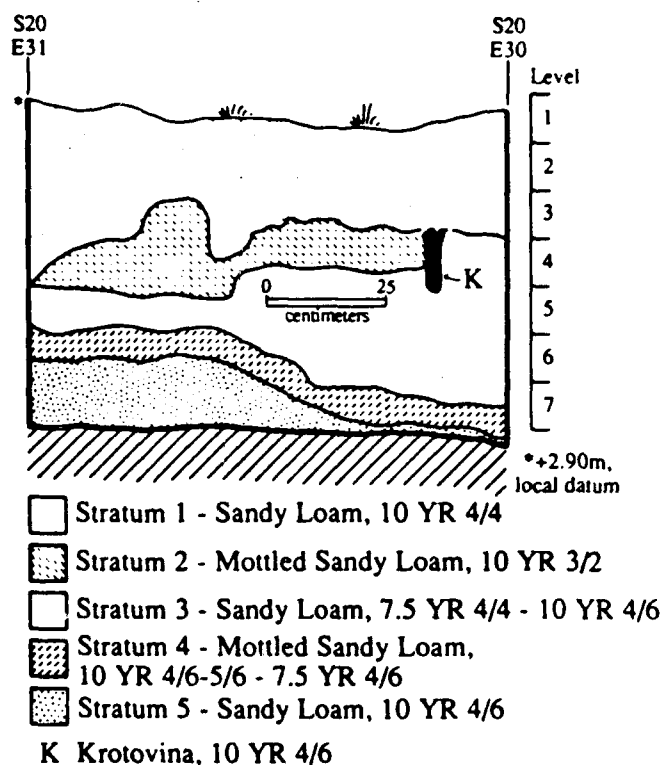


Figure 4.34 Profile of the south wall of TP 1, 41DN377.

Recommendations: Results of testing indicate the site has been severely disturbed by a twentieth century occupation and the burying of a high pressure gas pipeline. The sandy matrix has not been conducive to the preservation of organic remains. Because the site occurs on private land and there is little evidence for prehistoric remains in primary context, no further work is recommended for 41DN377. The site is not recommended for nomination to the National Register of Historic Places.

41DN378

Map Quad	Little Elm 7.5', #3396-223
Elevation above MSL	520-530 ft
Vegetation	Grass
Previous Research	Newman and Brown 1990
Cultural Affiliation	Unknown Prehistoric, Historic
Size	30x60m
Recommendations	No further work

Description: Site 41DN378 is located on a gentle sandy slope adjacent to Running Branch Creek (Figure 4.1). It is approximately 300 m north of the confluence of Running Branch and Little Elm creeks. A diffuse surface scatter of lithic debris was originally noted. Several of the 13 shovel tests along three transects yielded lithic debris and concentrations of charcoal approximately 20 cm bs. The site area has been disturbed by rodent burrowing and past cultivation activities (Newman and Brown 1990).

Testing: Testing consisted of three BHTs, two 1x1-m TPs, and a shovel test pit (STP). The TPs were excavated to 90-95 cm bs (Figures 4.35 and 4.36). The BHTs helped elucidate the nature of the charcoal observed during initial reconnaissance (Newman and Brown 1990:69). The charcoal represents a recent burning event probably associated with land clearing. A buried soil occurs beneath recent colluvium/alluvium.

The BHTs and TPs yielded twentieth century historic items in association with flakes (Figure C.6a). Historic items were also recovered from the buried soil. No diagnostic artifacts were recovered from the prehistoric component. A total of four bones, none identified, were recovered.

Table 4.16

Artifacts Recovered From Site 41DN378¹

TP	<u>Material</u>		<u>Artifact Categories</u>								
	C	Q	T	AP	DP	Ce	ID	UB	BB	S	H
1	1							2	1		
2									1		4
STP 1	2	2									

¹ C=Chert; Q=Quartzite; T=Tool; AP=Arrow point; DP=Dart point; Ce=Ceramic; ID=Identified bone; UB=Unburned bone; BB=Burned bone; S=Shell; H=Historic.

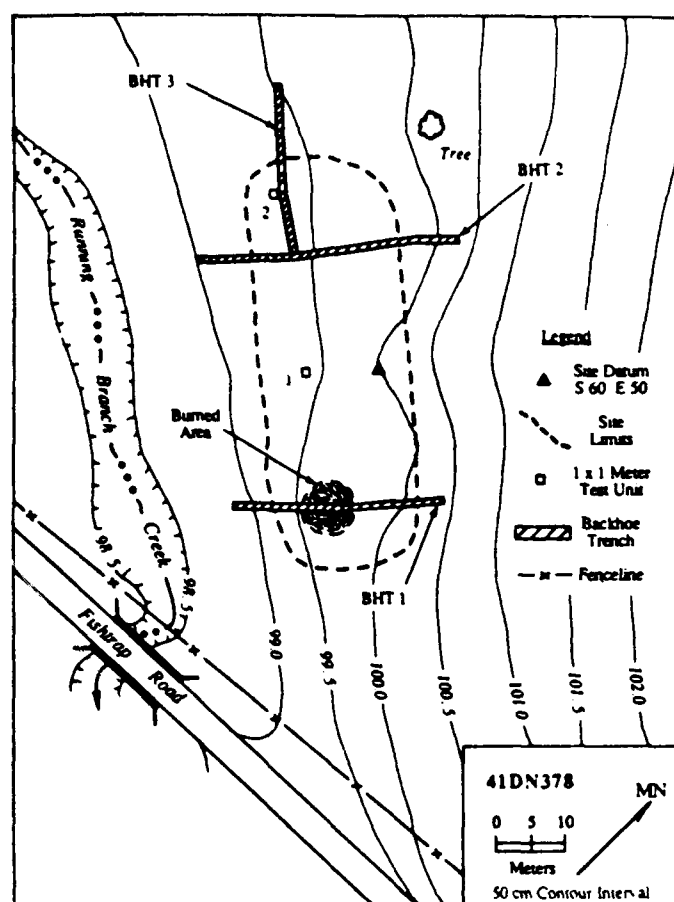


Figure 4.35 Map of site 41DN378. (Contour line 100 approximates the 532-ft flood pool elevation.)

Recommendations: Results of testing at 41DN378 indicate the site has been severely disturbed by a historic occupation in combination with recent colluvial/alluvial processes. The buried soil represents an old plowzone that contains both prehistoric and historic remains. The overlying deposits are a result of recent colluvial and alluvial deposition. The site is on private land, but the COE has easement rights. Because results of testing indicate the prehistoric remains are in very low density and are no longer in primary context, no further work is recommended for 41DN378. The site is not recommended for nomination to the National Register of Historic Places.

41DN381

Map Quad
Elevation above MSL
Vegetation
Previous Research
Cultural Affiliation

Size
Recommendations

Little Elm 7.5', #3396-223
520-535 ft
Grass
Newman and Brown 1990
Late Archaic, Late Prehistoric I,
Late Prehistoric II
20x40m
Excavation

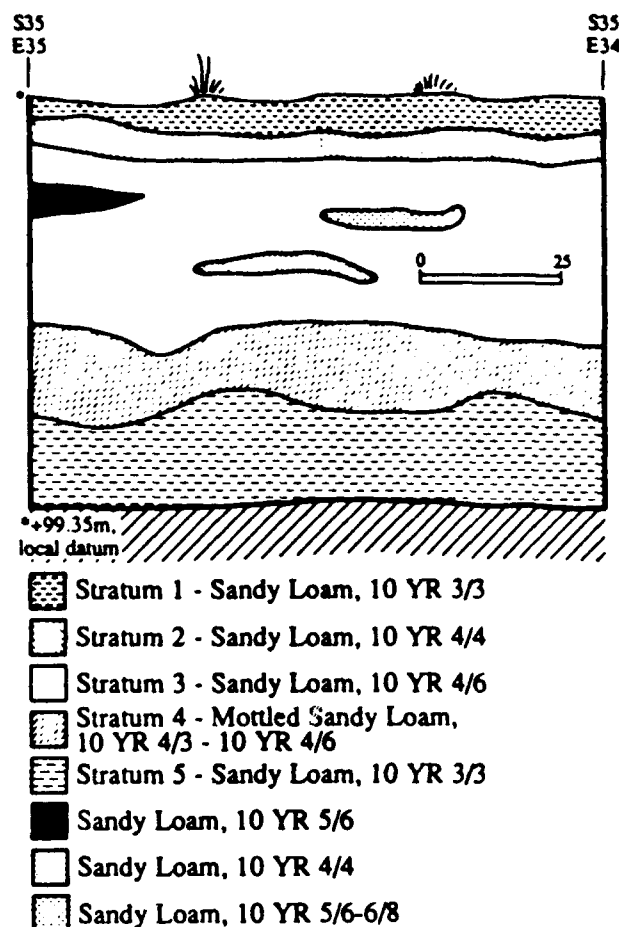


Figure 4.36 Profile of south wall of TP 2, 41DN378.

Description: Site 41DN381 is located on a gentle sandy slope and its interface with the Little Elm Creek floodplain (Figure 4.1). A small gully separates the site from site 41DN20 to the south. The site was originally noted as having a diffuse surface scatter of lithic debris in erosional areas of the ridge slope and rodent backdirt piles. Thirteen STPs placed along two transects yielded one flake (Newman and Brown 1990). The site has been disturbed by rodent burrowing and past cultivation activities.

Testing: Testing consisted of five BHTs and ten 1x1-m TPs (Figure 4.37). TPs were excavated to 80-125 cm bs (Figure 4.38). In addition to the BHTs and TPs a proton magnetometer survey was conducted over two 20x20-m areas of the site (Figure 4.37). The two areas were separated only by BHT 2. Consequently, interpolation of the data for the intervening space permitted a single map to be constructed (Figure 4.39). Several subsurface magnetic anomalies were detected. Five TPs were placed over the anomalies, resulting in detection of three rock hearths (i.e., Features 1, 2, and 4). Another rock hearth, Feature 3, was first discerned at the east end of BHT 2 and subsequently investigated by excavation of TP 1.

Features 1 and 2 were discovered in TP 5. Feature 1 occurred in level 6 while Feature 2 occurred in levels 8-9. Feature 3, the rock hearth at the east end of BHT 2, occurred within level 2 of TP 1. Feature 4 occurred in TP 9, levels 5-6.

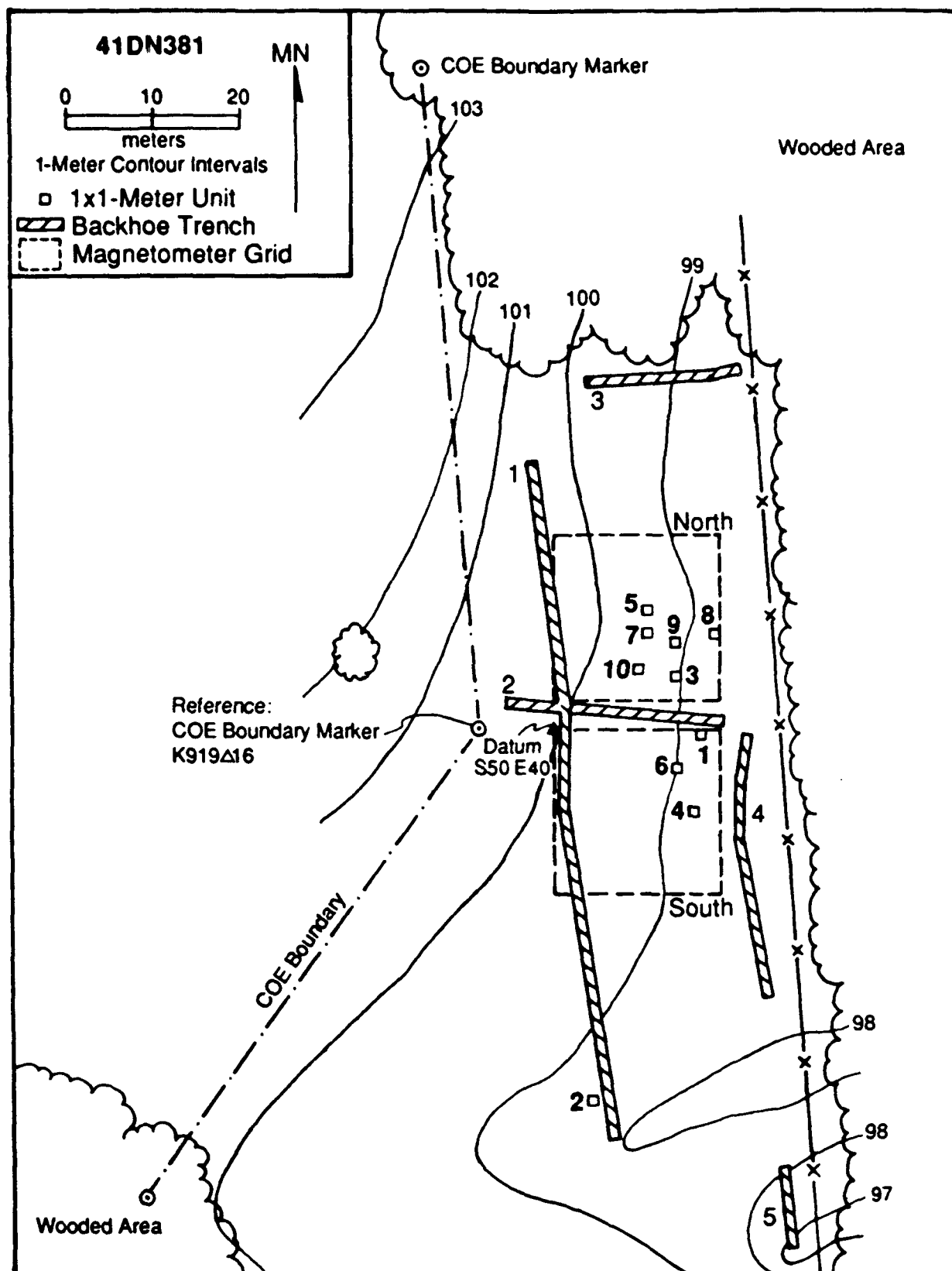


Figure 4.37 Map of site 41DN381.

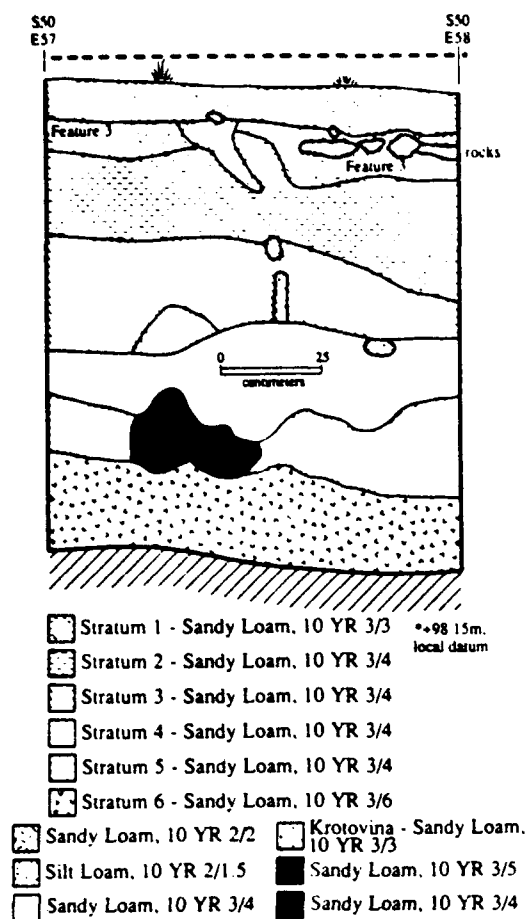


Figure 4.38 Profile of north wall of TP 1, Feature 3, 41DN381.

Projectile points include (Figure 4.30):

- | | | |
|--------|-----------|---|
| TP 1, | level 1: | Bonham arrowpoint |
| TP 3, | level 3: | Bonham arrowpoint, #26 dart/spear point |
| | level 4: | Kent dart/spear point |
| TP 5, | level 3: | Ellis dart/spear point |
| | level 5: | Dallas dart/spear point |
| | level 6: | Trinity dart/spear point |
| | level 9: | Fairland and Wells dart/spear points |
| | level 11: | Yarbrough dart/spear point |
| TP 6, | level 2: | broken arrowpoint |
| TP 7, | level 3: | Harrell arrowpoint |
| | level 10: | Ellis dart/spear point |
| TP 9, | level 1: | Bonham arrowpoint |
| | level 3: | broken dart/spear point |
| | level 5: | Fresno arrowpoint |
| TP 10, | level 8: | Kent dart/spear point |
| | level 9: | # 8 Gary dart/spear point |
| | level 10: | broken dart/spear point |

A total of 51 lithic tools were recovered of which 47 were from quarter-inch screen, two from BHTs, and two from float samples (Figure 4.40). Tools are retouched flakes, bifaces, knives, resharpening flakes, and utilized flakes (Table 4.17). Three pottery sherds, all Nocona Plain, were recovered from TPs. The sherds have plain exteriors and interiors and are tempered with crushed shell. One sherd was recovered in association with Feature 3 in TP 1. A body sherd from TP 7,

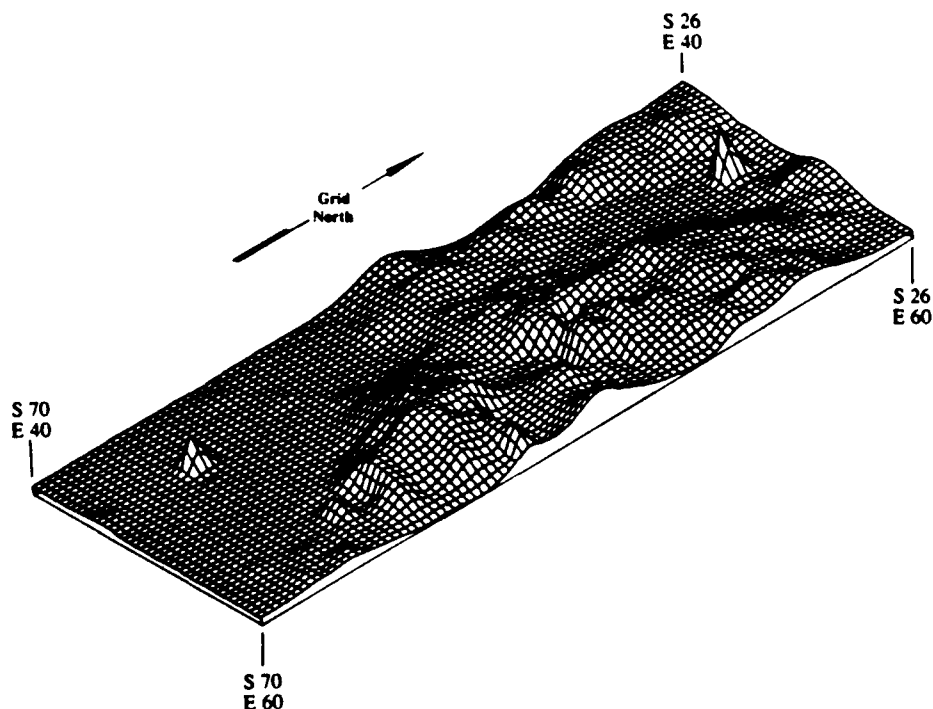


Figure 4.39 Magnetometer map of site 41DN381.

level 3, has a discernible coil break. The only historic items recovered during testing were two pieces of sheet metal. With the exception of a possible plowzone, no other evidence of historic disturbance was detected.

Table 4.17

Artifacts Recovered From Site 41DN381^{1,2}

TP	Material		Artifact Categories								
	C	Q	T	AP	DP	Ce	ID	UB	BB	S	H
1	89	146	5	1		1	46	152	58	6	
2	6										
3	59	146	10	1	2		7	19	5		
4	22	32	3				1	2	5		
5	79	140	8		6		7	33	24		
6	36	54	2	1			1	6	3		
7	51	115	8	1	1	2	7	72	32	3	
8	52	74	6								2
9	64	124	5	2	1		3	7	9		
10	53	106	2		3		1	7	1		
BHT		1	2		2						

¹ C=Chert; Q=Quartzite; T=Tool; AP=Arrow point; DP=Dart point; Ce=Ceramic; ID=Identified bone; UB=Unburned bone; BB=Burned bone; S=Shell; H=Historic.

² Counts include material recovered from floated samples.

A total of 508 bones were recovered, of which 14.4% were identified (Table 4.18). The sample recovered from the ten TPs produced 73 elements recorded among 15 taxa. Feature 2 yielded four elements, mostly teeth fragments and a non-poisonous snake vertebra. Feature 3 also yielded teeth, a snake vertebra (viper) and some turtle shell. The rodent and snake remains are exclusively from feature material that was floated. The bones are highly fragmented, gnawed, and surface weathered. Three of the large mammal splinters are fragments of bone tools, exhibiting marks of manufacture or use. Mussel shell is represented by nine valves.

Table 4.18

Identified Vertebrates from 41DN381

Taxon	Provenience	NISP ¹
Mud/Musk Turtles (Kinosternidae)		
	U. 3, Lv. 8	1
Box Turtle (<i>Terrapene</i> sp.)		
	U. 1, Lv. 3	1
	" Lv. 4	3
	U. 7, Lv. 5	1
	" Lv. 7	1
Indeterminate turtle		
	U. 1, Lv. 2	3
	" Lv. 3	2
	" Lv. 4	2
	" Lv. 5	1
	" Lv. 8	1
	" Lv. 10	1
	U. 3, Lv. 8	1
	U. 4, Lv. 3	1
	U. 5, Lv. 7	1
	U. 7, Lv. 7	1
	U. 9, Lv. 8	1
	" Lv. 11	1

Fea. 3	3
Non-vipers (Colubridae)	
Fea. 2	1

Vipers (Viperidae)	
U. 1, Lv. 2	1

Turkey (?) (cf. <i>Meleagris gallopavo</i>)	
U. 1, Lv. 9	1

Cottontail (<i>Sylvilagus floridanus</i>)	
U. 1, Lv. 2	1
" Lv. 3	1
" Lv. 4	3
" Lv. 5	1

Pocket gopher (<i>Geomys bursarius</i>)	
U. 1, Lv. 2	2

Indeterminate rodent	
U. 1, Lv. 2	1

Small mammal	
U. 5, Lv. 8	1

Medium mammal	
U. 1, Lv. 2	1
" Lv. 3	1
" Lv. 5	1
" Lv. 6	1
U. 5, Lv. 3	1
Fea. 2	1

White-tailed deer (<i>Odocoileus virginianus</i>)	
U. 1, Lv. 3	2
" Lv. 4	2
" Lv. 7	2
" Lv. 8	1
" Lv. 9	2
" Lv. 10	1
U. 3, Lv. 5	1
" Lv. 7	1
U. 7, Lv. 3	1
U. 10, Lv. 8	1
Fea. 2	1

Bison (<i>Bison bison</i>)	
U. 7, Lv. 3	1

Cow/Bison/Elk (Artiodactyla)	
U. 3, Lv. 9	1
" Lv. 10	1
U. 6, Lv. 2	1
U. 7, Lv. 3	1

Large mammal (tool)	
U. 1, Lv. 3	1
" Lv. 4	1
" Lv. 6	1
" Lv. 8	1
U. 3, Lv. 5	1
(tool) U. 7, Lv. 4	1
U. 9, Lv. 10	1
Fea. 2	1

¹ NISP=Number of identified specimens.

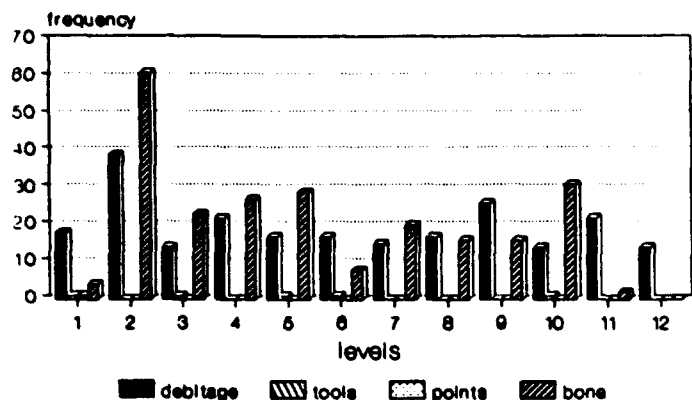


Figure 4.40 Distribution of artifacts in TP1, 41DN381.

Recommendations: Results of testing at 41DN381 indicate the site contains well-preserved organic remains, cultural features, and artifacts representing Late Archaic and Late Prehistoric occupations. Artifactual remains extend to a depth of approximately 1 m, and charcoal occurs throughout the matrix. The organic remains will provide data for radiocarbon dating, subsistence strategies, butchering techniques, and environmental reconstructions. The lithic debris will provide information about social and trade networks and stone tool technology. The intact features, in conjunction with the artifacts, will permit intrasite analyses of activity areas. Therefore, these findings indicate that 41DN381 is eligible for nomination to the National Register of Historic Places, and mitigation efforts should be expended to address Research Design issues.

41DN384

Map Quad	Little Elm 7.5', #3396-223
Elevation above MSL	525-530 ft
Vegetation	Grass, trees
Previous Research	Newman and Brown 1990
Cultural Affiliation	Late Prehistoric I, Historic
Size	10x60m
Recommendations	No further work

Description: Site 41DN384 is located on an upland ridge and adjacent slopes along the Little Elm drainage (Figure 4.1). Sandstone bedrock exposures occur along the eroded ridge slope and beach area. A diffuse scatter of lithic debris occurred along the eroded slopes in an area measuring approximately 50x70 m (Newman and Brown 1990). However, subsequent testing indicates the remaining portion of the site is confined to a much smaller area measuring only 10x60-m.

Testing: Testing consisted of three BHTs and three 1x1-m TPs (Figure 4.41). The TPs were excavated to 30-60 cm bs (Figure 4.42). Results of testing indicate the only part of the site with any depth is in an old fence line that has been removed.

Historic items were found in association with the prehistoric remains. The old fence line represents the edge of a previously cultivated field where plowed soil accumulated along the fence. It is this accumulation that contains the mixture of both prehistoric and historic remains.

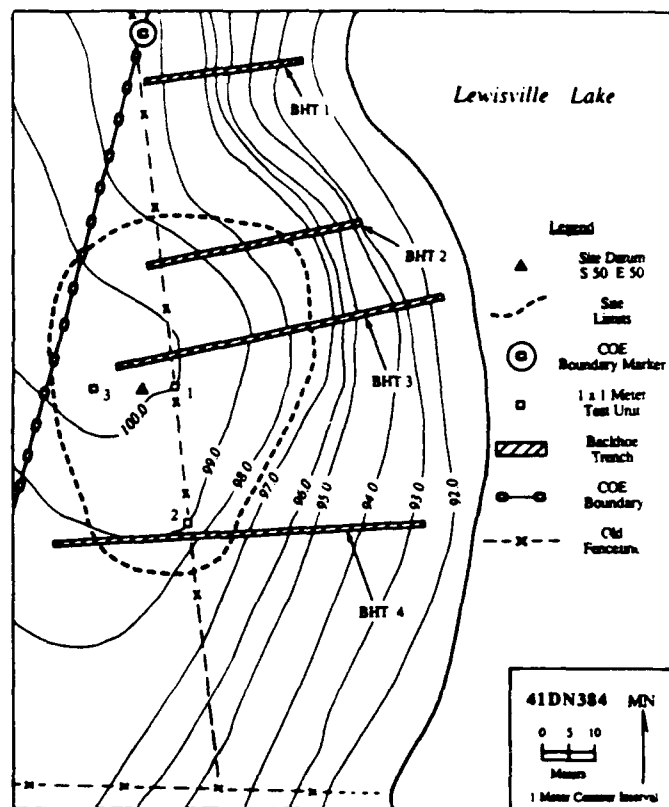


Figure 4.41 Map of site 41DN384. (Contour line 98.0 approximates the 532-ft flood pool elevation.)

Prehistoric diagnostic artifacts include two Catahoula arrowpoints recovered from TP 1, level 4 (Figures 4.43 and C.6b). The only other prehistoric tool, a retouched flake, was recovered from BHT 4. A total of three animal bones, none identified, were recovered. Historic remains include a fence staple, whiteware, bottle glass, zinc fruit jar fragments, a 12-gauge shotgun shell, and a two-strand twisted barbed wire fragment.

Table 4.19

Artifacts Recovered From Site 41DN384¹

TP	Material		Artifact Categories								
	C	Q	T	AP	DP	Ce	ID	UB	BB	S	H
1	3	9		2				3			7
2		1									2
3	5	2									1
BHT			1								

¹ C=Chert; Q=Quartzite; T=Tool; AP=Arrow point; DP=Dart point; Ce=Ceramic; ID=Identified bone; UB=Unburned bone; BB=Burned bone; S=Shell; H=Historic.

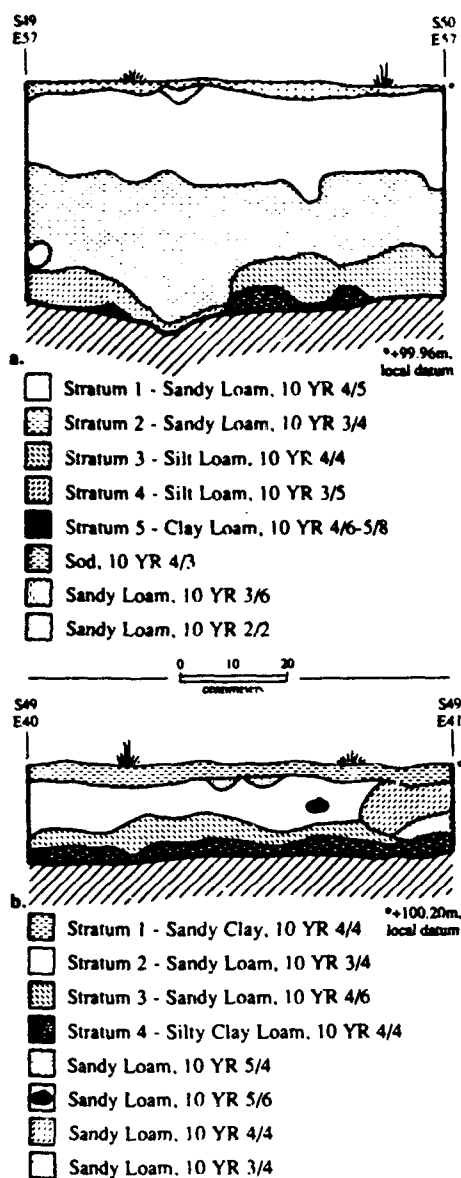


Figure 4.42a Profile of east wall of TP 1, 41DN384;
42b Profile of north wall of TP 3, 41DN384.

Recommendations: Results of testing indicate no prehistoric or historic remains are in primary context. The cultural remains are contained within deposits along a previous fence row. Therefore, no further work is recommended for site 41DN384. The site is not recommended for nomination to the National Register of Historic Places.

41DN386

Map Quad	Little Elm 7.5', #3396-223
Elevation above MSL	500-540 ft
Vegetation	Grass, trees
Previous Research	Newman and Brown 1990
Cultural Affiliation	Late Archaic, Late Prehistoric I, Late Prehistoric II
Size	5x40m
Recommendations	No further work

Description: Site 41DN386 is located on an upland ridge and adjacent slopes on the north site of a major drainage where the opposing uplands come close together (Figure 4.1). The site was originally believed to include most of the sandy knoll. Large quantities of prehistoric artifacts, including projectile points (Figure 4.43), bifaces, scrapers, and flakes, were collected from the beach. Several of the 19 STPs placed along four transects yielded subsurface materials from the ridge and slopes (Newman and Brown 1990). However, results of testing indicate the site is confined to the lower elevations along the beach and probably on a terrace that is now inundated by Lake Lewisville. The terrace is discernible on the 1948 topographic map.

Testing: Testing consisted of two BHTs and four 1x1-m TPs (Figure 4.44). TPs were excavated to 20-70 cm bs (Figure 4.45). The only evidence of prehistoric occupation was from TPs placed on the beach. A rock hearth, Feature 1, was discovered in TP 1, level 4 (Figure C.6c). Large quantities of artifacts were recovered from the severely eroded beach (Table 4.20).

Diagnostic artifacts recovered from TPs include one Travis and one Yarbrough dart/spear points from TP 4, levels 4 and 6, respectively. The base of a broken dart/spear point was also recovered from TP 4, level 4. The bases of two dart/spear points were recovered from TP 1, levels 3 and 6 (Figure 4.43).

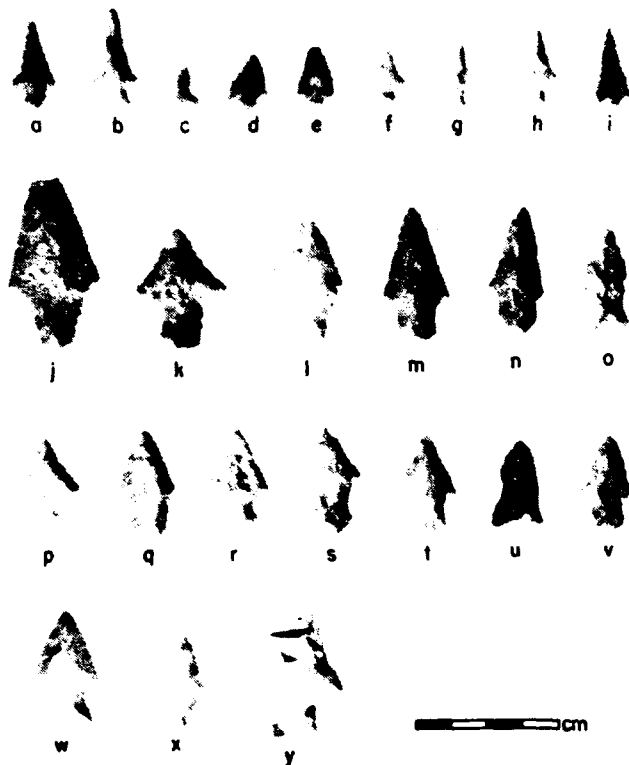


Figure 4.43 Projectile points from 41DN382, 41DN384, 41DN386, 41DN387, and 41DN446. Key (site #/TP #/level #): a. 382/1/4; b. 384/1/4; c-v. 386; w. 387/1/2; x. 387/2/8; y. 446/4/11.

A total of 15 tools were recovered from TPs. These include retouched flakes, resharpening flakes, and utilized flakes. One tool was recovered from BHT 1 while 61 tools, in

addition to the projectile points, were recovered from the beach (Figure 4.46). Dart/spear points recovered from the beach include one # 1 Gary, five # 3 Gary, two # 8 Gary, two Dallas, two Palmillas-like, one Travis, five Yarbrough, one Carrollton, one Ellis, one Trinity, and one # 30 lanceolate type point. Arrowpoints include two Bonham, three Scallorn, two Fresno, one Clifton, one Catahoula, and one Harrell.

Other projectile points include one broken arrowpoint and nine broken dart/spear points. Two grooved sandstone abraders and a hammerstone were also recovered from the beach along with four pieces of pottery. The pottery sherds have plain exteriors and interiors and are tempered with crushed shell. Other tools include denticulates, knives, retouched flakes, and notches/spokeshaves. Historic items recovered from the TPs 1 and 4 include plastic fragments and bottle glass from levels 1-3.

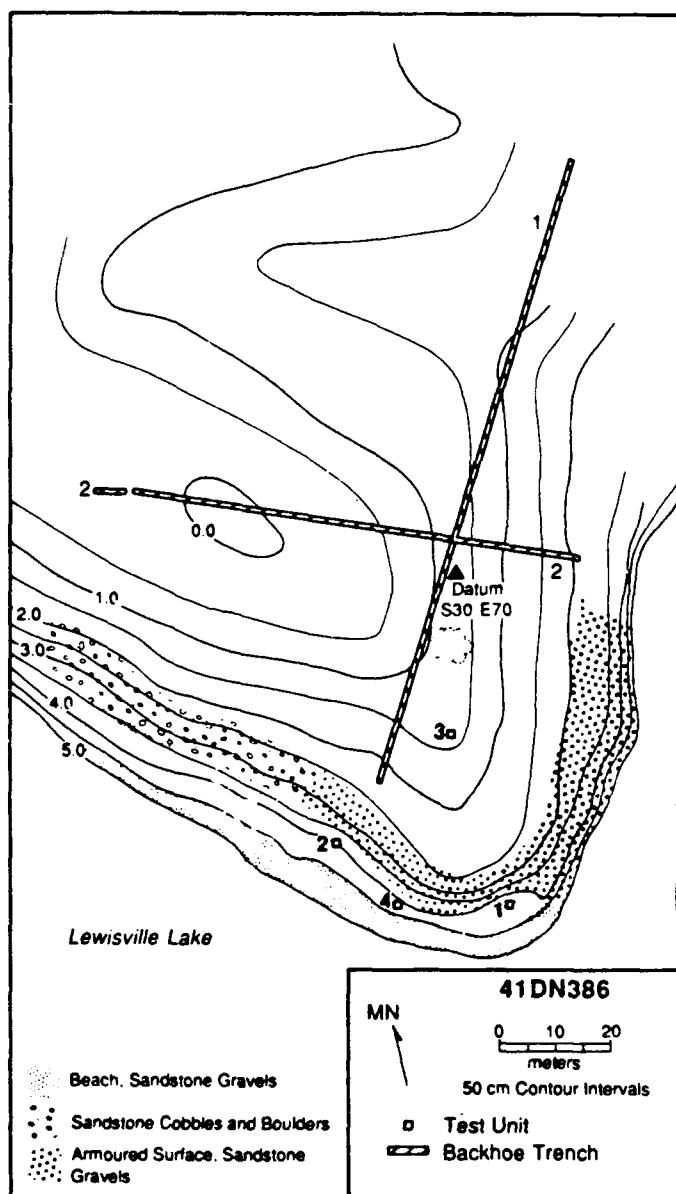


Figure 4.44 Map of site 41DN386. (Contour line 0.5 approximates the 532-ft flood pool elevation.)

A single, lower right second molar, of a human was recovered from the beach. The tooth measures mesiodistally 11.0 mm, buccolingually 11.5 mm, the apex-crown is 18.5 mm, and the cingulum-crown is 6.5 mm. The roots are fused, and tertiary anatomy is noted. The root apex is patent to a thin wire probe. This fact together with the minimal wear on the cusps and the absence of calculus suggests a person of young adult years (i.e., <23 years old). Three small carious lesions are seen in the intercusps. One carious lesion completely penetrates the enamel. A small mesiobuccal plane (2x4 mm), sloping downward laterally, shows microscarring and pitting compatible with mechanical use of the dentition in concert with the right hand.

Table 4.20

Artifacts Recovered From Site 41DN386¹

TP	Material			Artifact Categories							
	C	Q	T	AP	DP	Co	ID	UB	BB	S	H
1	17	37	4		2		34	169	60	1	5
2	5	38	2				1	2			22
3	3	13									
4	33	79	7		3		4	10	13		4
Be	164	291	61	11	31	4	32	31	14	1	
Surf.	1										

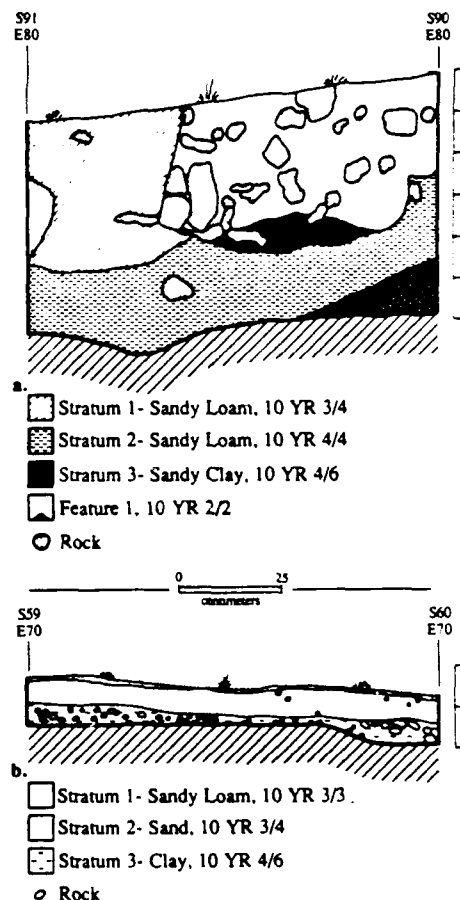


Figure 4.45a Profile of west wall of TP 1, 41DN386;
45b Profile of east wall of TP 3, 41DN386.

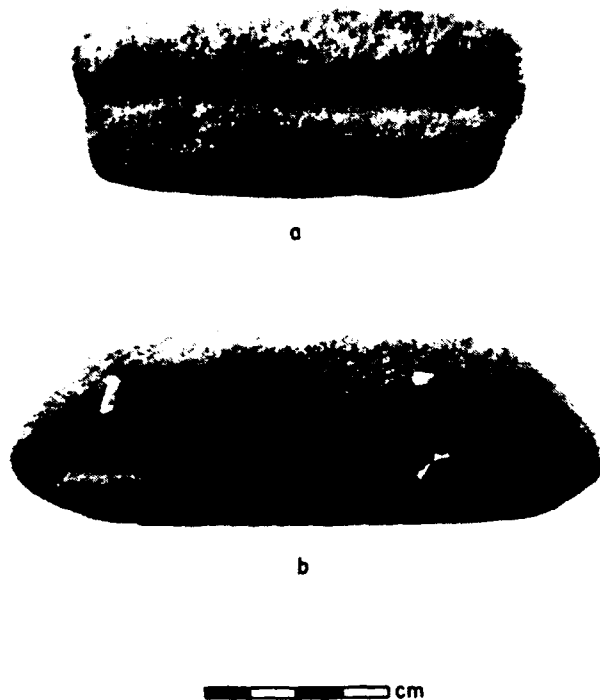


Figure 4.46 Sandstone grooved abraders from the beach at 41DN386.

Table 4.21 shows the identified faunal remains recovered from the TPs and the beach. Fauna most likely associated with the prehistoric occupation include turtle, beaver, deer, and bison. Out of a total of 370 animal bones, 19% have been identified. The vertebrates are all typical faunas for the region and common to archaeological sites of this time period. Only one element, a maxilla fragment of a beaver, had butcher marks. The cut marks probably represent skinning cuts. Seventeen percent of the identified remains were burned, while 29% of the unidentified bones were burned. A tool fragment made from a large mammal bone was recovered from the beach. Mussel shells include two valves.

Table 4.21

Identified Vertebrates from 41DN386

Taxon	Provenience	NISP ¹
Gar (<i>Lepisosteus</i> sp.)		
	Beach	4
Drum (<i>Aplodinotus grunniens</i>)		
	U. 4, Lv. 1	1
	Beach	1
Indeterminate fish	Fea. 1	1
Map turtle (<i>Graptemys</i> sp.)		
	Fea. 1	1
Box turtle (<i>Terrapene</i> sp.) (MNI = 2)		

U. 1, Lv. 2	1
Fea. 1	1
Beach	2
Indeterminate turtle	
U. 1, Lv. 4	1
" Lv. 5	1
U. 4, Lv. 2	1
Fea. 1	1
Indeterminate snake	
Fea. 1	1
Cottontail (<i>Sylvilagus floridanus</i>) (MNI = 2, by prov.)	
Beach	2
Fea. 1	2
Pocket gopher (<i>Geomys bursarius</i>)	
Beach	1
Squirrel (<i>Sciurus</i> sp.)	
Beach	1
Beaver (<i>Castor canadensis</i>) (MNI = 2, by prov.)	
U. 1, Lv. 5	1
Beach	2
Indeterminate rodent	
Fea. 1	1
Small mammal	
Fea. 1	2
Raccoon (<i>Procyon lotor</i>)	
Beach	1
Deer (<i>Odocoileus virginianus</i>) (MNI = 2, dental age)	
U. 1, Lv. 3	1
" Lv. 4	1
U. 4, Lv. 2	1
" Lv. 5	1
Beach	12
Fea. 1	1
Bison (<i>Bison bison</i>)	
U. 1, Lv. 4	3
Fea. 1	2
Cow/Bison/Elk (Artiodactyla)	
U. 1, Lv. 3	2
U. 2, Lv. 4	1
Beach	4
Fea. 1	1
Large mammal	
U. 1, Lv. 3	4
" Lv. 4	3
" Lv. 6	1
(tool) Beach	1
Fea. 1	1

¹ NISP=Number of identified specimens.

A hearth, Feature 1, was discerned in TP 1, level 4. The hearth contained burned rock and quantities of lithic debris and bone. The feature is located on a narrow shelf that parallels the beach and is being eroded into the lake. The

shelf is less than 4 m wide and appears to represent the beach line during normal pool elevation.

Recommendations: Results of testing indicate most of site 41DN386 has been destroyed with the remaining portions severely disturbed by shoreline erosion. Although large numbers of artifacts have been collected from the beach, their origin and provenience cannot be determined. Therefore, no further work is recommended for site 41DN386. The site is not recommended for nomination to the National Register of Historic Places.

41DN387

Map Quad	Little Elm 7.5', #3396-223
Elevation above MSL	515-535 ft
Vegetation	Grass, brush, trees
Previous Research	Newman and Brown 1990
Cultural Affiliation	Late Prehistoric II, Historic
Size	40x80m
Recommendations	No further work

Description: Site 41DN387 is located on an upland slope on the southern edge of a drainage that has its confluence with Little Elm Creek to the west (Figure 4.1). A dirt road traverses the northern part of the site. A dense surface scatter of lithic debris was observed. Some of the 19 shovel tests, spaced 20 m apart, yielded additional lithic debris (Figure 4.47).

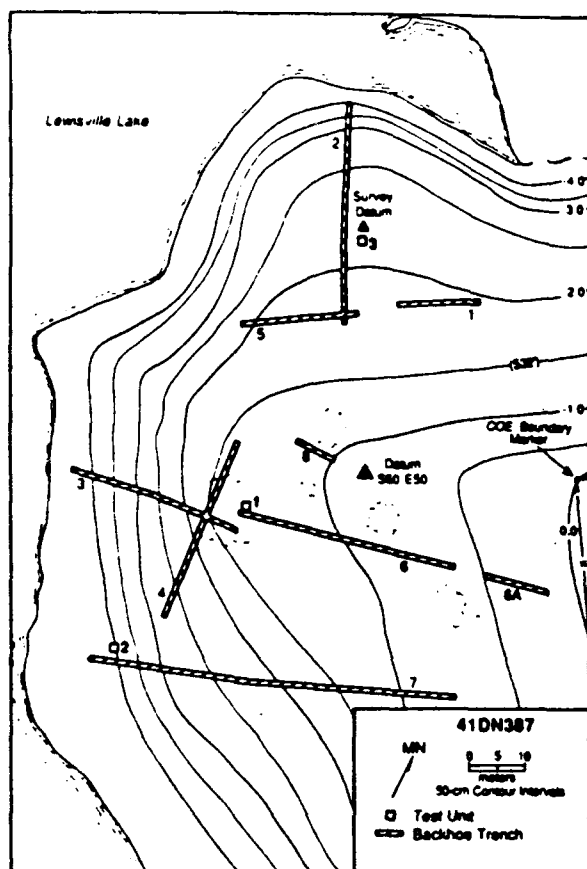


Figure 4.47 Map of site 41DN387.

Testing: Testing consisted of eight BHTs and three 1x1-m TPs which were excavated to 40-80 cm bs (Figure 4.48). Results of testing indicate an early twentieth century occupation has severely disturbed the Late Prehistoric component, particularly on the ridge top in the vicinity of TP 1. Artifacts from TP 2, which is located at the base of a steep slope, are attributed to colluvial deposition (Figure C.7a). Prehistoric diagnostic artifacts include Ellis and Gary dart/spear points from TP 1, levels 2 and 6, respectively. A broken dart/spear point was also recovered from level 7. A Carrollton dart/spear point was recovered from TP 3, level 3, and a Bonham arrowpoint was recovered from TP 2, level 8. Other tools include a knife, retouched flakes, utilized flakes, a hammerstone, and a notch/spokeshave (Table 4.22).

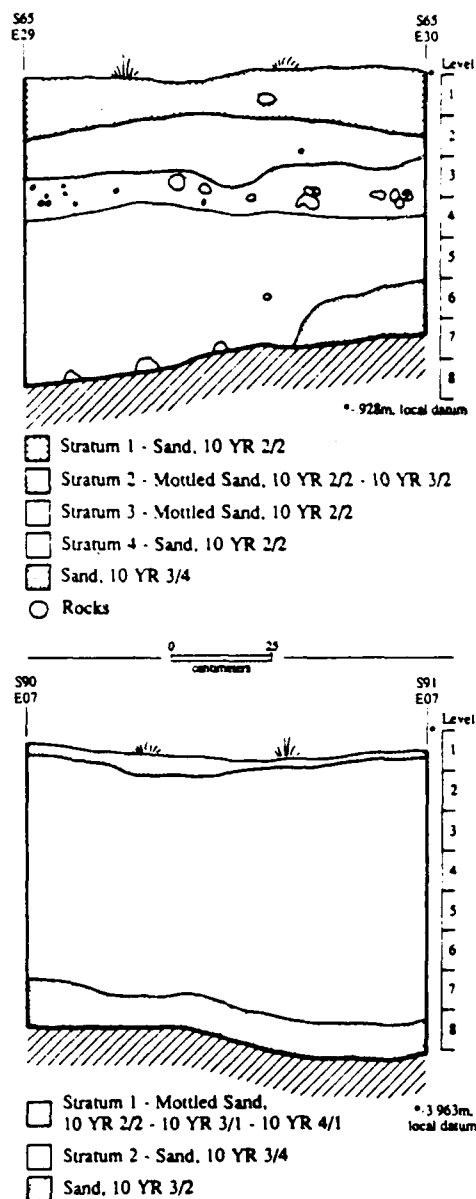


Figure 4.48a Profile of north wall of TP 1, 41DN387;
48b Profile of east wall of TP 2, 41DN387.

Prehistoric ceramics include two sherds with plain exteriors and interiors that are tempered with crushed shell. The sherds were recovered from TP 1, level 4. Historic remains include tin can fragments, metal screws, wire,

whiteware, bottle glass, a porcelain doorknob fragment, shoe and boot eyelets, jean rivets, a 4-hole white glass button, .22-cal. cartridges, and a 12-gauge shotgun shell.

Table 4.22

Artifacts Recovered From Site 41DN387¹

TP	Material		Artifact Categories								
	C	Q	T	AP	DP	Ce	ID	UB	BB	S	H
1	47	74	2		5	2	14	18	27	1	247
2	12	61	4	1			28	45	44	1	
3	25	30	2		1						3
BHT		1	1				2	1			
Surf.			1		1						

¹ C=Chert; Q=Quartzite; T=Tool; AP=Arrow point; DP=Dart point; Ce=Ceramic; ID=Identified bone; UB=Unburned bone; BB=Burned bone; S=Shell; H=Historic.

Table 4.23 shows the identified faunal remains. A total of 179 bones (25% identified) were recovered. Animals most likely associated with the prehistoric occupation include turtle, deer, bison, and cottontail. The site has an abundance of historic materials mixed with the prehistoric remains. Consequently, the indeterminate categories of large mammal and cow/bison/elk could represent pig, cow, bison, or deer (elk is doubtful). Likewise, the presence of armadillo in level 1 indicates modern intrusion by this burrowing edentate, and the origin of a single, unburned femur of a cotton rat is not known. The rest of the faunal assemblage is typical of prehistoric sites in the region, indicating exploitation of aquatic/ riparian habitats (fishes, skunk), woodland edges (cottontail, box turtle, deer), and grasslands (cotton rat, bison). None of the bones exhibit butchering marks. Interestingly, 41% of the identified bones are burned; however, the cause of burning is not clear. Mussel shell consists of two valves.

Table 4.23

Identified Vertebrates from 41DN387

Taxon	Provenience	NISP ¹
cf. White crappie (<i>Pomoxis annularis</i>)	U. 1, Lv. 1	1
Indeterminate fish	U. 1, Lv. 1	2
Box turtle (<i>Terrapene</i> sp.)	U. 2, Lv. 3	1
Indeterminate turtle	U. 1, Lv. 5	1
	U. 2, Lv. 2	2
	" Lv. 3	2
	" Lv. 4	3
	" Lv. 5	1
	" Lv. 6	3
	" Lv. 8	1
BHT 7		1
Armadillo (<i>Dasypus novemcinctus</i>)		

	U. 1, Lv. 1	1
Cottontail (<i>Sylvilagus floridanus</i>)	U. 2, Lv. 6	1
Cotton rat (<i>Sitomodon hispidus</i>)	U. 4, Lv. 1	1
Striped skunk (<i>Mephitis mephitis</i>)	U. 1, Lv. 1	2
Medium mammal	U. 1, Lv. 4	1
	U. 2, Lv. 4	2
White-tailed deer (<i>Odocoileus virginianus</i>)	U. 1, Lv. 2	1
	" Lv. 6	1
	U. 2, Lv. 2	1
	" Lv. 7	4
BHT 7		1
Large mammal	U. 1, Lv. 6	2
	U. 2, Lv. 4	1
	" Lv. 6	1
(2 tools)	" Lv. 7	3
Pig (<i>Sus scrofa</i>)	U. 1, Lv. 4	1
Cow/Bison/Elk (<i>Artiodactyla</i>)	U. 2, Lv. 3	1
Bison (<i>Bison bison</i>)	U. 2, Lv. 7	1

¹ NISP=Number of identified specimens.

Recommendations: Results of testing indicate the prehistoric component at site 41DN387 has been severely disturbed by a historic occupation and colluvial processes. Because the prehistoric remains are no longer in primary context and appear to be mixed with historic materials, no further work is recommended for the site. The site is not recommended for nomination to the National Register of Historic Places.

41DN436

Map Quad	Lewisville West 7.5', #3397-111
Elevation above MSL	515-540 ft
Vegetation	Grass, brush, trees
Previous Research	Newman and Brown 1990
Cultural Affiliation	Not known
Size	20x80m
Recommendations	No further work

Description: Site 41DN436 is located on the edges and slopes of an upland ridge that protrudes into the Hickory Creek drainage of Lake Lewisville (Figure 4.1). The moderate slopes of the ridge facilitate exposure of quartzite cobbles. No temporally diagnostic artifacts were observed with the majority of the lithics consisting of tested cobbles, cores,

and flakes. The site has been periodically inundated and is normally part of the beach (Newman and Brown 1990).

Testing: Testing consisted of six BHTs and six 1x1-m TPs (Figure 4.49). The TPs were excavated to 10-20 cm bs (Figure 4.50). Historic debris was found in association with prehistoric lithic materials (Table 4.24) (Figure C.7b). Most of the prehistoric items consisted of tested cobbles, a few flakes, and hammerstones that were recovered from the beach. No organic remains or diagnostic artifacts were observed. Historic items recovered from the TPs include plastic fragments, clinkers, cork, asphalt, and bottle glass.

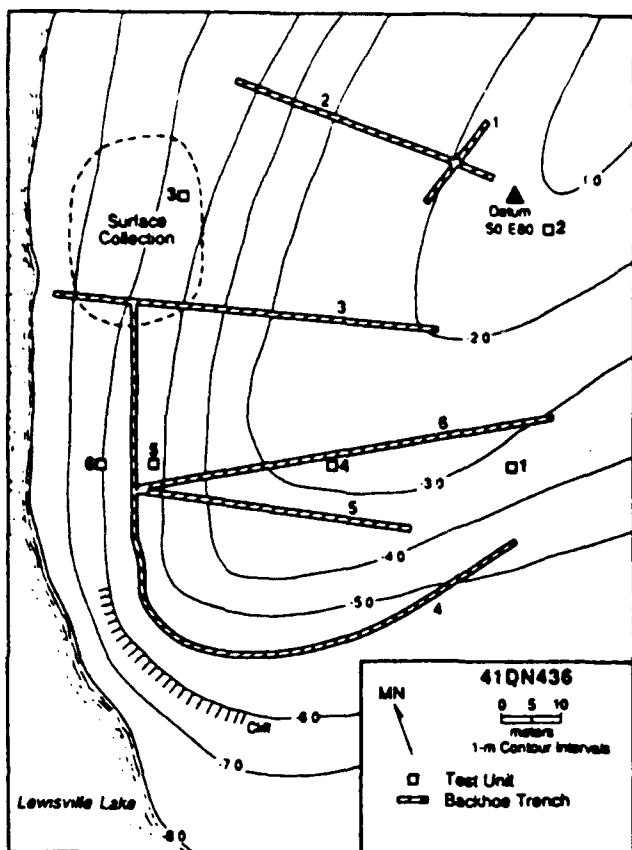


Figure 4.49 Map of site 41DN436. (Contour line -1.0 approximates the 532-ft flood pool elevation.)

Two intensive surface collections yielded a large quantity of lithic debris (Table 4.24). Most artifacts are quartzite cobbles that have either been tested for determination of suitable raw material for the manufacture of chipped stone tools and/or quartzite cores. Cores generally have had only a few flakes removed. The low frequency of flakes suggests most lithic reduction occurred at loci other than the Uvalde Gravel outcrop. The recovery of three chert flakes indicate some nonlocal material was brought to this lithic workshop for minimal modification.

Tested cobbles have only one or two flake scars. Cobbles were struck where a flat surface was present on the cobble which provided a striking platform. Cores are "block cores" that have had several flakes randomly removed. Lithic reduction at the site was by use of hard hammer percussion with little evidence of tool manufacture occurring at the site.

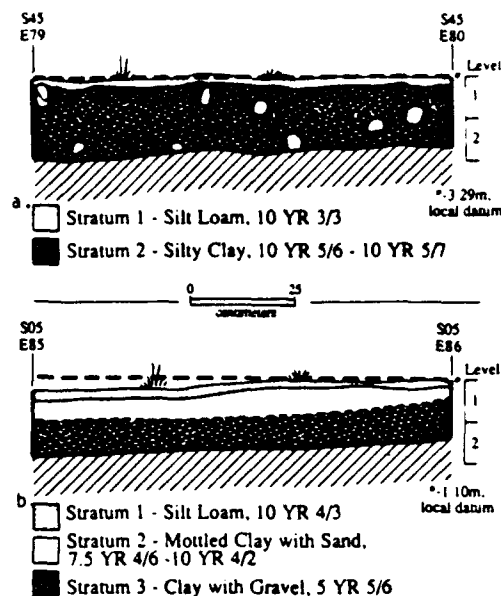


Figure 4.50a Profile of north wall of TP 1, 41DN436;
50b Profile of north wall of TP 2, 41DN436.

Table 4.24

Artifacts Recovered From Site 41DN436¹

TP	Material		Artifact Categories								
	C	Q	T	AP	DP	Ce	ID	UB	BB	S	H
1		4									
2		5									9
3		8									
4		9	4								
5		59	8								
6		10	1								
Surf.	3	68	41								

¹ C=Chert; Q=Quartzite; T=Tool; AP=Arrow point; DP=Dart point; Ce=Ceramic; ID=Identified bone; UB=Unburned bone; BB=Burned bone; S=Shell; H=Historic.

Recommendations: Results of testing indicate the site has been severely disturbed by shoreline erosion. In addition to testing, there have been two intensive surface collections conducted on the beach. The absence of artifacts in their primary context and the recovery of a large quantity of lithic debris make additional investigation unwarranted.

Recovered materials indicate the Uvalde Gravels were used as a source of quartzite cobbles for the manufacture of chipped stone tools. Most of the lithic debris consists of tested material with few flakes being recovered. This suggests lithic reduction occurred at loci other than where the Uvalde Gravels outcrop.

Because of severe site disturbance, no further work is recommended. The site is not recommended for nomination to the National Register of Historic Places.

41DN442

Map Quad Lewisville West 7.5', #3397-111
 Elevation above MSL 525-530 ft
 Vegetation Grass, brush, trees
 Previous Research Newman and Brown 1990
 Cultural Affiliation Late Archaic
 Size 5x5m
 Recommendations No further work

Description: Site 41DN442 is located on a terrace of a small tributary of Poindexter Branch of Hickory Creek (Figure 4.1). The site was discovered as a surface scatter of lithic debris and a dart/spear point in a streambed (Figure 4.51). A dense layer of charcoal was exposed approximately 130-140 cm bs in the adjacent streambank (Newman and Brown 1990).

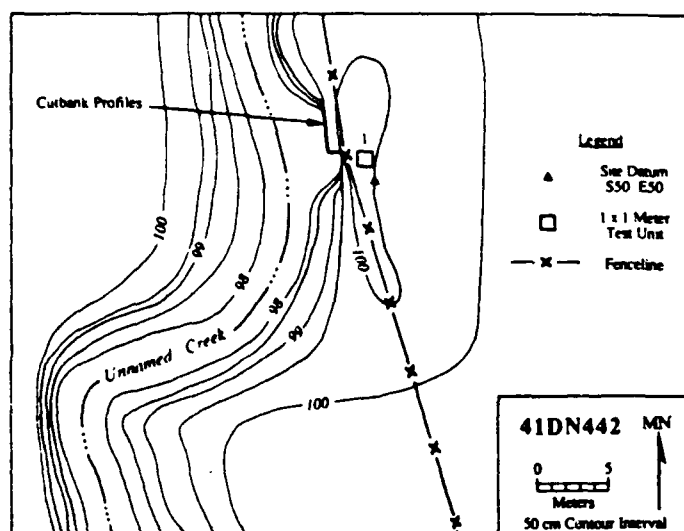


Figure 4.51 Map of site 41DN442. (Contour line 100 approximates the 532-ft flood pool elevation.)

Testing: Testing consisted of cleaning the cutbank with the aid of a backhoe and one 1x1-m TP. TP 1 was excavated 93 cm bs (Figure 4.52). It was not excavated to 140 cm bs because the slope of the buried charcoal was oriented toward the surface where the pit was; consequently, its depth was much less in the 1x1-m unit than where it was exposed along the creek bank. No prehistoric artifacts were observed, but several historic items, consisting of a plastic fragment, some wire strands, and a piece of two-strand twisted barbed wire, were recovered from the upper two levels of TP 1 (Figure C.7c). Profiling the cutbank helped to elucidate the nature of the deposits which appear to represent several episodes of alluviation and possible burning of the vegetation (Figure 4.53). There was no evidence of cultural activity associated with any of the buried deposits. The charcoal is attributed to episodes of natural burning and subsequent burial.

Recommendations: Results of testing indicate no cultural remains are associated with the buried deposits that contain charcoal. In the absence of cultural remains, it is recommended that no further work be conducted at 41DN442. The site is not recommended for nomination to the National Register of Historic Places.

41DN446

Map Quad Lewisville West 7.5', #3397-111
 Elevation above MSL 525-540 ft
 Vegetation Grass, brush, trees
 Previous Research Newman and Brown 1990
 Cultural Affiliation Late Prehistoric II, Historic
 Size 60x80m
 Recommendations No further work

Description: Site 41DN446 is located on a gentle sandy slope that is adjacent to the Hickory Creek channel (Figure 4.1). Numerous ridges and adjacent small drainages characterize the area that exhibits some marked topographical relief. The site was discovered when lithic and historic debris were observed in a dirt road. Cultural remains were recovered from several of 13 STPs. A Bonham arrowpoint was recovered from the surface (Newman and Brown 1990).

Testing: Testing consisted of four BHTs and four 1x1-m TPs (Figure 4.54). TPs were excavated to 60-150 cm bs (Figure 4.55). A rock hearth was discovered in TP 1, level 5. No organic remains were found in association with the hearth. Results of testing indicate the site has been severely disturbed by historic activities to depths of 20-50 cm bs (Figures C.8a and C.8b) and by erosion and colluvial processes.

The only diagnostic artifact recovered was an Ellis dart/spear point fragment from TP 4, level 11 (Figure C.8b). Tools include a core and utilized flakes (Table 4.25).

A total of 11 bones were recovered, of which one was identified. This bone was an unburned cervical vertebra from a large turtle. It was from TP 2, level 1. Because a large quantity of historic debris was also recovered from TP 2, levels 1 and 2, the turtle may be a recent intrusion.

Historic items recovered from the TPs include plastic shotgun wadding, plastic fragments, tin can fragments, cinder block fragments, ceramic skeet fragments, hand-made brick fragments, aluminum pull tabs, bottle glass, and a Pearl Beer can.

Table 4.25

Artifacts Recovered From Site 41DN446¹

TP	Material		Artifact Categories								
	C	Q	T	AP	DP	Ce	ID	UB	BB	S	H
1	10	8									43
2	7	6	1				1				18
3	4	18	3								5
4	16	83	4		1			10			3
Surf.		2									

¹ C=Chert; Q=Quartzite; T=Tool; AP=Arrow point; DP=Dart point; Ce=Ceramic; ID=Identified bone; UB=Unburned bone; BB=Burned bone; S=Shell; H=Historic.

Recommendations: Results of testing indicate site 41DN446 has been severely disturbed by historic activities and erosion. The low density of prehistoric remains and

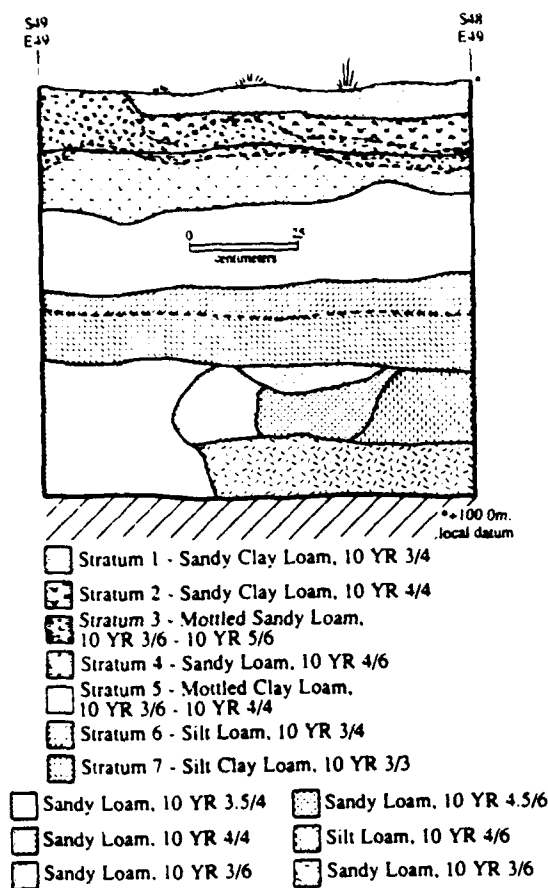


Figure 4.52 Profile of the west wall of TP 1 at 41DN442.

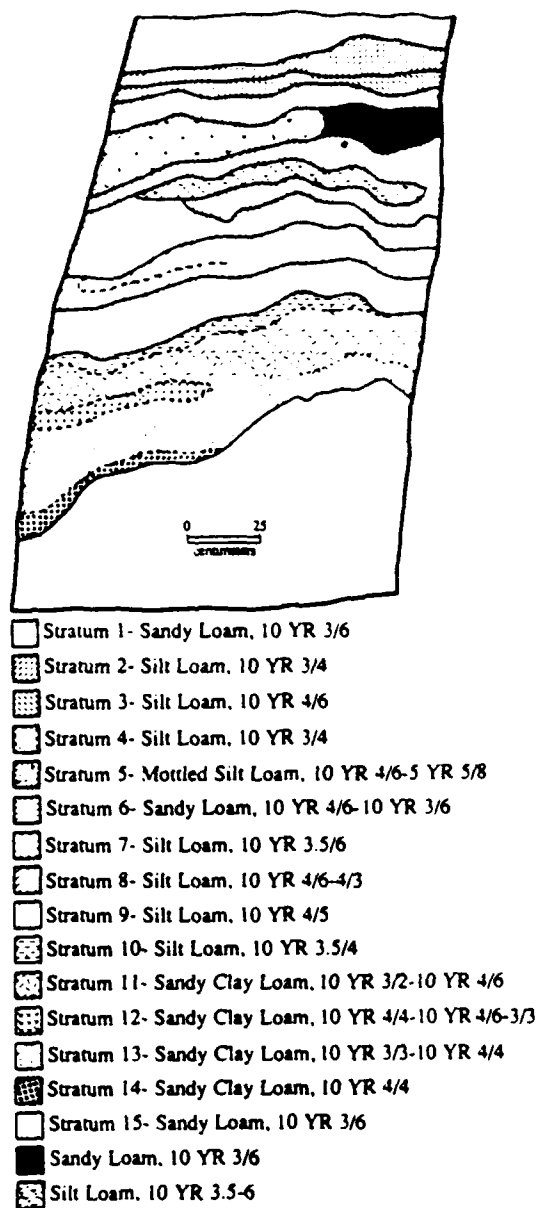


Figure 4.53 Profile of the north wall of the creek bank at 41DN442.

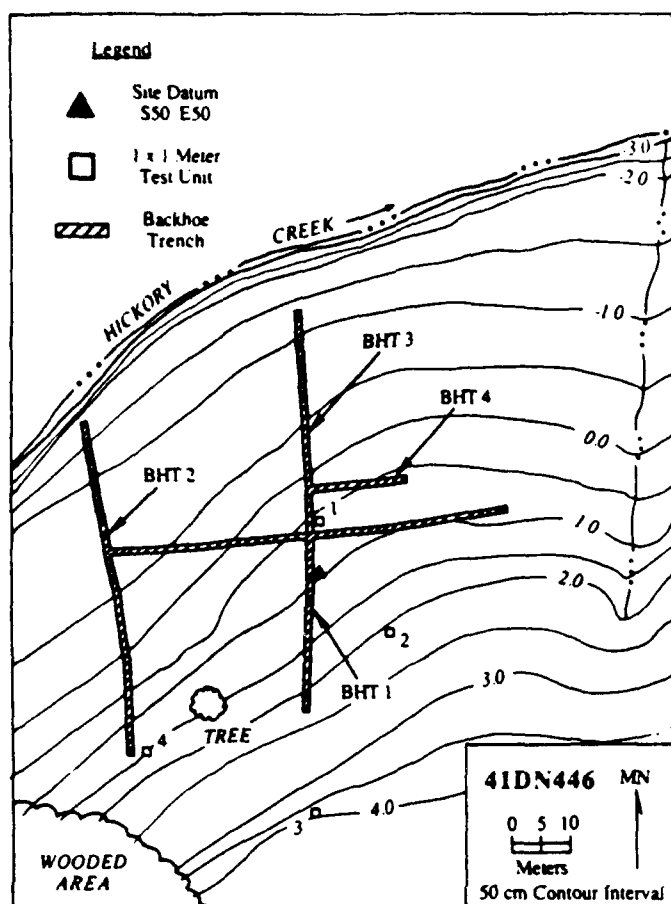


Figure 4.54 Map of site 41DN446. (Contour line 1.0 approximates the 532-ft flood pool elevation.)

general absence of organic remains does not indicate the site contains significant information. Prehistoric cultural remains do not appear to be in primary context. Therefore, no further work is recommended for 41DN446. The site is not recommended for nomination to the National Register of Historic Places.

41DN447

Map Quad Lewisville West 7.5', #3397-111
 Elevation above MSL 522-529 ft
 Vegetation Grass, brush, trees
 Previous Research Newman and Brown 1990
 Cultural Affiliation Unknown prehistoric, Historic
 Size 20x30m
 Recommendations No further work

Description: Site 41DN447 is located on the sandy toe slope of a terrace that is on the south side of Hickory Creek (Figure 4.1). Hickory Creek is located less than 50 m north of the site area. The site was located by recovery of lithic and historic debris from three of 17 STPs placed along six transects. The site has been severely disturbed by past cultivation activities (Newman and Brown 1990).

Testing: Testing consisted of three BHTs and three 1x1-m TPs (Figure 4.56). The TPs were excavated to 15-40 cm bs (Figure 4.57). Historic remains were found in association with the prehistoric remains (Figure C.8c). All cultural remains are

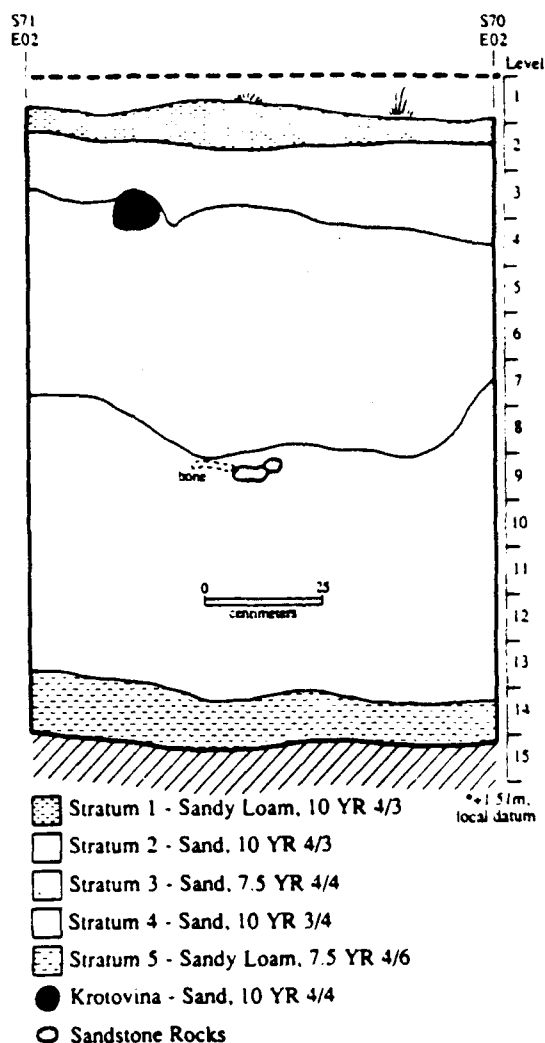


Figure 4.55 Profile of west wall of TP 4, 41DN446

confined to the plowzone. No prehistoric diagnostic artifacts were found. Tools recovered include a knife from BHT 1, a biface resharpening flake, and a retouched flake (Table 4.26). No organic remains were observed. Historic items recovered from the TPs include whiteware, bottle glass, a 4-hole white glass button, and a .22-cal. lead bullet. The historic remains are indicative of an early twentieth century occupation.

Table 4.26

Artifacts Recovered From Site 41DN447¹

TP	Material			Artifact Categories							
	C	Q	T	AP	DP	Ce	ID	UB	BB	S	H
1	13	37	1								1
2	4	14									4
3	5	13	1								13
BHT			1								

¹ C=Chert; Q=Quartzite; T=Tool; AP=Arrow point; DP=Dart point; Ce=Ceramic; ID=Identified bone; UB=Unburned bone; BB=Burned bone; S=Shell; H=Historic.

41DN448

Map Quad	Denton East 7.5', #3397-114
Elevation above MSL	530 ft
Vegetation	Grass, brush, trees
Previous Research	Newman and Brown 1990
Cultural Affiliation	Not known
Size	10x30m
Recommendations	No further work

Description: Site 41DN448 is located on a terrace situated approximately 150 m south of the Old Alton Cemetery and adjacent to Hickory Creek (Figure 4.1). A city pumping station and trash dump bounds the east edge of the site. The site was found as a result of erosion of the cutbank along Hickory Creek which had exposed a buried lens of charcoal approximately 1 m bs. No evidence of cultural activities was noted when the site was recorded. However, an unburned occipital fragment of a deer/pronghorn and a complete unburned left calcaneum of an adult bison were recovered from the vicinity of the buried charcoal lens (Newman and Brown 1990).

Testing: Testing consisted of one BHT placed perpendicular to Hickory Creek (Figure 4.58).

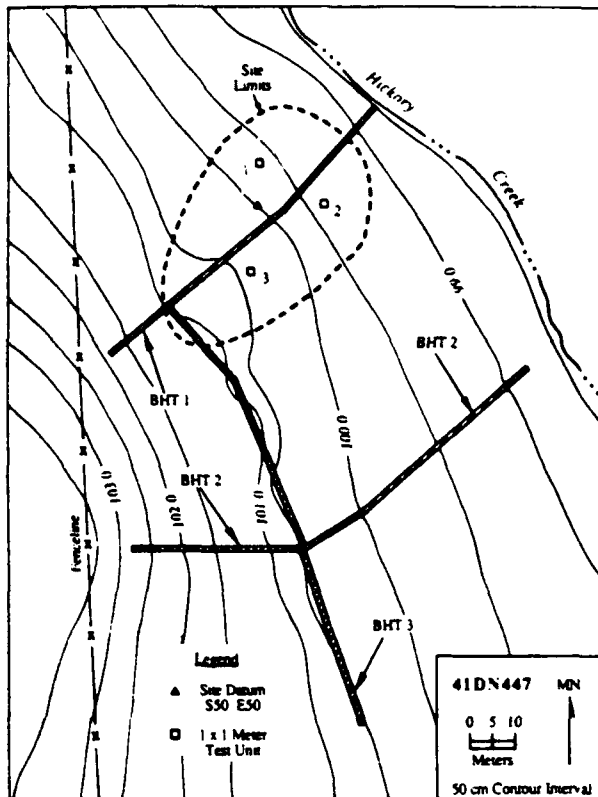


Figure 4.56 Map of site 41DN447. (Contour line 101.0 approximates the 532-ft flood pool elevation.)

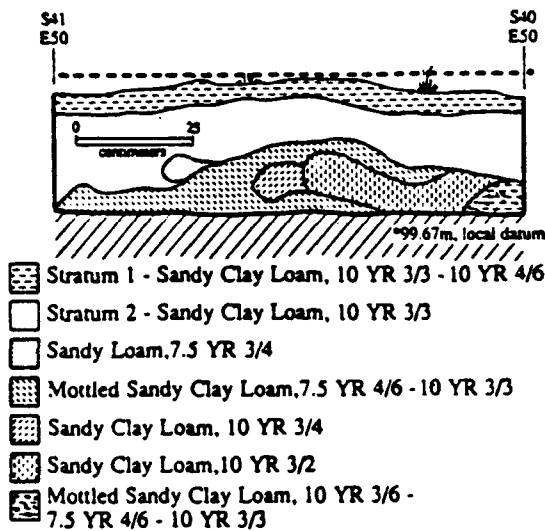


Figure 4.57 Profile of west wall of TP 1, 41DN447.

Recommendations: Results of testing indicate the prehistoric component has been destroyed by a historic occupation and severe erosion. Because the prehistoric remains do not occur in primary context and are found mixed with historic debris, no further work is recommended for 41DN447. The site is not recommended for nomination to the National Register of Historic Places.

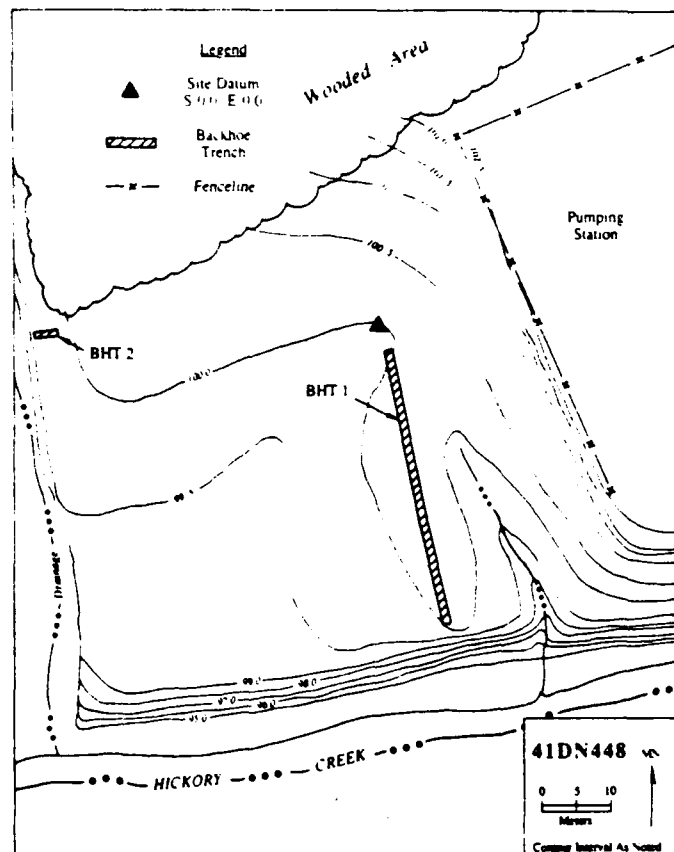


Figure 4.58 Map of site 41DN448. (Contour line 99.5 approximates the 532-ft flood pool elevation.)

No cultural remains were observed. Two bones recovered from the BHT consist of a proximal femur fragment of an adult bison at a depth of 180 cm bs and a distal fragment of a canid humerus at a depth of 200 cm bs. The canid bone represents an individual the size of a large domestic dog or wolf. Neither element was burned or had butcher marks. The site appears to contain numerous episodes of alluviation

(Figure 4.59) that have buried charcoal and animal bones. The charcoal is attributed to episodes of natural burning.

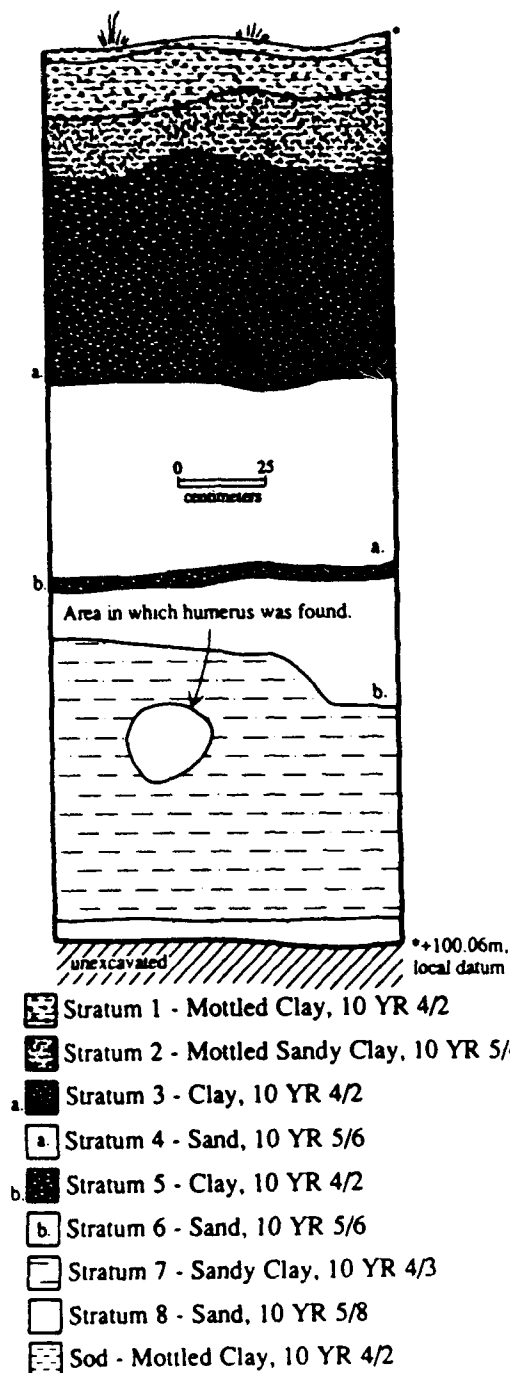


Figure 4.59 Profile of middle portion of BHT 1, 41DN448

Recommendations: Testing at 41DN448 did not yield evidence of cultural remains. Characteristics of the stratigraphy indicate the charcoal and animal bones are a result of natural deposition rather than cultural activities. Therefore, no further work is recommended for 41DN448. The site is not recommended for nomination to the National Register of Historic Places.

CHAPTER 5

INTERPRETATION OF RESULTS AND RECOMMENDATIONS FOR THE PREHISTORIC SITES

by
Kenneth Lynn Brown

Introduction

Three forms of testing were conducted: (1) backhoe trenching, (2) manual excavation of 1x1-m TPs (manual excavation of 1x0.5-m TPs was done at site 41DN392, see Chapter 8), and (3) proton magnetometer surveys. These techniques were employed to determine the vertical and horizontal extent of cultural deposits. BHTs were carefully examined for evidence of cultural remains. Manual excavations consisted of excavating in arbitrary 10-cm levels and sifting the matrix through quarter-inch hardware cloth. All matrix was dry screened with the exception of some matrix, at sites 41DN20 and 41DN372, which was fine screened by use of waterscreening. Much of the matrix from TPs at 41DN372 was also waterscreened through 1/4-inch hardware cloth. Flotation samples were taken from all discernible features. Proton magnetometer surveys were conducted at three sites, 41DN27, 41DN381, and 41DN392 (see Chapter 8). The proton magnetometer surveys resulted in delineating several subsurface magnetic anomalies that were tested by use of 1x1-m TPs. These testing procedures follow those outlined within the Research Design (Ferring and Lebo 1988) as they pertain to determination of significance for nomination of sites to the National Register of Historic Places.

Results of Testing

The diversity in testing intensity at the 23 prehistoric sites was determined by several factors that included, but were not limited to, (1) the classification of the site as a group 1 or group 2 site by the USACE (i.e., group 2 sites were to have less effort than group 1 sites), (2) the results of backhoe trenching indicated the presence or absence of cultural remains in primary context, (3) the presence or absence of charcoal for radiometric dating, (4) the presence or absence of well-preserved faunal and botanical remains for environmental and subsistence studies, and (5) the density and quantity of all artifacts. Table 5.1 summarizes results of testing at the 23 prehistoric sites.

Site integrity consists of five levels: (1) none, (2) unknown, (3) poor, (4) good, and (5) excellent. The category "none" is for sites with no discernible cultural remains while the category "unknown" is for sites that landowners did not permit testing on their private lands. Poor integrity is characterized by the mixing of historic debris with the prehistoric remains because of a historic occupation or destruction of a component by cultivation or digging activities (e.g., human or rodent). Good integrity is characterized by the presence of artifacts in what may be primary context but with some disturbance (e.g., cultivation, rodent burrowing, colluvial processes). Excellent integrity is the presence of features and artifacts in primary context in addition to well-preserved faunal and floral remains (Table 5.2).

Table 5.1

Summary of Results of Testing at 23 Prehistoric Sites

Site	Test Pits	BHT	Site Integrity	Recommend to N.R.
41DN2	20	3	poor	no
41DN4	0	2	unknown	not now
41DN20	6	4	good	yes
41DN21	1	2	poor	no
41DN26	11	4	excellent	yes
41DN27	10	7	excellent	yes
41DN37	16	2	poor	no
41DN40	6	8	poor	no
41DN369	0	1	none	no
41DN372	17	5	excellent	yes
41DN374	16	4	poor	no
41DN377	4	3	poor	no
41DN378	2	3	poor	no
41DN381	10	5	excellent	yes
41DN384	3	4	poor	no
41DN386	4	2	poor	no
41DN387	3	8	poor	no
41DN392 ¹	12	3	poor	no
41DN436	6	6	poor	no
41DN442	1	0	none	no
41DN446	5	4	poor	no
41DN447	3	3	poor	no
41DN448	0	1	none	no

¹ Test pits at this site were 1x0.5m; see Chapter 8.

Figures 5.1a-5.2b summarize site locations relative to landforms, soils, and slope. Sites are divided into three groups according to recommendations. First, sites that were tested (N=23), second, sites recommended for excavation (N=5), and third, all sites relocated and/or found during survey of the Lake Lewisville shoreline (N=66) (Lebo and Brown 1990).

Landform

The relative percentage of all surveyed sites indicate the majority of them are situated on slopes and ridges (Figure 5.1a). Almost an equal proportion of tested sites are situated on terraces, slopes, and ridges/slopes (31-34%), while one is situated on the floodplain. Four-fifths of the sites recommended for excavation occur on slopes, while none occur on floodplains or ridge/slopes. This distribution is attributed to the fact that Lake Lewisville is an existing lake and has inundated large portions of the floodplain, and sites situated on ridges/slopes are above the elevations of the project domain. Thick recent sediments were excavated on

Table 5.2

Research Potential of Prehistoric Sites

site	C/14	Lithic Studies	Faunal Studies	Floral Studies	Environ. Studies
41DN2	no	yes	no	no	no
41DN4	no	yes	no	no	no
41DN20	no	yes	no	no	no
41DN21	no	yes	no	no	no
41DN26	yes	yes	yes	yes	yes
41DN27	yes	yes	yes	yes	yes
41DN37	no	yes	no	no	no
41DN40	no	yes	no	no	no
41DN369	no	no	no	no	no
41DN372	yes	yes	yes	yes	yes
41DN374	no	yes	no	no	no
41DN377	no	yes	no	no	no
41DN378	no	yes	no	no	no
41DN381	yes	yes	yes	yes	yes
41DN384	no	yes	no	no	no
41DN386	no	yes	no	no	no
41DN387	no	yes	no	no	no
41DN392 ¹	no	yes	no	no	no
41DN436	no	yes	no	no	no
41DN442	no	no	no	no	no
41DN446	no	yes	no	no	no
41DN447	no	yes	no	no	no
41DN448	no	no	no	no	yes

¹ This site is discussed in Chapter 8.

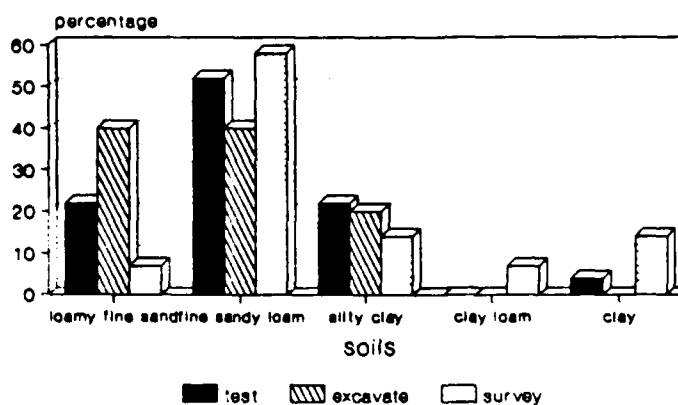
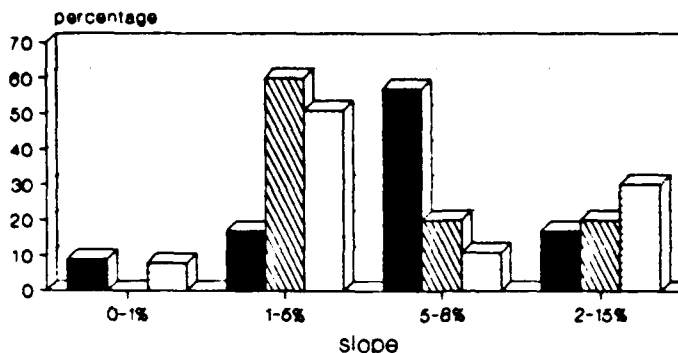
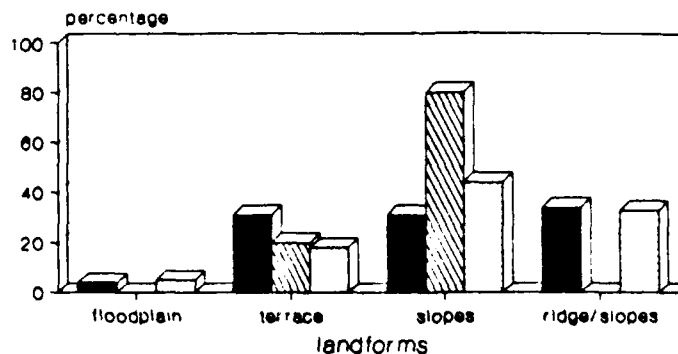
the floodplains of the Elm Fork of the Trinity and Hickory Creek. These probably conceal sites there (see Lebo and Brown 1990).

Slope

The relative percentage of all surveyed sites indicate more than half are situated on terrain with 1-5% slopes (Figure 5.1b). Sites plotted for 2-15% slopes most often occur on slopes of less than 5%. Although most of the sites tested during the project occurred on 5-8% slopes, sites situated on floodplains are either presently inundated and/or are deeply buried and are of very low visibility. The present distribution suggests that well-drained topography was selected for site locations. This occurrence of site locations is matched by the relative percentage of sites recommended for excavation.

Soil

The relative percentage of all surveyed sites indicates more than half are situated on fine sandy loam (Figure 5.1c). The clay loam and clay soil associations have low permeability and slow runoff, suggesting there was selection for locating sites on well-drained terrain. More than half of the sites tested occur in fine sandy loam deposits, with equal (22%) numbers occurring in loamy fine sands and silty clays. Sites recommended for excavation occur equally in loamy fine sand and fine sandy loam deposits. A representative sample of sites associated with silty clay are also recommended for excavation.



(survey sites N=65)

Figure 5.1 Geomorphic and soils characteristics of prehistoric sites at Lewisville Lake. See text for discussion and sample sizes.

Site Size

Site size is examined only for tested sites because of the difficulty of determining site size during the survey phase. The relative percentage of tested sites with respect to size (Figure 5.2a) suggests the majority of sites are less than 2,000 sq m.

Sites less than 500 sq m ($n=4$) have been greatly disturbed by cultivation that has resulted in artifactual remains being confined to fence-lines or other restricted areas. Most of these sites were probably larger in extent at the time of their occupation. The small sites (2,000 sq m or less) probably represent short-term campsites used by nomadic hunters and gatherers. The larger sites ($n=5$) may represent either more permanent habitations and/or repeated use of the same general landform over a longer period of time that resulted in a greater areal scatter of cultural debris.

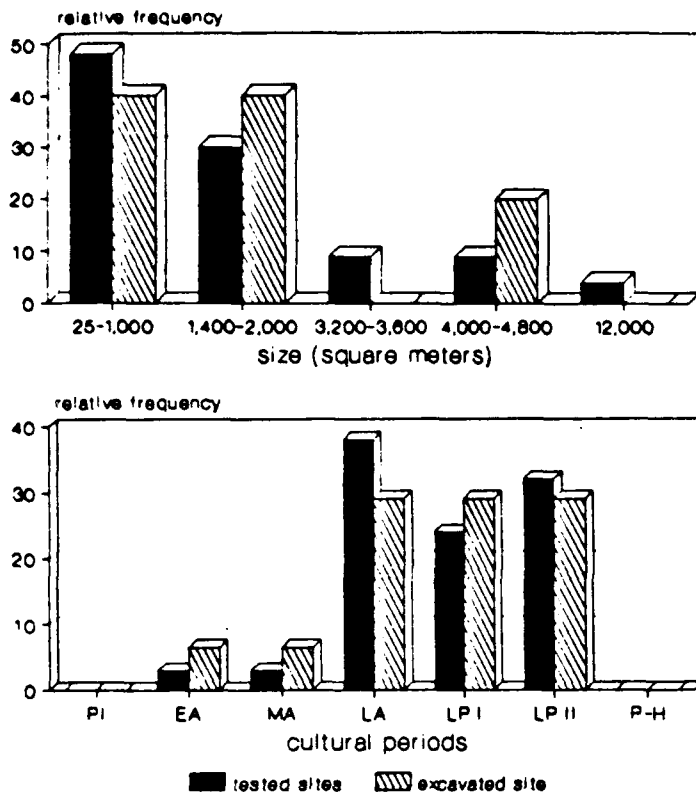


Figure 5.2 Size and cultural components of tested sites and sites recommended for excavation at Lewisville Lake.

Cultural Affiliation

Most sites tested are multicomponent. Determination of cultural period is based on culturally diagnostic ceramic and projectile point types. The criteria used for assigning cultural period is based on the work of Lynott (1977) and Prikryl (1987). All components believed to be present at each site are included in the relative percentage of cultural periods shown in Figure 5.2b. Because of the difficulty in assigning more specific cultural periods to site components based only on surface remains, relative percentages for cultural affiliation are for only the tested sites. There are major gaps in the archaeological record for the Paleoindian (PI), Early Archaic (EA), Middle Archaic (MA), and Proto-Historic (P-H) periods. This distribution of known components is believed to be attributed to early and middle Holocene climatic patterns. Living surfaces and deposits dating before the Late Archaic period may have been removed by extensive erosion. Consequently, locations where earlier cultural remains are preserved will occur in special environments that were conducive to the preservation of those deposits.

One likely location for well-preserved Paleoindian, Early Archaic, and Middle Archaic occupations is below the floodplains of the major streams. However, locating them is hampered by the existence of Lake Lewisville which has inundated large areas of floodplain. These well-preserved cultural deposits will most likely be encountered accidentally during construction projects that involve moving large quantities of sediments from the floodplains.

Site 41DN20 is the only partially preserved possible Early to Middle Archaic occupation presently known within the project domain that has not been inundated or destroyed. Its occurrence on a talus slope composed of loamy fine sand may be another specific environmental condition conducive to the preservation of earlier occupations. However, testing indicates there has been substantial disturbance of the site probably due to slopewash.

The absence of Proto-Historic and Historic Native American sites within the project domain is not understood at this time. Proto-Historic and Historic occupations probably have not had time to become buried by colluvial and alluvial sediments, resulting in their destruction during the nineteenth and twentieth centuries by farming and ranching activities.

In summary, site locations are most frequently associated with well-drained slopes (1-8%) that have soils with high permeability (loamy fine sand, fine sandy loam, and silty clays). Boundary constraints of the project directly affected site location patterns associated with elevation above mean sea level and to a lesser degree landforms, slopes, and soils. The paucity of Paleoindian, Early Archaic, and Middle Archaic components may be a consequence of severe erosion during the Early and Middle Holocene. The early components will likely be confined to specific environments that were conducive to their preservation. The absence of Proto-Historic and Historic components is attributed to the shallowness of the deposits which have subsequently been destroyed by historic farming and ranching activities.

Recommendations

Recommendations for nominating sites to the National Register of Historic Places are shown in Table 5.1. Five of the 23 prehistoric sites tested are recommended for nomination to the National Register of Historic Places. The five sites are 41DN20, 41DN26, 41DN27, 41DN372, and 41DN381. Of the five sites recommended for nomination to the National Register, four have excellent integrity and one (41DN20) has good integrity.

The four sites with excellent integrity (41DN26, 41DN27, 41DN372, and 41DN381) have data that are applicable to all of the research hypotheses and problems outlined in the Research Design (Ferring and Lebo 1988). The presence of features, artifacts, and well-preserved faunal and floral remains in primary context will permit inter- and intrasite studies to be undertaken and obtaining radiometric dates for refining the local chronology and associated lithic and ceramic styles is possible. Studies of lithic raw materials will help elucidate trade and social interaction spheres within the Upper Trinity River Basin. Subsistence strategies, butchering patterns, and environmental reconstructions will be possible with the faunal and floral data.

Site 41DN20 essentially contains only lithic data. Although faunal and floral data are lacking, the possible Early

to Middle Archaic component can yield valuable information about these poorly known periods of human occupation in the region. Study of lithic raw materials will help elucidate trade and social interaction spheres in addition to lithic technology studies. Detailed geomorphic studies for all five sites can yield valuable information about site formation processes.

Recommendations for mitigating the adverse impacts of the planned rise in the water level of Lake Lewisville for the five sites recommended for nomination to the National Register of Historic Places are presented below. These are only recommended guidelines and goals. It should be emphasized that suggested excavation sizes will vary depending upon the number and types of features encountered during excavation. It should be realized that features slow the pace of excavation, which has an impact on how large an area is excavated.

41DN20

For site 41DN20, it is recommended that a 4x5-m block of contiguous 1x1-m units be excavated. Prior to digging the block, the existing backhoe trenches should be extended onto the floodplain of Little Elm Creek. The trenches were initially not excavated onto the floodplain because of a high water table during the time of site testing. Also, a few additional 1x1-m TPs could be excavated upslope and south of the existing six TPs to determine whether other areas of the site may have better-preserved cultural remains. If better-preserved cultural deposits are not discerned in the extended backhoe trenches or 1x1-m TPs, then the 4x5-m block can be excavated to incorporate the existing 2x2-m test area. Because of the sandy matrix and absence of discernible cultural stratigraphy, excavations can be done in arbitrary 10-cm levels. It is recommended that a 15-20% sample of the deposits be fine screened.

41DN26

For site 41DN26, it is recommended that 100 contiguous 1x1 m be excavated in order to study intrasite activity patterns. Based on the results of testing, the best location for a block would be in the vicinity of TPs 3 and 5 where the deposits appear to have a higher organic content. Because of the sandy matrix and absence of discernible cultural stratigraphy, excavations can be done in arbitrary 10-cm levels. It is recommended that a 15-20% sample of the deposits be fine screened.

41DN27

Site 41DN27 appears to have well-preserved deposits in the vicinity of TPs 5 and 8. It is recommended that 100 contiguous 1x1-m units be excavated in order to study intrasite activity patterns. With the recovery of Archaic-like dart/spear points in the vicinity of TP 4, a second block or expanded testing may be considered. Because of the sandy matrix and absence of discernible cultural stratigraphy, excavations can be done in arbitrary 10-cm levels. It is recommended that a 15-20% sample of the deposits be fine screened.

41DN372

Site 41DN372 is a midden deposit that contains both Late Prehistoric and Late Archaic occupations. Based on the results of testing, the best-preserved area of the site appears to be south of the large pecan tree, or in the vicinity of TPs 2, 10, 11, and 12. It is recommended that at least 25 contiguous 1x1-m units be excavated through both the Late Prehistoric and Archaic occupations. Because the site area is more confined and some historic disturbance has destroyed a portion of the site in the vicinity of TPs 7, 15, and 16, a smaller excavation area is justified. In addition, the higher clay content of the deposits and the likelihood of encountering large numbers of features in primary context will reduce the rate of excavation. Excavation may best be done in arbitrary 10-cm levels, and a 15-20% sample of the deposits should be fine screened.

41DN381

Site 41DN381 contains both Late Prehistoric and Archaic occupations. Based on the results of testing, the area most likely to yield the greatest amount of information is in the vicinity of TPs 1, 3, 5, 7, 9, and 10. Because of the well-preserved features, artifacts, faunal, and floral remains, it is recommended that at least 100-150 contiguous 1x1-m units be excavated in the Late Prehistoric component to study intrasite activity areas. A smaller 3x3-m or 4x4-m block can be excavated through the less well-preserved Archaic component. A 15-20% sample of the deposits should be fine screened.

Conclusions

The above recommendations, for mitigating impacts of the planned rise in the water level of Lake Lewisville on significant cultural remains, will yield important new information about the Archaic and Late Prehistoric periods in the Upper Trinity River Basin. The recommendations are meant to be possible guidelines and goals that are subject to change depending upon the circumstances at each site. The number and types of cultural features encountered will have a direct impact on the size of completed excavation blocks.

CHAPTER 6

HISTORIC THEORETICAL FRAMEWORK, RESEARCH DESIGN, METHODS, AND PREVIOUS INVESTIGATIONS

by
Susan A. Lebo

Introduction

Archaeological testing was conducted at 16 historic sites in 1988. Surface and subsurface data and historical and archival data were collected for fifteen sites. The pre-1901 graves at the sixteenth site, the Little Elm Cemetery, were photographed, and inscriptions were recorded on a hand-held cassette recorder. The results of the test excavations are presented in Chapters 8 and 9, and the investigations at the Little Elm Cemetery are presented in Appendix E.

The purpose of this chapter is to outline the general theoretical issues that guided the historic research at Lewisville Lake. The research design provided the structure for defining the research questions or hypotheses, data requirements, and research methods.

General Issues

The Lewisville Lake project, like other Cultural Resource Management (CRM) projects, provided an opportunity to investigate a record of human cultural dynamics within a defined region. Such investigations must be conducted within explicitly defined theoretical frameworks stating the hypotheses, data requirements, and research methods. The research design (Ferring and Lebo 1988) was developed to define the research directions of the Ray Roberts Lake - Lewisville Lake project. These research directions are part of a broader attempt to mitigate known and potential impacts associated with Federal landuse. Fundamental is the goal of assessing National Register significance and recovering data from those sites that meet National Register eligibility but cannot be avoided or preserved. Under these circumstances, the research design was developed to encompass theoretical issues and research methods that consider the state of archaeological and historical knowledge of the region and the discipline.

During the historic period, the Lewisville Lake area was sequentially occupied until the present by populations that adapted to the still-changing landscape used by prehistoric populations. It is clear that the ways the new populations distributed themselves and used the land changed through time (Skinner et al. 1982a, 1982b). These settlers were constrained by factors including land prices, agricultural and livestock potentials, markets for farm and ranch produce, the availability of wage-earning positions, as well as regional and national economies.

When compared with the prehistoric period, there are process changes that condition the way certain archaeological and historical problems must be addressed. For example, tool manufacture during the historic period is replaced by tool purchase, food is increasingly bought rather

than produced, and so on. These changes influence how site function is evaluated but not the basic focus on site function relative to landscape position, major economic activities on landuse potentials, and so on.

Geographical references include not only landform and climate, important at prehistoric sites, but also historical modifications, including roads, bridges, and distance to markets, which must be considered in developing models of site location and site-use history. Archival and oral informant data provide qualitative data unavailable for prehistoric sites. These enable better determination of ethnic affiliation, economic activities, duration and character of occupations, lifeways, and sociocultural relations among project area settlers.

National Register Criteria and Assessments

Each historic site recorded or rerecorded during the survey was evaluated for potential eligibility for nomination to the National Register of Historic Places (see Lebo and Brown 1990). The four evaluation criteria, A-D, are presented below.

- A. Association with events that have made a significant contribution to the broad patterns of our history; or
- B. Association with the lives of persons significant to our past; or
- C. Embodiment of distinctive characteristics of a type, period, or method of construction or representative of the work of a master, or possessing high artistic values, or representing a significant distinguishable entity whose components may lack individual distinction; or
- D. Have yielded, or may be likely to yield information important in prehistory or history.

Criterion D was most applicable to sites recorded in the project area. Three aspects of this criterion were used in assessing eligibility: (1) integrity and content, (2) ability to yield significant new information, and (3) ability to address major research questions. It is important to recognize that only preliminary research can be undertaken using survey or testing data.

Integrity is the condition of the archaeological deposits and includes information on whether the deposit is undisturbed, partially disturbed, or has been destroyed, as well as, the vertical and horizontal relationship of the site contents, including both natural and cultural stratigraphy. Content refers to the types of site elements present,

including artifacts, features (e.g., discrete artifact clusters, burials, hearths, trash pits, etc.), and structural remains.

Data recovered during survey along with results obtained from previous studies (summarized in Lebo and Brown 1990) indicate that past archaeological research at Lewisville Lake has been highly biased towards prehistoric resources. In addition, the lake was constructed before current laws requiring CRM were established, and, as a result, archaeological data for over 80% of the reservoir has been destroyed. This has serious implications for archaeological assessments of NR eligibility. Site types or sites dating to particular periods known to have occurred in the study area may no longer be represented. Others may exhibit poor integrity or content, yet represent the only remaining examples in the reservoir. As a result, ability to yield significant new information was assessed by comparing these aspects (integrity, content, context, frequency) of historic sites in the study area with other recorded sites at Lewisville Lake, Ray Roberts Lake, Joe Pool Lake, and Richland Creek reservoirs (e.g., Lebo 1989a).

Sixteen sites were recommended for testing based on preliminary assessments that they potentially met all three aspects of Criterion D presented above. These assessments were based on surface reconnaissance, shovel testing, and surface collection data.

Testing was recommended to obtain additional information from sites exhibiting National Register potential based on limited survey data. Archival research was recommended to verify or refine archaeological dates for historic sites, to recover site-specific information, (including landuse, ownership, ethnicity, and socioeconomic status of the occupants), as well as community or region-wide data on changes in settlement and landuse, which could be used to assess further NR eligibility.

Research Issues

The primary reason for studying historic archaeological resources is their ability to provide information about settlement, landuse, and lifeways not available in historical documents. Farmstead archaeology has become an integral part of historic archaeology in the last 20 years and is important for several reasons. According to Cliff and Moir (1985:5),

First, until the second decade of the twentieth century, a majority of households in America were located in rural settings and were agrarian (Eldridge and Thomas 1964). In many parts of Texas, over half the rural population was made up of farming households until after World War II (Lee 1982). Consequently, the archaeology of farmsteads and traditional lifeways of agrarian households is of great interest because it relates directly to the roots of many Americans... Despite these facts, nineteenth and early twentieth century farmsteads in Texas have received very little archaeological attention (Fox 1983)...[Secondly, farmsteads exhibit] unique potential for measuring certain elements of household consumption and change.

Necessary data sets for studying nineteenth and early twentieth century settlement, landuse, and lifeways include: (1) cultural assemblages or content, (2) context, (3) subsistence, and (4) structural remains. A multidisciplinary

approach involving archaeological, geological, archival, oral history, and faunal studies was developed.

Cultural assemblages provide information on the access to and utilization of specific types of goods, the types of activities carried out, and the socioeconomic status, ethnicity, and landuse patterns of residents at sites in the study area (e.g., Miller 1980; Moir 1982, 1987a, 1987b, 1988a, 1988b; Saunders 1982). These data can be compared with information from other sites and with historical records to study social, economic, and settlement changes within the region.

Site context refers to the spatial distribution or relationship of artifacts, features, structures or structural remains, and activity areas. Site planning studies, including yard proxemics (see Moir 1987a, 1987b, 1988a), indicate relationships among socioeconomic status, ethnicity, farm size, functional or landuse considerations, length of occupation, and the type of and placement of features and structures.

Subsistence studies involve identification of faunal and floral remains that may reveal diet, husbandry, butchering, consumption, and refuse disposal patterns. These patterns are useful for examining changes in adaptation strategies and for comparing site-specific and regional historical documentation of ethnicity, socioeconomic status, and landuse and productivity.

Architectural studies involve changes in the frequency and distribution of building styles and the relationships between environmental and cultural factors, including surface geology and ethnic or geographic origin. These data can be used in conjunction with documentary sources to reconstruct the structural landscape of the study area.

Research Questions

The historic research was directed by, but not limited to, the eight research hypotheses developed prior to the survey. These hypotheses are discussed in detail in Ferring and Lebo (1988) and are only summarized here. Two hypotheses, 7 and 8, have been integrated into hypotheses 1-6. Limitations resulting from the incomplete nature of the data base (i.e., less than 20% of the area impacted by the construction of the lake remained undisturbed) are presented.

1. Distance to source areas for environmental (e.g., water and land) and economic resources (e.g., goods and services) for residents in the study area is reflected in the distribution (i.e., dispersal or compactness) of sites or settlements.
2. The distance to source areas changed between the early settlement period, before 1870, and after railroad service reached the area. This change is reflected in the distribution of domestic and non-domestic sites, and the source of the material purchased and utilized by residents in the study area.
3. Artifact and architectural assemblages (content) will reflect differences in sociocultural factors (e.g., ethnicity, socioeconomic status) and site planning (e.g., size, complexity, and landuse).
4. Environmental change affected the distribution, size, and landuse patterns of farmsteads in the project area.

between 1840 and 1940. Soil type, topography, availability of water, loss of soil productivity, insects (e.g., boll weevils, locusts), and droughts affected the survival potential of farmsteads.

5. Site function and site planning, including the location of structures and activity areas will be reflected in the artifact and architectural assemblages (content and context).

6. The introduction, assimilation, dispersal, and duration of different artifact and architectural styles and technologies in the study area will reflect sociocultural, economic, and political change within the region.

Limitations

Hypotheses 1 and 2 cannot be directly addressed using the survey or testing data. As noted earlier, no archaeological data are available for over 80% of the reservoir. Comparison of the existing historic sites with historical documents indicates that the recovered sample is not representative of the historical past. No industrial sites (e.g., grist mills, cotton gins) were found in the study area. In addition, while the area was initially settled in the 1840s, no pre-Civil War sites were found. These hypotheses are best addressed using historical sources.

Hypothesis 3 can be addressed using testing and mitigation sites. Sheet refuse and feature investigations and archival research are necessary to recover data on content, context, site planning, and sociocultural factors.

Historical information is available for the study area for the 1840 to 1940 period, but archaeological data are not available for the pre-Civil War period, or again, for at least 80% of the reservoir. Hypothesis 4 can best be addressed using the distributions recorded during survey. While the interpretations will be limited by the aforementioned factors, they can be strengthened through comparison of these data with information from other reservoirs (e.g., Ray Roberts Lake). Historical information concerning landuse, farm size, and productivity can be used to identify general trends that can be compared with specific site data.

The survey data from existing sites in the project area can provide preliminary assessments of site function and planning for addressing Hypothesis 5. However, testing or mitigation data are necessary to adequately isolate and recover information on artifact and architectural assemblages, features, and site planning.

Hypothesis 6 cannot be directly addressed using the data recovered within the study area. No standing structures were recorded. However, house mounds, brick scatters, cellars and cellar depressions, wells, and windmills provide information about types and distribution of structures. This information can be used to examine subsistence/economic strategies (e.g., farms versus ranches), site planning, and sociocultural changes.

Research Methods

The research methods and techniques developed and used on the project were designed to maximize data recovery for addressing the research questions discussed above and assessing NR eligibility. This was accomplished using a

multidisciplinary approach incorporating geology, archaeology, biology, environmental science, architecture, and history. Discussion of the research methods is divided into three sections (1) field, (2) lab, and (3) historical research.

Field Methods

Fieldwork was accomplished using (1) shovel test pits, (2) 1x.5-m and 1x1-m test units, (3) backhoe trenches, (4) hand-excavated trenches, (5) systematic surface-collection blocks, and (6) magnetometer surveying. The methods used at each site were determined depending on several factors, including (1) level of data collected during survey, (2) site age, (3) site size, (4) artifact density, (5) presence or absence of surface features, and (6) site integrity.

All sites were mapped using a transit. All features (e.g., wells, house mounds, fence lines) and units were mapped. A grid was established for each site with grid north (GN) corresponding to magnetic north (MN). A permanent datum, a brass monument marker, was set in concrete at each site. All backhoe trenches were profiled with at least a 10-m section being exposed and profiled in each trench. A planview was recorded for all features. Color slides were taken at each site, including site overviews, features, and representative units.

The standard test unit size used at all sites was 1x.5m. Shovel test pits were excavated at sites with poor integrity where vertical control was less important. Shovel test pits provided a rapid method of assessing site size and age at disturbed sites and for determining site limits. The number of 1x.5-m units and shovel test pits excavated at each site was determined by site size and site integrity. Few units were excavated at sites with poor integrity.

Test units were excavated in arbitrary 10-cm levels using the SW corner as the unit datum. Elevations were taken from this datum corner and then tied to a site datum. All levels were dry screened through 1/4-inch hardware cloth. Larger test units were excavated in high density features. Fine-screen samples were collected in several features. No flotation samples were recovered.

The shovel test pits were excavated as a single level to sterile. The matrix was screened through 1/4-inch hardware cloth. These units were not given coordinates, and sterile shovel test pits placed outside the site area were not mapped.

Backhoe trenches were used to recover geological information, including soils and site formation processes. Backhoe trenches were judgmentally placed to investigate magnetometer anomalies and surface features, such as depressions that might be of archaeological significance. Trench orientation was judgmentally determined based on several factors, including site slope and the orientation of magnetometer anomalies and surface features (e.g., house mound). Backhoe trenches were also used to augment the excavation of 1x.5-m units by exposing large areas.

Machine scraping was used to remove the A-horizon in areas where we were interested in searching for features visible in the B-horizon, particularly trash pits, fence lines, and building foundations. Hand-excavated trenches were utilized to recover a representative sample of archaeological features identified during survey or early in testing (e.g., high

density sheet-refuse middens and trash pits). Systematic surface collection was implemented at sites that yielded low density subsurface deposits or only surface artifacts during survey. This approach was used to maximize locating and identifying subsurface archaeological features at several sites. Magnetometer surveys were conducted at both low and high density sites to aid in identifying subsurface features and recover sufficient data for making assessments of NR eligibility.

The testing results are presented by site in Chapter 8 and a summary of the efforts are presented in Chapter 9. An overview of the research methods recommendations for mitigation is given in Chapter 9.

Laboratory Methods

Artifacts and special samples (e.g., fine screen) recovered during testing were sent to the laboratory where they were inventoried, processed, analyzed, and curated. The historic classification system is presented in Appendix D. The first level of analysis, unit coding, involved recording artifact counts by artifact category for each unit level. This provided an overview of assemblage content for each site that could be used to identify site function and, at a gross level, site age and research potential. These data are provided by site in Chapter 8.

In the second analysis level, detailed analysis, emphasis was placed on ceramics, bottle glass, and architectural remains because they provide the greatest information for dating historic components. Mean beginning dates (MBD) were calculated for refined earthenwares, stonewares, and bottle glass assemblages from each site. Only diagnostic, datable sherds were used. All other sherds (e.g., burned and discolored refined earthenwares and nondiagnostic bottle glass) were excluded from the calculation of MBD values. Refined earthenware dates were based on beginning popularity dates for types defined by paste, glaze, and decoration (e.g., light blue-tinted whiteware, plain, 1880-1930). Stoneware beginning dates were based on interior/exterior glaze combinations (e.g., natural clay slip/bristol glaze, 1890), while bottle glass dates were based on diagnostic manufacturing attributes (e.g., turn-molded, non-applied lip, 1880).

Mean beginning dates were determined by summing the beginning date for each diagnostic artifact (by category) and dividing by the number of artifacts. The formula used is:

$$\text{MBD} = \frac{\text{SUM } (x_1 \dots x_n)}{N}$$

Mean beginning dates were obtained separately for refined earthenwares, stonewares, and bottle glass, and a combined MBD value was then obtained. This approach allowed the dates obtained for different categories to be compared. The combined MBD value provided the most useful date for each site, particularly when sample sizes were small. Many of the MBD values are not statistically valid because of sample size, but do provide a gross date that can be correlated with architectural, archival, and oral-history data to provide a relative beginning date.

Mean beginning dates were calculated instead of median dates because MBD is not influenced by how long a type was available. Variability was evident between the MBD values obtained for different artifact categories. This variability was primarily the result of differences in the accuracy with which we currently are able to date specific artifact types. Sample size was also a factor at some sites.

At sites containing discrete deposits (e.g., house mound, trash dump, sheet refuse midden) separate dates were obtained for each deposit. In some instances, it was possible to identify different occupations or features that post-dated occupation.

The results of the laboratory analyses are presented by site in Chapter 8. These data indicate that the MBD obtained for each site with statistically large enough sample sizes correlated well with the archival research. Sample sizes for some sites were inadequate.

Historical Research

The historical research conducted during the testing was directed towards recovering data from archival and oral-history sources. Archival research, the study of historical documents is a vital part of historic archaeology. This research was begun during the survey and will continue through the mitigation stage. During survey, emphasis was placed on recovering a general overview of the local and regional history, primarily available from secondary sources. Historical maps, photographs, books and journal articles on local history were examined. During testing, the archival research was directed towards recovering information on specific aspects of the historic landscape directly pertinent to the sixteen sites recommended for testing. Primary sources were emphasized and included diaries, journals, and tax, land, and census records. Archival research during both the survey and testing was conducted at the Dallas Public Library, the Willis Library at the University of North Texas, the Denton County Courthouse, and the Carroll Courts Building in Denton.

Oral history research was more limited, being directed towards informal interviews primarily with amateur and professional historians, researchers, and members of historical societies. Archival and oral history research at the Little Elm Cemetery, 41DN395, was greatly aided by the caretaker, Mr. Stubblefield, who was informally interviewed while we were documenting the pre-1901 graves, and later on the phone. No formal oral history interviews were conducted.

Previous Investigations

A discussion of the previous investigations within the Lewisville Lake area is presented here because these earlier studies directly impacted the development and implementation of the Scope of Work (SOW) and the research design. As mentioned earlier in this chapter, the SOW was developed by the COE to address the legal requirements for identifying and mitigating the adverse impacts on NR eligible cultural resources. The research design was developed to specify the research questions that would be used to direct the archaeological work and how the contractual goals specified in the Scope of Work would be met.

Documents produced by previous researchers were examined and efforts were made during the survey to relocate all previously identified archaeological (prehistoric and historic) sites in the study area to determine their NR eligibility along with all newly recorded sites. This process was necessary to ensure that all potentially NR-eligible sites were assessed and included in nominations made for resources within the study area. While none of the previously recorded sites directly within the study area are currently on the NR, potential eligibility had not been determined for many of them.

Professional archaeological research in the project area was undertaken in the 1940s and 1950s (Stephenson 1948a, 1948b, 1949, 1950, 1952), but the majority of the research has been carried out by amateurs during the construction of Lewisville Dam, which began in November, 1948, and was completed in November, 1951 (Anon. 1971:45, cf. Nunley 1973:1).

The Historic Pottery Kiln Survey was conducted by the Texas Historical Commission in the early 1970s and focused on locating and recording nineteenth century stoneware pottery kiln sites throughout the state. This work was initiated in Denton County. Four potteries in the county, Cranston (41DN16), Roark (41DN18), Wilson (41DN19), and Serren (41DN75) were considered eligible for nomination to the National Register of Historic Places (Georgeanna Greer, personal communication 1986). Two potteries, Cranston and Roark, are located on the edge of the reservoir. Early historic sites within the reservoir contain sherds from stoneware vessels produced at Denton County potteries, including Cranston and Roark.

A survey of the reservoir between the 515- and the 532-ft contour elevations was funded by the COE in December, 1972. Work was carried out under the direction of Parker Nunley to study the effects of the proposed conservation pool increase from the 522- to 532-ft contour on the cultural resources within the impact area. Approximately 40% of the impact area was surveyed (Nunley 1973:3).

Using data collected from previous professional (e.g., Historic Pottery Kiln Survey; Stephenson 1948a, 1948b, 1949, 1950) and amateur studies, Nunley (1973) identified thirteen historic components, including nine located above the 532-ft contour, three historic stoneware potteries (Cranston, Roark, and Serren), five surface scatters, one cemetery, and four farmsteads. Site locations are shown in Figure 6.1. Five sites (41DN11, 41DN24, 41DN37, 41DN47, and 41DN58) were identified as prehistoric (Nunley 1973), but later research indicates they also contain historic components (Lebo and Brown 1990). Three (41DN11, 41DN24, and 41DN37) are historic scatters, and two are farmsteads (41DN47 and 41DN58). A more detailed discussion of these is provided in Lebo and Brown (1990).

A second survey funded by the COE was conducted by Southern Methodist University (SMU) at Wynnwood Park in 1985. The work was undertaken to identify and evaluate historic and prehistoric resources within the 695-acre park scheduled to be impacted by a proposed golf course. Thirteen archaeological sites, including one prehistoric component (41DN288) and thirteen historic components were found (Figure 6.2). Seventeen localities or isolated finds were also found (Cliff and Moir 1985:9). All project lands were surveyed. A representative sample of surface scatters was collected, and subsurface testing was conducted where appropriate. The historic components ranged in age from ca. 1860 to 1950

with the majority dating between 1890 and 1950 (Table 7.2). Based on the recommendations made by Cliff and Moir (1985), four components were determined eligible for the National Register of Historic Places (41DN281, 41DN284, 41DN286, and 41DN289). A detailed discussion of this survey is provided in Cliff and Moir (1985).

Our survey, funded also by the COE, was conducted in 1986 and 1987. The survey area was defined by the existing shoreline and the 532-ft contour. A total of approximately 14,000 acres was intensively surveyed. Auger holes and shovel test pits were excavated in high probability areas. Historic maps were used to help locate and date historic sites within the survey area. Eighty-five historic sites were recorded during the survey. An additional site was identified during construction work at Hickory Creek Park in September, 1989. Including Wynnwood Park (n=13), 99 historic components have been identified and recorded at Lewisville Lake. An overview of all historic sites in the present study area are presented in Table 6.1.

Table 6.1

Overview of Historic Components in Present Study Area

Site ¹	Component ²	Site Type ³	Date Range	Integrity ⁴	Potential	Recommendation ⁵
DN11	P/H	S	1890s-?	Poor	None	None
DN24	P/H	S	?	None	None	None
DN34	H	S	e. 20th c.	Poor	None	None
DN37	P/H	S	?	Low-mod.	Poor	None
DN40	P/H	S	?	Poor	Poor	None
DN43/44	P/H	F	1890s-1940	Low-mod.	Mod.	Test
DN47	H	F	e. 20th c.-recent	None	Low	None
DN58	H	F	1875-1940	Poor	Poor	None
DN343	H	F	e. 20th c.	Poor	Poor	None
DN354	P/H	S	?	None	None	None
DN366	H	F	1880s-1950s	Poor	Poor	None
DN367	P/H	F	?	None	None	None
DN369	P/H	S	?	None	None	None
DN371	H	F	1895-1940	Low-mod.	Low-mod.	None
DN373	P/H	S	?	None	None	None
DN375	P/H	S	?	None	None	None
DN377	P/H	S	l. 19th c.-?	Low	None	None
DN379	H	F	1890s-1940	Poor	Low	None
DN388	P/H	S	l. 19th c.-?	None	None	None
DN390	H	F	1900-1950	Poor	None	None
DN391	H	F	1890s-1950s	Poor	Low	None
DN392	P/H	S	1860s-e. 20th c.	Low-mod.	Low-mod.	Test
DN393	H	F	1880-recent	Poor	None	None
DN394	H	?	20th c.	Poor	None	None
DN395	H	C	l. 19th c.-present	Good	Good	Document
DN397	P/H	S	1870-1920s	Poor	None	None
DN398	H	S	1880/90-1930s	None	None	None
DN399	H	F	1890s-	Good	Poor	None

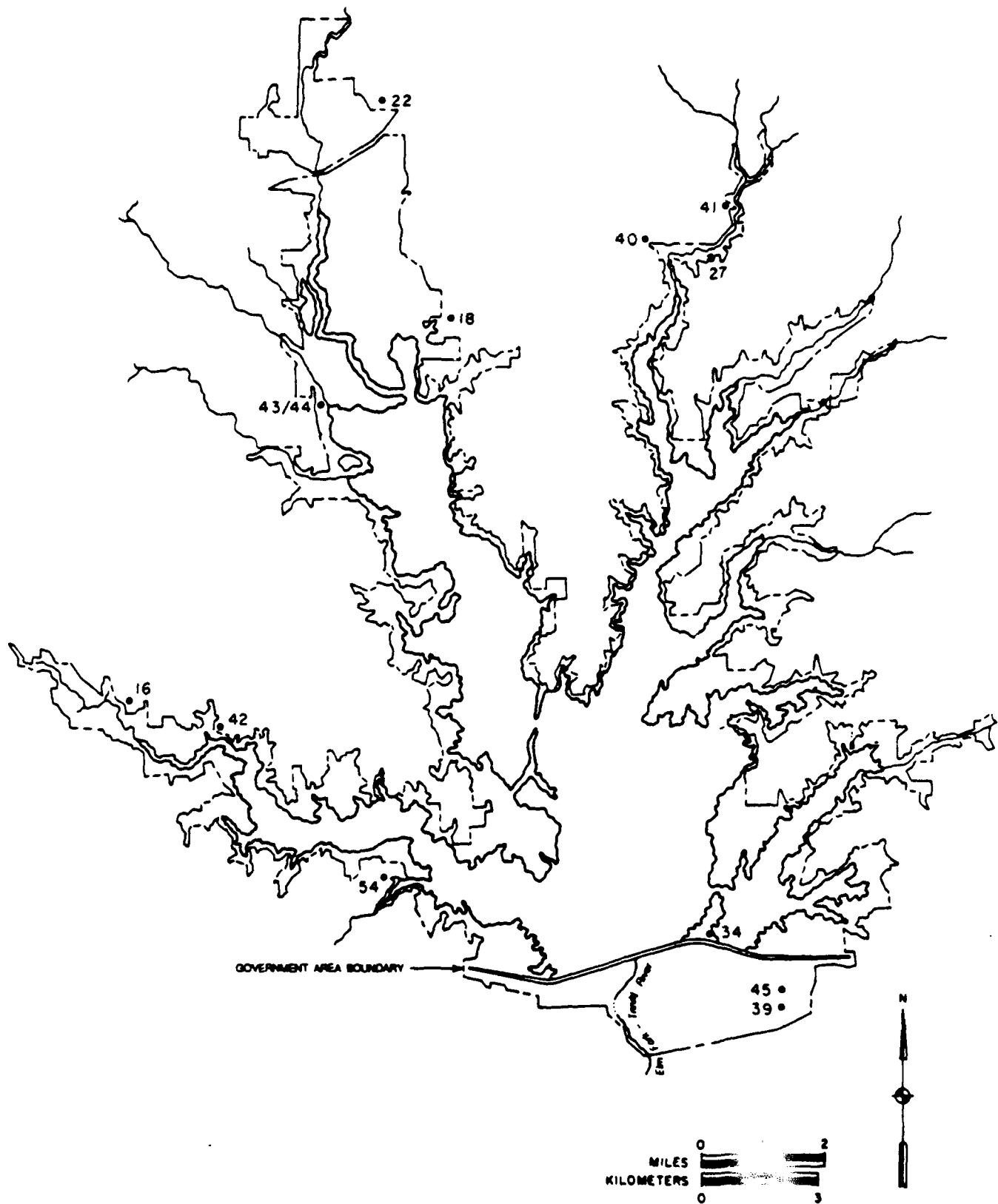


Figure 6.1 Historic components reported in the Lewisville Lake area by Nunley.

DN400	H	F	1950s 20th c.- recent	Poor	Low	None
DN401	H	F	1880-1940	Mod.	Good	Test
DN402	H	F	1880-1940	Mod.	Low- mod.	Test
DN403	H	F	1880s- 1940s	Low- mod.	Low	Test
DN404	H	F	1870-1930	Low- mod.	Low- mod.	Test
DN405	H	S	e. 20th c.	None	None	None
DN406	H	F	1870-1930	None	None	None
DN407	H	F	1870s- 1940s	Low	Low- mod.	Test
DN408	H	I	20th c.?	None	None	None
DN409	H	F	1880-1940	Low- mod.	Mod.	Test
DN410	H	S	1870-1910	Low	Low- mod.	Test
DN411	P/H	F	1880-1940	Low- mod.	Low- mod.	Test
DN413	H	S	1870s- 1940	Poor	None	None
DN414	H	S	l. 19th c.- 1930	Poor	None	None
DN415	H	S	1880s-1930	Poor	None	None
DN416	H	F	1880s- 1940s	Poor	None	None
DN417	H	F	1920s-	Poor	None	None
DN418	H	S	1880s-1940	Poor	None	None
DN421	H	F	1900-1940s	Poor	None	None
DN422	H	F	recent	Poor	None	None
DN423	H	F	1880-1940s	Mod.	Mod.	Test
DN424	H	F	1880-1940s	Mod.	Mod.	Test
DN425	H	S	1900-1940	Poor	None	None
DN426	H	S	20th c.	Poor	None	None
DN427	P/H	S	1875-1920	Poor	None	None
DN428	H	F	1870-1940	Mod.	Mod.	Test
DN429	H	F	1870s- 1940s	Mod.	Mod.	Test
DN430	H	F	1890s- 1950s	Mod.	Mod.	Test
DN431	H	S	1880-1940s	Poor	None	None
DN432	H	F	20th c.- recent	None	None	None
DN433	H	S	l. 19th c.- 1940s?	None	None	None
DN434	P/H	I	recent	None	None	None
DN437	P/H	S	l. 19th c.- recent	None	None	None
DN438	H	F	1890-recent	None	None	None
DN439	H	S	1895-1930s	None	None	None
DN440	H	S	1870-1910?	None	None	None
DN445	P/H	F	?	None	None	None
DN446	P/H	S	l. 19th c.-?	None	Low	None
DN447	P/H	S	l. 19th c.-?	Mod.	Low	None
DN449	P/H	S	?	None	None	None
DN450	H	F	1880s- 1920s	None	None	None
DN451	H	S	1880-1920s	None	None	None
DN452	H	S	20th c.	None	None	None
DN453	H	S	?-1940	None	None	None
DN454	P/H	S	?	None	None	None
DN456	H	S	1900-1920	None	None	None
DN457	H	B	20th c.	Low	Poor	None
DN458	P/H	D	Modern	Poor	None	None
DN460	H	F	1880s- 1950s	Poor	Poor	None

DN461	P/H	I	?	None	None	None
DN462	H	F	1900?-1940	Low- mod.	Low- mod.	None
DN463	H	D	20th c.	None	None	None
DN464	H	F	20th c.	Poor	None	None
DN465	P/H	F	l. 19th c.- e. 20th c.	None	None	None
DN471	H	S, D	20th c.	None	None	None
DN472	H	F	1900-recent	None	None	None
DN474	P/H	S	20th c.	None	None	None

1 Site number is preceded by 41 (e.g., 41DN11).

2 H=historic; P=prehistoric.

3 B=bridge; C=cemetery; D=dump; F=farmstead; I=isolate; S=scatter; ?=unknown.

4 None=no intact deposits or features; Poor=features, no intact deposits; Low=features, possible buried deposits, minimal disturbance; Mod.=features, buried deposits, minimal disturbance.

5 None=no further work recommended.

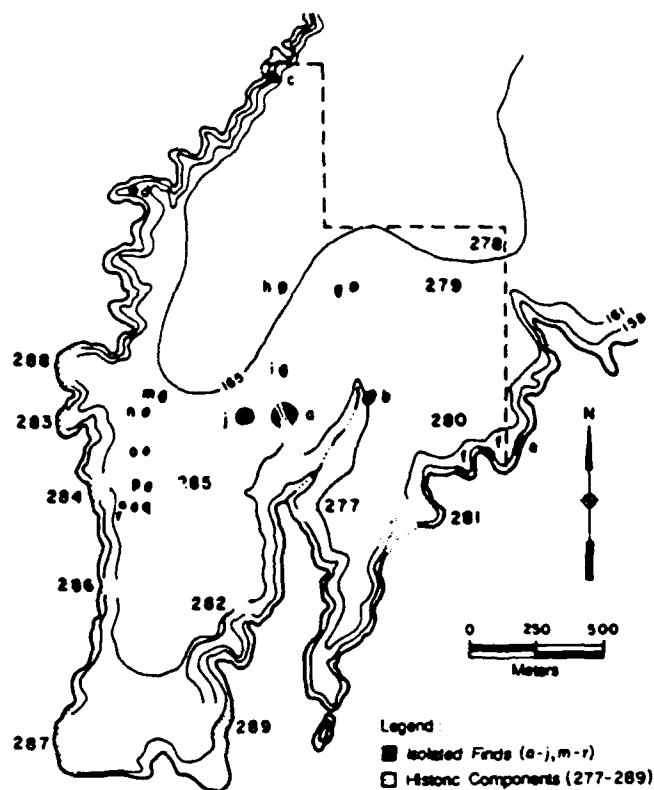


Figure 6.2 Historic components and localities reported in Wynnwood Park by Cliff and Moir (1985).

The results from the previous investigations and our survey indicate that artifact scatters and farmsteads are the dominant site types in the study area (Table 6.2). No industrial sites, businesses or towns were recorded. These data indicate also that both artifact scatters and farmsteads are dispersed, overlap in distribution, and occur in all major drainage areas. Nineteen historic scatters occur in the western half of the study area, in the Eastern Cross Timbers, while twenty-three are located in the eastern half, in the Blackland Prairie. However, almost twice as many farmsteads occur on the Blackland Prairie (n=39) as in the Eastern Cross Timbers.

Approximately 68% of the datable components dated before 1900, and 63% of these dated before 1890. Sites initially occupied prior to 1880 (n=14) include five in the Eastern Cross Timbers and nine in the Blackland Prairie. This supports historical and archival data suggesting that the Blackland Prairie was preferred over land in the Eastern Cross Timbers because of its suitability for farming. Twenty-eight sites initially occupied between 1880 and 1900 were identified, 10 occurring in the Eastern Cross Timbers and 18 in the Blackland Prairie.

These data indicate that the project area was heavily utilized during the nineteenth and early twentieth centuries. Early components found in the study area date primarily to ca. 1870. No clearly identifiable pre-Civil War components were located, although historic information indicates this area was initially settled around the 1840s. The earliest dated component was 41DN289 in Wynnwood Park. It is a surface beach scatter and was assigned a date of ca. 1850 to 1855 (Cliff and Moir 1985).

Table 6.2

Historic Components in Project Area
Recommended for Further Work

Site ¹	Site Type ²	Date Range	Integrity	Potential ³
DN43/44	F	1890s-1940	Low-mod.	Mod./F, BD
DN392	S	1860s- early 20th c.	Low-mod.	Low-mod./EO, SO
DN395	C	1860s-p.	Mod.	Cemetery
DN401	F	1880-1940	Mod.	Mod./F, BD
DN402	F	1880-1940	Mod.	Low-mod./F, BD
DN403	F	1880s-1940s	Poor-Low	Low/F
DN404	F	1870-1930	Poor	Low-mod./F, EO
DN407	F	1870s-1940	Low	Low-mod./EO
DN409	F	1880-1940	Low-mod.	Mod./F
DN410	S	1870-1910	Poor	Low-mod./EO, SO
DN411	F	1890-1940	Low-mod.	Low-mod./F
DN423	F	1880-1940s	Mod.	Mod./F, BD
DN424	F	1880-1940s	Mod.	Mod./F, BD
DN428	F	1870-1940	Mod.	Mod./F, BD, EO
DN429	F	1870s-1940s	Mod.	Mod./F, BD, EO
DN430	F	1890s-1950s	Mod.	Mod./F, BD

¹ Site number preceded by 41 (e.g., 41DN43/44).

² C=cemetery; F=farmstead; S=scatter.

³ BD=known subsurface deposits; EO=early occupation date; F=surface features; SO=short occupation.

Initial occupation in the 1870s to 1900s is clearly indicated by the components recorded in the project area (see Table 6.1). The area was heavily utilized in the twentieth century, and urban sprawl, reservoir construction, and industrial development have adversely impacted many early components. In addition, it should be noted that the distribution patterns discussed above are based only on components between the 522- and 532-ft contours. No data

are available for components located below the current lake level or above the 532-ft contour, so regional reconstructions of past distributions cannot be determined using these archaeological data.

Because many of the components recorded in the project area were adversely impacted, few exhibited potential for yielding significant information or are eligible for the National Register of Historic Places. Sixteen sites, including thirteen farmsteads, two scatters, and one cemetery were recommended for further work (Figure 6.3). In some instances, historic scatters were recommended because they yielded early MBD values and field observations suggested the potential for buried deposits. An overview of these components is presented in Table 6.2.

In summary, 99 historic components have been identified at Lewisville Lake, including Wynnwood Park. These components include 38 scatters, 41 farmsteads, two dumps, one bridge, one cemetery, two isolates, and one unknown. The two isolates were originally recorded as sites and later downgraded to isolated finds. Within the project area, 5.3% of the scatters and 32% of the farmsteads were recommended for additional work. One scatter and 33% of the farmsteads at Wynnwood Park were recommended as NRHP eligible. The dumps and bridge are modern. The cemetery was recommended for documentation. Table 6.3 shows by time period the percentage of historic components recommended for further investigation.

Table 6.3

Percentage of Historic Components in Present
Study Area Recommended for Further
Investigation by Time Period

Time Period	Total Number	Number Recommended	Percent Recommended
Pre-1880	14	6	42.9%
1880-1890	19	6	31.6%
1890-1900	7	3	42.9%
Late 19th c.	8		
20th c.-recent	22		
Modern	3		
Unknown	12		

The most commonly identified historical sites in the project area were farmsteads dating between the 1860s and 1940s. Historical research and archival background of the region indicate that initial settlement began in the early 1840s with the establishment of the Texas Emigration and Land Company, later known as the Peters Colony.

Numerous communities were established in the 1840s and 1850s. The primary occupation of residents in Denton County was subsistence farming. With the exception of Grayson County, cotton was relatively unimportant during this period. Most of the land in the county was patented by 1870. Farm size increased during the late nineteenth century, and tenant farming became common. By 1900, half of all farmers were tenants. During the twentieth century, farm size continued to increase, but by the 1920s, the number of farms began to decrease, and rural migration to the cities was increasing steadily.

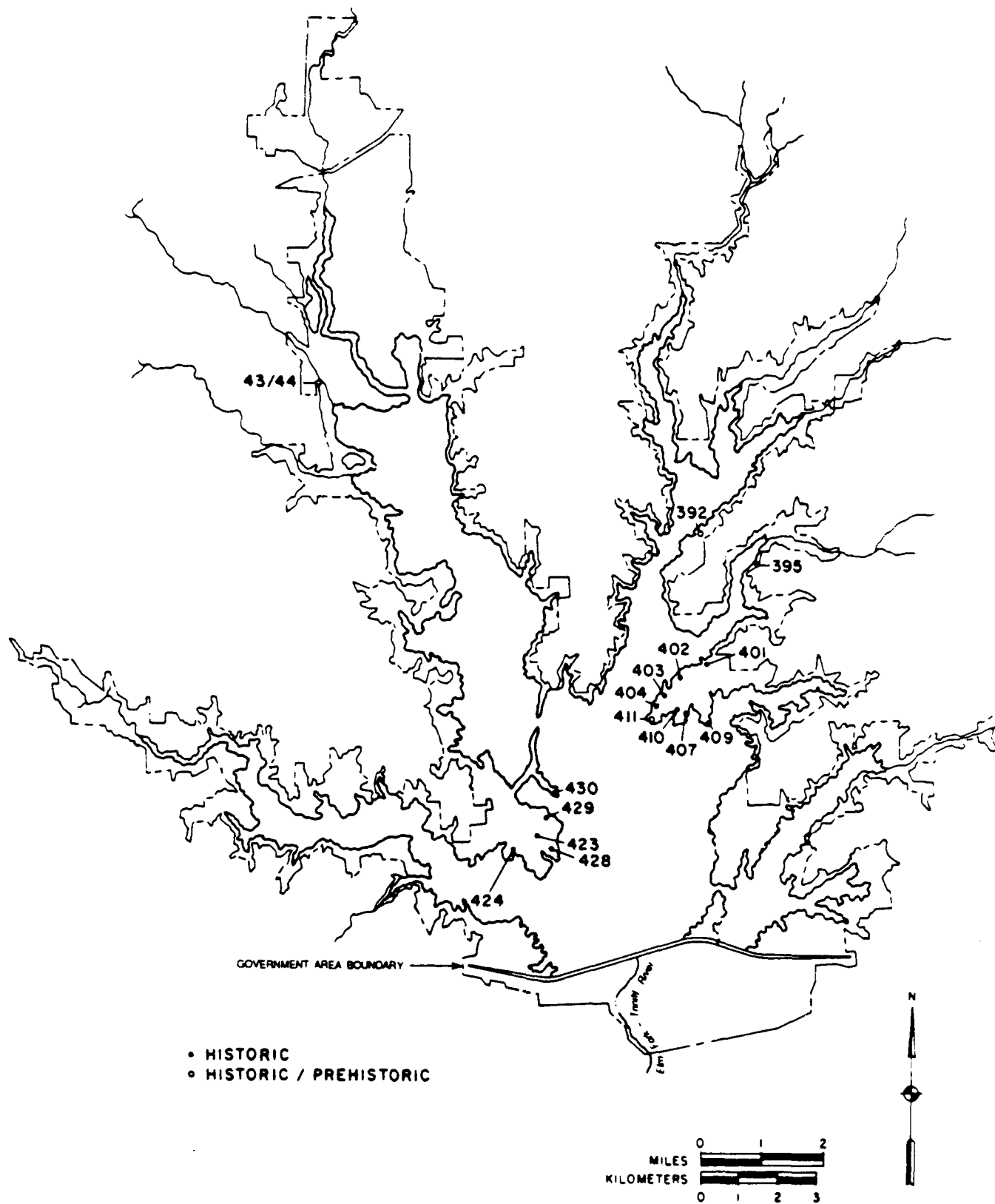


Figure 6.3 Distribution of the historic components recommended for testing based on survey results.

CHAPTER 7

HISTORIC BACKGROUND

by
Susan A. Lebo

Early Exploration: ca. 1500-1830

Spanish explorers crossed northcentral and East Texas centuries before the first major Anglo colonization effort in southern Texas by Moses S. Austin. The Hernando de Soto expedition, led by Luis de Moscoso de Alvarado after de Soto's death, purportedly passed through Pilot Point in 1542 on the way back to Mexico. The exact course followed by Moscoso's group is still a matter of historical debate (Reese, Pegues, and Yates 1988; Skinner et al. 1982a).

According to Richner and Bagot (1978:77), the Spanish claimed East Texas in the late 1500s, but they did not attempt to control it until 1685 when the French moved from Louisiana into Spanish Territory. The Spanish were primarily interested in locating precious metals, and because gold and silver were not found in East Texas, the Spanish were not active there. But in 1685, they established missions to convert the indigenous population to serve as a buffer to stop French encroachment. No Spanish settlements were established in the Upper Trinity River Basin, near the project area.

French exploration was more extensive in northcentral Texas than that of the Spanish. An expedition headed by Athanase de Mezieres traveled through the region in the 1760s and 1770s (Skinner et al. 1982a, b). The French were interested in establishing trade relations with regional Native American groups, including the Caddo, Wichitas, Delaware, Kickapoo, Kichai, and Shawnee. Several of these groups, including the Wichitas, had entered the region from other parts of the United States in the 1700s (Newcomb 1961; Reese, Pegues, and Yates 1988; Skinner et al. 1982a, b).

Historic Settlement: ca. 1830-1870

Anglo settlers were in the Denton area as early as the 1830s, and a military outpost was situated three miles southwest of there. Several major overland routes crossed the area, including the California Trail which ran east-west through Cooke County. A second trail, the Chihuahua Trail, was used primarily in 1839 and 1840 (Skinner et al. 1982a, b). Bird's Fort in Tarrant County was established in 1840 by Colonel Jonathan Bird and a company of volunteer rangers. It is commonly considered the first settlement in the area (Reese, Pegues, and Yates 1988).

In 1838, the Texas Congress authorized establishment of a military road, the Central National Road (now called Preston Road). It ran from Dallas to the Red River at Preston's Bend. It followed the north-south ridge between the Elm Fork and East Fork of the Trinity River near the Collin-Denton County line, about one mile east of Denton County. It provided new immigrants with an improved transportation route through northcentral Texas (Bridges 1978; Odom and Lowry 1975).

As settlers immigrated to the area, skirmishes occurred with Native American groups in the region. One of these was at Village Creek, in present day Tarrant County. In 1838, the Caddo village was attacked by a troop of volunteer rangers led by Thomas J. Ruck. The village was destroyed, but the same site was later reoccupied by Cherokee Indians who immigrated to the area from present day Cherokee County. A force was led by General Tarrant against the village in 1841, after several years had passed without incident. The village was reported to be large, with about 225 lodges and extensive areas of cultivation (Strickland 1937). Shortly after the raid, efforts were made to force all Native Americans out of the Upper Trinity, opening the area for Anglo settlement (Reese, Pegues, and Yates 1988).

In the early 1840s, colonists began homesteading along major waterways (such as the Elm Fork of the Trinity) in the Blackland Prairies and around the southern edge of the Cross Timbers. This settlement was initiated when the government of the new Republic of Texas began searching for a way to alleviate the financial strain brought on by their fight for independence. A variety of measures were initiated to encourage immigration.

Colonization in the project area occurred after W.S. Peters of St. Louis and 19 other men petitioned the Congress of the Republic of Texas on February 4, 1841, for a land grant. Their company, the Texas Emmigration and Land Company, became known as the Peters Colony (Connor 1959).

The Texas Emmigration and Land Company established an office in southeast Denton County in 1843 (Odom and Lowry 1975). Although chiefly motivated by financial concerns, they were directly responsible for promoting much of the immigration to the area (Ferring and Reese 1982). Four separate contracts were negotiated with the Texas Government by the Texas Emmigration and Land Company (Figure 7.1). The first contract, made in 1841, includes the Lewisville Lake project area. Located in the Cross Timbers zone, this included the area from what is now the southern boundary of Denton County to the Red River, the eastern half of Denton and Cooke counties, the western third of Grayson County, and a small portion of Collin County (Connor 1959; Ferring and Reese 1982). The second contract was signed on November 9, 1841, extending the colony lands westward to encompass the three forks of the Trinity, and the third, signed July 26, 1842, extended the colony farther west and east. The fourth contract was signed on January 16, 1843, and contained over 10 million acres of land for colonization.

The Texas Emmigration and Land Company was responsible for surveying the sites and providing assistance in house construction. In return, they could retain up to half a settler's land. The land titles were issued to the company agents rather than to the settlers themselves (Ferring and Reese 1982). This led to hostility between the company and the settlers which culminated in the "Hedgcoxe War" in 1852.

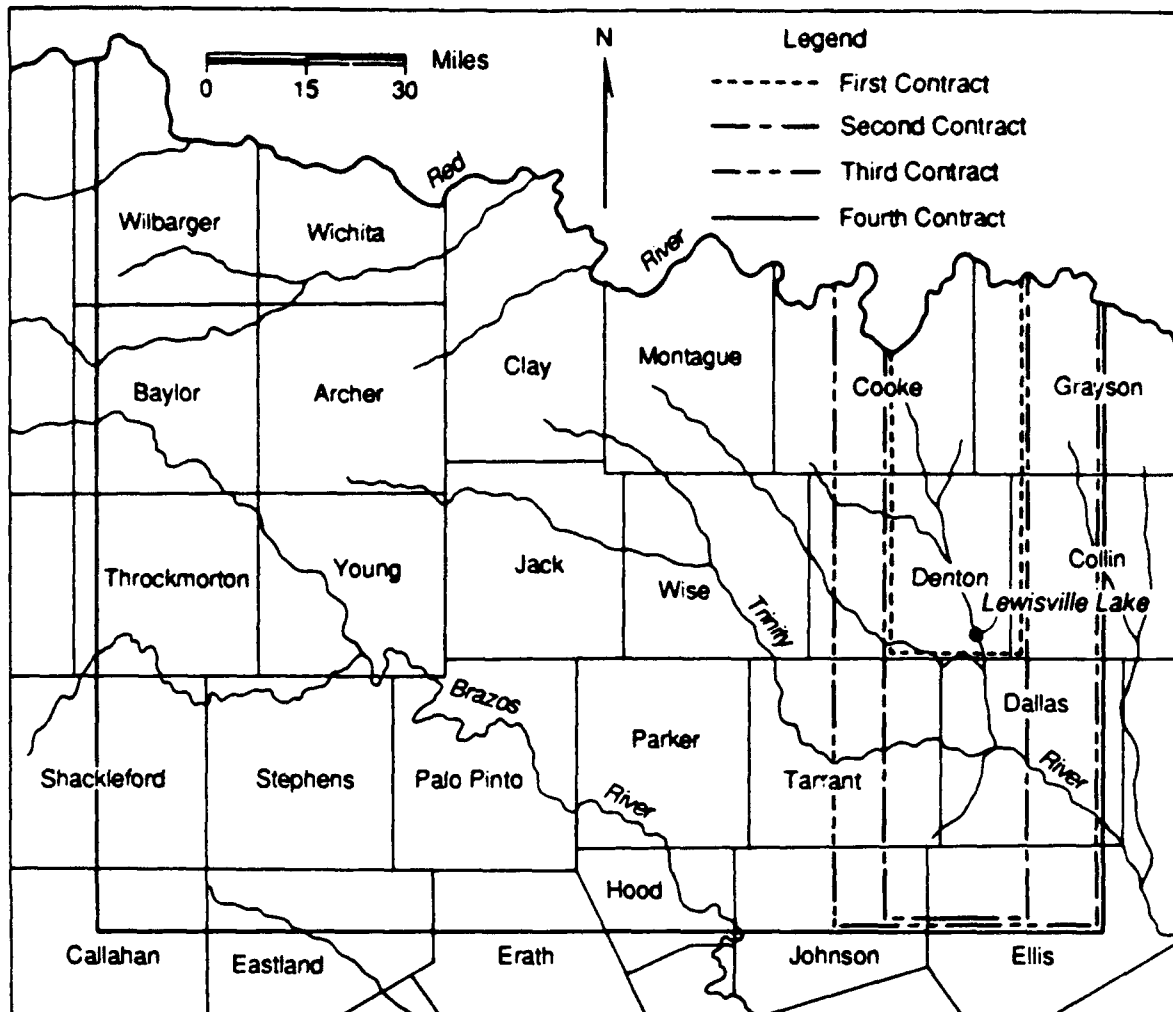


Figure 7.1 Land contracts negotiated by the Texas Emigration and Land Company with the Texas Government in the 1840s.

Following protests, the law granting the Texas Emigration and Land Company half the settler's land was repealed, and the company was compensated with 1,088,000 acres of vacant land within the colony (Lowry 1980). This angered the settlers, and during the summer of 1852, the office of Henry O. Hedgcoxe, agent for the land company, was raided and burned.

The Peters Colonists, primarily Anglo-Americans from the Upper South, chose their land according to the availability of water, wood, and arable farmland. The settlers were overwhelmingly farmers from central and western Missouri, including the northern Ozarks, southcentral Kentucky, and middle Tennessee. They settled primarily east of the Balcones Fault on the Blackland Prairies, where agricultural potential was good. West of this area, soils and climate in the Eastern Cross Timbers combined to create an area more suited to ranching. The 1850 census (U.S. Bureau of Census, 1850:Population) indicates that 94 of the 101 individuals who listed their occupations in Denton County were farmers.

In the six-county area including Collin, Cooke, Dallas, Denton, Grayson, and Tarrant counties, the first land settled by the Peters Colonists was in Grayson, Collin, and Dallas counties. About 25% of the land in Grayson County was claimed by veterans and other citizens of Texas before the

arrival of the Peters Colonists. Collin County had 12% of its land claimed before 1840, while 3.2% of the land in Dallas County was claimed or occupied. Settlers migrated to the first available farmland they found, in this case Dallas County. As immigration increased and less land was available for new settlement, the immigrants began farming in the more northern and western counties. In general, as colonization spread westward, land holdings were larger because of the ecological and agricultural factors mentioned earlier (Williams 1969).

Good, tillable land was available in Cooke, Denton and Tarrant counties, but immigration routes into these areas were poor, hindering settlement. The route used by most early colonists took them west to Fort Smith, by Fort Towson, into Indian Territory, and then across the Red River around Preston's Fort (Williams 1969).

Denton County, originally part of Red River County under the Mexican Government, was incorporated in 1837 as a section of Fannin County. In 1846, by an act of the first Texas Legislature, it was made a separate county along with 30 others (Skinner et al. 1982a). The first settlement in Denton County was Bridges' Settlement, later Hebronville, established in 1843 (Bates 1918; Odom and Lowry 1975). "This settlement was partly in Denton County, partly in Collin County, and partly in Dallas County" (Bates 1918:27). The Peters Colony (Texas

Emmigration and Land Company) land office was located here, along with a settlers' store.

Bridges' Settlement expanded, and its western edge became Hottford Prairie in 1844, located on the headright grants of John and Augustus King who came to the area in 1843. In 1855, it was sold to Basdeal Lewis, the town was laid out, and it was called Lewisville (Reese, Pegues, and Yates 1988).

Other early settlements include Stewarts Creek, in 1844; Teel (northeast of the project boundary), in 1850; Ritters Lake (now under Lewisville Lake) in 1844; and Pilot Point in 1845 (Bates 1918; Odom and Lowry 1975; Bridges 1978). Denton was established in 1857 (Bridges 1978).

In 1847, the Peters Colony administrators resumed national advertising to attract new homesteaders. This advertising resulted in a boost in the population. Between 1847 and 1848, almost 1,300 settlers arrived, including the return of 60 to 70% of the colonists who had left two years earlier. Within a few years a number of new communities were established.

The first county seat of Denton County was established in 1846 at Pinkneyville, about one mile southwest of the present location of Denton on Pecan Creek. It was abandoned because of its distance from the bulk of the population in the southeast corner of the county. The county seat was moved four miles south to Alton in 1848, on the fringe of the project area, but this site was abandoned because of water shortages. The third site chosen was in the Alexander E. Cannon homestead on Hickory Creek, five miles south of present-day Denton. The first courthouse in the county was built there in 1851, and it was given the name of Old Alton. It was moved for the last time in 1857 to Denton (Bridges 1978; Odom and Lowry 1975).

The Daugherty family immigrated to Denton County in 1851 and settled at Old Alton. This town was located a short distance down Hickory Creek from the original community of Alton and just southeast from the point where the Old Fort Worth Highway crossed the creek about 6 miles south of Denton (Bridges 1978). The Old Alton or Hickory Creek Cemetery was established there in 1852 and is located on the west margin of the study area, adjacent to the Cranston Pottery Kiln Site (41DN16).

Shortly after Old Alton was started, the post road and stage line from Sherman through Little Elm to Birdville was moved to serve Old Alton (Bates 1918). In 1856, a mail route was started that ran between Old Alton and Taylorsville (later called Decatur) in Wise County (Bridges 1978). Early establishments included a courthouse (1851), post office (1851), first of several stores (1851), a school (1852), a church (1855), a hotel (1855), a blacksmith shop (1856), the Cranston Pottery (ca. 1854), and the Hickory Creek Cemetery (Bridges 1978).

The Town of Little Elm (east side of Lewisville Lake) was established with mail service in 1845 (Bridges 1978; Lowry 1980). The post office was on the mail route between Preston and Birdville. The town was named for a nearby creek and was formed by the consolidation of the Lloyd, Hackberry, Dickson, and Hilltown settlements (Lowry 1980:15). The first store in Little Elm was established in 1859. The Little Elm Cemetery was established in the late 1800s and is discussed in Appendix E.

During the 1850s, settlement in Denton County moved west of the Lewisville project area, and southwest of the Ray Roberts project area. New communities were established at Frenchtown (1852), Hawkins (1853), Rue (1854), Denton Creek (now called Stony) in 1854, Denton in 1857, Keys Community (1858), and Bolivar in 1859 (Bridges 1978). In 1856, agents of the Peters Colony also moved their main office from near Farmer's Branch to Office Creek, just north of the present town of Hebron (Bridges 1978).

The 1850s were a time of great change throughout the Upper Trinity region. Northcentral Texas was the fastest growing region of Texas during the late antebellum period (Lowe and Campbell 1987). Colonists filled most of the vacant lands in the project area and had begun extending to new, unclaimed lands in the western portion of Denton County. Urban centers were developing during this period and rural communities were in their earliest stages of development. Transportation networks improved, and rough trails were being shaped into roads. Many of the ferries listed as historic localities date to this period. In 1854, Alexander Cockrell built the first bridge spanning the Trinity River, connecting east and west Dallas. The Fort Worth to Yuma stageline began operations in 1856, and by 1858 several more were in existence (Reese, Pegues, and Yates 1988).

The 1850s also saw the first large-scale attempt to navigate the Trinity River. Prior to this period, freight wagons were the chief means of transporting goods and services between this area and eastern and southern Texas market centers. By 1860, nine individuals in Denton County listed their primary occupation as teamster, along with five wagonmakers and one wheelwright.

Small keel and flat boats sporadically serviced early settlements on the Trinity. Small steamers appeared on the Trinity River in the 1830s and reached the upper Trinity by 1842 (Sciscenti 1971; Richner and Bagot 1978). Cotton was the major cargo carried downstream followed by cattle, other livestock, and deer hides (Brown 1930). Steamers travelling upstream carried staples and manufactured goods including, sugar, molasses, coffee, whiskey, flour and clothing (Richner and Bagot 1978:101).

While many thought the Trinity River was the most navigable stream in Texas, navigation was not possible many months of the year, and in 1852, the "Dallas" became the first of a long line of ships to sink in the Trinity. The "Dallas" was enroute to the coast and took three months to reach Porter's Bluff near present-day Corsicana, where it was forced to turn around due to low water. It hit a snag and sank on the return trip (Greene 1973; Reese, Pegues, and Yates 1988).

While this region of Texas was capable of producing vast quantities of cotton and wheat, commercial agriculture was relatively unimportant before the Civil War (Lowe and Campbell 1987). The north-central plains, including the Lewisville project area, grew more rapidly (in number of farms) than any of the other areas of Texas during the 1850s. This region became the state's second-leading cattle, hog, and corn producer and remained the largest wheat-growing area (Lowe and Campbell 1987:30, 34).

While over half of the state's wheat was grown in this area, cattle, hogs and corn were raised primarily for home consumption. Wild game was plentiful, including prairie chickens, quail, turkey, ducks, geese, deer, and antelope. Buffalo were also hunted. They were numerous in the 1830s,

but were pushed farther west as the frontier moved westward. "Until the early 1870's, hunting parties from Denton and the surrounding area went into the buffalo regions of West Texas and returned with hides, meat and thrilling stories of their experiences" (Bridges 1978:36).

Smaller game included rabbits, fish, and squirrels. Farm animals included pigs, hogs, chickens, turkeys, goats, cows, sheep, and horses. Wild plants supplemented farm gardens and orchards. Wild plums, grapes, persimmons, nuts, berries, and honey were utilized. Pecans were the most common nuts, and less important types included black walnuts and hickory nuts. Blackberries and dewberries were common, while strawberries, elderberries, and mulberries were less abundant. Staple farm crops included wheat, corn, sorghum, cabbage, turnips, sweet potatoes, beets, mustard, peppers, beans, and onions. Pumpkins, cushaws, watermelons, cucumbers, citrons (pie melons), and beans were planted among the corn. Common plants utilized by settlers include Lamb's quarters, dandelions, sheep sorrel, volunteer mustard, poke weed, and wild onions (Bridges 1978). Gourds were also cultivated. Few foodstuffs were imported, the most common was probably coffee.

Cotton was a relatively unimportant crop in the Grand Prairies region before the Civil War. "By 1860,... cotton farming was being extended into Central Texas, even though the notion still prevailed that it was a bottomland crop not suited to the black prairies" (Richardson, Wallace, and Anderson 1988:181).

"After the War with Mexico, the range cattle industry spread into the vast prairie region marked today by such cities as Dallas, Fort Worth, and Denton. John Chisum...owned a herd in Denton County during this period" (Richardson, Wallace, and Anderson 1988:284). By 1860, two cattle-ranching clusters had developed in the state, including the Cross Timbers region (Jordan 1981:126). The population to cattle ratio was between 1:2 and 1:5 for Denton County.

Early settlers were largely self-sufficient, and industries were operated on a seasonal basis by individuals whose primary occupation was farming. By 1860, 41 types of manufacturing establishments existed in Texas. Among these were local manufacturers of agricultural implements, beer, bread, brick, firearms, furniture, patent medicines, pottery, saddles, steam engines, cotton gins, and whiskey (Dugas 1955:154). Mills and gins were established up and down the Trinity River and its tributaries, including Denton, Holford Prairie (Lewisville), and Pilot Point.

An ox-tread grist mill was built near the Lewisville project area in the early 1860s. It was situated a short distance from the square on the west side of North Elm Street in Denton by Peter Teel and G.M. Teel. The Teels were one of the early families to settle in the Lewisville Lake project area.

In 1865, the Teels sold the mill and the lot on which it was located to Mrs. M.E. Mounts. A short time later I. N. Hembree and O. M. Keith purchased the property, and Hembree moved the mill to his home on Duck Creek north of Bolivar. During these earlier days many of the people of Denton and southeastern Denton County had their milling done at Witt's Mill, later and better known as Trinity Mills on the Trinity River just above Carrollton (Bridges 1978:87).

Several early cotton gins were established in the Lewisville project area during the 1860s, including one owned

by J.M. Clayton, reportedly the first cotton gin in Denton County. Bridges (1978:121) reported that this gin was established at Lewisville (formerly Holford Prairie) in the season of 1867-1868. Another early gin was located near the south end of Bernard Street on the outskirts of Denton in 1869. It was built by W.C. Baines and was operated by jennets and a whimp or capstan device that supplied the power for running the machinery. The gin was replaced by a larger and faster gin around 1870 by Captain C.C. Scruggs who built a gin on the bank of Pecan Creek on the north side of McKinney Street about a block east of the railroad crossing. Soon after, a corn mill was added to the gin operation. It was powered by animals and later changed to steam power. The mill operated for 14 or 15 years.

Sawmills were frequently combined with a grist mill or general store. Mills located in the Texas interior, including the study area, did not have easy access to gulf ports and served mostly local needs since transportation costs were prohibitive (Dugas 1955; Maxwell 1964, 1982). Lumber was "as high as sixty and seventy dollars per thousand feet and was often hauled hundreds of miles by ox team" (Dugas 1955).

By 1860, a small number of individuals in Denton County listed their primary occupation as miller or millwright. Data on manufacturing for 1860 (U.S. Bureau of Census, 1860: manufacturing) indicate that flour and grist milling was the third largest industry in Denton County. These data also indicate the importance of other rural and urban industries during the late 1850s and the 1860s, including, carriage and wagon making, brick making, pottery making, saddlery, carpentry, and blacksmithing. One industry, pottery production, was established in Denton County where suitable clays were available, but did not occur in the immediately surrounding counties. Seven potters and one pottery hand are listed in the 1860 census (U.S. Bureau of Census, 1860: Population) for this county, and seven potters are listed for 1870 (U.S. Bureau of Census, 1870: Population).

Civil War

Slavery was not a burning issue in Denton County. "The slightly more than 5,000 population in the county in 1860 included only about 250 slaves. Still, most of the pioneers had come from southern or border states, and the sympathy of the county went reflexively to the Secessionists" (Odom and Lowry 1975:5). Many supported the Confederacy not because of the slavery issue, but because of a strong belief in the right to secede. The decision to secede passed in Denton County with 331 for, and 256 against (Odom and Lowry 1975:5).

Eight companies were formed, and a thousand men enlisted from Denton County (Bates 1918:98). According to Bridges (1978:97), Denton County troops entered the Confederate Calvary and served in the Indian Territory, the Missouri-Arkansas campaigns, and the Tennessee-Mississippi campaigns. Home guards were organized of boys under military age and old men. They served as the basic law enforcement in the county between 1861 and 1868.

Industrial development in Texas was dramatically curtailed by the Civil War. For example, cotton production decreased from 345,170 bales in 1860 to only 280,502 bales in 1869. It was not until the early 1870s that many industries regained prewar levels of production.

Post-Civil War: 1870-1900

Indian uprisings were a constant fear during the 1860s, but did not become a problem until after the Civil War when former Confederate military posts were abandoned, citizens were disarmed, and protection was furnished by ineffective Federal troops. From 1866 to 1873, Denton experienced its most furious and dangerous period of Indian Wars (Bridges 1978:98).

Anglos and African-Americans from the Lower South immigrated to the area after the Civil War. African-American settlers established rural and urban communities in western Grayson, eastern Cooke, and northeastern Denton counties. The African-American community in the town of Denton dates from about 1875 (Jordan 1977).

Midwestern Anglo-Americans, principally from Illinois and Indiana, and European-born groups who had resided a decade or more in the Midwest or in settlements in southcentral Texas, immigrated to the area from the 1870s to the early 1900s. German, French, and Czech settlements were established. Germans established settlements in northern Denton County, while French communities occur in western Denton County (Jordan 1977).

While by 1870, most of the land in Denton County was patented, some land was still available through homesteading or outright purchase. A boom occurred in this region, including the establishment of new communities supported by military aid and the coming of the railroads. The railroads created new markets for crops and other goods produced in the Lewisville area. The economic crisis of 1873 slowed railroad completion and stunted agricultural expansion temporarily (Skinner et al. 1982a).

Railroad lines in northcentral and East Texas tripled between 1870 and 1880 (Figure 7.2). The Houston and Texas Central reach Dallas in 1872 (Acheson 1977) and by 1877 was part of a completed track from Galveston to Chicago. In an effort to ensure an east-west line of the Texas and Pacific, Dallas secured state legislation and offered land and bonds (Reese, Pegues, and Yates 1988). This line reached Dallas in 1873 but was not completed to Fort Worth until 1876. The population and economy of Fort Worth declined during the three year delay in completing the railroad.

Towns that developed between Dallas and Denton along the Houston and Texas Central are Letot, Farmers Branch, Carrollton, Trinity Mills, and Lewisville (Reese, Pegues, and Yates 1988). Denton was on the line of the Southwestern Branch of the Missouri Pacific Railroad. Pilot Point had a railroad station, and Gainesville in Cooke County was on the western terminus of the Missouri, Kansas, and Texas Railroad (Burke's Texas Almanac 1882).

Prior to the Civil War, cotton production was concentrated in the Brazos River Valley, and to a lesser extent, in northcentral and East Texas. The Brazos River Valley was considered an ideal location because it was similar in physical conditions to the parts of the Lower South from which the planters had originally migrated. These were areas suited to the use of slaves, and cotton was the chief cash crop (Boehm 1975:21). After the Civil War, new immigrants settled in areas that were still sparsely populated. Among these areas was the Blackland Prairie, which extends westward into the Lewisville project area. By 1880, 35% of the cotton production in Texas was in the Blackland Prairie (Boehm 1975:21).

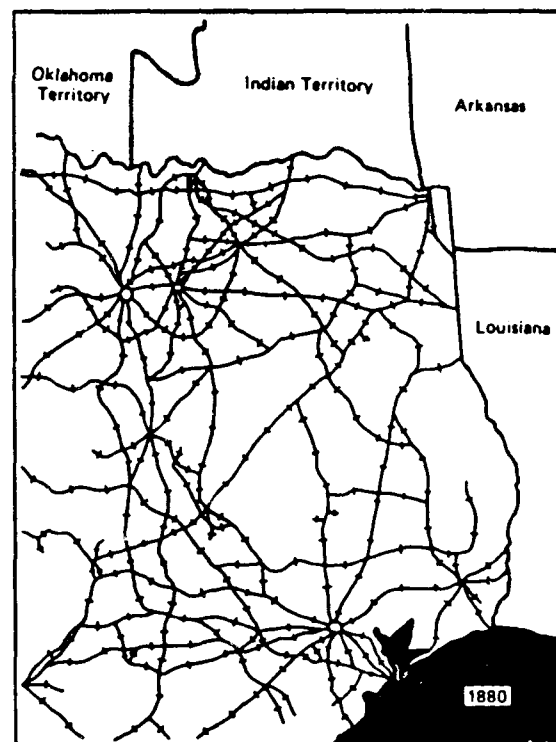
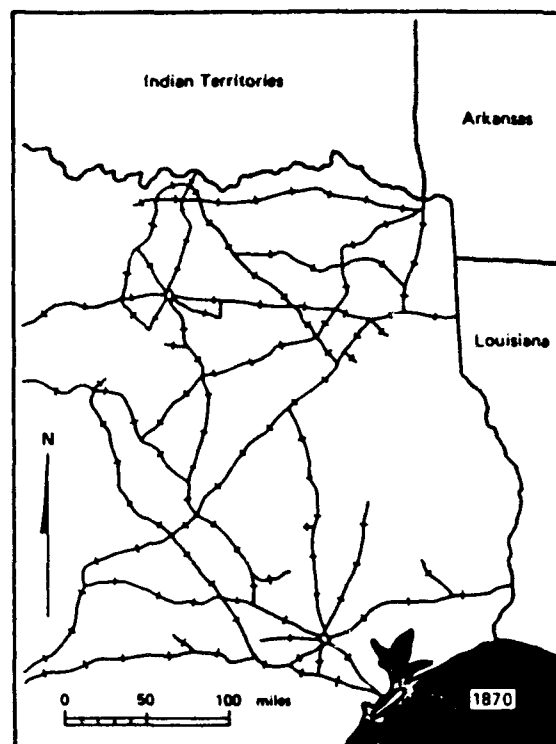


Figure 7.2 Railroad lines in northcentral and East Texas in 1870 and 1880 (Ferring and Reese 1982).

Major market centers for cotton processing also changed. In the early 1870s, Dallas became a major compress point, along with Denison and Sherman. Cotton produced in the Blackland Prairie was shipped to these cities and then on to northern markets through St. Louis and southern markets through Galveston and New Orleans (Ellis 1970:502).

As new markets became accessible by rail, increasingly more land was put into cash crop production between 1875 and 1900. Cattle and stock production was more intensive west of the project area, close to the Grand Prairies, while farming was the primary occupation in the project area. Industrial development increased within the cities, and new occupations sprang up to meet the market demands.

One major change in agricultural practices between 1850 and 1880 was the introduction of barbed wire, patented in 1874, and sold in Gainesville, Denton, and other nearby towns in 1875 (Bridges 1978). This made it practical to fence in cattle rather than fencing crops to keep livestock out and had the effect of vastly decreasing the amount of open range.

Tenant farming became a common practice. The principle cash crops continued to be cotton, corn, and wheat. Almost 40% of all farmers in Texas were tenants during the 1880s (Green 1977:135). Two types of tenancy were common, cash and share. Cash tenants rented the property, equipment, and seed, while share tenants paid the owner with one third of the grain and one fourth of the cotton [or other cash crops] grown during the season. This arrangement intensified during a depression in the 1890s (Ferring and Reese 1982). Many small farm owners were forced into tenancy while others were forced off of their farms and into the cities.

Farm size and tenancy data for Denton County indicate that farm sizes increased in the 1870s and 1880s. Median farm size rose from 50 to 99 acres in the 1860s to between 100 and 499 acres in the 1870s. It began to decrease after 1890, but figures for 1935 (Texas Almanac 1939-1940:173-176) reveal that farm size did not decrease substantially and averaged 141 acres in Denton County.

Tenancy increased steadily in Denton County after the Civil War. In 1880, a third of the farmers were tenants but by 1900, one half were. This increase continued into the early 1900s. Sixty-one percent were tenants in 1910 (Texas Almanac 1914:201-206), 66% percent in 1925 (Texas Almanac 1929:114-117), and a slight decrease was recorded in 1935 (60%) (Texas Almanac 1939-1940:173-176).

New Century (1900 to Present)

Economic turbulence early in the twentieth century was partially caused by the unstable cotton economy nationwide. By 1910, over 50% of all farmers in Texas were tenants (Green 1977:135), and over 60% in Denton County. Rising land values caused many landowners to demand cash payments in addition to the usual thirds and fourths crop payments. This, coupled with exorbitant interest rates made it almost impossible for the average renter to get ahead (Ferring and Reese 1982).

This pattern continued through the 1920s when the availability of cheap farm labor increased the percentage of tenant farmers, including both cash cropping and sharecropping. By the mid 1930s, cotton was losing its importance as a cash crop in northcentral Texas.

Farm size and mechanization increased, while land prices decreased. The number of farms continued to increase until about 1910 when 4,303 farms were reported for Denton County (Texas Almanac 1914:201-206). By 1925 they had declined to 4,255 (Texas Almanac 1929:114-117) and to 3,796 in 1935 (Texas Almanac 1939-1940:173-176). Data available for the state indicate that while the average number of acres harvested per farm, value per farm, and value of farm products per farm increased steadily between 1880 and 1970, farm population and the number of farms also increased until the Depression, when they began to decline.

War-related jobs and the oil industry provided temporary relief from the economic hardships of falling farm crop prices. Employment in the cities was an economic alternative chosen by many people in the project area. The population dropped as farmers converted to large-scale ranching or agribusiness, or left their farms because small farms were no longer economically viable (Skinner et al. 1982a, b).

CHAPTER 8

HISTORIC SITE DESCRIPTIONS

by

Susan A. Lebo, with faunal descriptions
by Bonnie C. Yates and archival contributions
by Bruce Mergele

Sixteen historic sites were selected for testing at the end of the survey phase, including 41DN43/44, 41DN392, 41DN395, 41DN401, 41DN402, 41DN403, 41DN404, 41DN407, 41DN409, 41DN410, 41DN411, 41DN423, 41DN424, 41DN428, 41DN429, and 41DN430. Site 41DN395, Little Elm Cemetery, is discussed in Appendix D. The remainder are presented in this chapter in order by TARI number, and their locations are shown in Figure 8.1. Test excavations were recommended to evaluate their eligibility for nomination to the National Register of Historic Places (NR).

Each site description is structured to provide a rapid overview of the site as well as detailed site information. General site information is encapsulated in table format at the beginning of each description, including information on USGS map quad, elevation, vegetation, site type, occupation range, and recommendations for additional work. Following this, a detailed discussion is provided under a series of headings: (1) Description: a brief overview of site location, topography, features, subsurface deposits, integrity, and survey results; (2) Previous Investigations: information about when the site was recorded and prior archaeological work conducted at the site; (3) Archival Investigations: an overview of which historic maps the site appears on, data on duration of occupation, and the chain of title; (4) Magnetometer Survey: information on the methods and results of the proton magnetometer survey used to locate cultural-related anomalies (e.g., buried cellars, house patterns); (5) Testing Method, Testing Results, and Archaeological Summary: an overview of the field methods used during the testing, the results, and an evaluation of site potential and significance; and (6) Recommendations. Three types of recommendations were made: avoidance, additional investigations, and no further work. Avoidance was recommended for NR-eligible sites where preservation was possible, while additional work was recommended for eligible sites that could not be avoided. No further work was recommended for sites that were considered not eligible for nomination to the National Register.

41DN44/43

Map Quad	Denton East 7.5', #3397-114
Elevation above MSL	520-550'
Vegetation	Oak, Bois d'arc, Greenbriar, Grasses
Cultural Affiliation	Historic (ca. 1870-1940)
Recommendations	No further work

Description: The site is located between Cooper Creek and Pecan Creek, on a north slope of two drainage terraces, north of a housing development. The current site area was

estimated at 120 m north-south x 100 m east-west based on extant surface artifacts, features, and data from the shovel tests dug during the survey (Figure 8.2).

A small sandstone and concrete foundation with machine-made bolt reinforcements is located in the southwest part of the site. It was assigned a date of post-1900. However, the archival data suggests it may date to the 1890s. A small number of uncut sandstone rocks occur northeast of the structure, and were identified as a possible structure location during survey. The testing data do not support this interpretation.

A third surface feature, a small concentration of historic artifacts, was located within an eroded roadbed near the northeastern extent of the site. The artifacts recovered from this area during survey were primarily ceramics and bottle glass. The ceramics yielded a mean ceramic beginning date of 1878. The nineteenth century material (n=14 sherds) exhibited a mean beginning date of 1861, and all but three sherds reflect types with terminal dates prior to 1930. The twentieth century sherds reflect types available after 1900 (n=7 sherds), with a mean beginning date of 1914. Four sherds have terminal dates of 1950 and three have terminal dates of 1989. The diagnostic bottle glass from this area (n=15 sherds) exhibited a mean beginning date of 1922. The nondiagnostic bottle glass included one fragment of dark olive (19th century) and two pieces of manganese (1880-1920). Additional sherds included one cobalt blue, and two unidentified.

A recent trash dump was situated 45 m northwest of the sandstone foundation, off the main site area. No material was recovered from this feature.

Previous Investigations: The site was redesignated and re-recorded during the survey. Two sites, 41DN43 and 41DN44, were previously recorded in this vicinity. No site forms or maps were on file at TARI. During survey, a surface reconnaissance was conducted and 23 shovel test pits were dug. Historic material was recovered from Shovel Test Pits 3, 4, and 8. The other pits were sterile. Prehistoric lithics, primarily flakes, were visible in eroded areas of the site, but no prehistoric material was found in the shovel test pits.

Archival Investigations: This site is located on the Morreau Forrest survey A-417 containing a league and labor (Figure 8.3). The survey was granted to M. Forrest in 1845 by the State of Texas as part of the Peters Colony. The site is located on Lot 8, Block F, which is located in the southeastern portion of the survey. The deed/title history for this Tract is provided in Table 8.1. A gap in the chain of title occurs between 1914 and 1924.

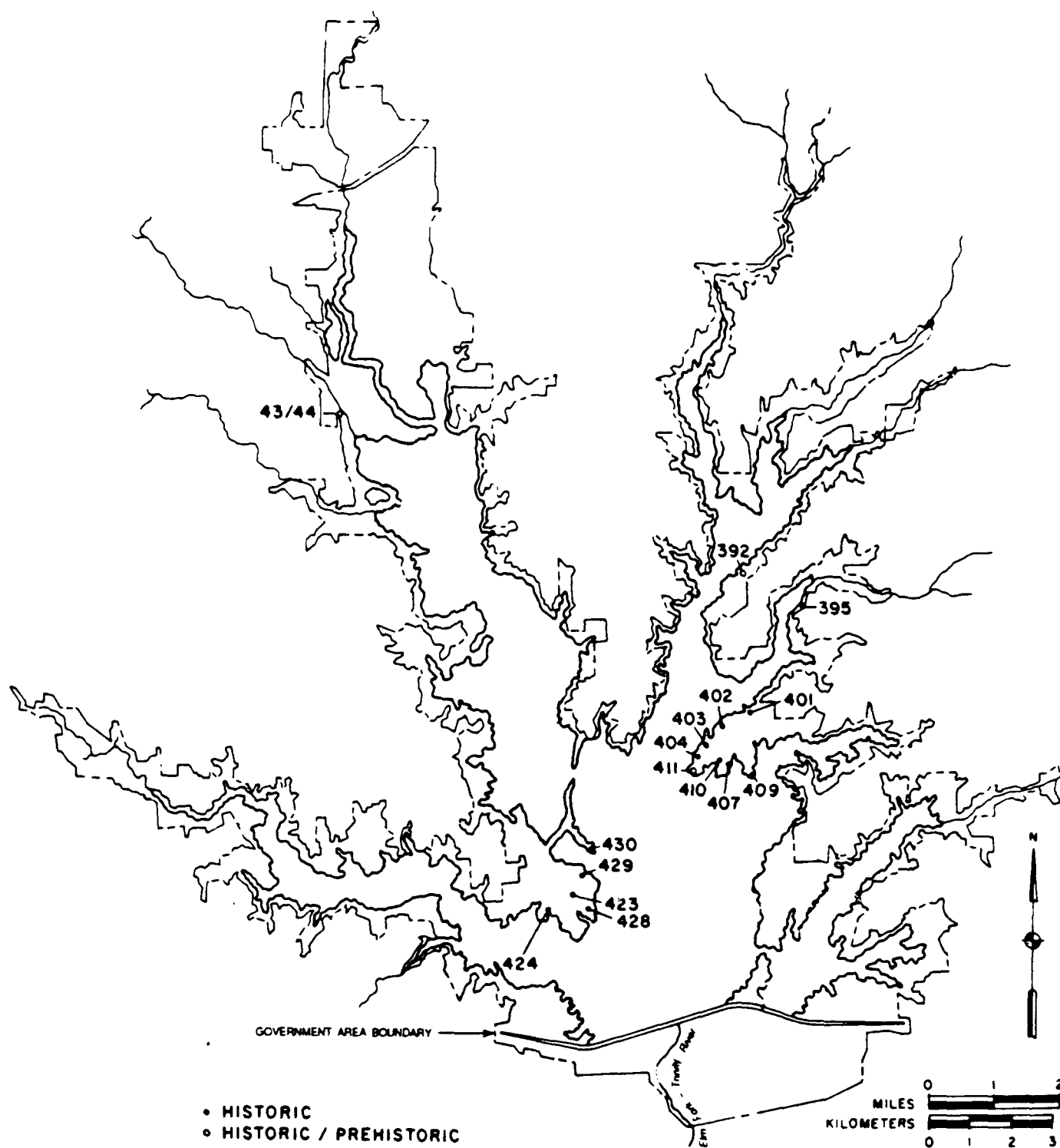


Figure 8.1 Location of historic components scheduled for testing.

These data indicate that site 41DN44/43 was not occupied as a farmstead prior to the turn of the century. An 1894 map (Book 50, p.236) shows houses, prairie, timber and cultivated fields, water sources, and subdivision designations within the survey. No dwellings are shown on Lot 8, Block F.

However, a spring is indicated north of the creek, and appears to correlate with the location of the extant sandstone foundation. This information supports the identification of this structure as a springhouse.

Table 8.1

Land Tract History for 41DN43/44

Morreau Forest survey A-417

Date	Grantor	Grantee	Price	Land Description	Ref.
1845	State of Texas	M. Forrest		4605.5 ac league and labor	
1886	M. L. Forest, E. D. Forest, M. D. Robinson, L. M. Robinson, by atty. Matthew Robinson	C. W. Guild	\$2300.	4605.5 ac; entire survey	29/619
1890	C. W. Guild	H. C. Clark	\$40440.	4605.5 ac less 225 ac south of Denton-McKinney Rd.	42/200
1893	Litigation between John Jeffries, Walter L. Jeffries and William A. Jeffries (Massachusetts) and C. W. Guild, C. R. Guild, H. C. Clark, A. E. McCarty, E. E. Holmes, W. F. Mitchell, J. E. Pritchett, C. C. Splawn, F. Wilkenson, J. Woodlow, B. F. Adams, B. F. Solomon, J. M. Solomon and L. Rees, Trustee. Complainants filed against defendants for monies approximating \$13,000 that were loaned in Deed of Trust, and for which the defendants failed to pay. Court awarded approximately \$10,000. and court costs plus northern half of survey to complainants. [actually awarded entire survey]				50/236
1894	Detailed map of subdivisions of League and Labor of Morreau Forrest by E. Biggerstaff, Co. surveyor. Shows houses, prairie, timber and cultivated fields along with water and subdivision designations. No dwellings are shown on Tract 8 of Block F. A spring is shown north of creek.				50/236
1897	W. L. Jeffries (Massachusetts)	John & William A. Jeffries	\$1.	Quit claim on Block A lots 1, 2, 3, 11; Block B lots 1,2,3,4,8,9,10, 11; Block C lots 4, 5; Block D lots 1,3,4,6; Block F lots 6,7, and 8	64/408
1899	W. A. Jeffries	A.H. Castleberry	\$512.	98.71 ac; Block F lot 8	71/464
1901	A. H. Castleberry	R.L. Castleberry	\$300.	30 ac; south portion of Block F lot 8	84/96
1903	A. H. Castleberry & wife Ida	W.T. Castleberry	\$1.	2 ac; 531 varas N of SW corner of Block F lot 8	89/102
1906	A. H. Castleberry & wife Ida	W. S. Fry	\$8996.	68.71 ac of N part of Block F lot 8, less 2 ac mentioned above, & 144 ac in Block F S1/2 of lots 3,4 & 5, and 10 ac S end of Block E lot 7	103/67
1914	W. S. Fry & wife Deborah	J. S. Smith	\$28,849.	345.47 ac in 1st Tract, including Block F lot 8, & 73.88 ac in 2nd Tract, including Block F lot 6	133/80
1924	Lillian Sanders, Ruth Sanders, and Lewis Sanders	City of Dallas	\$29,796.	502.23 ac in 2 tracts; Tract 1 is 375.66 acres in R. J. Mosely survey A-803; Tract 2 is 82.74 ac, including Block F, Lots 2-5 and 7-10	195/488

The site appears on the 1918 and 1936 maps. A farmstead is shown at this general location on both. The site was located outside the area depicted on the 1925 map, and the farmstead is not recorded on the 1946 map. This information indicates that the site was probably abandoned around 1940.

Testing Method: Six 1x.5-m test units, four shovel test pits, and four backhoe trenches were excavated. The 1x.5-m test units were placed randomly across the main site area, focusing on the area north of the sandstone foundation. This area exhibited the greatest potential for recovering an intact sheet refuse deposit. It was situated between the sandstone

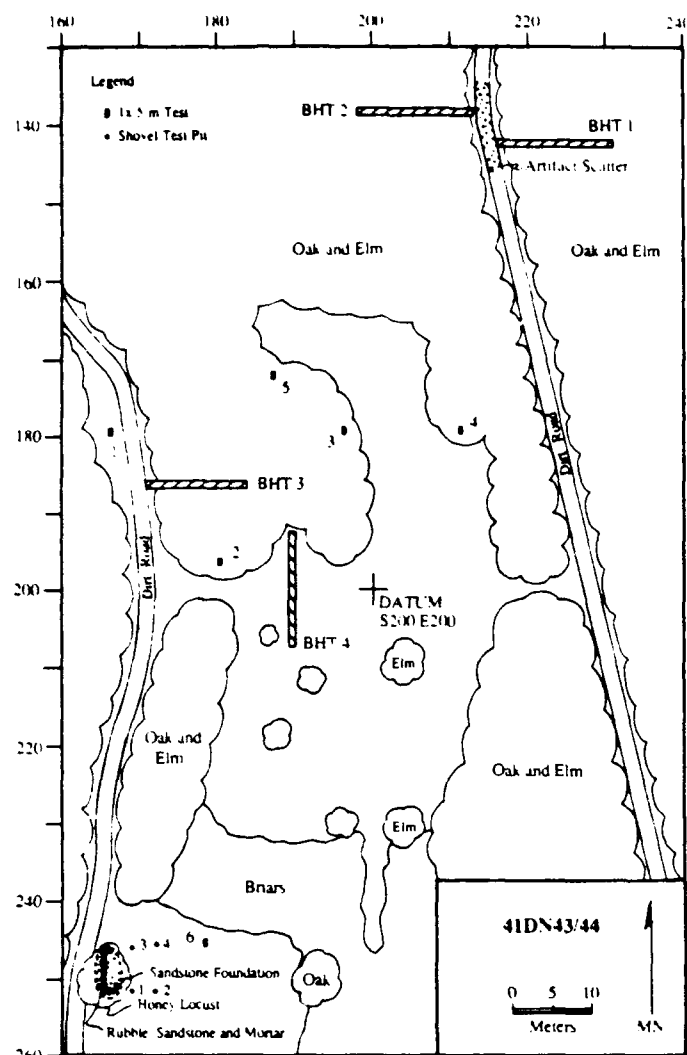


Figure 8.2 Map of site 41DN43/44.

foundation, the reported sandstone outcrop, and the artifact concentration within the roadbed. The shovel test pits were placed at several meter intervals, east of the sandstone foundation in an effort to acquire additional information on the function of the structure, including the recovery of a larger architectural sample. The backhoe trenches were placed in areas where small artifact scatters were visible on the ground surface. Backhoe Trenches 1 and 2 were placed to determine the extent and integrity of the historic artifact scatter recorded during survey. Backhoe Trenches 3 and 4 were placed through smaller, more diffuse scatters (Figure 8.4). The ground cover was cleared near the small sandstone outcrop and indicated that the stones were natural rather than cultural in origin.

Testing Results: Test Unit 1 contained cultural material to 23 cm below surface (Table 8.2), while the remaining units were either sterile (Units 4 and 6), or contained historic material in the upper 5 cm only (Units 2 and 3). Prehistoric material was found in Units 1, 2, 3, and 5, with flakes extending to depths of 25 cm below surface. With the exception of Shovel Test Pits 2 and 3, all of the shovel test pits and 1x.5-m units excavated near the sandstone foundation were sterile. Shovel Test Pit 2 contained two bottle glass sherds, and Shovel Test Pit 3 contained a cattle ear tag.

The backhoe trenches did not yield any subsurface historic or prehistoric material. In addition, the profiles of Backhoe Trenches 1 and 2 (see Figure 8.4) indicate that the artifact concentration in this area was confined to the roadbed, and no evidence of subsurface disturbance or historic or prehistoric features was found in either trench.

The artifacts from Test Unit 1 included a mixture of nineteenth and twentieth century material. The mean beginning date for the ceramics ($n=4$ sherds) was 1850, with three sherds having an ending date of 1910, and one with an ending date of 1989. The diagnostic bottle glass assemblage ($n=2$ sherds) is too small to be useful. They included one unidentifiable handmade bottle lip (pre-1910) and one modern bottle fragment (1940-1989). With the exception of one machine cut nail, the remaining assemblage is comprised primarily of twentieth century items, including wire nails, metal tractor parts, a wagon box rivet, tin can fragments, thin and heavy metal fragments, and bailing wire. Two mother of pearl buttons, a metal cake mold, and metal lamp parts were also found.

Table 8.2

Artifacts From Test Units at 41DN43/44^{1,2}

Unit	R	B	T	L	W	C	W	BM	P	TH	H	MW	MH	P
1	4	8	1	15	3	1	15	4	2	33	9	2	1	2
2		1										1		5
3										3				3
5														1
STP2	1													

¹ Only units and artifact categories containing remains are included in table; R=refined earthenware; B=bottle glass; T=table glass; L=lamp glass; W>window glass; C=cut nails; W=wire nails; BM=building material; P=personal items; TH=thin and heavy metal; H=household; MW=machine and wagon; MH=metal hardware; P=prehistoric.

² Only datable ceramics and bottle glass were used in the calculation of mean beginning dates.

Faunal Remains: An isolated cottontail femur was recovered from the surface. No other faunal remains were found.

Archaeological Summary: The results of testing indicate very little of the site remains in its primary context. The site has been severely disturbed by downslope erosion, and the removal of some of the cultural deposit by dirt bike activity. A recent trash dump occurs on the western margin of the site, and construction disturbance has removed the southern extent of the site. The historic assemblage is largely confined, except in Test Unit 1, to the upper 5 cm below surface, or occurs as surface deposits. The extant features indicate that only the sandstone foundation is in situ. No new surface or subsurface features were identified during testing.

The prehistoric component was not evident during the survey, with the exception of a small number of flakes noted on eroded surfaces. This component is small ($n=11$ items) and includes primarily flakes, several tools, and a few broken bifaces. This assemblage was recovered from units placed on an eroding slope and may reflect slope-wash. A possible intact

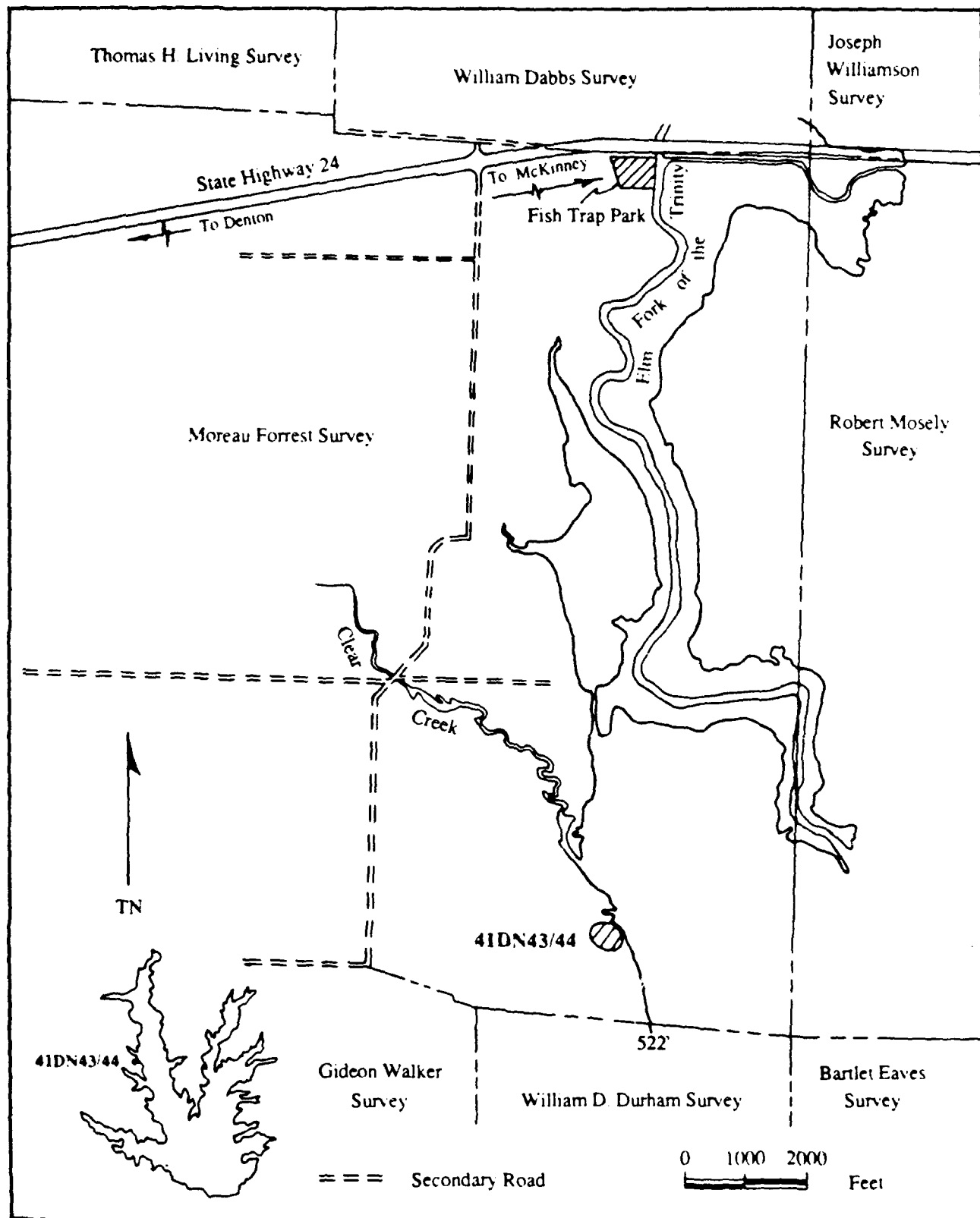


Figure 8.3 Location of site 41DN43/44 on the Moreau Forest survey A-417.

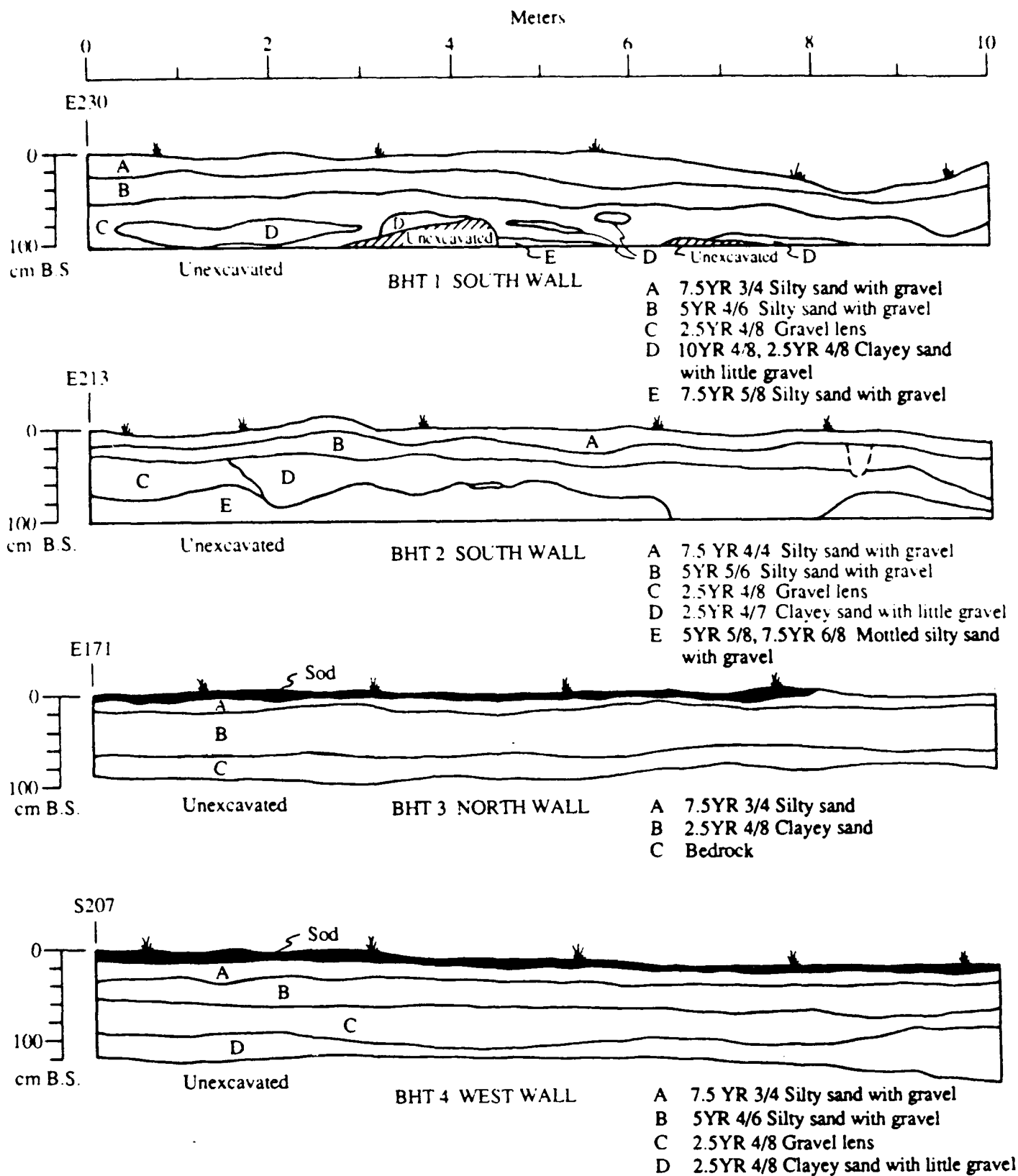


Figure 8.4 Profiles of BHTs 1-4 at 41DN43/44.

component may be preserved in the upper part of the terrace sediments, outside the project area.

The site was identified as a possible farmstead occupation dating between ca. 1870 and 1940. The testing data and archival research provided insufficient data. No intact historic or prehistoric deposits were identified. No evidence of the house associated with the sandstone foundation (possible springhouse) was found. No dwelling was shown on the archival map, and the springhouse may have been associated with a farmstead on an adjoining Tract. The twentieth century farmstead located on this Tract was not clearly identified in the archaeological deposits at this site. It may have been located elsewhere on the Tract.

Recommendations: No additional archaeological work is recommended. The testing data indicate that this site is not eligible for the National Register of Historic Places. Insufficient intact historic or prehistoric deposits were identified, and the site has been badly impacted by slope-wash and post-occupation activities.

41DN392

Map Quad	Little Elm 7.5', #3396-223
Elevation above MSL	525-535'
Vegetation	Cottonwood, Grasses
Cultural Affiliation	Prehistoric (unknown)
	Historic (ca. 1860s to 1920)
Recommendations	No further work

Description: The site is located on a ridge point on the east bank of Little Elm Creek (see Figure 8.1) and 135 m north of a trailer park. The main site area was estimated as 140 m east-west x 85 m north-south based on the moderate historic and prehistoric artifact scatter identified during survey.

Surface erosion has seriously impacted the site. The A-horizon is truncated in many areas. In undisturbed areas, it was recorded extending to 35 to 45 cm below surface. No surface or subsurface features were identified (Figures 8.5 and 8.6). The prehistoric scatter covered an area measuring 140x85 m, while the historic scatter overlapped, but was more limited in distribution, covering a 115x75-m area. The major concentration of prehistoric and historic artifacts was located within the 50x50-m area mentioned above.

The prehistoric assemblage was tentatively identified during survey as Archaic based on the presence of a Gary point and the absence of ceramics. The historic material included a high percentage of decorative refined earthenware styles common before 1880. A total of 23 ceramics were recovered, including 11 stonewares with a mean ceramic beginning date of 1861. The refined earthenwares (n=12 sherds) produced a mean ceramic beginning date of 1870. No other historic diagnostic artifacts were recovered in the surface collection.

Previous Investigations: The site was recorded during survey. Field work focused on surface reconnaissance and the recovery of a representative sample of historic and prehistoric surface artifacts. Two auger holes and three shovel test pits were excavated to determine subsurface integrity. No artifacts were found in these units.

Archival Investigations: The site is located on the Richard Hensworth survey A-577 (Figure 8.7). The land was granted to the heirs of Hensworth, and the site was first occupied in 1873 when the land was granted to R. D. Massey. It was sold by Mrs. Sarah Massey in 1918. R. D. Massey died in 1890. The site does not appear to have been reoccupied when it was sold in 1918.

This historic map data indicates the site was not reoccupied when it was sold in 1918. The site is shown on the 1918 map but is absent on the 1925, 1936, 1946, and 1960 maps. The chain of title for the property is provided in Table 8.3.

Proton Magnetometer Survey: A magnetometer survey was conducted in the main site area to locate anomalies that could be identified as archaeologically significant. The survey was conducted by personnel from the Department of Geology, University of Texas at Arlington, under the direction of Dr. Brooks Ellwood. It was hoped that this survey would provide evidence of subsurface historic and prehistoric archaeological features, including hearth and house remains.

Three 20x20-m blocks, one 10x10-m block, and one 5x10-m block were placed over the area surface collected and tested during the survey. This area of the site was covered in dense grass and brush, which was cleared before the magnetometer blocks were laid in. An intensive surface collection was conducted to remove all recent metal items present on the surface. These items included primarily tin cans, aluminum cans, ammunition (spent shells), and scrap metal.

The values produced by the proton magnetometer ranged from -39 to +500, and the results are shown in Figure 8.6. A sample of the negative anomalies and two dipolar anomalies were tested. None of the anomalies were found to be associated with either historic or prehistoric archaeological features. The A-horizon was truncated in the units excavated to test these anomalies, and the large dipolar anomaly on the western margin of the site was situated in a recent roadbed.

Testing Method: Testing included excavation of three backhoe trenches and twelve 1x.5-m test units. Two backhoe trenches (1 and 3) and six 1x.5-m units (1-3 and 5-7) were judgmentally placed to test the magnetometer anomalies. The remaining units (4 and 8-12) were randomly located to achieve representative site coverage.

Testing Results: Historic artifacts were recovered from all of the test units, and prehistoric material was found in 10 units (Table 8.4). However, this material exhibited limited variability, and density. All of the historic artifacts were recovered close to the surface, with only Units 1 and 3 (both located in anomalies) containing material below 5 cm. Unit 1 contained two vessel glass fragments (10-15 cm below surface), and Unit 3 contained one tin can fragment (10-20 cm). A single historic artifact was found in the outlying units (5, 7, 9, 10, 11 and 12). Prehistoric artifacts were found in these units, but the density averaged only 1 or 2 items per unit. The A-horizon was more truncated in the outlying units, particularly on the northern and western margins of the site.

No historic or prehistoric features were found during testing. No material was recovered in the backhoe trenches (Figure 8.8), which contained thin sod and A-horizons within the main site area (BHT 2) and the western margin (BHT 1). A

Table 8.3
Land Tract History for 41DN392

Richard Hensworth survey A-577

Date	Grantor	Grantee	Price	Land Description	Ref.
1849	State of Texas	R. Hensworth		283.5 acres	F/155
1872	Prior to 1872 the survey was patented to the heirs of Richard Hensworth. In 1872 the land was conveyed by T. Hensworth, brother, and only heir, and his attorney, J. A. Carroll. An 1872 deed [40/228] reflecting the conveyance of 75 ac (Tracts 1 and 1A) to J. D. McKechnan indicates that this land is adjacent to a Tract sold to Samuel B. Harbison, which includes Tracts 2 and 4, containing 100 acres and the location of site 41DN392.				
1873	W. B. Miller & wife D. Z.	R. D. Massey	\$1000.	100 acres/Tracts 2 and 4	P/501
1918	Affidavit of Mrs. Sarah Massey, widow of R. D. Massey who died in 1890 reflecting land history: (1) 100 ac of survey [Tracts 2 and 4] purchased from W. B. Miller in 1873 [P/501], (2) 50 acres sold to W. P. Parker in 1887 [Tract 4; 123/57], currently owned by R. M. Thomas and purchased by him from W. H. Wilson [157/122], and (3) heirs, Henry W. Massey and Uriah Massey mistakenly conveyed all of the 100 acres [Tracts 2 and 4] to S. Faust [160/40].				
1923	U. Massey & wife Emma (Jones Co.), H. Massey & wife Mary	S. D. Faust	\$250.	98 acres/Tracts 2 and 4, minus 2 ac off west side of Tract 2 & 50 ac of D. M. Cules survey	191/141
1953	S. D. Faust	USA	\$2850.	98 ac; Tracts 2 and 4, minus 2 ac off west side of Tract 2	389/368

thicker, but still relatively shallow A-horizon occurred in the northern site area, above the slope.

The historic assemblage obtained during testing was statistically too small to make meaningful interpretations. Five ceramics were recovered including four undecorated light blue tinted whitewares (1880-1930) and one undecorated blue tinted ironstone (1850-1900). A single diagnostic bottle glass fragment was found. It is an aqua non-applied turn-molded oil type medicinal lip sherd (1892-1910). No other historic diagnostic artifacts were found.

The prehistoric assemblage was also too small to make meaningful interpretations. Two chert flakes, one chert chunk, and eight quartzite flakes were found. In addition, six retouch flakes were recovered. No points, or ceramics were found.

Faunal Remains: Thirteen burned fragments of large mammalian bone were recovered. A small piece of tooth enamel from a cow-sized animal was identified.

Archaeological Summary: The testing results indicate that the site does not exhibit potential for recovering significant information for addressing current research questions. No features were identified, and the magnetometer survey failed to yield any anomalies of archaeological significance.

The A-horizon has been truncated, and the historic component is confined to the upper 5 cm below surface in all but two units (1 and 3). The horizontal and vertical distribution of this material is limited, and has been seriously impacted by downslope erosion. This component was identified as a possible farmstead occupation dating to the mid-1860s to 1880s. The chain of title was difficult to determine, and is

inconclusive because some of the early deeds were lost when the courthouse burned in 1876 and were not refilled. The archaeological data do not provide any conclusive evidence of a house location on this site. The extremely low density of the deposit suggests that the occupation was limited in duration.

Table 8.4
Artifacts From Test Units at 41DN392^{1,2}

Unit	RE	SW	BG	BM	P
1	1		1	10	6
2			1		1
3		1			
4					5
5					2
6	1				2
7					1
8	1				5
9	1				
10					1
11					2
12					1

¹ Only units and artifact categories containing remains; are included in table; RE=refined earthenwares; SW=stonewares; BG=bottle glass; BM=building material; P=prehistoric.

² Only datable ceramics and bottle glass were used in the calculation of mean beginning dates.

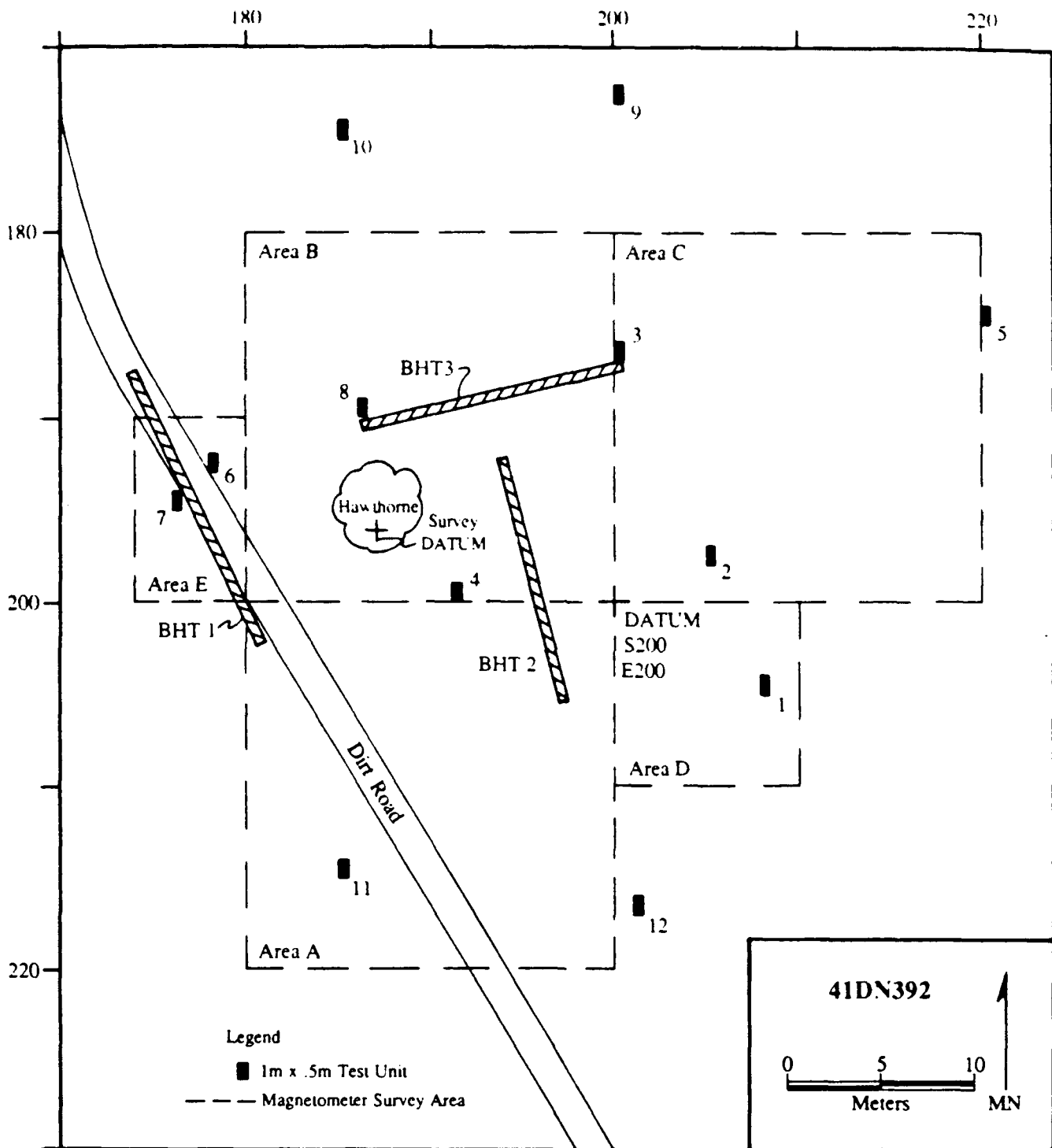


Figure 8.5 Map of site 41DN392.

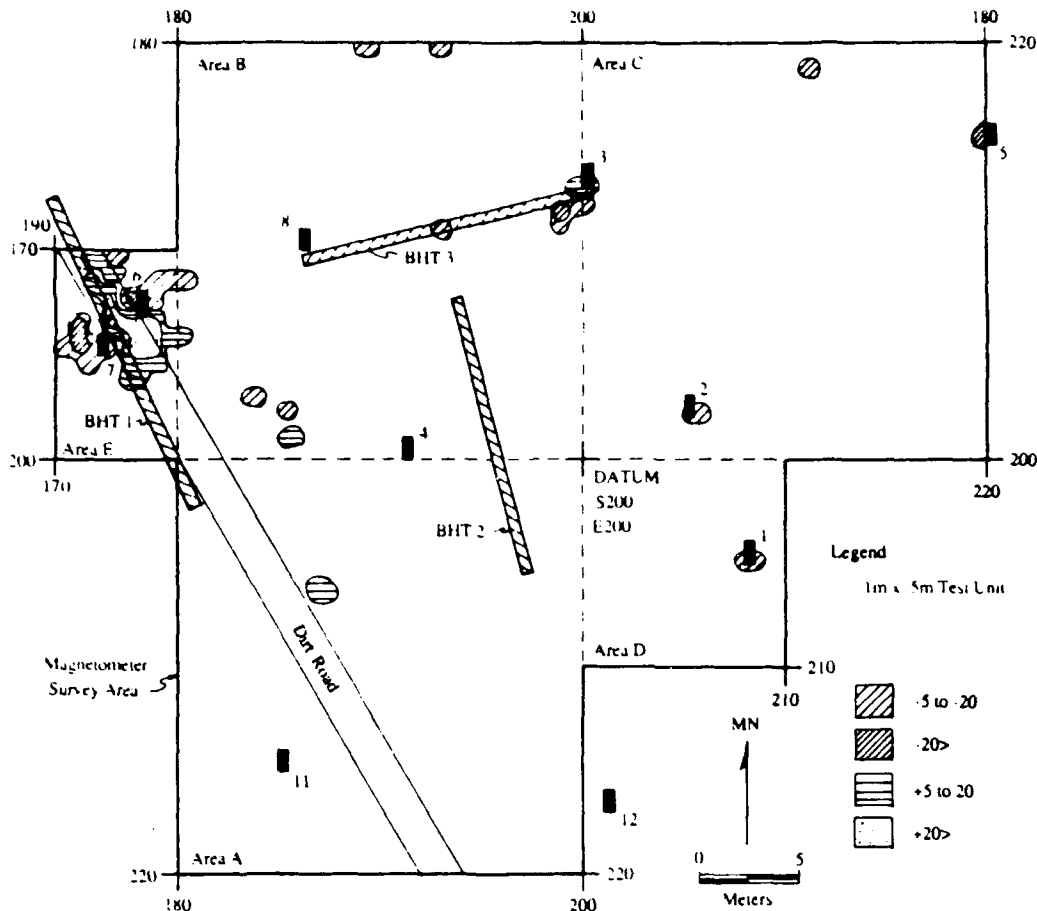


Figure 8.6 Map showing the magnetometer survey results for site 41DN392.

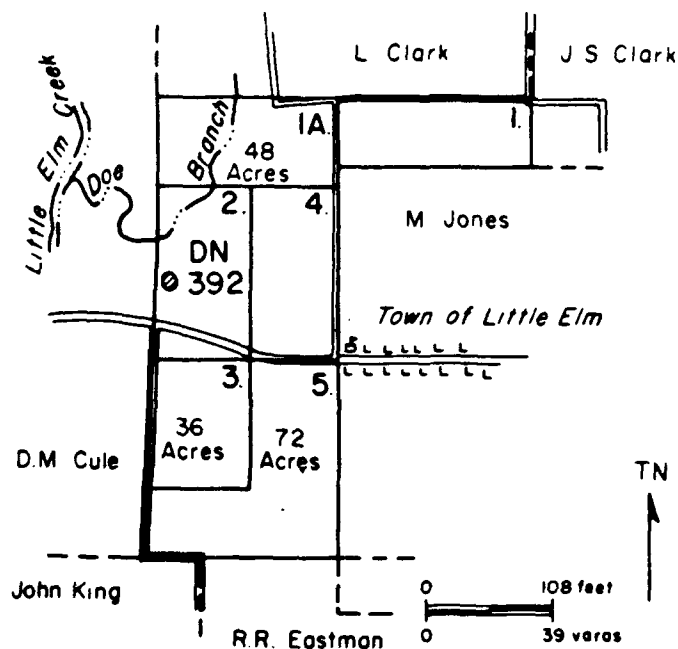


Figure 8.7 Location of site 41DN392 on the Richard Hensworth survey A-577.

The prehistoric component is mixed with the historic material across the site. No intact midden area or subsurface features were found. The horizontal distribution of this assemblage is broader than the historic, reflecting greater downslope movement of lithics, which were recovered on the surface or in the upper 5 cm of outlying units.

Recommendations: No additional archaeological work is recommended. The testing data indicate that this site is not eligible for the National Register of Historic Places. Insufficient intact historic or prehistoric deposits were identified. The site has been seriously impacted by erosion and does not exhibit potential for yielding significant new information for answering major research questions.

41DN401

Map Quad
Elevation above MSL
Vegetation
Cultural Affiliation
Recommendation

Little Elm 7.5', #3396-223
520-530'
Locust, Bois d'arc, Grasses
Historic (ca. 1870s to 1940s)
Mitigation

Description: The site is located on a north-facing ridge slope at the northern end of Lewisville Lake State Park (see Figure 8.1). The current site area was estimated at 130 m east-west x 60 m north-south based on surface features and shovel testing (Figure 8.9).

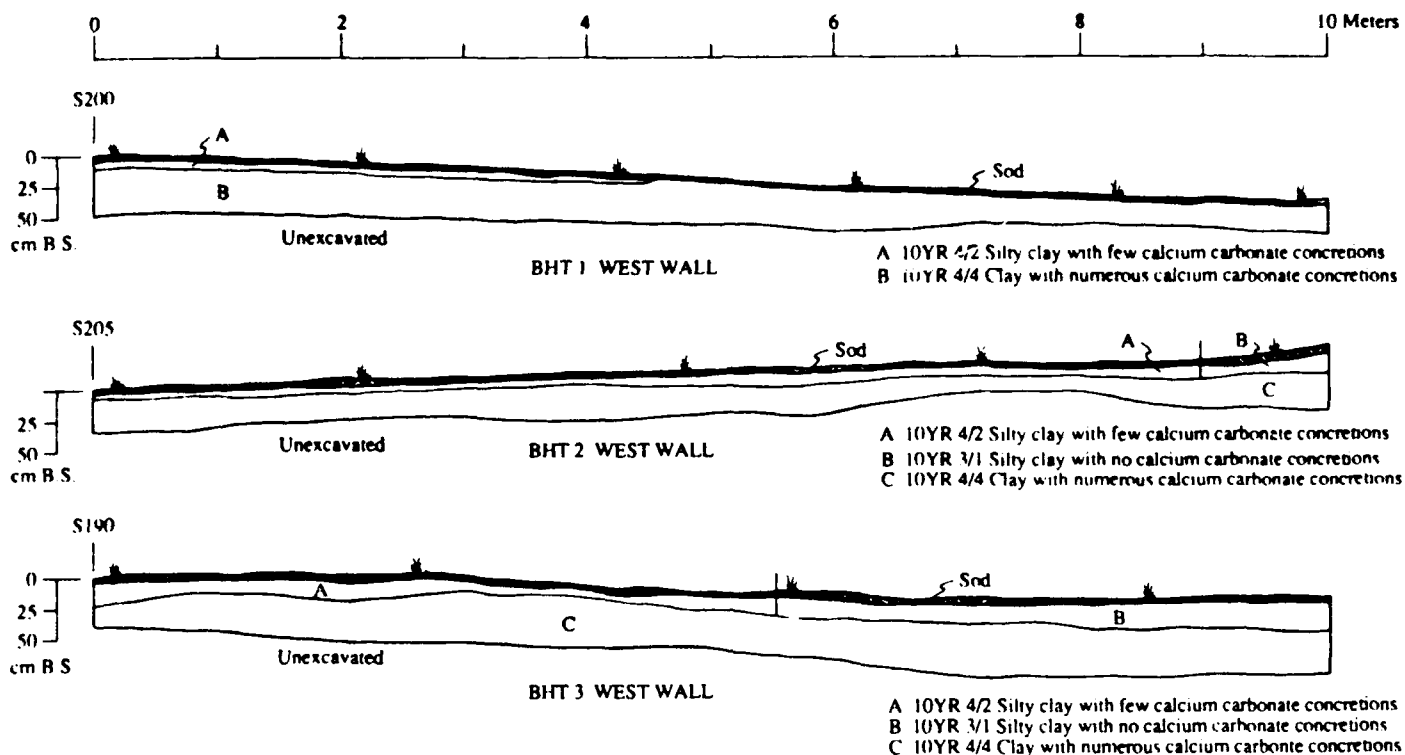


Figure 8.8 Profiles of BHTs 1-3 at 41DN392.

Sandstone blocks on the south side of the house mound were probably piers for the south porch. The mound was estimated at approximately 15x15 m. A chimney base, composed of brick rubble, and sandstone and limestone blocks, is located in the southeast corner of the mound. Several poured concrete footings for support posts occurred off the southwest corner of the house mound. Metal support braces to a windmill remain southwest of the mound. Several old fence lines cross the site, and a cellar (formerly identified as a dugout) occurs west of the windmill. The function of this structure was not ascertained during the survey. A concrete water trough is located on the far southwestern edge of the site, well outside the main sheet refuse area.

The artifact assemblage recovered during survey reflected a farmstead occupation dating from ca. 1880 to 1940. The refined earthenwares yielded a mean ceramic beginning date of 1873 ($n=11$ sherds), and the stonewares yielded a date of 1872 ($n=6$ sherds). The diagnostic bottle glass ($n=18$ sherds) provided a date of 1894. A single sherd which dated post-1940 was excluded from the calculation of the above date because it post-dated occupation of the site. A combined beginning date of 1883 was obtained for the site. The architectural remains recovered included one piece of machine made brick and one wire nail.

Previous Investigations: The site was recorded during survey. Sixteen shovel test pits were dug, and a representative sample of diagnostic surface artifacts was collected. Material was found in Shovel Test Pits 2-4 and 13. The remaining units were sterile.

Archival Investigations: Site 41DN401 is located on the A. W. Rogers survey A-168 (Figures 8.10 and 8.11), and an overview of the chain of title is provided in Table 8.5. The site is situated on Tract 2, and was first homesteaded in the 1880s. In 1881, W. M. Granberry acquired the entire survey, and filed for a homestead designation in 1888, at which time he listed 200 acres as encumbered, and 120 nonencumbered.

This farmstead is located on the 1918, 1936, and 1946 maps. It is represented by a windmill only on the 1960 map. It is located outside the area included on the 1925 map.

Testing Method: Testing included excavation of five backhoe trenches, thirteen 1x.5-m test units, four shovel test pits, and one hand-excavated trench comprised of five contiguous 1x1-m units. In addition, a 12x12-m block containing nine contiguous 4x4-m units was systematically surface collected (see Figure 8.9).

Backhoe Trenches 1-3 were excavated to examine the eastern and western site limits respectively. Backhoe Trenches 4 and 5 were contiguous and were placed to recover information about the house mound, chimney fall, and sheet refuse deposit associated with the north and east yards. The 1x.5-m units were judgmentally located to maximize site coverage. The surface collection units were placed in the north or back yard where a high density sheet refuse deposit was identified in Test Unit 6. These units were excavated to recover both vertical and horizontal data on this deposit, along with data on site age, duration, and spatial overlapping of multiple historic components.

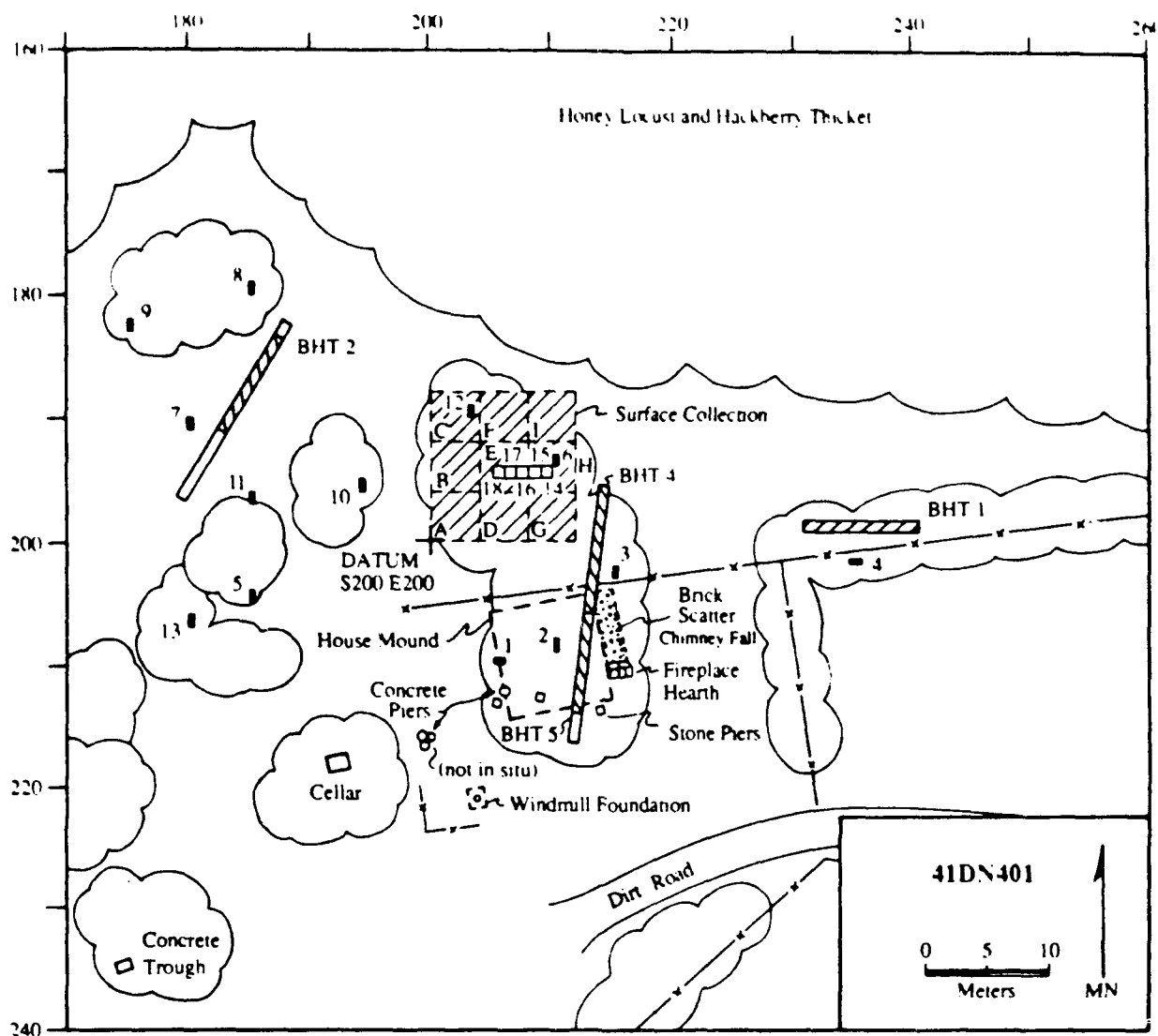


Figure 8.9 Map of site 41DN401.

Testing Results: The testing data revealed a multicomponent historic occupation, with the first spanning ca. 1880 to 1920, and the second, ca. 1930 to post-1940. The house mound and proximal yard area contained a dense sheet refuse deposit reflecting both components.

The profiles exposed in the backhoe trenches indicate that the A-horizon remains intact (Figure 8.12). A recent trash pit was encountered in Backhoe Trench 2, but no material was collected. The house mound was exposed in Backhoe Trench 5, including an in situ pier on the west side of the trench. The A-horizon is a dark, silty clay with a low to moderate density of calcium carbonate concretions. The units placed in the northwestern site area contained material from the more recent component and post-occupation debris. Recent debris was also visible in this area and in the western site area.

An overview of the systematic surface collection data from the north or back yard is presented in Table 8.6. These data indicate that a density gradient from 12 items per unit in the south row, to .06 items in the north row. The south row is well within the main sheet refuse deposit, while the north row is on the fringe, or possibly outside this feature.

The assemblage from the excavated units is shown by unit type in Table 8.7. The 1x1-m units recovered material from the densest part of the sheet refuse feature, while the 1x.5-m units recovered a mixture of house debris, sheet refuse, and a limited amount of post-occupation debris. A profile of the contiguous 1x1-m units is shown in Figure 8.13.

The diagnostic refined earthenwares (n=117 sherds) from the 1x.5-m units yielded a mean ceramic beginning date of 1863, and the stonewares (n=31 sherds) dated 1874. The diagnostic bottle glass (n=34 sherds) produced a date of 1895. Architectural remains included a mixture of items from the original construction episode of the dwelling and items from later modifications or additions. Machine cut nails accounted for 68.4% of the nail assemblage, while handmade brick represented 64.2% of the bricks. Building material was comprised primarily of mortar (n=1059 artifacts/fragments or 97%), wire, screws, and fence staples.

The refined earthenwares (n=139 sherds) from the 1x1-m units produced a mean ceramic beginning date of 1866. The stonewares (n=32 sherds) dated 1872. The diagnostic bottle glass (n=26 sherds) dated 1893. The architectural items

Table 8.5
Land Tract History for 41DN401

A. W. Rogers survey A-168

Date	Grantor	Grantee	Price	Land Description	Ref.
1859	A. W. Rogers & wife	W. M. Coffee (Kentucky)	\$720.	320/entire survey	D/425
1867	W. M. Coffee (Kentucky)	J. Hufford (Denton Co.)	\$1000.	320/entire survey	D/427
1869	J. Hufford & wife Cynthia	R. M. Key	\$1000.	320/entire survey	D/429
1872	R. M. Key & wife Emma	J. Hufford	\$2500.	320/entire survey	D/431
1873	J. Hufford	M. Splawn	\$4000.	320/entire survey	D/432
1875	M. Splawn & wife Margaret	J. Hufford (Collin Co.)	\$4100.	320/entire survey	D/434
1876	J. Hufford (Grayson Co.)	Mrs. C. H. Hollenbeck (Dallas Co.)	\$2500.	320/entire survey	D/435
1878	C. H. Hollenbeck	C. J. Hufford	\$1800.	320/entire survey	L/43
1881	J. & C. J. Hufford	W. M. Granberry	\$2000.	320/entire survey	28/106
1888	W. M. Granberry	to wit homestead designation		200/120 nonencumbered	36/565
1890	W. M. Granberry & wife Mary	H. Sommerville & Texas Loan Agency (Corsicana, Tx.)	\$4000.	320/entire survey & 120 ac. of A. J. King survey (Tracts 1 & 3)	44/206 45/29
1893	H. Sommerville & wife Mollie (Collin Co.)	J. M. London	assume \$4000. note	320/entire survey & 120 ac. of A. J. King survey (Tracts 1 & 3)	51/102
1896	J. M. London	A. J. Streeter (partner of H. Sommerville)	assume note & \$7199. debt	320/entire survey & 120 ac. of A. J. King survey (Tracts 1 & 3)	56/633
1898	Texas Black Land Co. of Dallas	J. M. Avery	\$1504.	320/entire survey & 120 ac. of A. J. King survey (Tracts 1 & 3)	72/573
1900	J. M. Avery	F. M. Grace & A. H. Smith	\$30.	NE corner of survey for cemetery (98/100 acres) Tract 3	115/465
1902	J. M. Avery	W. D. Austin	\$4700.	320/minus cemetery	85/253
1902	W. D. Austin (Rockwall Co.)	R. M. Womack (Rockwall Co.)	\$11,200. & balance of notes	320/minus cemetery	84/295
1902	R. M. Womack (Rockwall Co.)	M. M. Womack (California)	\$10,000.	320/minus cemetery	85/428
1910	Mrs. M. M. Womack (femme sole; Okla.)	H. F. Griffin (Grayson Co.)	\$10,000.	320/minus cemetery	103/526
1911	H. F. Griffin & wife Laura A. (Grayson Co.)	T. Wilson (Grayson Co.)	Trade for lot in Sherman	200/Tract 2	105/383
1913	T. Wilson & wife Clara (Grayson Co.)	D. C. Adams	\$6000.	200/Tract 2	125/609
1913	D. C. Adams & wife Fannie	Julia Hessel & husband F. E.	\$10,200.	200/Tract 2	124/365
1918	F. E. Hessel & wife Julia	M. M. Squires	\$14,000.	200/Tract 2	163/65
1921	M. M. Squires & wife Ella	F. E. Hessel	\$16,955.	200/Tract 2	179/498
1921	F. E. Hessel & wife Julia	G. W. Morrell	\$8555.	200/Tract 2	178/152
1922	G. W. Morrell & wife Elaine	HUB Mtg. & Trading Co. (Johnson Co.)	\$175,000.	200/Tract 2	177/245
1933	John Hancock Mutual Life Ins. Co. (Boston)	E. H. Ray	\$5000.	196.31/Tract 2	243/161
1938	E. H. Ray & wife Mrs. Belle Seay	J. B. McEntire	\$2250.	196.31/Tract 2	273/374
1952	Maud S. McEntire	USA		196.31/Tract 2 & 270.39 ac. from adjoining survey	382/127

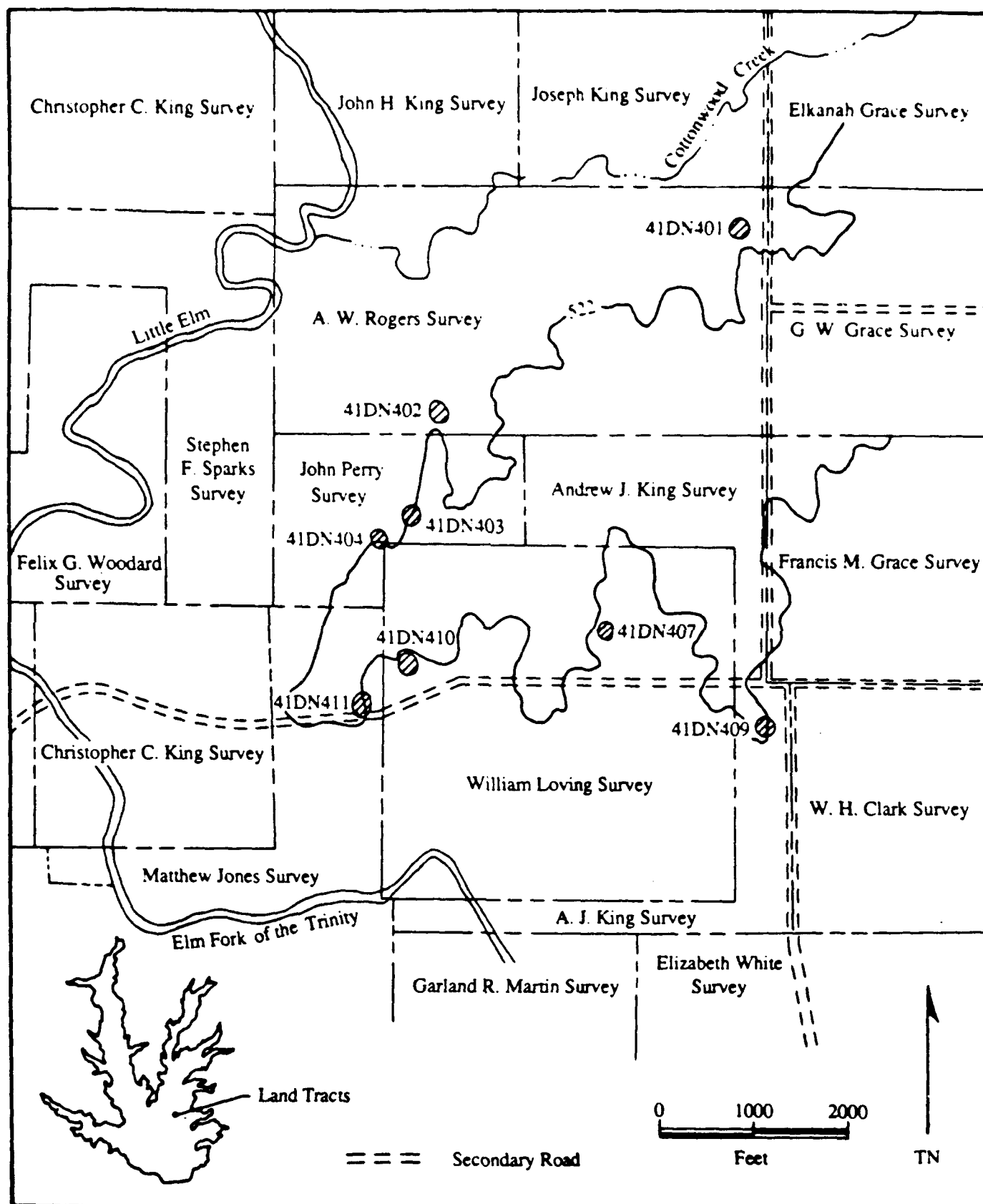
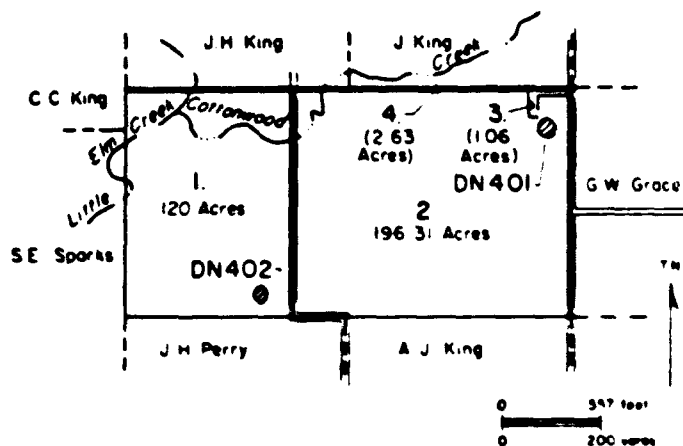


Figure 8.10 Land tract locations of sites 41DN401, 41DN402, 41DN403, 41DN404, 41DN407, 41DN409, 41DN410, and 41DN411.



reflected the same pattern seen for the 1x.5-m units. When combined with the assemblage from the 1x.5-m units the refined earthenwares yielded a mean beginning date of 1871, and the stonewares dated 1871.

The remaining artifact categories are not discussed by unit type. Personal items included fragments of writing or drawing slate (n=4 fragments), stoneware pipes (n=2 fragments), kaolin pipes (n=1 fragment), and clothing fasteners (n=12 artifacts/fragments), including rivets, buckles, buttons, and snaps. Two dolls, one marble, one doll vessel, and a pencil fragment were also recovered. Household items included primarily stove and furniture parts, while horse and stable gear included horseshoe nails, buckles, and a single hame ring. The ammunition included one shotgun shell and one .38 cal. centerfire cartridge.

Figure 8.11 Location of site 41DN401 on Tract 2 of the A.W. Rogers survey A-168 and 41DN402 on Tract 1.

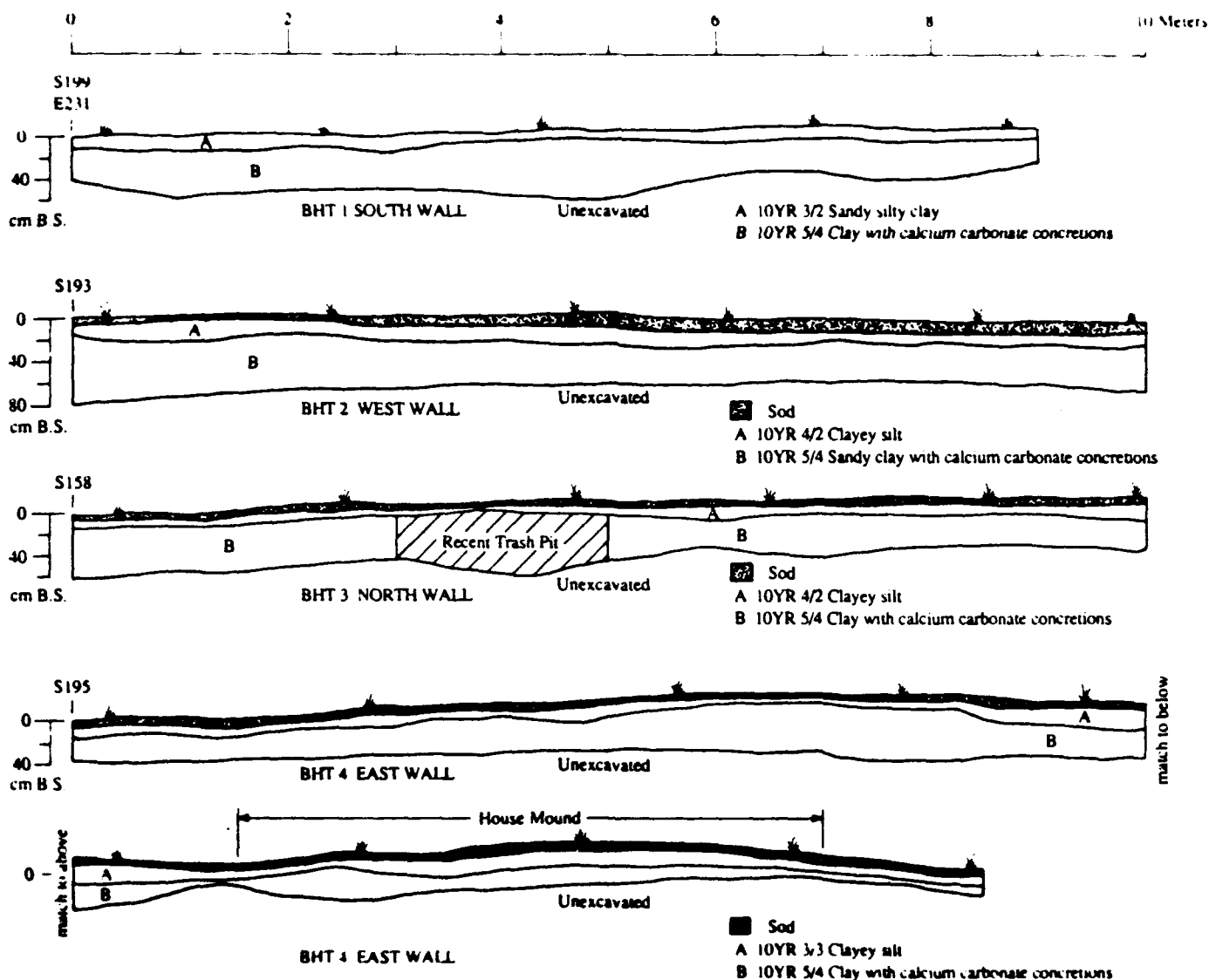


Figure 8.12 Profiles of BHTs 1-4 at 41DN401.

Table 8.7
Artifacts From Test Units at 41DN401^{1,2}

Unit	R	S	Po	B	T	L	U	W	CN	WN	HB	MB	BM	P	TH	TC	H	MW	MH	A	HS	E
Shovel Test Pits:																						
1	1			3									2		2							
2				1							1											
3										1												
4													1		2							
1x.5-m Units:																						
1	1	1		6	2	1		6	5	1			455	2	47							
2	2	16		1				2	4				75		5							
3	10		1	27		3	1	43	21	4	2	3	155	4	13	2	2		2	1		
4	21		1	5				9					25		3				1			
5	1		2	78	9	2	4	66	21	13			13	3	9	5	1		1		1	1
6	19		3	31	1			26	12	5	6		91	1	2	8	1					
7	4	2		10	3			4	14	1		1	7		3	4						
8	3			7					3		1		20		3	2						
9	4	6		5				3	4	3			81		1	30	4	1				
10	11	6	2	29	2	3	2	3	23	12			129		3	20					3	
11	5	5		7				3	2	1					2							
12	19	14	1	47	2		2	21	22	13			9	9	2	13		2	1		1	
13	18	4		28	3	1	1	28	24	14		1	29	29	7	20	1	1			1	
1x1-m Units:																						
14	35	8	4	76	6			54	37	8	1		12	1	4	45	2		1			
15	31	3	1	71	4	3		36	20	12		4	14			38	1		1			
16	37	9	7	115	1	2	5	4	15	27			18	3	4	46	4				1	
17	41	12	5	80	3	2	1	47	43	15	1		14	3	9	57			3	1	1	
18	15	9	2	33	6	2	1	20	3	2	1		12	1	2	62			1			

¹ Only units and artifact categories containing remains are included in table; R=refined earthenware; S=stoneware; Po=porcelain; B=bottle glass; T=table glass; L=lamp glass; U=unid. glass; W=window; CN=cut nails; WN=wire nails; HB=handmade brick; MB=machine-made brick; BM=building material; P=personal items; TH=thin and heavy metal; TC=tin cans; H=household; MW=machine and wagon; MH=metal hardware; A=ammunition; HS=horse and stable gear; E=electrical; P=prehistoric.

² Only datable ceramics and bottle glass were used in the calculation of mean beginning dates.

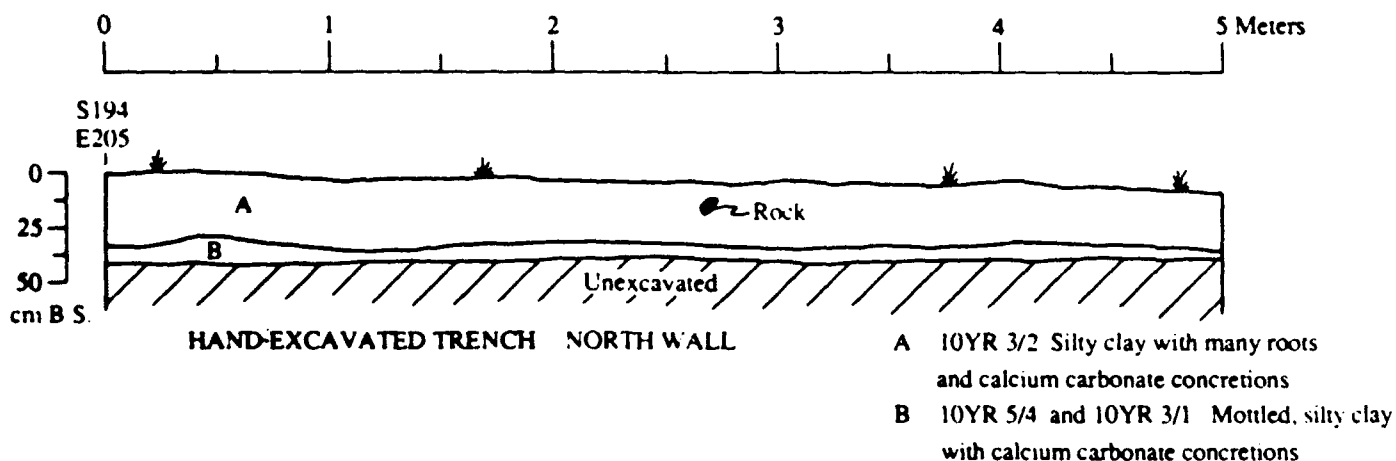


Figure 8.13 Profile of 1x1-m units in hand-excavated trench at 41DN401.

Table 8.6

Surface Collection from 41DN401^{1,2}

Unit	C	VG	AR	P	Th	Hm	MW	A	H
A	30	100	30	1	32	1		1	1
B	9	27	35		14	1			
C	5	8	8						
D	10	77	38	2	31				
E	6	13	4		8				
F		1		1					
G	7	16	3		15	1	1		
H	6	8	9		5	1			
I	1								

¹ Only units and artifact categories containing remains are included in table; C=ceramics; VG=vessel glass; AR=architecture; P=personal items; Th=thin metal; Hm=heavy metal; MW=machine and wagon; A=ammunition; H=household.

² Only datable ceramics and bottle glass were used in the calculation of mean beginning dates.

Faunal Remains: A total of 92 pieces of bone were recorded, of which 70 could not be identified to element. Approximately 21% had been burned. Twenty-four percent were identified (Table 8.8).

These identified taxa are consistent with animals recovered from settlement-period farmsteads. Pig and cow elements suggest on-site butchering (teeth and feet). The large bird could be domestic or wild turkey. Raccoon and squirrel were popular game animals hunted to supplement the diet or for sport. One of the large mammal bones exhibited saw cut marks, but the element could not be determined.

Table 8.8

Identified Vertebrates from 41DN401

Taxa	Provenience	Count
Large bird	U.9, Lv.1	1
Fox squirrel (<i>Sciurus niger</i>)	U.1, Lv.1	1
Raccoon (<i>Procyon lotor</i>)	U.9, Lv.1	1
Medium mammal	U.16, Lv.2	1
Pig (<i>Sus scrofa</i>)	surface	1
	U.7, Lv.1	1
	U.12, Lv.2	1
	U.13, Lv.2	1
	U.14, Lv.1	1
	U.14, Lv.2	2
	U.15, Lv.1	1
	U.16, Lv.2	1
Cow (<i>Bos taurus</i>)	U.16, Lv.2	1
Large mammal	U.5, Lv.2	1
	U.6, Lv.3	1
	U.12, Lv.1	1
	U.14, Lv.1	1
	U.14, Lv.2	1
	U.16, Lv.1	1
	U.16, Lv.2	1
	U.17, Lv.2	1

Archaeological Summary: The surface and subsurface assemblages recovered from the site indicate that the early component (ca. 1880 to 1920) remains intact, and that the more recent component (1930 to 1940) overlies the older, and it may be possible to spatially separate and analyze them. The dwelling area exhibits integrity and potential for yielding information on house orientation, size, and layout.

Recommendations: This site meets the criteria for nomination to the National Register of Historic Places, and for addressing major research questions. The site provides an excellent opportunity to make intrasite comparisons between multiple occupations at the site, as well as making intersite comparisons with other farmsteads in the Lewisville Lake area and surrounding reservoirs.

41DN402

Map Quad	Little Elm 7.5', #3396-223
Elevation above MSL	520-530'
Vegetation	Cottonwood, Scrub oak, Grasses
Cultural Affiliation	Historic (ca. 1880 to 1940)
Recommendation	No further work

Description: The site is situated on a small north-south trending peninsula in Lewisville State Park (see Figure 8.1). During survey, site size was estimated at 60 m north-south x 40 m east-west based on surface features and artifacts. No subsurface material was recovered.

Three concrete foundations occurred in the northern site area, including two concrete well pads. Several concrete pilings, no longer *in situ*, and two artifact concentrations were evident. The first concentration was southwest of the foundations, while the second, a post-occupation dump, was southeast of the foundations (Figure 8.14). Much of the site was destroyed by heavy equipment before testing began.

The ceramics (n=10 sherds) recovered from the surface during survey yielded a mean beginning date of 1887. The diagnostic bottle glass (n=3 sherds) dated 1917. No diagnostic architectural items were collected, but data recorded in the field indicated that only machine-made brick and wire nails were found.

Previous Investigations: The site was recorded during the survey. A representative sample of diagnostic surface artifacts were collected from the southwestern artifact scatter, and ten shovel test pits were dug. All of the test pits were sterile.

Archival Investigations: Site 41DN402 is located on the A. W. Rogers survey A-168 of 320 acres (see Figures 8.12 and 8.13). The chain of title is presented in Table 8.9. Except for 0.98 acres set aside in 1900 for the Grace and Smith Cemetery, the survey was not subdivided until 1911. The site is shown on the 1918, 1936, and 1946 maps.

Testing Method: The site was seriously impacted when it was bulldozed by the clearing contractor before testing began. Both surface artifact concentrations and the sheet refuse deposit were removed. As a result, only limited testing was warranted. Seven 1x.5-m test units were excavated in undisturbed areas. No units were excavated in the disturbed areas.

Table 8.9
Land Tract History for 41DN402

A. W. Rogers survey A-168

Date	Grantor	Grantee	Price	Land Description	Ref.
1859	A. W. Rogers and wife	W. M. Coffee (Kentucky)	\$720.	320/entire survey	D/425
1867	W. M. Coffee (Kentucky)	J. Hufford (Denton Co.)	\$1000.	320/entire survey	D/427
1869	J. Hufford & wife Cynthia	R. M. Key	\$1000.	320/entire survey	D/429
1872	R. M. Key & wife Emma	J. Hufford	\$2500.	320/entire survey	D/431
1873	J. Hufford	M. Splawn	\$4000.	320/entire survey	D/432
1875	M. Splawn & wife Margaret	J. Hufford (Collin Co.)	\$4100.	320/entire survey	D/434
1876	J. Hufford (Grayson Co.)	Mrs. C. H. Hollenbeck (Dallas Co.)	\$2500.	320/entire survey	D/435
1878	C. H. Hollenbeck	C. J. Hufford	\$1800.	320/entire survey	L/43
1881	J. & C. J. Hufford	W. Granberry	\$2000.	320/entire survey	28/106
1888	W. M. Granberry	to wit homestead		200/120 nonencumbered	36/565
1890	W. M. Granberry & wife Mary	H. Sommerville & Texas Loan Agency (Corsicana, Tx.)	\$4000.	320/entire survey & 120 ac. of A. J. King survey (Tracts 1 & 3)	44/206
1893	H. Sommerville & wife Mollie (Collin Co.)	J. M. London	assume \$4000. note	320/entire survey & 120 ac. of A. J. King survey (Tracts 1 & 3)	51/102
1896	J. M. London	A. J. Streeter (partner of H. Sommerville)	assume note & \$7199. debt	320/entire survey & 120 acres of A. J. King survey (Tracts 1 & 3)	56/633
1898	Texas Black Land Co. of Dallas	J. M. Avery	\$1504.	320/entire survey & 120 acres of A. J. King survey (Tracts 1 & 3)	72/573
1900	J. M. Avery	F. M. Grace & A. H. Smith	\$30.	NE corner for cemetery (98/100 ac)	115/465
1902	J. M. Avery	W. D. Austin	\$4700.	320 minus cemetery	85/253
1902	W. D. Austin (Rockwall Co.)	R. M. Womack (Rockwall Co.)	\$11,200. & bal. of notes	320 minus cemetery	84/295
1902	R. M. Womack (Rockwall Co.)	M. M. Womack (California)	\$10000.	320 minus cemetery	85/428
1910	Mrs. M. M. Womack (femme sole) (Oklahoma)	H. F. Griffin (Grayson Co.)	\$10000.	320 minus cemetery	103/526 103/527
1911	H. F. Griffin & wife Laura A.	J. M. Jemison	\$2400.	120/Tract 1	105/215
1913	J. M. Jemison & wife Fannie	G. A. Newton	\$2400.	120/Tract 1	122/476
1914	G. A. Newton & wife Flora H.	W. P. Stedman	\$7100.	120/Tract 1	133/483
1916	W. P. Stedman & wife M. E.	G. A. Newton	\$800. cancel \$6300. note	120/Tract 1	150/143
1921	G. A. Newton & wife Flora	J. R. Hill	\$6000.	120/Tract 1	181/140
1923	J. R. Hill	J. T. Poe & wife Emma	\$1650. & \$350. note 1926	120/Tract 1	186/393
1926	J. T. Poe & wife Emma	G. A. Newton	\$6001.	120/Tract 1	205/359
1928	G. A. Newton	Mrs. Roxie A. Chapman	\$9000.	120/Tract 1	218/599
1952	J. E. Ramsey, Jr. et ux.	USA	\$9475.	120/Tract 1	379/548

Table 8.10
Artifacts From Test Units at 41DN402^{1,2}

Unit	R	S	Po	B	T	L	W	CN	WN	MB	BM	P	TH	TC	MW	MH	A	E
11				9	1		3			2								4
12	3		3	7			3		4	2	3							30
14	1			3								1		6				
16	2			4										250				
18													1					
20				11		1	3	7	4		5		1	3	1	1	1	
23	1	1		12		1	5			1				2				

¹ Only units and artifact categories containing remains are included in table; R=refined earthenware; S=stoneware; Po=porcelain; B=bottle glass; T=table glass; L=lamp glass; W>window glass; CN=cut nails; WN=wire nails; MB=machine-made brick; BM=building material; P=personal items; TH=thin and heavy metal; TC=tin cans; MW=machine and wagon; MH=metal hardware; A=ammunition; E=electrical.

² Only datable ceramics and bottle glass were used in the calculation of mean beginning dates.

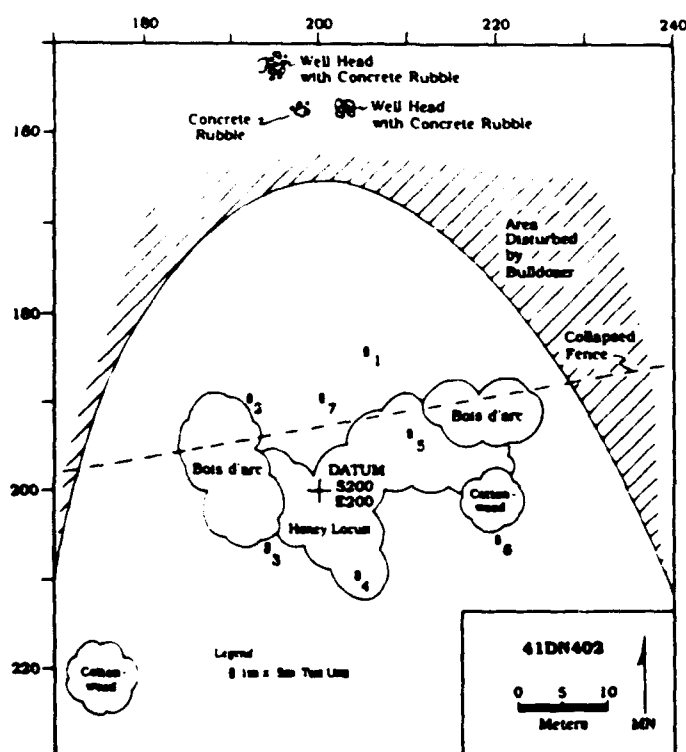


Figure 8.14 Map of site 41DN402.

Testing Results: Artifacts were found in the upper 5 cm of the test units (Table 8.10). Only one unit had a single artifact below 10 cm. No features were found in the undisturbed part of the site.

The ceramic assemblage (n=11 sherds) yielded a mean beginning date of 1888, which correlated with the date yielded by the ceramic assemblage recovered during survey. The diagnostic bottle glass (n=10 sherds) yielded a date of 1905, 12 years younger than the date obtained for the survey material, and may reflect less post-occupation bottle glass in the subsurface assemblage. A small architectural assemblage was recovered, including seven machine-cut nails, four wire nails, five machine-made brick, and eight pieces of fencing wire and mortar. Tin can fragments and electrical-related items (e.g., battery parts) were prevalent, while personal items (pocket knife), wagon parts, metal tools, and ammunition were extremely uncommon.

Faunal Remains: Only one fragment was recovered. It was unburned and was found in Level 1 of Unit 5.

Archaeological Summary: The house area was removed. The assemblage recovered during testing reflects a low to moderate sheet refuse deposit that has been vertically and horizontally truncated. The extant deposit reflects a farmstead occupation dating from the 1880s to after 1940.

Recommendations: Because the site has been largely removed and exhibits little potential of yielding significant archaeological data, additional work is not recommended. This site does not meet the criteria of eligibility for nomination to the National Register of Historic Places.

41DN403

Map Quad
Elevation above MSL
Vegetation

Little Elm 7.5', #3396-223
520-530'
Cottonwood, Locust, Bois d'arc,
Grasses

Cultural Affiliation
Recommendations

Historic (ca. 1880s to 1940s)
No further work

Description: The site is situated about 250 m south of 41DN402 on a small ridge that slopes down to the lake on the west side of the site (see Figure 8.1). The current site area

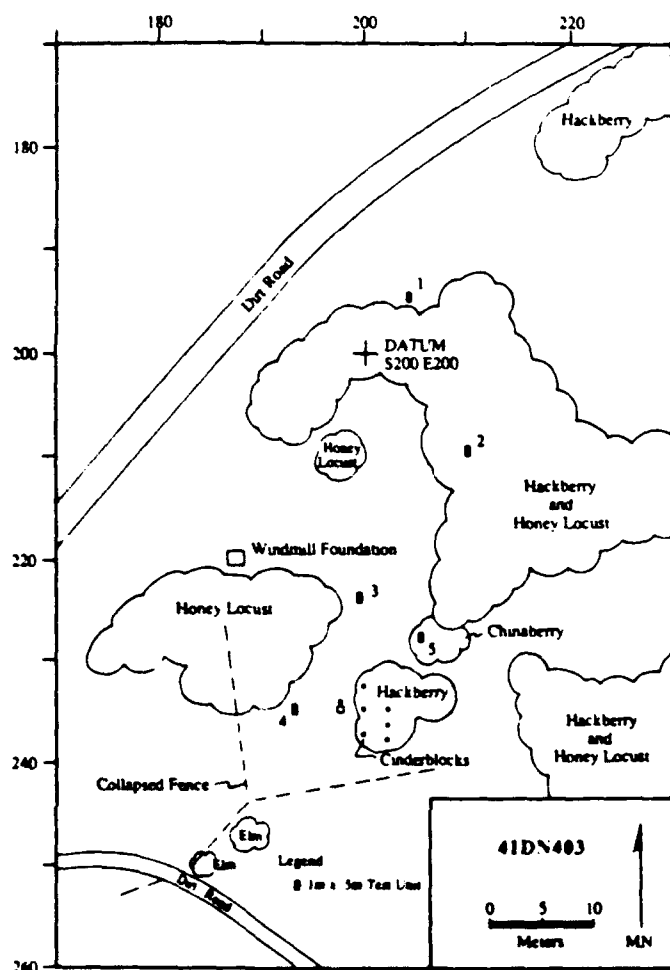


Figure 8.15 Map of site 41DN403.

was estimated at 50 x 50 m based on surface artifacts, features, and shovel testing.

Features include a windmill foundation and several fallen fencelines (Figure 8.15). The windmill has concrete encasing the well shaft and metal support braces. It is situated in the northwestern site area. A small number of concrete blocks and bricks, scattered on the surface, may represent a recent structure, post-dating site occupation. The house location was not identified.

Artifacts recovered from the surface during survey dated ca. 1880s to 1940s. The ceramics yielded a mean beginning date of 1871. The refined earthenwares (n=4 sherds) dated 1865, and the stonewares (n=5 sherds) dated 1876. The diagnostic bottle glass (n=5 sherds) dated 1910. A number of architectural items were recovered along the beach, including fence staples, wire, chain fragments, door hinges, a horse shoe, and a metal horse brush suggesting that an outbuilding may have been located in this area. Recent debris and erosion have also affected this part of the site.

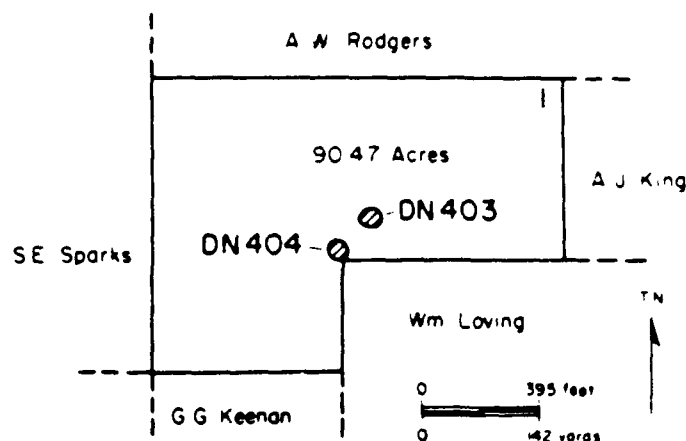


Figure 8.16 Location of sites 41DN403 and 41DN404 on Tract 1 of the J.H. Perry survey A-1058.

Previous Investigations: The site was recorded during the survey. Ten shovel test pits were excavated, and a sample of diagnostic surface artifacts was collected. All of the shovel test pits were sterile.

Archival Investigations: Site 41DN403 is located on the J. H. Perry survey A-1058 (Figures 8.11 and 8.16), which was granted in 1870. He owned the property until 1890 when he sold it along with improvements, to E. C. Venable. It changed ownership a number of times between 1890 and 1914 (Table 8.11), when it was purchased by J. Sparks and his wife, Sallie as their homestead. This site is shown on the 1918, 1925, 1936, and 1946 maps.

Testing Method: Five 1x.5-m test units were judgmentally placed to maximize site coverage. An intensive surface reconnaissance was conducted but did not prove fruitful.

Testing Results: The assemblage recovered during testing is shown in Table 8.12. Archaeological integrity is poor, and the site has been impacted by inundation and surface erosion. No subsurface features were found.

Faunal Remains: Only one fragment was recovered. It was unburned and was found in Level 1 of Unit 2.

Archaeological Summary: Few artifacts were recovered during the testing (Table 8.12), and no intact deposits were identified. The house location was not located. Archaeological and archival data indicate this site was occupied into the 1940s.

Recommendations: This site does not meet the criteria of eligibility for nomination to the National Register of Historic Places. No intact or significant archaeological deposits remain, and no further work is recommended.

Table 8.11

Land Tract History for 41DN403 and 41DN404

John H. Perry survey A-1058

Date	Grantor	Grantee	Price	Land Description	Ref.
1870	State of Texas	J. H. Perry Homestead		90.47/entire survey	G/40
1890	J. H. Perry & wife L. E.	E. C. Venable	\$1500.	90.47/entire survey w/ improvements	41/305
1893	E. C. Venable & wife C. R.	Texas Loan Agency	\$1. and forgive note	90.47/entire survey	47/467
1893	Texas Loan Agency	J. M. London	payment of 3 notes	90.47/entire survey	80/461
1901	London Hardware Co.	J. W. Moorman & wife M. G.	\$100. assume notes	90.47/entire survey	80/578
1901	J. W. Moorman & wife M. G.	M. A. Daugerty & husband J. E.	\$1750.	90.47/entire survey	81/579
1905	J. E. Daugherty & wife Mary A.	J. Sparks	\$2020.	90.47/entire survey	98/529
1907	J. Sparks & wife Sallie E.	J. D. Pinckard & J. M. Saunders	\$3000.	90.47/entire survey	101/479
1911	J. D. Pinckard & J. M. Saunders, et al.	J. Sparks	\$3500.	90.47/entire survey	119/209
1914	J. Sparks & wife Sallie E.	to wit homestead designation		250/incl. entire J. H. Perry survey, 40 ac. of J. L. Sparks survey & 119 ac. of A. J. King survey	133/361
1920	J. Sparks & wife Sallie E.	Maxwell Inv. Co. (J. E. note McPherson, Trustee)	\$12,000.	250/same as above	67/591
1920	Maxwell Invest. Co. of Missouri	Central Life Transfer Assurance Co.		250/same as above	175/525
1939	Central Life Assurance Society (Mutual) of Iowa	J. B. McEntire	\$8500.	250/same as above	275/525
1952	Maud S. McEntire	USA	\$167,700.	466.70 & 1124.70 ac, incl. 90.47 ac of J. H. Perry survey	382/127

Table 8.12

Artifacts From Test Units at 41DN403^{1,2}

Unit	R	Po	B	T	W	CN	WN	MB	BM	P	TH	TC	MH
1	1		2					1				4	
2			2	1			2		7		5	1	1
3	7	1	10		4	3			1	2	4		
4	6		1	4	210		15	2	57				
5	2		4		1		6		35			5	

¹ Only units and artifact categories containing remains are included in table; R=refined earthenware; Po=porcelain; B=bottle glass, T=table glass; W=window glass; CN=cut nails; WN=wire nails; MB=machine-made brick; BM=building material; P=personal items; TH=thin and heavy metal; TC=tin cans; MH=metal hardware.

² Only datable ceramics and bottle glass were used in the calculation of mean beginning dates.

41DN404

Map Quad
Elevation above MSL
Vegetation

Little Elm 7.5', #3396-223
520-530'
Cottonwood, Willow, Greenbriar, Grasses
Historic (ca. 1870-1930)
Mitigation

Cultural Affiliation
Recommendations

Description: The site is located in the south-western part of Lewisville State Park, approximately 235 m southwest of 41DN403 (see Figure 8.1). The current site area is estimated to be 70 m east-west x 55 m north-south, and the western portion has been removed by extensive beach erosion and a two-track dirt road. The only surface feature found during survey was a handmade brick and sandstone scatter. It did not appear to be disturbed and was identified as the probable location of the former dwelling (Figure 8.17). Surface artifacts were sparsely distributed across the site, including handmade bottle glass, ironstone and whiteware ceramics, salt glazed and natural clay slipped stonewares, and handmade brick fragments with ash glazing.

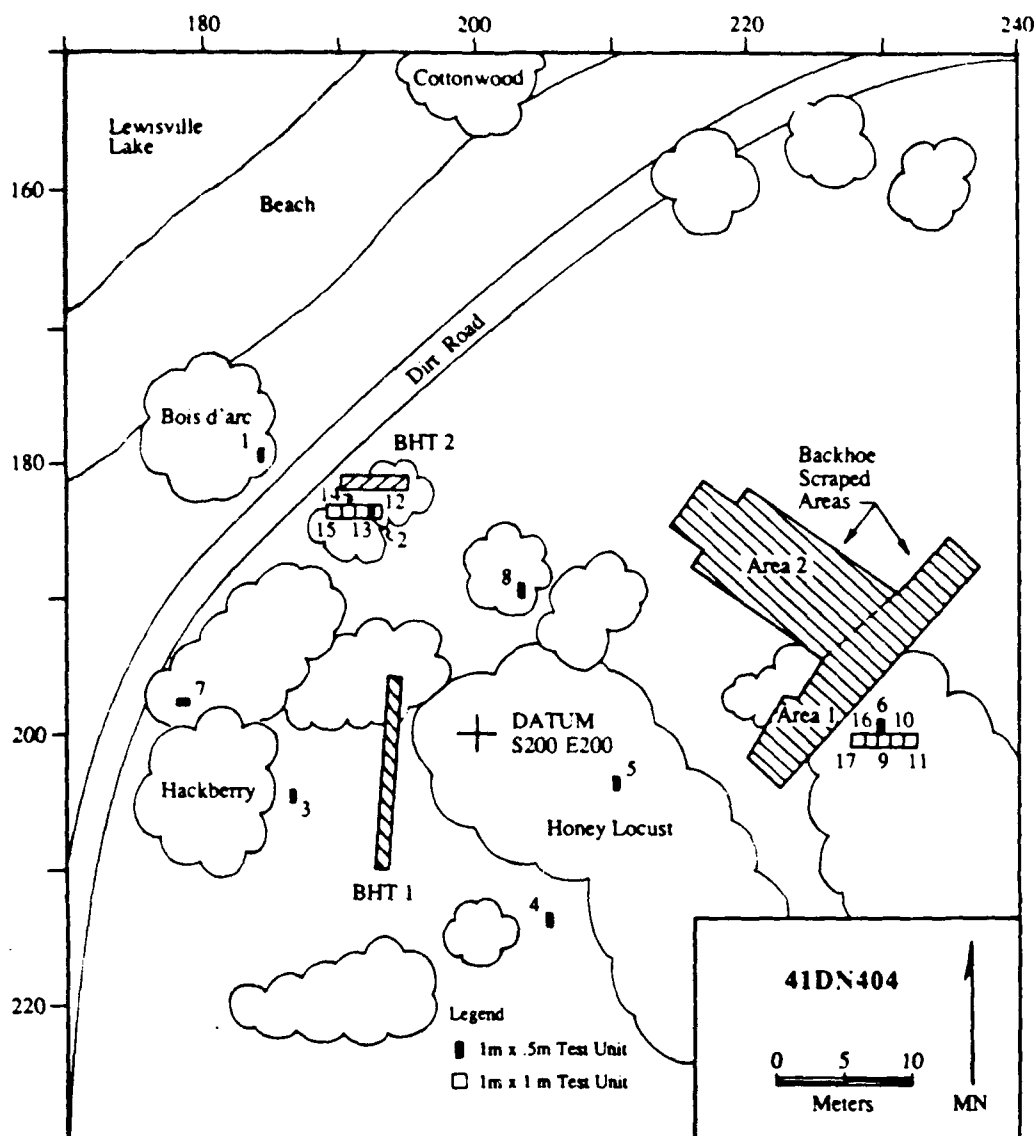


Figure 8.17 Map of site 41DN404.

The surface artifacts from survey, and the age of the architectural remains indicated that the site was occupied between ca. 1870 and 1920. The refined earthenwares (n=4 sherds) yielded a mean beginning date of 1858, and the stonewares (n=6 sherds) yielded a date of 1885. The diagnostic bottle glass (n=4 sherds) dated 1880.

Erosion and a two-track dirt road have impacted the western site area. No post-occupation dumping was noted. No well or other surface features were evident during survey.

Previous Investigations: This site was recorded during survey, and field work involved the excavation of ten shovel test pits, and recovery of a grab sample of diagnostic surface artifacts. The shovel test pits were sterile and indicated a shallow A-horizon.

Archival Investigations: Site 41DN404 is situated on the J. H. Perry survey A-1058 (see Figures 8.10 and 8.16), which was granted in 1870. He owned the property until 1890 when he sold it along with improvements to E. C. Venable. This Tract

changed ownership a number of times between 1890 and 1914 (Table 8.11). Site 41DN403 is also located on this Tract. Both sites are shown on the 1918 map, but 41DN404 is not on the 1936 or 1946 maps. It is probable that the 1914 Sparks homestead is located on 41DN403.

Testing Method: Testing included eight 1x.5-m test units, nine 1x1-m units, two hand-excavated test trenches, two backhoe trenches, and feature exploration in two areas of the site using machine excavation to remove the A-horizon. The 1x.5-m units were judgmentally placed to maximize site coverage. The 1x1-m units were located to test two features encountered in 1x.5-m units. Backhoe Trench 1 was dug to examine subsurface integrity and for feature exploration. Backhoe Trench 2 was judgmentally placed to bisect a feature exposed in Unit 2.

Testing Results: The artifact assemblage recovered during testing is presented in Table 8.13 and indicates that two spatially separate activity areas occur at the site. The units placed between these two areas (4, 5 and 8) contained either an extremely low density sheet refuse deposit, or were sterile. Units 3 and 7 also appear to be on the periphery of the site.

Table 8.13
Artifacts From Test Units at 41DN404^{1,2}

Unit	SC	R	S	Po	B	T	L	U	W	CN	WN	HB	MB	BM	P	TH	TC	H	MW	MH	A	HS	E
1x.5-m Units:																							
1		2	3		6				3	25						1	3						
2		7	1		23				2	5			10			3	3			1	1		
3									2	1	1						7						
4		1	1			1		1															
6		2			1	1	1			2	1	26	102										
7		1			2																		
8		1																					
1x1-m Units:																							
9		2	2		19	4		1	1			4	62	27	2		1						
10		4			8		1			2	3	46		25	1								
11		3			15	1			2	4	10	20		5		1	2						
12		7	1		18				12	9	1	2		1		7	2		3				
13		7	3		28				9	22	1	4		5	2	7	17		3		1		
14	1	8	5		38				10	37	3	7		5	1	4	4						1
15		6	5		18	2		1	8	17	2	7		7	1	6	8	1	1				
16		4	4		31	1		3	1	7	7	320		83	1	4	5	12					
17		4	1		27	5			4	9	3	230		29	3		5					1	
Surface Collection:																							
All		25	12	1	21	7		2	1	11	5	3	1										
Machine Scraped Areas:																							
Area 1			1																				
Area 2		1	1		1											2		1					

¹ Only units and artifact categories containing remains are included in table; SC=semi-coarse earthenware; R=refined earthenware; S=stoneware; Po=porcelain; B=bottle glass; T=table glass; L=lamp glass; U=unid. glass; W=window glass; CN=cut nails; WN=wire nails; HB=handmade brick; MB=machine-made brick; BM=building material; P=personal items; TH=thin and heavy metal; TC=tin cans; H=household; MW=machine and wagon; MH=metal hardware; A=ammunition; HS=horse and stable gear; E=electrical.

² Only datable ceramics and bottle glass were used in the calculation of mean beginning dates.

The first domestic component dates from ca. 1870 to the 1890s. It was found in the northwestern site area and extended to a depth of 7 to 10 cm below surface. A buried ash deposit, a possible kitchen activity or dumping area was located in this part of the site. The feature, encountered in Unit 2 (Figure 8.18), was designated Feature 1 and is a filled pit containing several layers of ash and charcoal. The artifact fill is 38% ceramics and vessel glass, 44% architectural remains, and 18% other. The artifact density averaged 30 artifacts per level, extending to a depth of 40 cm. The dwelling associated with this component was not located during testing.

Diagnostic refined earthenwares (n=25 sherds) in Feature 1 produced a mean beginning date of 1866, while the stonewares (n=4 sherds) dated 1869. The diagnostic bottle glass yielded a comparable date, dating 1869 (n=13 sherds). Architectural remains were predominately late nineteenth century, although some later material was also present.

The second component, dating ca. 1870 to the early 1900s is located in the southeastern site area. It is characterized by a brick scatter of press-molded bricks and domestic remains indicative of an early house area. The deposits in this portion of the site extend up to 40 cm below surface (see Figure 8.17) and contain a high frequency of domestic remains (excluding brick fragments) in the northern area with decreasing density to the south.

Handmade brick accounted for 75% of the artifacts from Unit 6 and 51% of the material in the hand-excavated trench (Units 9-11 and 16-17). When this material is excluded from the calculations, ceramics and vessel glass account for 26% of the remains, while other architecture represents 67%, and other items, a mere 7%. The refined earthenwares (n=17 sherds) yielded a mean beginning date of 1867, while the stoneware sample was too small (n=2 sherds). The diagnostic bottle glass (n=10 sherds) produced a date of 1873.

Faunal Remains: A total of 317 vertebrate bones were recovered, of which only one fragment was burned. Six elements were identified (Table 8.14).

Table 8.14
Vertebrate Remains from 41DN404

Taxa	Provenience	Count
Suckerfish (<i>Ictiobus</i> sp.)	U.10, Lv.1	1
Indet. fish	U.6, Lv.1	1
Opossum (<i>Didelphis virginianus</i>)	U.9, Lv.2	1
Indet. rodent	U.10, Lv.2	1
Large mammal	U.13, Lv.2	2

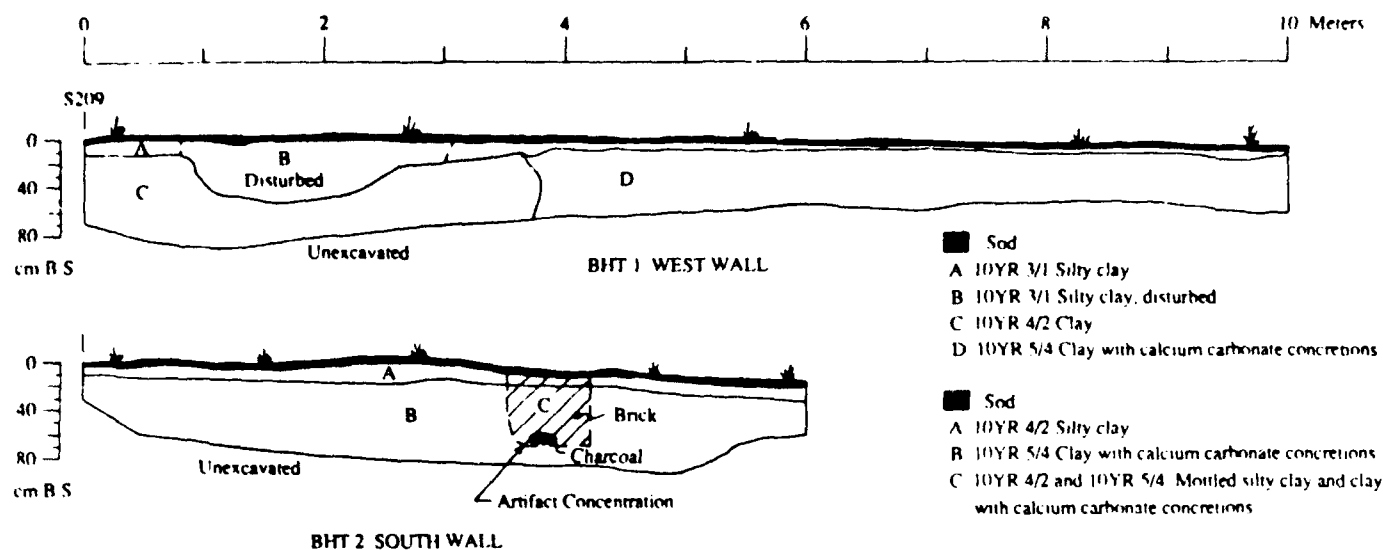


Figure 8.18 Profiles of BHTs 1 and 2 at 41DN404.

The cultural association of the fish and opossum is unclear, but may represent hunting and fishing to supplement the occupants' diets. The large mammal vertebral fragment appears to have been cleaved and may represent butchered cow or pig.

Archaeological Summary: The site contains several intact features, including a brick scatter associated with the former dwelling in the southeastern site area and a kitchen-related deposit in the northwest. The sheet refuse deposit is low density, and the western portion of the site has been truncated. The surface and subsurface assemblages recovered during survey and testing both reflect a ca. 1870 to early twentieth century farmstead. No evidence of a later component was identified, and this site represents the best example of a short-term domestic site with good integrity in the project area.

Recommendations: This site exhibits excellent potential for investigating a relatively intact, pre-1900 farmstead with known archaeological features. The site contains a significant archaeological record that meets the criteria for nomination to the National Register of Historic Places, and represents one of only two well preserved pre-1880 farmsteads in the project area.

This site provides an excellent opportunity to examine intra- and intersite patterning with other sites in the project area and with sites of similar age and function in the Ray Roberts, Joe Pool, and Richland-Chambers reservoirs.

41DN407

Map Quad
Elevation above MSL
Vegetation
Cultural Affiliation
Recommendations

Lewisville East 7.5', #3396-222
520-530'
Cottonwood, Locust, Grasses
Historic (ca. 1870s to 1940s)
No further work

Description: The site is on a small ridge on the southern projection of Lewisville State Park (see Figure 8.1). It is located 500 m east of 41DN410, and the current site area was estimated at 85 m east-west x 35 m north-south (Figure 8.19). Features visible during survey included a brick scatter, probably associated with the former dwelling, and an old fence line on the west side of the site. A smaller scatter was noted on the beach above the water level. The brick were machine made, including GLOBE, DIAMOND, and STAR bricks, and DENTON firebrick. Part of a lightning rod and bolt were found.

Surface artifacts recovered during survey yielded a combined mean beginning date of 1871 (n=12 sherds). The stonewares (n=6 sherds) dated 1866, and the bottle glass dated 1882 (n=5 sherds). A single refined earthenware sherd (1850-1910) was found.

The site was seriously impacted by heavy equipment before testing began. Major surface features, including the brick and artifact scatters were removed (Figure 8.19).

Previous Investigations: The site was recorded during survey, and fieldwork focused on the excavation of ten shovel test pits and recovery of a grab sample of diagnostic surface artifacts. All of the shovel test pits, except STP 8 were sterile.

Archival Investigations: Site 41DN407 is located on the W. Loving survey A-747 (see Figure 8.10) of 320 acres. The land was first granted in 1850, and a complete chain of title is provided in Table 8.15. The site is on Tract 2 (Figure 8.20), which was conveyed to J. Casidy, and his wife, Melinda in 1870 along with improvements. The Casidys lived on the site until their deaths. The land was sold by the District Court of Denton County in 1910. These data correspond well with the information recovered during survey.

A farmstead is shown at this location on the 1918 and 1936 maps. No structures appear on the 1946 or 1960 maps. The site is outside the area included on the 1925 map. This information indicates the site was probably occupied until ca. 1940. However, none of the artifacts found date this late. The

Table 8.15
Land Tract History for 41DN407

William Loving survey A-747

Date	Grantor	Grantee	Price	Land Description	Ref.
1850	State of Texas	Peter Teel, assignee. of Wm. Loving		320 acre survey	E/123
1870	R. M. Scott, & wife	J. F. Fleming		79.25 ac; later designated Tracts 1 and 2	F/360
1870	P. Teel	J. F. Fleming		10 ac; w part of Tract 2 [between 41DN410 & 41DN407]	F/360
1870	R. L. Burk (Attorney)	J. Casidy		49 ac; part of Tract 2 including 41DN407 and improvements	F/360
1876	R. L. Burk	J. Casidy	\$425.	89 ac; Tracts 1 and 2 in cotton, incl. all lands in 1870 transactions	F/360
1910	District Court [J. & M. Casidy, deceased]	P. Clayton & husband J. H.	\$829. value	60 ac; Tract 2	T/106 [Court Minutes]
1937	P. Clayton & husband J. H.	P. C. Carter	\$1000.	60 ac; Tract 2	268/587
1937	P. Clayton & husband J. H.	A. E. Grace	\$1500.	60 ac; Tract 2	281/8
1953	A. E. Grace	USA	\$6835.	60 ac; Tract 2	

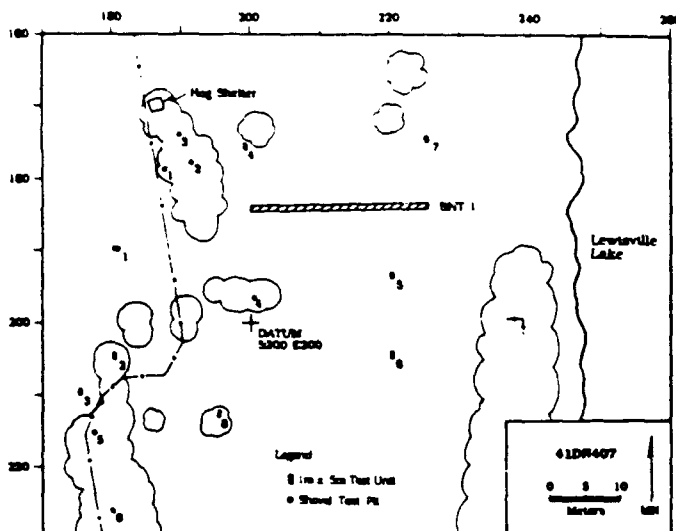


Figure 8.19 Map of site 41DN407.

brick suggests that the house was built after 1900. No handmade brick was found.

Testing Method: Eight 1x.5-m units, six shovel test pits, and a single backhoe trench were dug. The backhoe trench, oriented east-west, was dug to investigate the integrity of the A-horizon, to determine if the site has been seriously impacted by surface erosion, and to identify subsurface archaeological deposits. No artifacts were recovered from the trench, and the profile (Figure 8.21) illustrates that the A-horizon is less than 20 cm deep across much of the site, but in some areas ranges up to 40 cm below surface. The shovel test pits and excavation units were judgmentally placed to maximize site coverage in undisturbed areas.

Testing Results: The artifact assemblage recovered during testing is shown by unit type in Table 8.16. These data

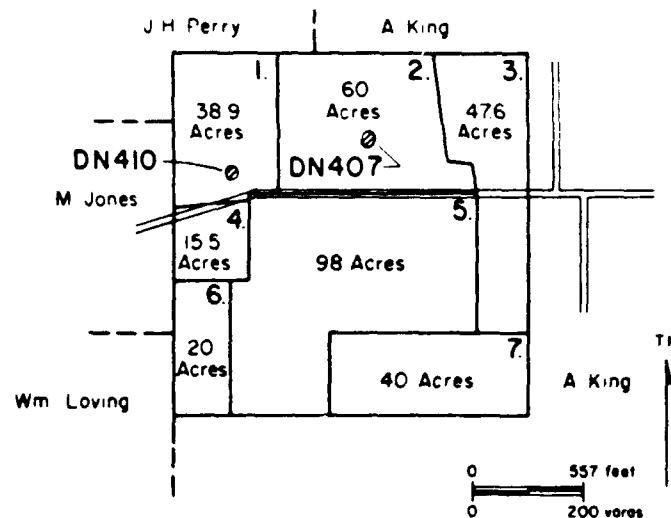


Figure 8.20 Location of site 41DN407 on Tract 2 and 41DN410 on Tract 1 of the W. Loving survey A-747.

indicate a dump in Unit 4, in the yard surrounding the hog shelter that contains a number of burned artifacts. The glass assemblage included 12 burned, unidentifiable fragments. The artifacts reflect a post-1930 dump, including battery cores, charcoal, pieces of caulk or putty, wire, charcoal, and thin metal, along with the abundance of household ceramics and bottle glass. The unburned, datable ceramics (n=12 sherds) yielded a mean beginning date of 1930. A single blue ironstone sherd was recovered (1850-1910). No diagnostic bottle glass was found in this feature. Thirty-four pieces of glass were clear, and ten were aqua body sherds. The architectural items were all twentieth century.

Architectural items, predominately mortar and wire fragments were the most frequent artifact category recovered in the 1x.5-m units. No house area was identified. The ceramic and bottle glass assemblages from these units were too small

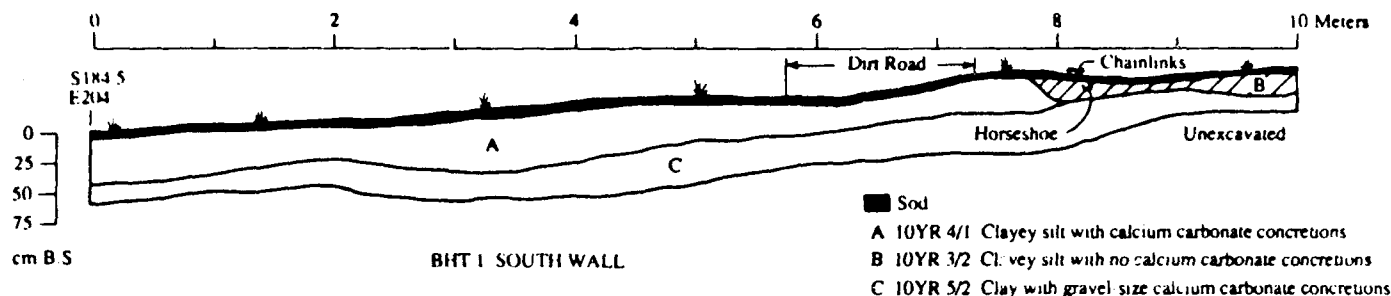


Figure 8.21 Profile of BHT 1, 41DN407.

to identify any significant patterns. However, all of these materials have popularity beginning dates that range between 1850 and 1910.

Data from the shovel test pits reflected a similar pattern as the 1x.5-m units. STPs 3 and 6 contained post-occupation material, including predominately glass fragments, while the remaining shovel test pits contain mostly architectural items.

Faunal Remains: Only four pieces of bone were recovered. Of these, two have been identified as a pig tooth fragment and a buffalo fish spine. Both were removed from Level 2 of Unit 8.

Archaeological Summary: Much of the site was removed by heavy equipment before testing began. Units placed in areas not disturbed by heavy equipment yielded eroded deposits containing primarily architectural debris. Several units were placed in disturbed, trash dumps. No dwelling or *in situ* assemblage was located.

Recommendations: This site does not contain potentially significant archaeological deposits and does not meet the criteria for nomination to the National Register of Historic Places. No further work is recommended.

Table 8.16

Artifacts From Test Units at 41DN407^{1,2}

Unit	R	S	B	T	U	W	CN	WN	HB	MB	BM	P	TH	TC	A	HS	E
Shovel Test Pits:																	
1											1		2				
2									1					3			
3			32		12		1	9	8	2	1			2			
4								2									
5											3						
6			15		16		2	2			2			5			
1x.5-m Units:																	
1			1								9		1				
2											17						
3						3				6		1					
4	42		13	2	100			56			3		15				21
5							4	6			2		3		1		
6						6	1	3		1			1	1		1	
7	1		1		1		1	1	1	1	25	1	1				
8	1	1	3			1	2	5			32		6	21			
Surface Collection:																	
All		2					1					1					

¹ Only units and artifact categories containing remains are included in table; R=refined earthenware; S=stoneware; B=bottle glass; T=table glass; U=unid. glass; W=window glass; CN=cut nails; WN=wire nails; HB=handmade brick; MB=machine-made brick; BM=building material; P=personal items; TH=thin and heavy metal; TC=tin cans; A=ammunition; HS=horse and stable gear; E=electrical.

² Only datable ceramics and bottle glass were used in the calculation of mean beginning dates.

41DN409

Map Quad Lewisville East 7.5', #3396-222
 Elevation above MSL 520-530'
 Vegetation Hackberry, Cottonwood, Locust
 Cultural Affiliation Historic (ca. 1880 to 1940)
 Recommendations No further work

Description: The site is on the southern point of a peninsula in Lewisville State Park (see Figure 8.1). The site is approximately 1400 m east of 41DN411. The current site area was estimated at 50 m north-south x 35 m east-west based on surface features and artifacts. Features recorded during survey included a brick scatter in the southern end of the site; a windmill foundation in the center; a barbed wire fence that bisects the site east-west; a second fence oriented north-south on the east side of the site; a circular concrete pad near the windmill; and a concrete piling and metal pipe on the southern edge of the site. Surface artifacts were clustered near the brick scatter, probably a chimney fall. Disturbances within the site area include a flowerbed with a concrete border southwest of Unit 4 (Figure 8.22) and downslope erosion.

Testing indicated that the brick scatter was not part of a chimney fall but simply a dispersed scatter. No windmill remains were found, and the concrete pad was identified as a capped well.

The refined earthenwares recovered from the surface (n=10 sherds) during survey yielded a mean beginning date of

1862, while the stonewares (n=9 sherds) dated 1893, and diagnostic bottle glass (n=11 sherds) dated 1896. A single post-1940 bottle glass sherd was not included in the calculations.

Previous Investigations: Site 41DN409 was recorded during survey, and field work included excavation of 16 shovel test pits, and recovery of a grab sample of diagnostic surface artifacts. All of the shovel test pits were sterile.

Archival Investigations: The site is located on the A. J. King survey A-707 granted to King in 1860 (see Figure 8.10). The early deeds for this land were lost when the courthouse burned in 1876 and have been reconstructed here through indirect references from more recent deed records. The site is located on Tract 2 (Figure 8.23), which appears to have been held by heirs of A. J. King until the 1890s. The chain of title for this property is shown in Table 8.17.

A farmstead is shown at this location on the 1918, 1925, and 1936 maps. No structures appear on the 1946 or 1960 maps. Based on this information, the site was probably abandoned in the late 1930s or early 1940s.

Testing Method: Six 1x.5-m test units were excavated.

Testing Results: The artifact assemblage recovered during testing is shown in Table 8.18. Unit 1 was sterile and appears to be outside the main site area. Units 2 and 3 contained sheet

Table 8.17

Land Tract History for 41DN409

A. J. King survey A-707

Date	Grantor	Grantee	Price	Land Description	Ref.
1860	State of Texas	Andrew J. King		160/preemption survey	C/395
1863	A. J. King	J. T. Stewart		40 (indirect ref.) Tract 2	39/98
1863	J. T. Stewart	J. A. Martin		40 (indirect ref.) Tract 2	39/98
1867	J. A. Martin	J. Grace	\$150.	40/Tract 2 & 40 ac in Loving survey	39/98
1868	J. Grace by atty. E. M. Wantland	J. A. Baugh	\$100.	40/Tract 2 & 40 ac in Loving survey	40/6
1890	E. C. Reed, et al. (formerly wife of A. J. King) with new husband D. Reed, children & heirs	G. W. Cotter (guardian of J. Baugh, minor)	\$1.	40/Tract 2 (quit claim deed) to replace lost deed made by A. J. King to J. Y. Stewart	43/296
1890	G. W. Cotter (guardian)	J. R. Greer	\$575.	40/Tract 2 & 40 ac in Loving survey	43/291
1917	J. R. Greer & wife Nellie, et al.	F. F. Taylor	\$23,960.	408.66 ac; including 40 ac Tract 2 & land in Loving, White, MEP & PRR, and Martin surveys	157/256
1936	Estate of J. R. Greer, et al.	W. S. Taylor et al.	\$1.	408.66 acres (same as above)	265/551
1941	W. S. Taylor & wife Nell, et al.	J. B. McEntire	\$15,000.	395 ac; including 40 ac Tract 2 & land in Loving, White, MEP & PRR, and Martin surveys	292/430
1952	Maud S. McEntire	USA	\$167,700.	466.70 ac & additional 1124.70 ac including 40 ac Tract 2	382/127

refuse deposits, with household ceramics and vessel glass accounting for over 50% of the assemblage. Unit 4 contained a mixture of recent debris (tin cans), ceramics, vessel glass, and architectural items. Unit 5 contained a high number of recent tin cans and architectural remains, while Unit 6

contained primarily architectural items. Units 4-6 appear to be located near the former dwelling, the brick scatter mentioned above, and an old fenceline.

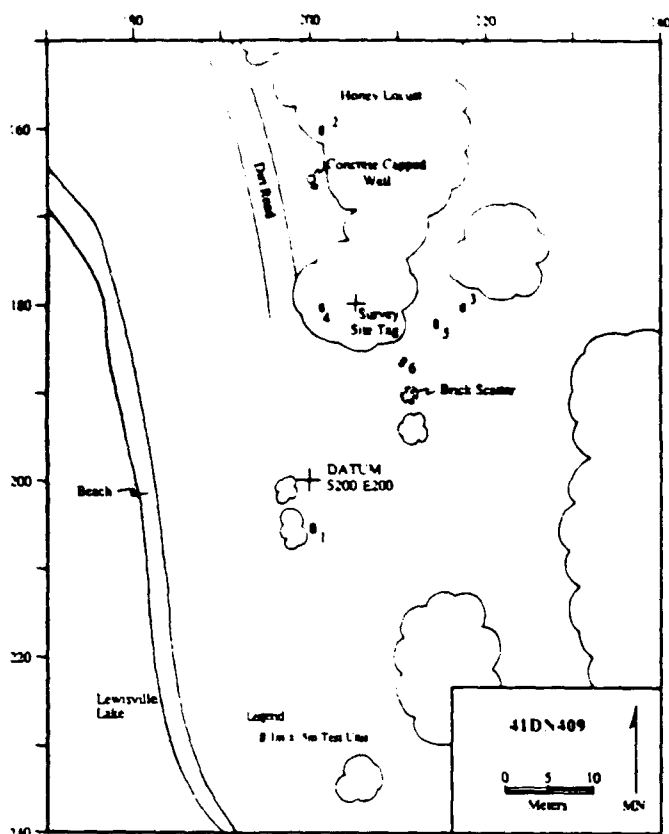


Figure 8.22 Map of site 41DN409

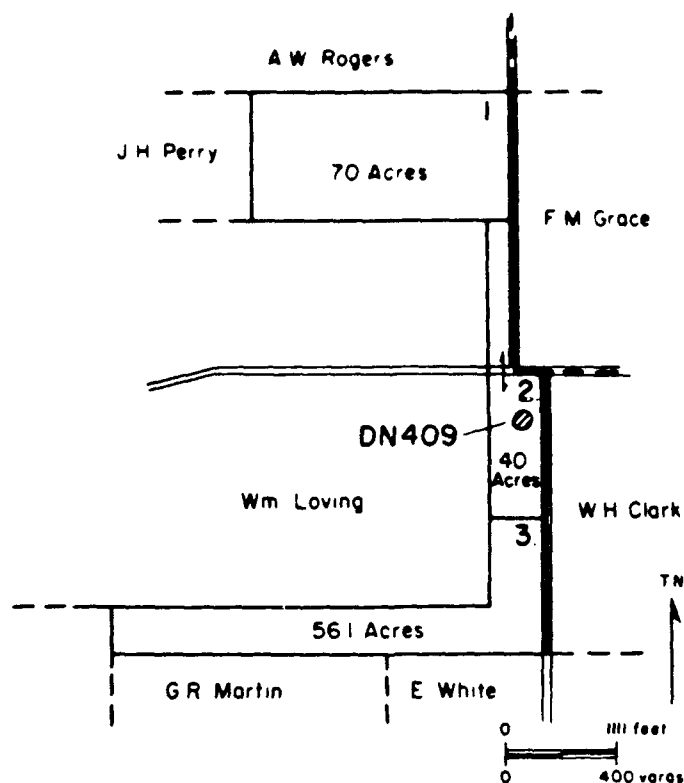


Figure 8.23 Location of site 41DN409 on Tract 2 of the W. Loving survey A-747.

Table 8.18

Artifacts From Test Units at 41DN409^{1,2}

Unit	R	S	Po	B	T	W	CN	WN	MB	BM	P	TH	TC	H	MW	P
1x.5-m Units:																
2	7		1	3		1	2	2					2			
3	8		2	9	2	4	1	6	1	1			6		1	
4	2		1	1		3	1						4			1
5	8	1		20	2	5	4	30		26	2	9	60		11	
6	6	1		7	1	5		8		6		2		1		
Surface Collection:																
All	2	1		3			1									

¹ Only units and artifact categories containing remains are included in table; R=refined earthenware; S=stoneware; Po=porcelain; B=bottle glass, T=table glass; W=window glass; CN=cut nails; WN=wire nails; MB=machine-made brick; BM=building material; P=personal items; TH=thin and heavy metal; TC=tin cans; H=household; MW=machine and wagon; P=prehistoric.

² Only datable ceramics and bottle glass were used in the calculation of mean beginning dates.

The refined earthenware assemblage (n=33 sherds) yielded a mean beginning date of 1872. The stonewares (n=2 sherds) dated 1888, and the diagnostic bottle glass (n=14 sherds) dated 1907. The architectural remains dated primarily ca. 1890 to early twentieth century.

Few machine-cut nails were found, and no handmade brick was noted. These data indicate that the site was occupied ca. 1880s to 1940. Only one diagnostic bottle glass fragment dated post-1940, and only two sherds had beginning dates after 1920. The median age of the refined earthenwares was 1880, and the most recent sherds had mean beginning dates of 1920. No post-1940 assemblage was found on this site.

Faunal Remains: A single pig tooth fragment from Unit 2, Level 1 was the only bone recovered.

Archaeological Summary: Most of the site area has been eroded, and a limited sheet refuse deposit was located. No subsurface features were found, and the dwelling area does not exhibit good integrity.

Recommendations: This site does not meet the criteria for nomination to the National Register of Historic Places. No significant archaeological deposits were located and additional excavation is not warranted.

41DN410

Map Quad	Little Elm 7.5', #3396-223
Elevation above MSL	520-530'
Vegetation	Creeping vines, Grasses
Cultural Affiliation	Historic (ca. 1870 to 1910)
Recommendations	No further work

Description: The site is situated on the south shore of Lewisville State Park (see Figure 8.1). It is on a small peninsula between 41DN411 and 41DN407, which are located on two larger peninsulas. Based on surface artifacts the present site area is 50x50 m. No features were found during survey (Figures 8.24 and 8.25).

The surface scatter contained nineteenth century ceramics and bottle glass. The refined earthenwares (n=10 sherds) yielded a mean beginning date of 1866. The stonewares dated 1871 (n=5 sherds), and the bottle glass (n=3 sherds) dated 1867. A combined mean beginning date of 1868 (n=18 sherds) was obtained. No architectural items or other datable remains were recovered during survey.

Previous Investigations: The site was recorded during survey. Field work involved excavation of ten shovel test pits, and recovery of diagnostic surface artifacts. All of the shovel test pits were sterile.

Archival Investigations: Site 41DN410 is located on the W. Loving survey A-747 (see Figure 8.11). The survey was granted to Peter Teel, assignee of William Loving in 1850 (Table 8.19). It was subdivided and Tract 1 (see Figure 8.20), containing site 41DN410, and Tract 2 were sold to J. F. Fleming in 1870. They were sold again in 1876 to J. Casidy and his wife, Melinda. They occupied the site until their deaths. The land was sold in 1910. This site is shown on the 1918, 1925, and 1936 maps. The archaeological data indicate that the site was occupied during the late nineteenth century, but no twentieth century deposit was found.

Proton Magnetometer Survey: A proton magnetometer survey was conducted in the main site area to locate anomalies of archaeological significance. The survey was conducted by personnel from the Department of Geology, University of Texas at Arlington, under the direction of Dr. Brooks Ellwood. It was hoped that this survey would provide valuable information about where the dwelling had been located.

A 20x20-m block was tested. This area was cleared of vegetation and recent surface metal before the magnetometer survey began. The values produced by the proton magnetometer ranged from -37 to +500. Only six data points

had values greater than +5 and eight had values greater than +5. The study area contained little background noise. The results of the survey are shown in Figure 8.24. Three small positive anomalies and two dipolar anomalies were identified. Backhoe Trench 2 was aligned east-west, cross-cutting the large dipolar anomaly and a smaller positive anomaly. Neither of these anomalies (Figure 8.26) were found to be associated with archaeological features. The site has a truncated and undulating A-horizon. It is less than 5-cm thick in some areas of the site and up to 25-cm thick in others. The shallow A-horizon showed up in the magnetometer survey as low positive or dipolar anomalies.

Testing Method: This site was tested in two phases. The first was conducted during the testing phase, which ran from late March to early June, 1988. After the mitigation phase of the Lewisville Lake project began in mid-June 1988, additional testing was conducted following discussion with the CE and personnel from the Texas Historical Commission. A second testing phase was recommended at 41DN410 to recover additional information for assessing site eligibility for nomination to the National Register of Historic Places.

Phase I Testing: The site was tested using fifteen 1x.5-m units, two 1x1-m units, nine shovel test pits, and two backhoe trenches. The 1x.5-m units were judgmentally placed to recover additional information on site integrity, age, function, and artifact density, and to provide maximum site coverage. The shovel test pits were located to augment these data. The backhoe trenches were excavated to recover information about site integrity and to test for features.

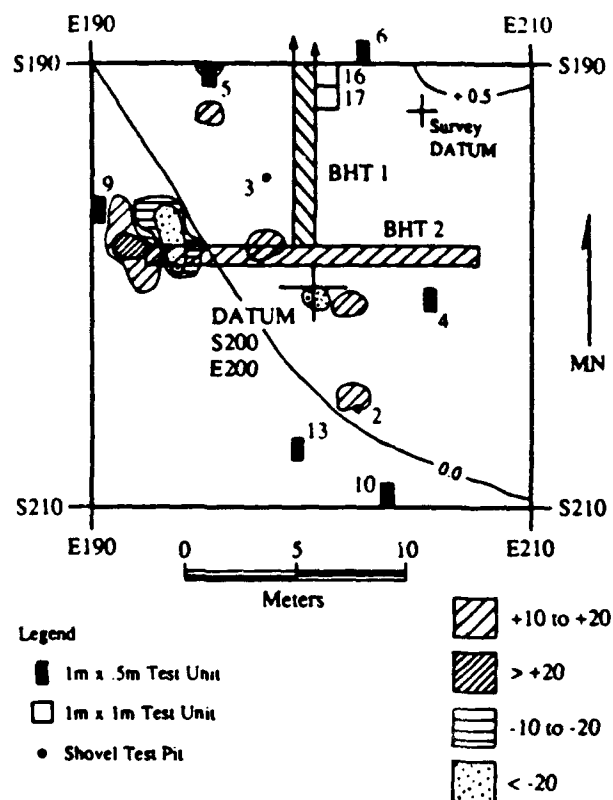


Figure 8.24 Magnetometer results at 41DN410.

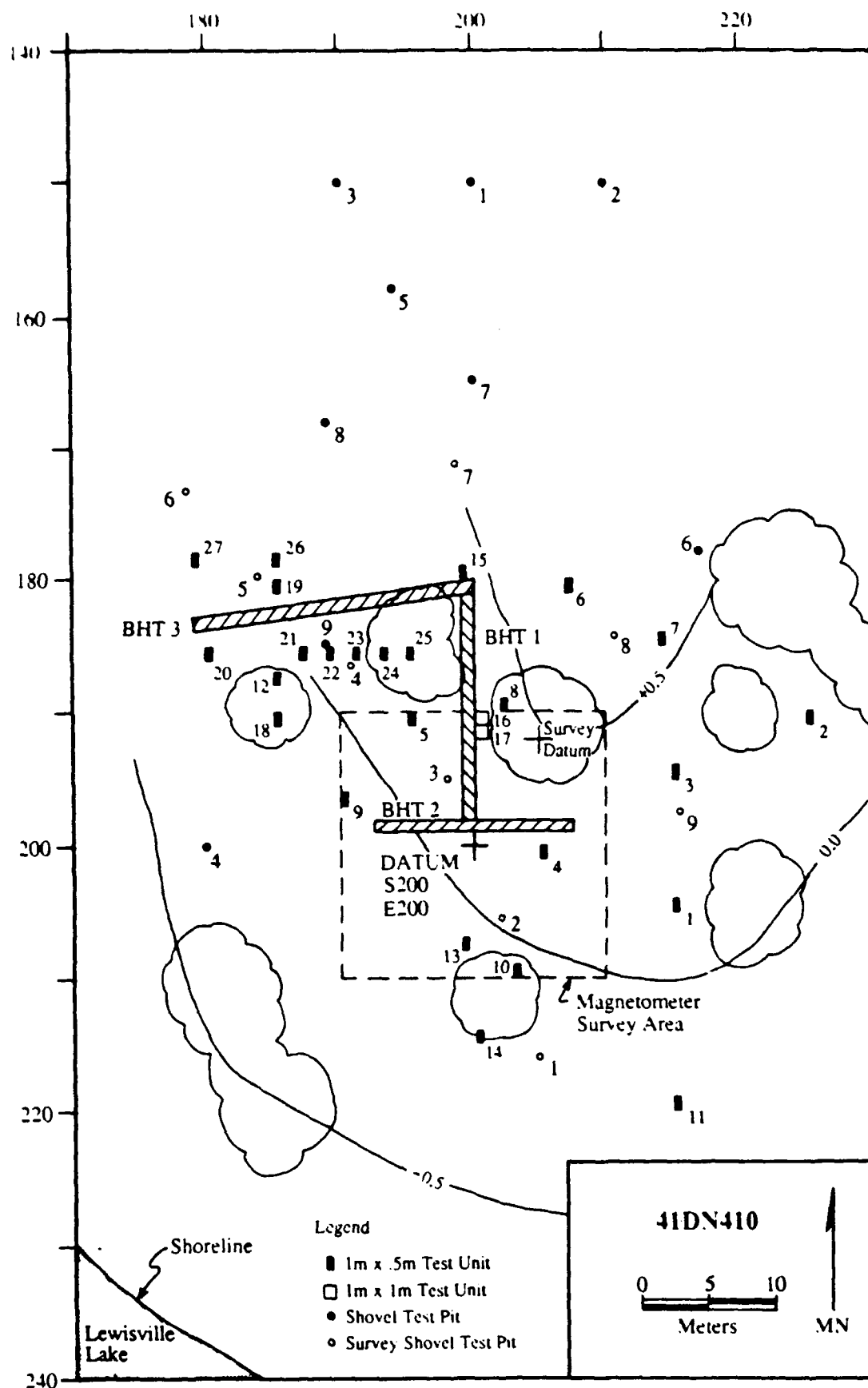


Figure 8.25 Map of site 41DN410.

Table 8.19
Land Tract History for 41DN410

William Loving survey A-747

Date	Grantor	Grantee	Price	Land Description	Ref.
1850	State of Texas	P. Teel, assignee of W. Loving		320 acre survey	E/123
1870	R. M. Scott and wife	J. F. Fleming		79.25 ac; Tract 1 and part of Tract 2	F/360
1876	R. L. Burk (Attorney)	J. Casidy	\$429.	89 ac; Tracts 1 & 2	F/360
1910	District Court [J. & M. Casidy, deceased]	W. C. Orr [Receiver] for sale by court with money to go to heirs		36.8 ac; Tract 1	T/106 [Court Minutes]
1910	W. C. Orr	Mrs. S. R. Davis	\$1001.	36.8 ac; Tract 1	116/136
1912	Mrs. S. R. Davis	J. Sparks	\$1000.	36.8 ac; Tract 1	125/136
1920	J. Sparks and wife Sallie F.	J. E. McPherson, Trustee [Maxwellnote Investment Co.]	\$12,000.	201 ac; including Tract 1	67/591 [Deed of Trust]
1920	Maxwell Invest. Co.	Central Life Assurance Society		201 ac; including Tract 1	175/123
1932	Sheriff's deed	Central Life Assurance Society	\$1500.	201 ac; including Tract 1 [and parts of A. J. King & J. H. Perry surveys]	240/556
1939	Central Life Assurance Society	J. B. McEntire	\$8500.	201 ac; see above	275/525
1952	Maud S. McEntire	USA	\$167,700.	466.7 ac; including 36.8 ac Tract 1	382/127

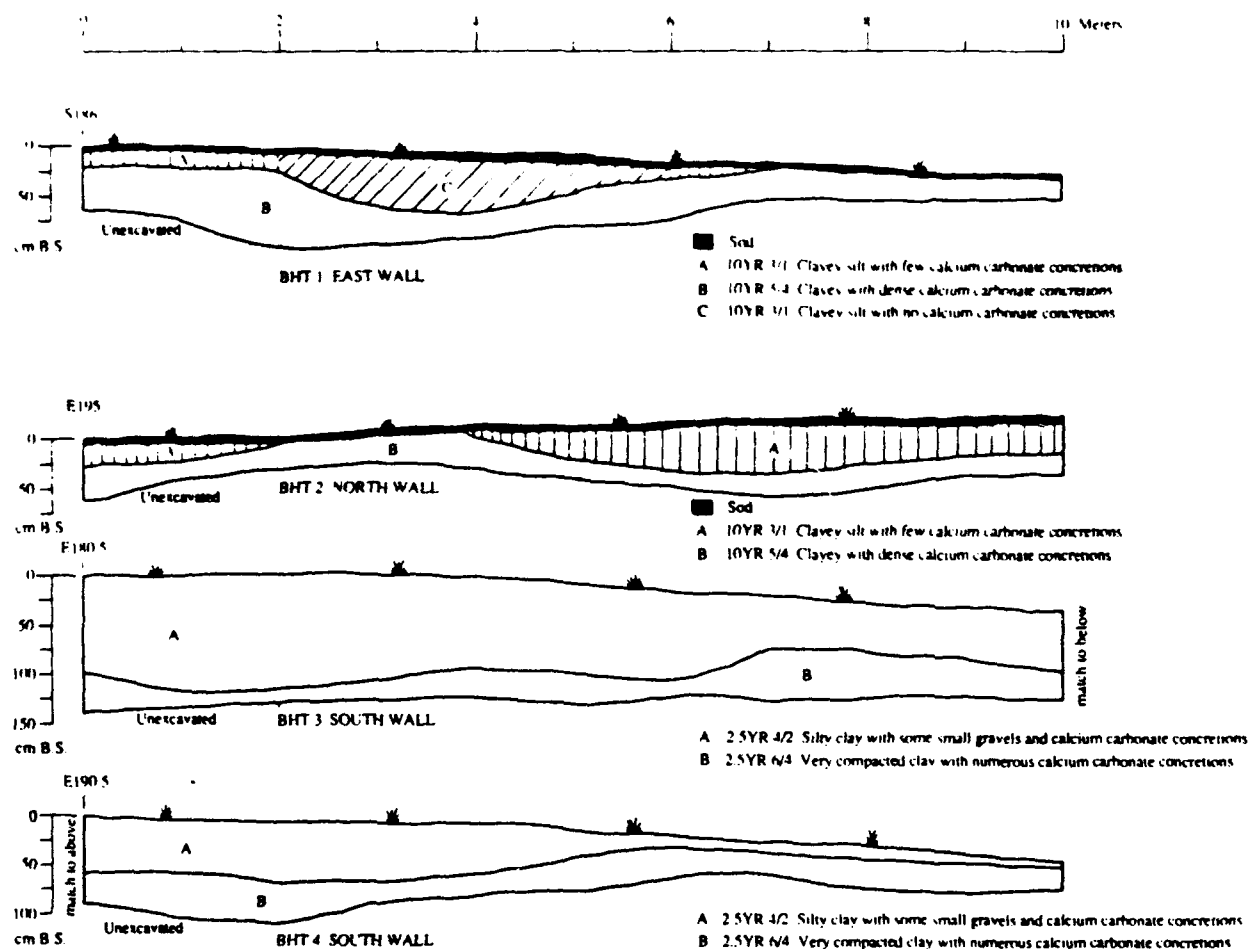


Figure 8.26 Profiles of BHTs 1-3 at 41DN410.

Backhoe Trench 1 was located so as to cross-cut the northern portion of the magnetometer block. A shallow depression occurred in the north end of this trench, which was then further examined by excavating two contiguous 1x1-m units. It was excavated into the B-horizon (see Figure 8.26). No feature was identified, and the cultural material in Units 16 and 17 were similar in type, frequency, and age as the material found in the other units excavated at the site.

Backhoe Trench 2 was placed to bisect the large dipolar anomaly. The profile (see Figure 8.26) indicates that this anomaly corresponded with an area of the site where the A-horizon had been removed. This area is on the edge of the ridge and has been impacted by downslope erosion.

Phase II Testing: The second phase of testing focused on the western margin of the site where the highest frequency of material was recovered during Phase I. This area is on an eroding slope that extends from the ridge to a drainage area west of the site.

A total of ten 1x.5-m units and a backhoe trench were excavated. Test Units 21 through 25 were spaced at 2-m intervals to provide good coverage of the slope. Unit 20 was situated to recover information downslope from Unit 12, excavated during Phase I and which contained a relatively high artifact density. Units 19, 26 and 27 were located to recover information on the downslope area north of Unit 12.

Backhoe Trench 3 was excavated east-west to cross-cut the western slope and provide valuable information on downslope erosion, and irregularities noted in the A-horizon visible in Units 18 through 27. These data indicate that the A-horizon varied considerably even between units placed only 2 m apart. Unit 22 contained less than 4 cm of A-horizon, which occurred only in the northern half of the 1x.5-m unit, while Unit 23 contained about 20 cm of A-horizon.

Testing Results: The testing results are also presented by testing phase.

Phase I Testing: Units placed on the ridge top were generally sterile (1, 3, 6, 7) or contained less than 3 artifacts (4, 8, 10, 13). All of the survey shovel test pits were sterile, and only four shovel test pits excavated during testing contained material (Table 8.20). Of these, only STP 12 contained a low to moderate artifact density, which represented downslope erosion.

Two 1x.5-m units placed on the ridge slope exhibited a low to moderate artifact density. Unit 9 was placed just west of the dipolar anomaly and contained 25 artifacts. Unit 12 was located northwest of Unit 9 and contained 37 artifacts. However, an examination of this material in conjunction with the stratigraphy indicates that these units contain slope wash deposits. Machine cut nails associated with a structure that undoubtedly was located upslope were recovered in Unit 12 and accounted for over 50% of the artifacts from this unit. Another 25% were tin can fragments that post-dated occupation. A similar pattern was evident in Unit 9 where 28% of the material was architectural items, or post-occupation debris (i.e., tin cans).

The datable surface refined earthenwares (n=14 sherds) yielded a mean beginning date of 1849, while the excavated sherds (n=8) dated 1869. The surface stonewares dated 1869 (n=8 sherds), and the excavated dated 1866 (n=7). The bottle glass from the surface (n=3 sherds) provided a date of 1887,

and the excavated also yielded a date of 1887 (n=13). One sherd dated post-1900. The architectural items were predominately pre-1900, including 25 machine-cut nails. No brick was found.

During the survey and testing Phase I, nineteen shovel test pits, fifteen 1x.5-m units, two 1x1-m units, and two backhoe trenches were excavated. These efforts along with the magnetometer survey provided excellent coverage of the

Table 8.20

Artifacts From Phase I Test Units at 41DN410^{1,2}

Unit	R	S	B	T	W	CN	WN	BM	P	TH	TC	H	MH
Shovel Test Pits:													
1													
2													
4							1				1		
9							5	1			1	2	
1x.5-m Units:													
2													
4			1										
5		1					3		1		3		1
8			1	1									
9		1	2	6			3		3	3	1	6	
10		1		1									
12		1	1	2	1	1	19		2		10		
13				1	1								
15									1				
1x1-m Units:													
16		2	1					1				1	
17													

¹ Only units and artifact categories containing remains are included in table; R=refined earthenware; S=stoneware; B=bottle glass, T=table glass; W=window glass; CN=cut nails; WN=wire nails; BM=building material; P=personal items; TH=thin and heavy metal; TC=tin cans; H=household; MH=metal hardware.

² Only datable ceramics and bottle glass were used in the calculation of mean beginning dates.

extant site area and failed to reveal significant archaeological deposits. No evidence of subsurface features, including data indicating the location of the former dwelling was recovered.

The Phase I testing results indicated the site limits were smaller than originally estimated during survey. No surface or subsurface features related to the 1870-1910 occupation were identified. Geological evidence of downslope erosion was recorded, particularly in the western site area. A truncated A-horizon occurred in the upper or main portion of the site. Few artifacts were recovered from subsurface deposits in this area. Based on these findings, we determined that the site was not eligible for nomination to the National Register of Historic Places, and no additional work was recommended.

However, personnel from the Texas Historical Commission felt that inadequate testing had been conducted to fully determine the eligibility of this site, and additional testing was recommended.

Phase II Testing: Phase II testing results are shown in Table B.21. Units placed in the western site area contain low to moderate artifact deposits that have eroded downslope from the main site area. The location of the dwelling was not identified.

Table 8.21

Artifacts From Phase II Test Units at 41DN410^{1,2}

Unit ³	R	S	Po	B	L	U	W	CN	HB	BM	P	TH	TC	MH	A
1x.5-m Units:															
18	1		1	5				7				1		1	
19	3			4				11			1	1			
20	1			1				3				1			
21	2			7	1			7							
22				4				2				1			
23	1	1		7		1		4						4	1
24				3				10				1	2		
25		1		2				2	1	5					
26				4				6				2	2	1	
27				3				5					1		
Surface Collection ³ :															
All	39	8		46			1	19				3			

Only units and artifact categories containing remains are included in table; R=refined earthenware; S=stoneware; Po=porcelain; B=bottle glass, L=lamp glass; U=unid. glass; W=window glass; CN=cut nails; HB=handmade brick; BM=building material; P=personal items; TH=thin and heavy metal; TC=tin cans; MH=metal hardware; A=ammunition.

2 Only datable ceramics and bottle glass were used in the calculation of mean beginning dates.

3 Two prehistoric lithics also found.

The refined earthenwares from excavated units (n=8 sherds) yielded a mean beginning date of 1858, while those from the surface (n=37 sherds) dated 1863. The stonewares from the excavated units (n=3 sherds) dated 1860, while the surface sherds (n=7) dated 1866. The surface bottle glass (n=6 sherds) dated 1892, while the single excavated sherd dated 1860. Architectural remains dated to the late nineteenth century, including one window glass fragment, one handmade brick fragment, and 76 machine cut nails. One wire nail was found.

Faunal Remains: Two burned fragments of bone were recovered. Neither could be identified. Provenience for these bones is Unit 9, Level 2 and Unit 11, Level 1.

Archaeological Summary: The archaeological assemblage recovered at 41DN410 reflects a late nineteenth century farmstead occupation. The low density nature of the deposit indicates that the site was occupied for a fairly short period of time, and no evidence of a second occupation was identified. Extensive slope wash and erosion are evident on the western, southern, and eastern slopes. Some recent bottle glass was recovered in each of the surface collections during testing.

Combined mean beginning dates for the refined earthenwares, stonewares, and bottle glass from survey and both testing phases are summarized below. These data indicate a mean beginning date of 1867 for 41DN410.

Refined earthenware	1861	(n=77 sherds)
Stonewares	1867	(n=30 sherds)
Bottle glass	1885	(n=26 sherds)
Combined	1867	(n=133 sherds)

Recommendations: The artifact assemblage from 41DN410 corresponds well with patterns already identified for early farmsteads in the region (Lebo 1989a). No significant new data were recovered from our investigations at 41DN410, and the assemblage does not reflect a unique pattern. The assemblage is redundant when compared with other farmsteads occupied during this period.

Geological data indicate the site has been severely impacted by downslope erosion. No features, including the former house location were found despite extensive testing, and conducting a magnetometer survey within the main site area. While the site can be used to address some limited research questions, it has neither integrity nor potential of yielding significant new information, and its historical context in the region's history is better represented by other sites.

This site does not meet the criteria for eligibility to the National Register of Historic Places. No further work is recommended.

41DN411

Map Quad	Lewisville East 7.5', #3396-222
Elevation above MSL	520-530'
Vegetation	Cottonwood, Willow, Grasses
Cultural Affiliation	Historic (ca. 1880 to 1940)
Recommendations	No further work

Description: The site is located on a terrace slope at the southwestern extent of Lewisville State Park (see Figure 8.1). It is a multicomponent site containing evidence of a prehistoric occupation and a historic farmstead. The current site area is 70 m north-south x 60 m east-west based on surface scatters and features. A small scatter of prehistoric chert and quartzite flakes, a Kent-like point, a ground stone, a dart point, a core fragment, and pottery. No subsurface prehistoric component was found. Historic features include a concrete foundation, several brick scatters, a small scatter of wood and stove parts, a stone scatter, a concrete step, a circular stone planter box, and part of an old fence. A well is located at the southwest end of the site. Recent disturbance is evident in several areas, including a campfire ring and recent debris (Figure 8.27).

The refined earthenwares (n=4 sherds) recovered during survey yielded a mean beginning date of 1875, while the stonewares (n=5) dated 1900. The diagnostic bottle glass (n=4 sherds) dated 1895. A single post-1940 bottle glass fragment was not included in the calculations. The combined mean beginning date for ceramics and bottle glass (n=13) was 1891.

Previous Investigations: The site was recorded during survey. Three auger holes and sixteen shovel test pits were dug, and a grab sample of diagnostic surface artifacts was recovered. All of the auger holes and shovel test pits were sterile.

Archival Investigations: The site is on the M. Jones survey A-668 (see Figure 8.10), and the chain of title is presented in Table 8.22. The site was granted to M. Jones in

Table 8.22
Land Tract History for 41DN411

Matthew Jones survey A-668

Date	Grantor	Grantee	Price	Land Description	Ref.
1856	State of Texas	Matthew Jones		102 acre survey	
1867	C. C. & Martha A. King, J. M.	J. S. Clark wife Emily	\$500.	65.4 ac; Tracts 1 & 2, including improvements, and 179.33 ac of M. Jones survey	1/523
1910	Heirs of J. S. Clark	Nancy M. Butler [heir]	\$1.	45.75 ac; Tract 1	105/29
1913	I. F. Thomas [heir]	M. M. Squires [heir]	\$5.	45.75 ac; Tract 1 Quit Claim Deed	128/135
1913	J. M. Gibson and wife Emily F. [heirs]	M. M. Squires [heir]	\$5.	45.75 ac; Tract 1 Quit Claim Deed	128/40
1913	M. M. Squires and wife E. M.	R. H. Hufford	\$2281.	45.75 ac; Tract 1	130/264
1917	R. H. Hufford and wife Viola	T. R. Chastain	\$3000.	45.75 ac; Tract 1	135/585
1952	T. R. Chastain and wife Rosie Kay	USA	\$4470.	45.75 ac; Tract 1	379/223

Table 8.23

Artifacts From Phase II Test Units at 41DN411^{1,2}

Unit³ R S B T L W CN WN HB BM P TH TC MH

1	2	14	1	4	1	6		1	4	1
2	3	1	9	8	1	1	3	1	5	5
1	1	1				2	1	2		
4		1	1					1		
5		2				1		7	2	1

¹ Only units and artifact categories containing remains are included in table; R=refined earthenware; S=stoneware; B=bottle glass, T=table glass; L=lamp glass; W=window glass; CN=cut nails; WN=wire nails; HB=handmade brick; BM=building material; P=personal items; TH=thin and heavy metal; TC=tin cans; MH=metal hardware.

² Only datable ceramics and bottle glass were used in the calculation of mean beginning dates.

1856 and was conveyed to J. S. Clark and his wife, Emily, in 1867. The deed indicated improvements had been made on the survey. The Clarks owned the property until 1913. The site is on Tract 1 of the Jones survey (Figure 8.28) and is shown on the 1918, 1925, and 1936 maps.

Recommendations: While the archival data, and a small number of ceramic artifacts indicate that this site was occupied during the late nineteenth century, no intact component was located. The archaeological deposits recovered during testing do not meet the criteria of eligibility for nomination to the National Register of Historic Places. No further work is recommended.

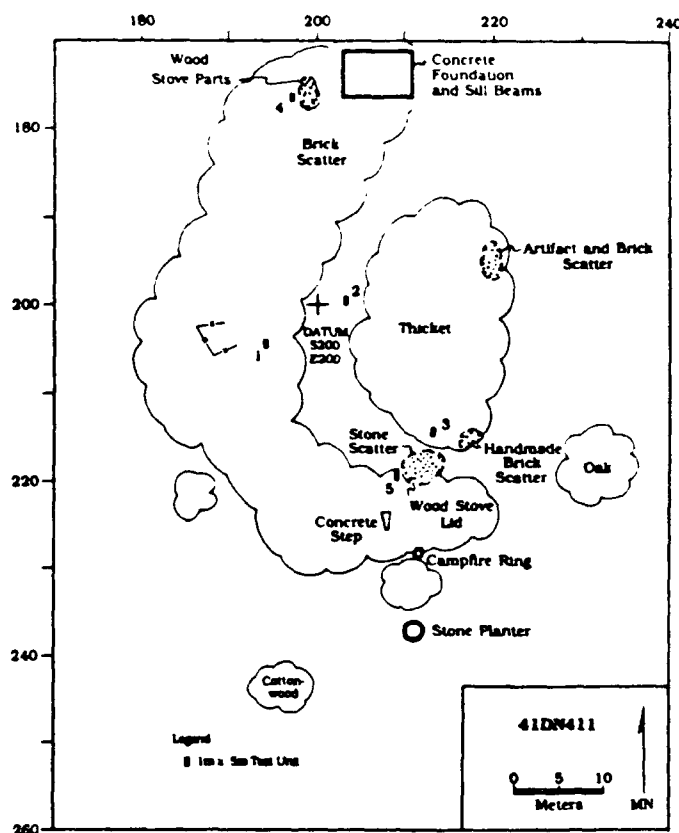


Figure 8.27 Map of site 41DN411.

Testing Method: Five 1x.5-m test units were judgmentally placed to maximize site coverage.

Testing Results: The most recent dwelling is located in the northeastern extent of the site. The original house location was not found. No subsurface features were identified. The assemblage from the five test units indicated a shallow, mixed deposit (Table 8.23). The diagnostic bottle glass all dated to the twentieth century, with a mean beginning date of 1916. The refined earthenwares (n=5 sherds) yielded a date of 1866. Three sherds had date ranges of 1850 to 1910, while two dated 1890 to 1889. The stonewares yielded a date of 1875 (n=3 sherds) and were represented by only one type (natural clay slipped vessels).

The architectural remains included two machine cut nails in Units 1 and 2 and several pieces of handmade brick from the surface. The other architectural items dated to the twentieth century, including the more recent house foundation. The miscellaneous remains, including the tin can fragments were primarily twentieth century.

No additional prehistoric artifacts were found on the surface or in the test units. The material recovered during survey were located on an erosional surface.

Faunal Remains: A large mammal cranial fragment was the only bone recovered. It was from Unit 5, Level 1.

Archaeological Summary: The earlier component, including the original dwelling location was not found. No surface or subsurface features associated with this component were located during survey or testing. Only a small number of artifacts dating before 1900 were found. No evidence of the pre-1870s homestead indicated in the deed records was found. Based on the predominance of twentieth century artifacts and features, including the concrete house foundation and stairs, and evidence of recent disturbance, this site does not warrant additional field work.

41DN423

Map Quad	Lewisville East 7.5', #3396-222
Elevation above MSL	525-528'
Vegetation	Locust, Grasses
Cultural Affiliation	Historic (ca. 1880 to 1940)
Recommendations	No further work

Description: The site is located near the center of Westlake Park (see Figure 8.1). It is bounded on the east by a two-track dirt road and a barbed wire fence bisects the western portion of the site. The current site area is approximately 75x80 m and includes several surface features and an artifact scatter. A filled, sandstone-lined well is located in the northern site area. It is west of a barbed wire fence. East of the fence is a stock pond and several brick scatters. One scatter is primarily of handmade brick, and the other is machine made brick. These scatters could be brick from the dwelling chimneys, or earlier and later courses to the same chimney (Figure 8.29).

The ceramics and bottle glass from survey yielded a combined mean beginning date of 1879 (n=6 sherds). The refined earthenwares (n=4 sherds) yielded a mean beginning date of 1880. A single natural clay slipped stoneware vessel fragment was recovered (1875-1900). The bottle glass

assemblage was also very small, including three clear, four aqua, and one manganese decolorized nondiagnostic sherds, and one post-1940 clear fragment. Other remains included one machine cut nail, one wire nail, and one piece of barbed wire, suggesting a ca. 1880 to ca. 1940 farmstead occupation.

Previous Investigations: The site was recorded during survey. Twelve shovel test pits were dug, and a grab sample of diagnostic surface artifacts was collected. Shovel Test Pits 3-6 and nine contained cultural material.

Archival Investigations: Site 41DN423 is located on the J. S. Weldon survey A-1398 (Figures 8.30 and 8.31), which was granted to Weldon in 1852. The chain of title provided in Table 8.24 indicates that the land belonged to the McCurley family between 1853 and 1905. A 1901 deed (80/253) identified Tract 5, which includes the site as the "old homestead." This probably is the F. B. and E. D. McCurley homestead, which was granted to F. B. McCurley in 1866.

F. B. McCurley remarried after his first wife died, and the land was conveyed to his second wife, R. J. McCurley in 1901. The second occupation dates to the early twentieth century after the McCurley family sold the property. This later occupation is shown on the 1918, 1925, 1936, and 1946 maps.

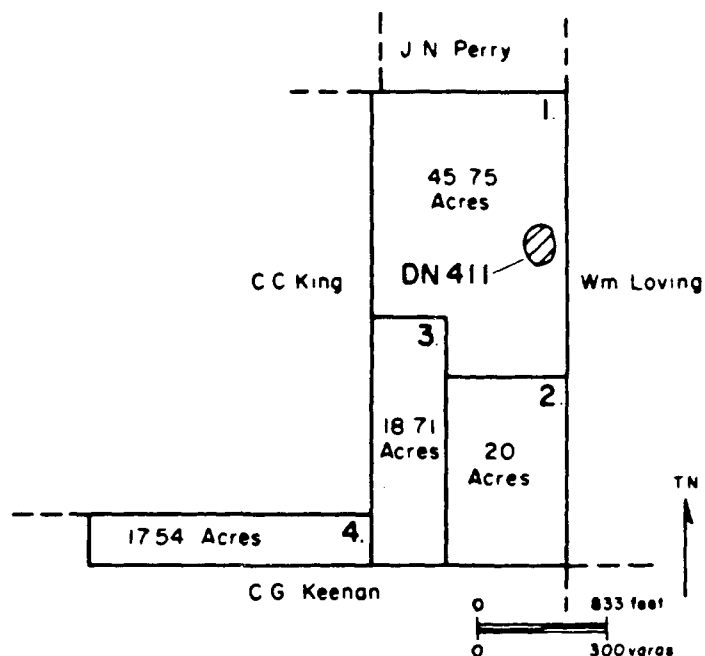


Figure 8.28 Location of site 41DN411 on Tract 1 of the M. Jones survey A-668.

Table 8.24

Land Tract History for 41DN423

J. S. Weldon survey A-1398

Date	Grantor	Grantee	Price	Land Description	Ref.
1852	State of Texas	J. S. Weldon		640 acre survey	C/375
1853	J. S. Weldon and wife	J. B. McCurley and wife, Sarah A.		640 ac	L/404
1855	J. B. McCurley and wife, Sarah A.	G. W. McCurley	\$480.	320 ac; East half of survey	L/404
1862	H. R. Hyatt (nee McCurley) [division of G. W. McCurley estate]	A. and G. C. McCurley	\$320.	320 ac; East half of survey and 320 ac of W. B. Weldon survey	M/336
1868	F. B. McCurley [heirs]	G. C. McCurley	\$500.	same as above	M/338
1871	S. Perry and wife Margaret (Illinois; heirs)	G. C. McCurley	\$200. indent.	same as above	M/339
1871	G. C. McCurley and wife, P. A. [heirs]	Mrs. E. D. McCurley	\$240.	80 ac; Tracts 4 & 5	M/332
1901	W. R. McCurley and wife, Tallie [heirs]	Mr. R. J. McCurley	\$300. & lien	40 ac; Tract 5 and 53.33 ac Tract 13, 6 ac N part of Tract 13; 5 ac Tract 1, and 25 ac W. Clark survey	80/253
1901	T. J. Robb and wife, M. A., and J. H. Snow and wife F. D. [heirs] (Oklahoma)	Mrs. R. J. McCurley [widow of F. B. McCurley]	\$625.	same as above	81/184
1905	R. J. McCurley, F. J. McCurley, and J. W. McCurley and wife	H. L. Henry	\$2100.	40 ac; Tract 5; 5 ac of Tract 1 & 25 ac of W. Clark survey	98/211
1908	H. L. Henry and wife, Leota	J. F. Cunningham	\$2300.	same as above	111/367
1916	J. F. Cunningham	D. Stockard	\$2200.	40 ac; Tract 5; 5 ac of W. Clark survey	135/477
1951	A. Stockard, et al.	USA	\$10,235.	45.5 ac; Tract 5 and 5 ac in W. Clark survey and 34.5 ac of second Tract in W. Clark survey	369/303

Testing Method: Eight 1x.5-m units and three backhoe trenches were excavated. Test Units 4 and 7 were placed to provide better site coverage. Units 1, 2, and 3 were located to isolate the wall lines of the dwelling associated with the extant house mound. Unit 5 was located to provide sheet refuse information near the well, and Unit 6 was placed to further expose a feature encountered in Unit 3. Backhoe Trench 1 was excavated to recover geological data, while Trench 2 was oriented to also provide information on a small mounded area west of the fence (Figure 8.29). Unit 8 was located to recover information concerning an artifact concentration exposed in Backhoe Trench 1. Backhoe Trench 3 was oriented northwest-southeast, and was excavated to expose the filled well.

Testing Results: The assemblage recovered during testing is presented in Table 8.25. Units 4 and 7 contained low density sheet refuse deposits. Unit 5 contained a high frequency of nails, with the remaining items reflecting sheet refuse. Units 1 and 2 contained a high percentage of architectural items from the house, as well as a small number of sheet refuse artifacts. Units 3 and 6 contained part of Feature 1, a brick walkway and step area to the more recent house, which along with Unit 8, contained mixed house and sheet refuse deposits.

The refined earthenwares from Units 3, 5, and 8 are from the sheet refuse deposit from the late nineteenth century occupation. These sherds (n=7) produced a mean beginning date of 1861, while the stoneware (n=8) yielded a date of 1876. The diagnostic bottle glass (n=7) dated 1919 and included one

sherd with a beginning date of 1954. The architectural remains reflected primarily the more recent occupation. The other remains included primarily twentieth century items.

Faunal Remains: Nine of the fifteen bones recovered from this site had been burned to some extent. One of the burned bones was an innominate fragment of a woodrat (*Neotoma floridanus*). It is doubtful that this animal contributed to the diet of the occupants, its remains are associated with the burned house debris in Feature 1 (Unit 3). The only other bone requiring comment is a large mammal fragment with a handsaw cut mark (Unit 8, Level 1).

Archaeological Summary: This site contains mixed deposits from several occupations. The earlier component has been largely masked by the more recent, including the construction of a large stock pond in the main site area. The earlier house area appears to have been partially removed by construction of the stock pond. The well is sandstone-lined and may date to the earlier occupation. The house mound, piers, and Feature 1 date to the more recent occupation. The profiles of Backhoe Trenches 1 and 2 indicate that the site had been plowed, and extensive mixing of the components has resulted from this activity, as well as the construction of the stock pond. These impacts preclude extensive spatial studies focusing on the earlier component.

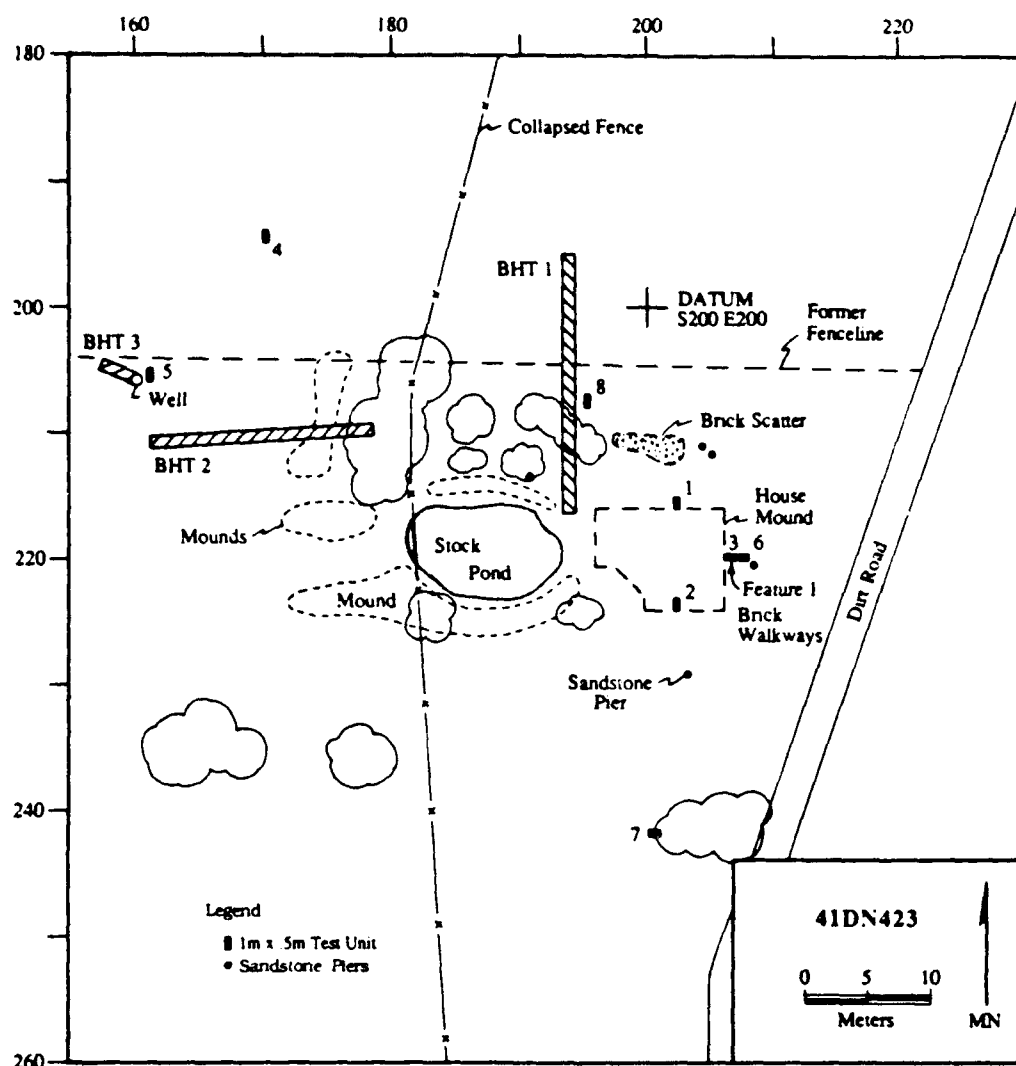


Figure 8.29 Map of site 41DN423.

Table 8.25

Artifacts From Test Units at 41DN423^{1,2}

Unit	R	S	B	T	L	W	CN	WN	HB	MB	BM	P	TH	TC	H	MW	MH	T	A	E
1		1	2			1	1	49				1			1					
2			3	2		3	1	32		21	6	4	1						1	26
3	4		27	2	8	6		102	4		10	9	104	5	3	1		1	2	2
4	3	2	3			3	1	1		1	1	1	3	2						
5		1	3			4	1	10			1		1	1						
6			2			1		15		25	1									
7		2	3	1		1	1	6			1		1		2					
8	3	3	15		2	2	2	26		5	1		2	8			1			1

¹ Only units and artifact categories containing remains are included in table; R=refined earthenware; S=stoneware; B=bottle glass; T=table glass; L=lamp glass; W=window glass; CN=cut nails; WN=wire nails; HB=handmade brick; MB=machine-made brick; BM=building material; P=personal items; TH=thin and heavy metal; TC=tin cans; H=household; MW=machine and wagon; MH=metal hardware; T=tools; A=ammunition.

² Only datable ceramics and bottle glass were used in the calculation of mean beginning dates.

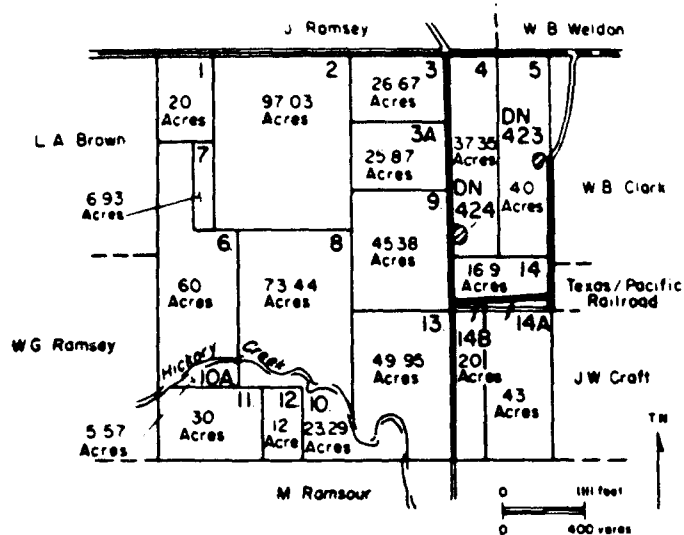


Figure 8.30 Location of 41DN423 on Tract 5 and 41DN424 on Tract 4 of the J.S. Weldon survey A-1398.

Recommendations: The older component does not exhibit good archaeological integrity, and the two occupations have been extensively mixed and disturbed. This site does not exhibit potential for providing significant archaeological information necessary for addressing major research questions. This site does not meet the criteria for nomination to the National Register of Historic Places, and additional work is not recommended.

41DN424

Map Quad	Louisville East 7.5', #3396-222
Elevation above MSL	520-525'
Vegetation	Locust, Grasses
Cultural Affiliation	Historic (ca. 1880 to 1940s)
Recommendations	No further work

Description: The site is on a small terrace in the southwestern area of Westlake Park (see Figure 8.1). The current site area was estimated to be 90 m north-south x 70 m east-west based on surface features and artifacts (Figure 8.32). A two-track dirt road is located on the northern margin of the site. Three depressions occur, but their function could not be determined. A stock pond is located east of the main site

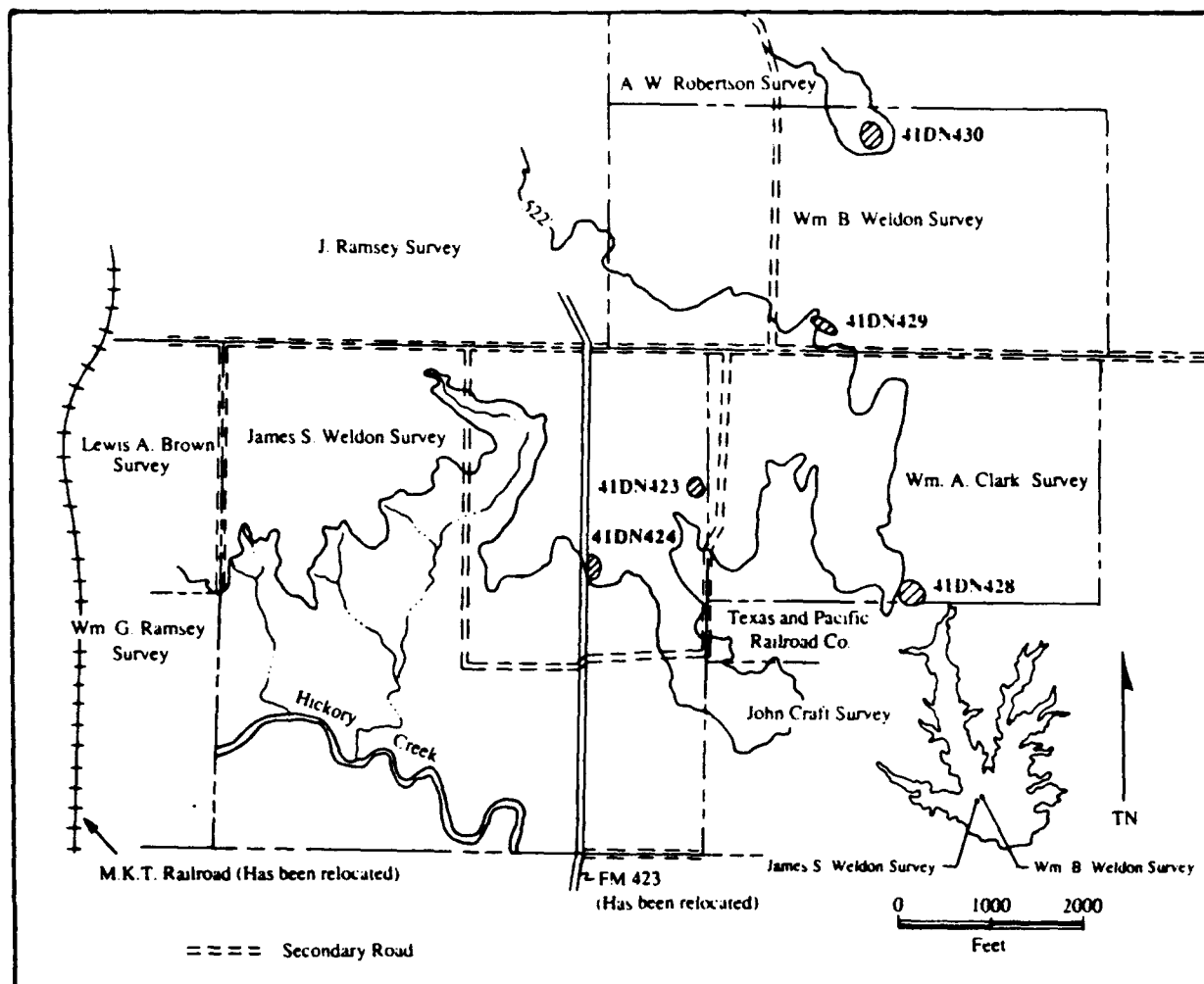


Figure 8.31 Land tract locations of sites 41DN423, 41DN424, 41DN428, 41DN429, and 41DN430.

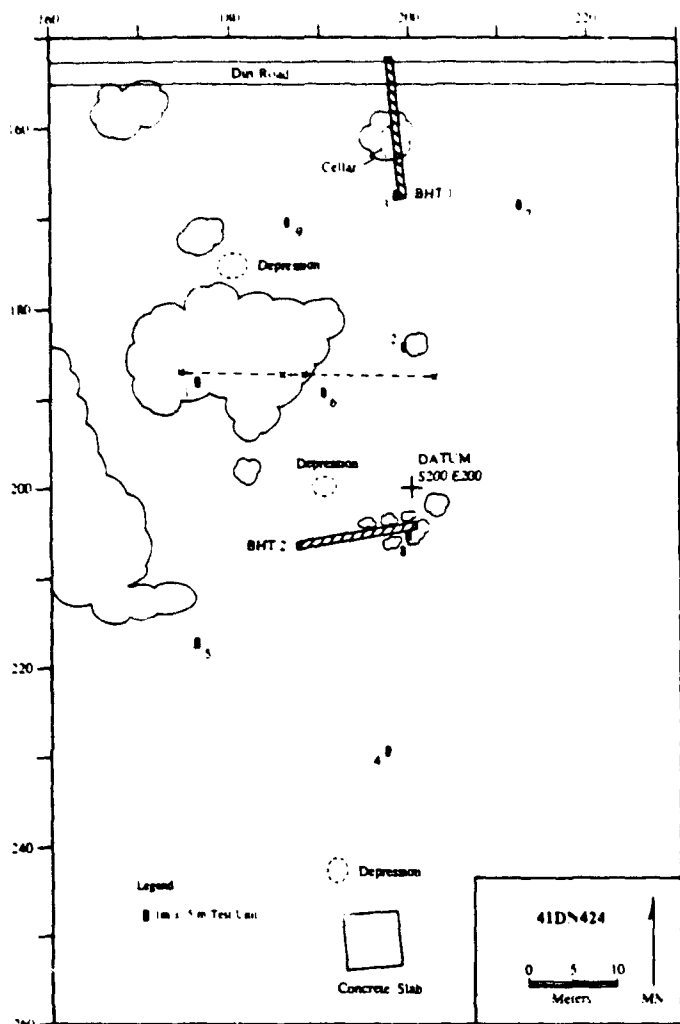


Figure 8.32 Map of site 41DN424.

area and is not shown on the map. Several concrete slabs are in the southeastern site area, including a windmill foundation near the stock pond. A collapsed barbed wire fence extends east-west through the north half of the site. The former house location was not identified. A small surface scatter was noted.

The artifacts recovered during survey included three refined earthenwares (one dating 1850-1910 and two dating 1890-1989), one natural clay slipped stoneware fragment (1875-1900), one post-occupation diagnostic bottle glass sherd (1940-1989), eight non-diagnostic bottle glass sherds (three clear, one manganese, and four aqua), one machine cut and one wire nail, and a small number of miscellaneous items (tin cans, wire).

Previous Investigations: The site was recorded during survey. Ten shovel test pits were excavated, and a sample of diagnostic surface artifacts was collected. Shovel Test Pits 3 through 6 and Shovel Test Pit 9 contained artifacts.

Archival Investigations: Site 41DN424 is located on the J. S. Weldon survey A-1398 (see Figure 8.30), and the chain of title is shown in Table 8.26. The site is in southern portion of Tract 4 (see Figure 8.22). The survey was granted to J. S. Weldon in 1852, and the east half, which contained 320 acres, including sites 41DN424 and 41DN423 was conveyed to J. B. McCurley in 1853. The land was subdivided several times by the McCurley family, with 80 acres being conveyed to Mrs. E. D. McCurley in 1871. It is at this time that ownership of the two sites split. Site 41DN424 remained in the McCurley family until 1892.

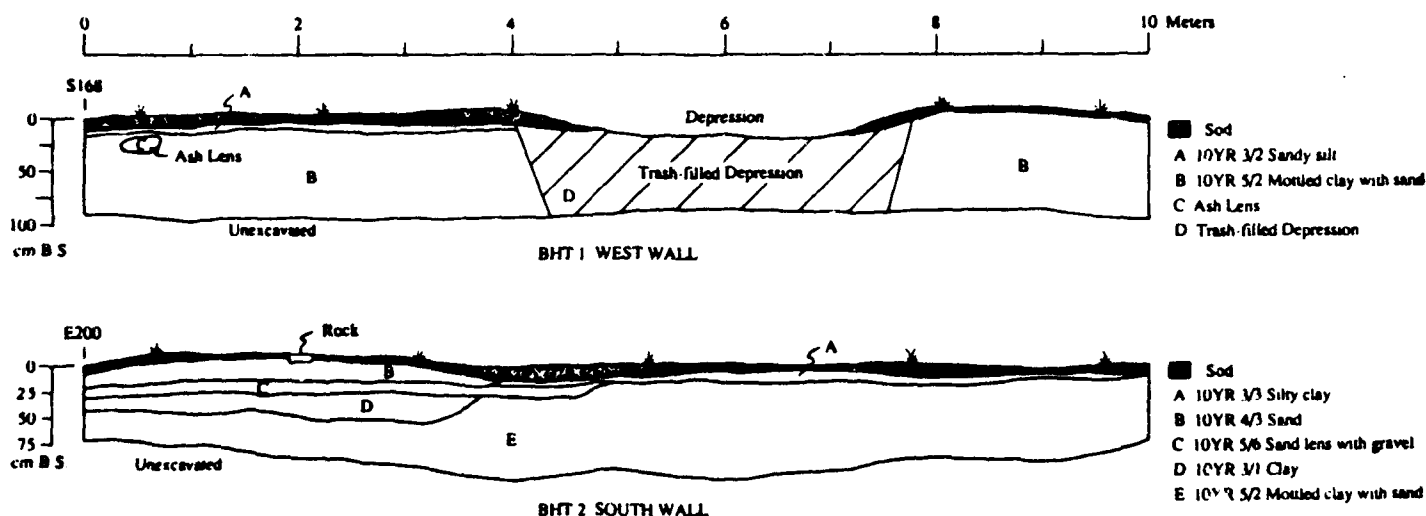


Figure 8.33 Profiles of BHTs 1 and 2 at 41DN424.

Table 8.26
Land Tract History for 41DN424

J.S. Weldon survey A-1398

Date	Grantor	Grantee	Price	Land Description	Ref.
1852	State of Texas	J. S. Weldon		640 ac survey	C/375
1853	J. S. Weldon and wife	J. B. McCurley and wife, Sarah A.		640/entire survey	L/404
1855	J. B. McCurley and wife, Sarah A.	G. W. McCurley	\$480.	320 ac; East half of survey	L/404
1862	Harriet R. Hyatt (nee McCurley) [heir of G. W. McCurley, dec'd]	A. & G. C. McCurley	\$320.	320 ac; East half of survey; Quit Claim & 320 ac of W. B. Weldon survey	M/336
1871	S. Perry and wife, Margaret A. (Illinois)	G. C. McCurley Indent.	\$200.	same as above	M/339
1871	G. C. McCurley and wife, P. A.	Mrs. E. D. McCurley	\$240.	80 ac; Tracts 4 & 5	M/332
1892	W. R. McCurley	T. J. Robb	\$600.	30 ac; South part of Tract 4	52/51
1892	T. J. Robb and wife M. A.	A. B. Robb	\$600.	same as above	49/495
1919	A. B. Robb	C. G. Thomas and C. C. Houston	\$3150.	30 ac; South part of Tract 4 & 10 ac; North part of Tract 4	171/81
1932	W. C. Murdock and wife, Emma	E. J. Murdock	\$1.	same as above	241/434
1933	E. J. Murdock	Republic Insurance Co. release	\$1.	same as above	244/229
1936	Republic Insurance Co.	C. J. Greene	\$5000.	87.33 ac. J. S. Weldon survey, including above 40 ac.	263/636
1939	C. J. Greene and wife, Dorothy	C. D. Cumbie & wife, Margaret	\$4450.	same as above	276/118
1950	C. D. Cumbie, et ux.	USA	\$17,110.	same as above	366/495

Table 8.27
Artifacts From Test Units at 41DN424^{1,2}

Unit	SC	R	S	Po	B	T	L	W	CN	WN	MB	BM	TH	TC	H	MW	MH	A
1			1	1	22		1	1	11	22		2		11			1	
2		6	2	2	81	7		27	1	1	1	6	12	27	10			
3		7	1		6			1	1	48	3	1	8	12			1	
4																		1
5					4				1			1		6				
6	1				7			4	4	15		5	1	1			1	
7					1					4						1		
8			1		15	4		1		6	2	3	15	4	1		3	
9			1		3					9			1	18	1			

¹ Only units and artifact categories containing remains are included in table; SC=semi-coarse earthenware; R=refined earthenware; S=stoneware; Po=porcelain; B=bottle glass; T=table glass; L=lamp glass; W=window glass; CN=cut nails; WN=wire nails; MB=machine-made brick; BM=building material; TH=thin and heavy metal; TC=tin cans; MW=machine and wagon; MH=metal hardware; A=ammunition.

² Only datable ceramics and bottle glass were used in the calculation of mean beginning dates.

Between 1892 and 1919, the site was owned by the Robb family. The early component reflected in the archaeological record probably includes both occupations. The more recent component is reflected in the later conveyances, most probably during the 1930s. A farmstead is shown at this

location on the 1918, 1925, 1936, and 1946 maps. No structures occur on the 1960 map.

Testing Method: Nine 1x.5-m units and two backhoe trenches were excavated. The 1x.5-m units were placed to

maximize site coverage, while the backhoe trenches were excavated to bisect two depressions (Figure 8.33). Backhoe Trench 1 bisected a collapsed cellar filled with modern trash. Backhoe Trench 2 revealed a disturbed area containing a few artifacts and one large concrete pier.

Testing Results: The artifacts from the 1x.5-m units are presented in Table 8.27. All of the units contained material from multiple occupations. Bottle glass, thin metal, tin cans, and architectural items comprised 73% of the assemblage. Architectural items from the multiple occupations were scattered across the site and were mixed together in the same units. No discernable house area could be identified for either component.

Refined earthenwares were recovered from only Units 2 and 3, north of the fence. They produced a mean beginning date of 1878 (n=12 sherds). The stonewares (n=6 sherds) also dated 1878 and were found on the periphery of the site. The diagnostic bottle glass (n=20 sherds) dated 1881.

Seven bottle glass sherds dated 1940-1989 were not included in the calculation. All but one of the miscellaneous remains reflected twentieth century items, including one shoe eyelet, one glass marble, two machine parts, one masonite fragment, two 20-gauge shotgun shells, two metal household items, and a cast-iron non-adjustable wrench part. A slate pencil fragment was also found.

Faunal Remains: Of the six bones recovered from this site, three have been identified. Two pig teeth were found in Units 3 and 8, Level 2. They have only slight occlusal wear and are probably from the same young pig. The presence of pig teeth usually indicates on-site butchering of swine.

A fibula of a turkey was recovered from Unit 1, Level 1. Whether this leg bone represents a wild turkey or domesticated is not clear.

Archaeological Summary: The site has been disturbed, and the two components are mixed. In addition, the older component is poorly represented.

Recommendations: This site does not meet the criteria for nomination to the National Register of Historic Places and does not contain significant deposits. No further work is recommended.

41DN428

Map Quad	Lewisville East 7.5', #3396-222
Elevation above MSL	515-522'
Vegetation	Oak, Grasses
Cultural Affiliation	Historic (1870-1940)
Recommendations	No further work

Description: The site is on a terrace above the Elm Fork of the Trinity River in the southeastern area of Westlake Park (see Figure 8.1). Based on surface features and artifacts, the current site area is approximately 80 m north-south x 30 m east-west (Figure 8.34). A depression is located in the southwestern site area, 30 m southwest of the artifact scatter. A two-track dirt road bisects the site north-south through the eastern portion of the site. A second artifact scatter occurs in the road. The artifact assemblage from testing is presented in Table 8.28.

The datable refined earthenwares found during survey (n=4 sherds) yielded a mean beginning date of 1850, while the stonewares (n=13 sherds) dated 1858. The diagnostic bottle glass (n=3 sherds) dated 1873. The architectural remains included one machine-cut nail found on the surface and five from STP 3. A harness chain ring, two cast-iron vessel fragments, and five bone fragments were found. No twentieth century architectural items were noted.

Previous Investigations: The site was recorded during survey. Seven shovel test pits were dug, and a sample of diagnostic surface artifacts were collected from the eastern scatter. Only STP 3 contained artifacts.

Archival Investigations: The site is located on the W. A. Clark survey A-238 (see Figure 8.30), and the chain of title is presented in Table 8.29. The site is on Tract 4 of the Clark survey (Figure 8.35). A farmstead is shown at this location on the 1918, 1925, and 1936 maps. No structures occur on the 1946 or 1960 maps.

Proton Magnetometer Survey: A proton magnetometer survey was conducted in the main site area to locate archaeologically significant anomalies. The survey was conducted by personnel from the Department of Geology, University of Texas at Arlington, under the direction of Dr. Brooks Ellwood.

A grid comprised of three 20x20-m blocks was placed over the main site area. The vegetation was cut, and all surface metal was removed before the survey began. The survey areas are shown in Figure 8.36. The values produced by the proton magnetometer ranged from -531 to +500. The most pronounced anomaly occurred in Area A and corresponded with the depression recorded during survey. This feature was identified as a large, trash filled pit (see Figure 8.33) and was characterized by a large dipolar anomaly. Among the material found in the feature was a 55-gallon drum filled with modern refuse, including tin cans, bottles embossed "NO DEPOSIT NO RETURN," and a motorcycle tail light dated 1957.

Testing Method: Ten 1x.5-m test units and two backhoe trenches were excavated to augment the magnetometer survey. These units were judgmentally placed to test both the dipolar anomaly and the small negative and positive anomalies. Backhoe Trench 1 was oriented north-south, cross-cutting several small anomalies. No cultural features were identified in the trench profile. However, these data indicate that the A-horizon has been truncated and the small anomalies recorded at the site reflect the relative thickness of the A-horizon, or the depth to the B-horizon. They do not reflect archaeological features. In addition, these data indicate that the road did not appear as an anomaly.

Testing Results: The site has been heavily impacted by recent activities as well as erosion, which has resulted in the removal of most of the A-horizon. The magnetometer survey failed to identify any significant archaeological features, including the former dwelling area.

The artifacts found during testing (see Table 8.28) reflect a mixed, low density sheet refuse deposit and recent trash. The sheet refuse is characterized by predominately late nineteenth to early twentieth century artifacts. The trash deposit includes a number of miscellaneous remains (e.g., rubber and plastic fragments).

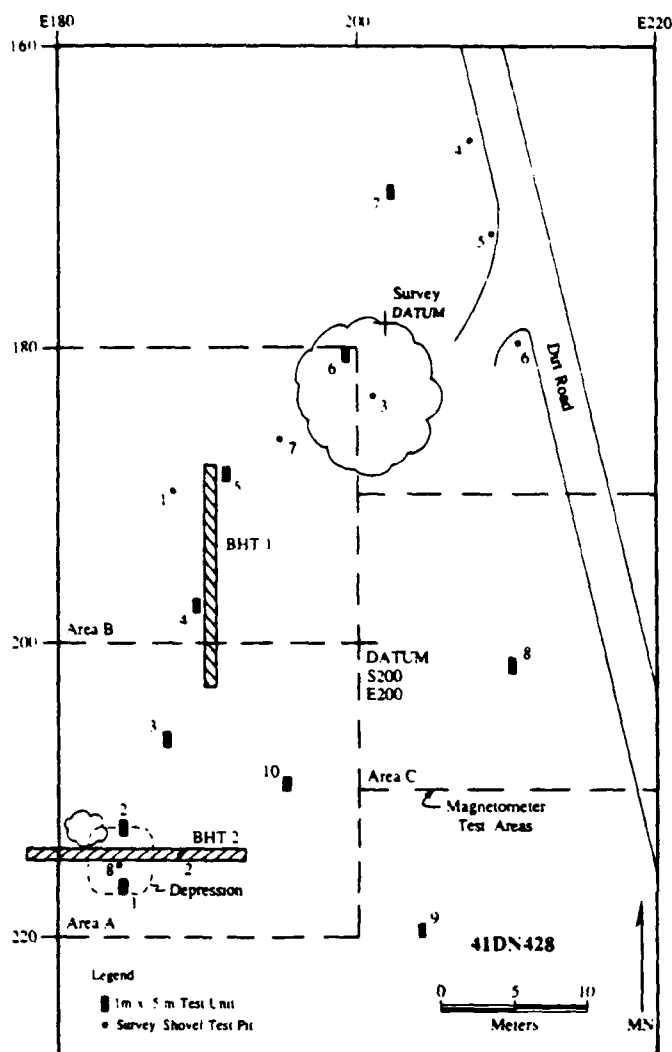


Figure 8.34 Map of site 41DN428.

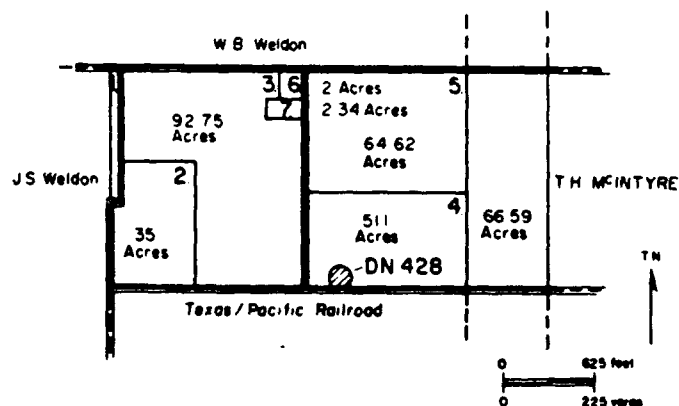


Figure 8.35 Location of site 41DN428 on Tract 4 of the W.A. Clark survey A-238.

as well as tin cans, and ammunition (.22 cal. centerfire cartridges). A small number of post-1940 bottle glass fragments were also found. These deposits could not be spatially separated.

The refined earthenwares ($n=7$ sherds) yielded a mean beginning date of 1850 and included blue-tinted ironstones (1850-1910). No twentieth century types were recovered from the test units. The stonewares ($n=3$ sherds) dated 1868, including two salt glazed and one natural clay slipped fragments. The datable bottle glass assemblage reflected both sheet refuse material and recent bottles. Datable bottle glass was recovered from sheet refuse deposits in Units 2, 3, 6, and 10. These sherds ($n=5$) yielded a mean beginning date of 1890. Post-1940 bottle glass ($n=3$ sherds) was recovered in Unit 6.

Non-diagnostic bottle glass sherds included four clear, 14 aqua, and 36 brown fragments. The architectural remains were extremely scanty and included five window glass fragments, sixteen machine cut nails, and two wire nails. No bricks were found.

Table 8.28

Artifacts From Phase II Test Units at 41DN428^{1,2}

Unit	R	S	B	T	W	CN	BM	TH	TC	A
2		2	2		2	3	1		13	
3	5		5			1			21	
4									7	
6			34							
7	1						1			
8	2	1	7			5	5		2	
10	3		2	2	3	5		2	1	2

¹ Only units and artifact categories containing remains are included in table; R=refined earthenware; S=stoneware; B=bottle glass; T=table glass; W=window glass; CN=cut nails; BM=building material; P=personal items; TH=thin and heavy metal; TC=tin cans; A=ammunition.

² Only datable ceramics and bottle glass were used in the calculation of mean beginning dates.

Faunal Remains: Only one burned bone fragment was recovered. It was found in Unit 3, Level 1.

Archaeological Summary: The sheet refuse deposit at this site reflects a ca. 1870 to 1940 farmstead. However, this component has been badly disturbed and is mixed with recent, post-1940 trash deposits. Data from the magnetometer survey, backhoe trenches, and excavation units indicate that the A-horizon has been truncated, and little of the sheet refuse deposit remains intact. The former dwelling location was not identified, and the only feature recorded at the site is a post-occupation (late 1950s) dump.

Recommendations: This site does not meet the criteria for nomination to the National Register of Historic Places nor does it exhibit potential for yielding significant archaeological deposits. No further work is recommended.

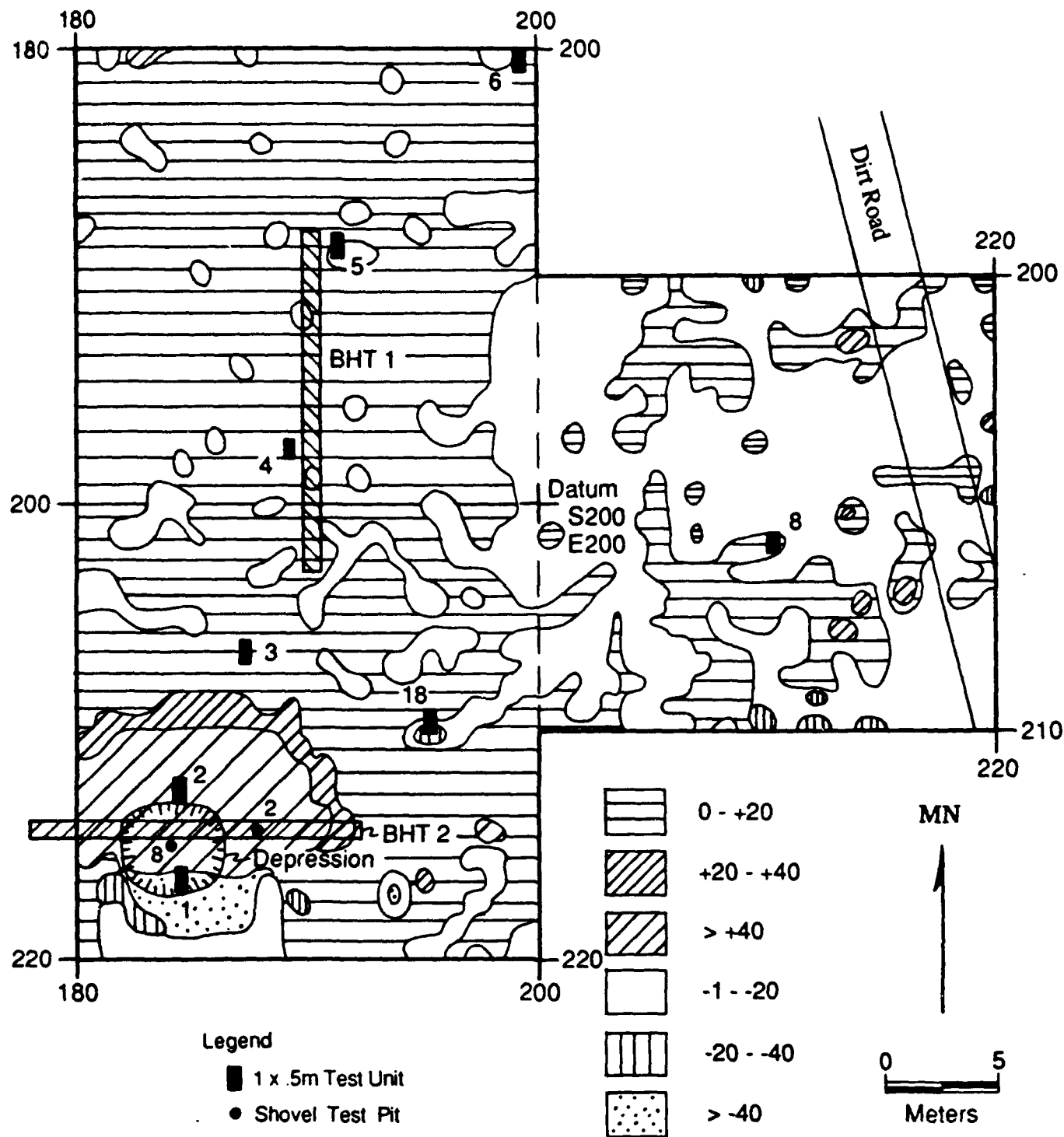


Figure 8.36 Map of magnetometer survey results, 41DN428.

Table 8.29
Land Tract History for 41DN428

William A. Clark survey A-238

Date	Grantor	Grantee	Price	Land Description	Ref.
1872	State of Texas	W. A. Clark's heirs		320 acre survey	Patent A/512
1873	E. B. Orr	O. C. McWhorter	\$640.	320 ac	A/357
1876	O. C. McWhorter, Margaret A. McWhorter	James Geraghty (Macon Co., Illinois)	\$500.	112 ac minus 2 ac including school	B/501
1876	James Geraghty	A. E. Graham	\$750.	107 ac minus 2 ac belonging to school	D/493
1883	A. E. Graham, Sallie Graham	T. J. Robb	\$1250.	107 ac minus 2 ac belonging to school	33/118
1885	T. J. Robb, M. A. Robb	J. A. McNeil	\$1236.28	107 ac minus 2 ac belonging to school	33/119
1887	J. A. McNeil and Delia McNeil	J. C. Armstrong, T. E. Ball	\$1200.	107 ac minus 2 ac belonging to school	33/120
1888	J. C. Armstrong, S. M. Armstrong	T. E. Ball	\$600.	107 ac minus 2 ac belonging to school including improvements	36/396
1905	H. L. Henry, Leota Henry	R. J. McCurley, F. J. McCurley, J. W. McCurley	\$4100.	104.75 ac minus 2.5 ac deeded to school	90/479
1908	Mrs. R. J. McCurley, F. J. McCurley, J. W. McCurley and wife, Teley	J. F. Cunningham	\$3050.	104.75 ac minus 2.25 ac deeded to school	108/198
1923	J. F. Cunningham and wife, Emma	J. A. Crawford and wife, Bertha	\$4637.	92.25 ac minus 2.25 ac deeded to school and 2 ac deeded to cemetery	185/383
1924	J. A. Crawford and wife, Bertha	O. F. Walters	\$10,202.	92.25 ac	196/34
1935	Mrs. Ada Mae Walters [estate of O. F. Walters]	A. C. Williams, Trustee		92.75 ac	276/520
1939	A. C. Williams, Trustee	Federal Farm Mortgage Corp.	\$700.	92.75 ac	276/520
1951	H. M. Dobson, et al.	USA		92.75 ac	

41DN429

Map Quad	Lewisville East 7.5', #3396-222
Elevation above MSL	515-522'
Vegetation	Locust, Willow, Oak, Grasses
Cultural Affiliation	Historic (ca. 1870s to 1940s)
Recommendations	Mitigation

Description: The site is on the northeastern shore of Westlake Park and approximately 1,200 m southeast of the Old Lake Dallas Dam (see Figure 8.1). Based on surface features and artifact scatters, the current site area is approximately 120x150 m. Features include a house mound and chimney fall, a capped well, cellar, and a two-track dirt road that bisects the eastern site area (Figure 8.37). The deposits east of the road are disturbed. Intact deposits in the main site area extended up to 40 cm below surface.

A small surface collection was recovered during survey. The refined earthenwares (n=4 sherds) yielded a mean beginning date of 1855, and the stonewares (n=2 sherds) dated 1870. A single bottle glass sherd was collected that dated (1910-1913). One machine cut nail, one wire nail, one unidentifiable heavy metal fragment, one hardware nut, and a screw plug from a 55-gallon drum were also collected.

Previous Investigations: The site was recorded during survey. Sixteen shovel test pits were dug, and a sample of diagnostic surface artifacts was collected. Shovel Test Pits 5, 10 and 12 contained artifacts. The other shovel test pits were sterile.

Archival Investigations: The site is located on the William B. Weldon survey A-1351, which was granted to Weldon in 1850 (see Figure 8.30). The survey was conveyed to G. W. McCurley in 1855 and remained in the McCurley family until 1933. The site is located on Tract 4 (Figure 8.38), and the archaeological deposit reflects the 1871 to 1933 ownership. The chain of title for this property is given in Table 8.30. The site is shown on the 1918, 1925, 1936, and 1946 maps.

Proton Magnetometer Survey: A proton magnetometer survey was conducted in the main house area to identify archaeologically significant anomalies. The survey was conducted by personnel from the Department of Geology, University of Texas at Arlington, under the direction of Dr. Brooks Ellwood. It was hoped that this survey would provide evidence related to a possible detached kitchen, or other outbuildings, and activity areas near the former dwelling.

Two contiguous 20x20-m blocks were placed to provide complete coverage of the house mound, a minimum of 10-m distance from the house in several directions, and part of a second mound in the northeastern portion of the site. Other

known features within these two blocks were a capped well northeast of the house and a two-track dirt road.

This area was tested using a series of contiguous 1x1-m units that revealed a dense sheet refuse deposit. This occurs on the crest of the ridge, and the material is primarily twentieth century in age. Units in this anomaly extended to depths of 30 to 45 cm below surface.

The site was covered in dense grass and brush, which was cleared before the survey was conducted. All visible metal on the surface was also recovered. The values produced by the proton magnetometer ranged from -500 to +500. The results of this survey are shown in Figure 8.39. The north half of the east block yielded low positive values ranging from +51 to +100 that appear to correlate with a shallow A-horizon. The B-horizon occurs between 10-15 cm below surface. A thicker A-horizon occurs west of this large anomaly and correlates with a small linear ridge that extends north-south through the western half of the site. A dipolar anomaly was recorded in the far northwestern corner.

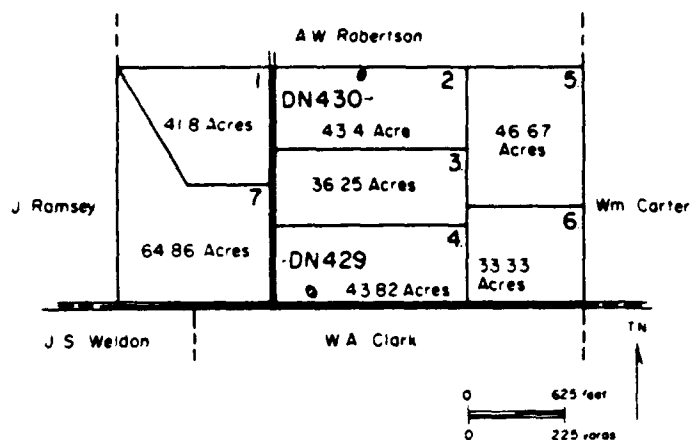


Figure 8.38 Location of 41DN429 on Tract 4 and 41DN430 on Tract 2 of the W.B. Weldon survey A-1351.

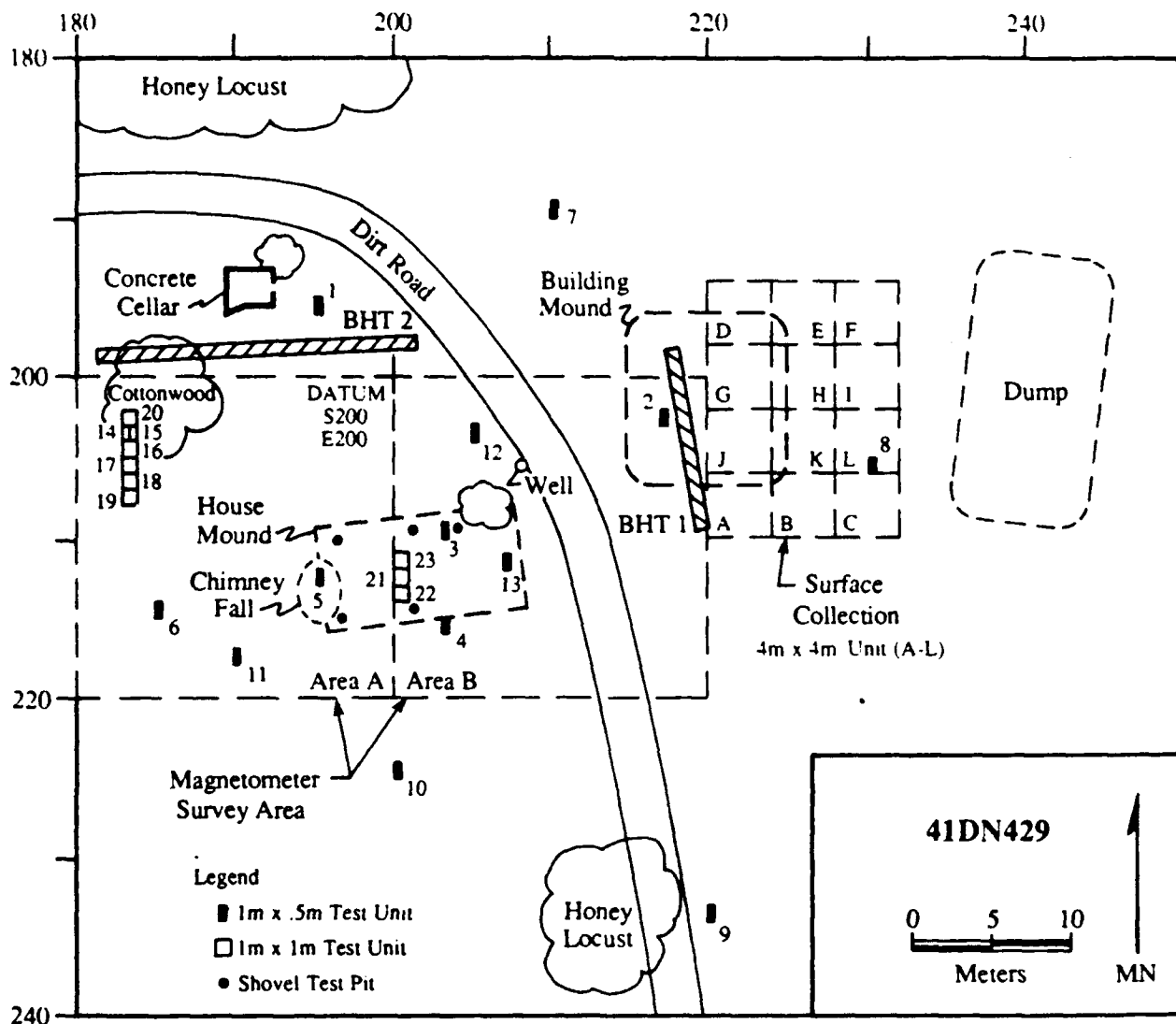


Figure 8.37 Map of site 41DN429.

A large dipolar anomaly occurs off the northeast corner of the house mound, and includes a capped well and windmill. This signature reflects the pattern identified for collapsed cellars at Ray Roberts Lake, and areas where the soil has been extensively disturbed. Several low negative anomalies and several high positive anomalies occurred within the fireplace and heavy chimney fall distribution, both on the western portion of the house mound and directly off the southwest corner. A high negative anomaly was also recorded southeast of the house mound. It is unknown if it reflects an archaeological feature. Additional investigation of these anomalies is recommended.

Testing Method: In addition to the magnetometer survey, fourteen 1x.5-m units, nine 1x1-m test units, and two backhoe trenches were excavated. The 1x.5-m units were judgmentally placed to maximize site coverage and test specific anomalies, with the exception of Units 3, 4, 5 and 13.

These four units were located within the house area to identify wall lines. Backhoe Trench 1 was excavated through a possible structure mound, while Trench 2 was placed north of the magnetometer block to recover information about the stratigraphy and cultural deposits outside the surveyed area

(Figure 8.40). The nine 1x1-m units were excavated as two hand-dug trenches. One was placed within the house mound to provide additional information about the former structure, including data on its building history. The other six 1x1-m units were hand-excavated as a trench through the dense sheet refuse deposit first identified in Unit 14. A systematic surface collection comprised of twelve contiguous 4x4-m units was conducted in the northeastern site area. This block overlapped the east-half second mound situated between the main site area and a modern dump.

Testing Results: Artifacts were recovered from all of the test units, and the results are shown in Table 8.31. The majority of the 1x.5-m units contained primarily sheet refuse. However, they vary considerably in artifact density. Units 1, 7, 8, 9, and 10 are located in the outer yard areas, and with the exception of Unit 8, they contained low density sheet refuse.

Few architectural remains or recent trash were recovered from these units. The only exception was Unit 8, which was located on the eastern extent of the surface collection block,

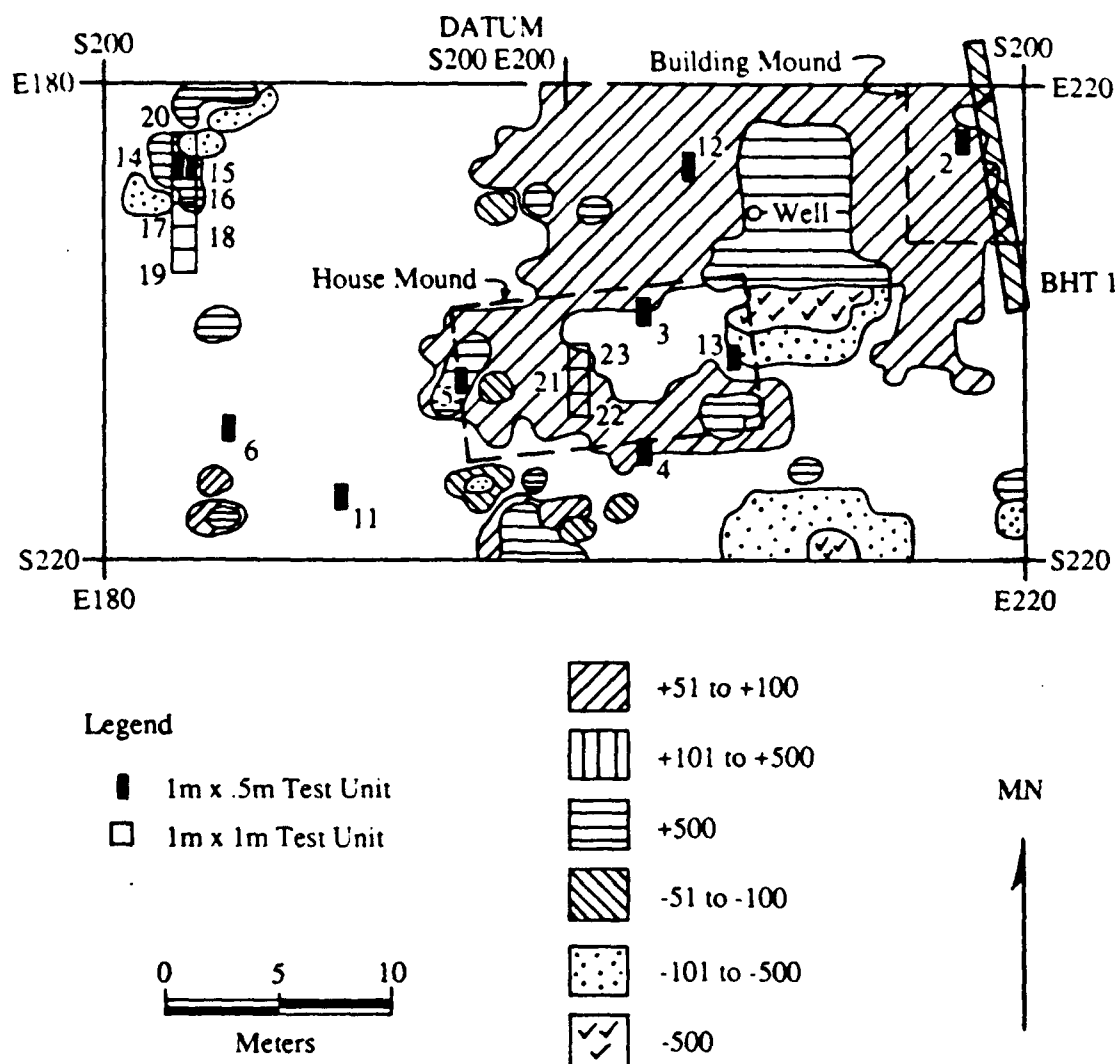


Figure 8.39 Map of magnetometer survey results, 41DN429.

Table 8.30

Land Tract History for 41DN429

William B. Weldon survey A-1351

Date	Grantor	Grantee	Price	Land Description	Ref.
1850	State of Texas	W. B. Weldon		320 ac survey	E/20
1855	J. H. Wilcox (surveyor) & wife Susan E.	G. W. McCurley	\$450.	320/entire survey	L/403
1862	Partitioning of land among heirs of G. W. McCurley	M. A. Perry (nee McCurley)		53.33 ac; Tract 3 of original subdiv.; part of Tract 4 in new div.	75/26
1871	S. Perry & wife Margaret (Illinois)	G. C. McCurley	\$200. indenture	640 ac; including 320 ac. W.B. Weldon survey & 320 ac. J. S. Weldon survey	M/339
1900	A. J. McCurley	R. L. & W. L. McCurley	\$260.	134 ac; central portion of survey containing current Tracts 2, 3 & 4	80/245
1933	W. L., R. L., & A. J. McCurley, E. & J. A. Mansfield (heirs)	A. H. Thurmond & wife Roxana	\$10.	43.82 ac; Tract 4 in new div. (quit claim deed)	245/131
1951	A. H. Thurmond & wife Roxana	USA	\$5230.	43.9 ac; Tract 4 in new division	368/550

Table 8.31

Artifacts From Test Units at 41DN429^{1,2}

Unit	SC	R	S	Po	B	T	L	U	W	CN	WN	HB	MB	BM	P	TH	TC	H	MW	MH	HS	T	A	E	P
1x.5-m Units:																									
1			2	4				1		1					1										
2		5	1	6					4	9		5				1	10			1					
3		1			8	1	1		19	8			1					1							
4	1				4	1	6		13	23		35			5	9	10				1				
5		2	1		77	13			70	12			8884	5			9	8	1						
6		2	3	2					1	3				2		1	73				1				
7					3				1						1		3	1							
8			3		115				2					5		26	18								
9					9				2					1	1	6									
10														1									1		
11		1	1		9	4	1		1	1	1	5	1	2		2	7						1		
12		1			5	1			1	4	3			1		1	1								
13		2			6						1	1													
14		57	10	3	153	19	8	14	49	33	75	1	8	40	36	5	274	15		2	1	1	1		
1x1-m Units:																									
15	1	49	15	5	185		6	15	38	20	75	20	7	21	22	23	158	14		13		3	2	4	
16	1	48	15	3	259	21	5	31	39	25	125	1	8	35	21	155	105	15	3	8	3	2	4	4	7
17	1	86	8	4	155	22	2	22	47	50	100		8	57	15	124	202	10	9	5		4	1	1	2
18		103	16		144	30	4	15	37	35	123	16	7	43	10	17	320	8	2	2	1				
19		28	13		100	22		4	22	9	22	8	5	18	3	25	267	2	3	3					
20		58	58	1	214	12	13	18	53	28	62	19	18	34	22	9	224	7	3	1	1	2	1	1	
21		14	14		41	7	25	1	16	4	7	24	1	4	9	4	24		1		1	1	1		
22		5	5	1	22	1	31		222	2	6		12	1	4	7	1					1			
23		11	11		22	2	8		63	4					5	7		1	1	1					1

¹ Only units and artifact categories containing remains are included in table; SC=semi-coarse earthenware; R=refined earthenware; S=stoneware; Po=porcelain; B=bottle glass; T=table glass; L=lamp glass; U=unid. glass; W=window glass; CN=cut nails; WN=wire nails; HB=handmade brick; MB=machine-made brick; BM=building material; P=personal items; TH=thin and heavy metal; TC=tin cans; H=household; MW=machine and wagon; MH=metal hardware; HS=horse and stable gear; T=tools; A=ammunition; E=electrical; P=prehistoric.

² Only datable ceramics and bottle glass were used in the calculation of mean beginning dates.

and just west of a large trash or burn pile. This unit contained 68.0% modern bottle glass. The archaeological deposit was shallow in these units, with the A-horizon generally extending less than 12 cm below surface.

The units placed within the house mound reflected mixed sheet refuse and architectural deposits. This variability is partially accounted for by the location of these units. Units 3 and 4 are situated along the wall line of the original house, just west of the later, eastern addition to the dwelling. Unit 13 appears to be in the yard area, east of the original house, and as such, contains a lower frequency of architectural remains. Unit 5 was placed within the original house, directly under the chimney fall. Primarily brick fragments were found in this unit. Ceramics accounted for only 2.5% of the artifacts from Unit 3, 1.0% from Unit 4, and 20.0% of Unit 13. Vessel glass (bottle, table, and burned or unidentifiable) represented 20.0% of Unit 3, 10.2% of Unit 4, and 60.0% of Unit 13.

Architectural items predominated in Units 3 and 4, accounting for 70.0% and 65.7% of the artifacts, respectively. They represented only 20% of the material from Unit 13. Thin unidentifiable metal and tin can fragments were most frequent in Unit 4, accounting for 17.6% of the artifacts. The A-horizon was shallow in the units located along the edge of the house mound or directly outside the mound. Units placed in the center of the mound contained a deeper A-horizon that extended up to 20 cm below surface.

The ceramics recovered from different units and deposits within the site area indicated mixed components. The dates for the refined earthenwares were based on paste/glaze data only. The major types present were ironstone vessels (1850-1900) and white whitewares, which have an extremely long popularity span (1890-1989).

The refined earthenwares from the 1x.5-m units (n=66 sherds) yielded a mean beginning date of 1882. The stonewares (n=13 sherds) produced a date of 1871. Similar dates were generated for Units 21 through 23, located under

the house. These sherds (n=25) dated 1876 and 1875 (n=1 sherd), respectively. The ceramics from Units 14 and 15, which were 1x.5-m units located in the dense trash deposit northwest of the dwelling dated 1879 for the refined earthenwares (n=96 sherds) and 1871 for the stonewares (n=13 sherds). The 1x1-m units, including Units 21-23 under the house produced a date of 1876 for the refined earthenwares (n=357 sherds) and 1875 for the stonewares (n=39 sherds). A different pattern was evident for the diagnostic bottle glass from these deposits.

The diagnostic bottle glass from the 1x.5-m units (n=43 sherds) yielded a mean beginning date of 1917. Twenty-one sherds dating post-1955 were excluded from the calculation because they post-dated site occupation. Sherds from Units 21-23 under the dwelling (n=9 sherds) dated 1910. The diagnostic bottle glass (n=59 sherds) in the 1x.5-m units in the trash deposit (Units 14 and 15) dated 1892, while the sherds (n=164) in the 1x1-m units (16-20) produced a date of 1901. Five sherds dating 1950-1989 and one dating 1949-1989 were excluded from these calculations.

The architectural remains from site 41DN429 reflected a mixture of the original occupation in the 1870s and later additions made to the dwelling during the twentieth century. Handmade brick and machine-cut nails predominated in the western portion of the house area. The brick from this area was not collected. The machine-cut nail assemblage in the sheet refuse deposit (Units 1-13) accounted for 90.6% of the nails recovered. They represented 34.4% of the nails in the trash deposit and 62.9% of the nails under the dwelling. The cellar dated to near the end of occupation, and had a 1940s date inscribed in it.

An overview of the assemblage recovered from the systematic surface collection is presented in Table 8.32. These data reflect the material recovered from the sheet refuse units.

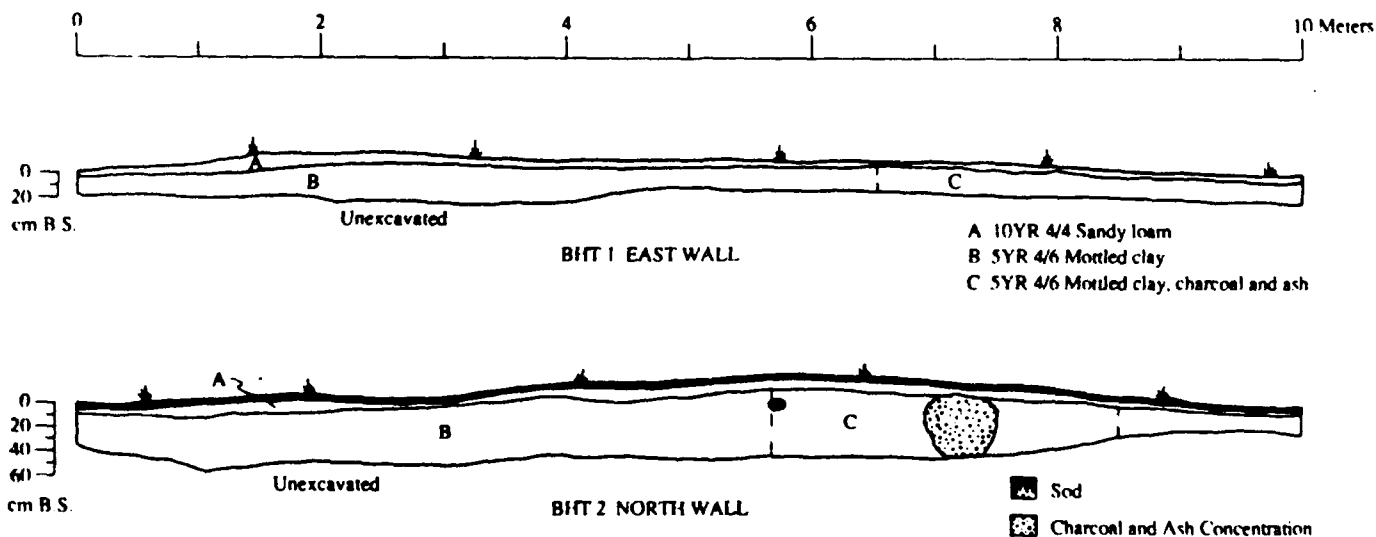


Figure 8.40 Profiles of BHTs 1 and 2 at 41DN429.

Table 8.32
Surface Collection from 41DN429^{1,2}

Unit	C	VG	AR	P	Th	WM	T	E	H
A	3	9			5	1			1
B	4	22	13		26	15	1		
C	4	33	1		5	4	1		
D	8	22	4		2				
E	8	38	7	1	13	6	1		5
F	6	21	1		4				
G	6	38	7	1	7	2		1	1
H	21	42	5	1	9	2	1	1	
I	17	31	7	1	26	2			
J	19	59	6	2	17	4			2
K	11	32	16		14	2		1	1
L	8	8	4		3	3			

¹ Only units and artifact categories containing remains are included in table; C=ceramics; VG=vessel glass; AR=architecture; P=personal items; Th=thin and heavy metal; WM=wagon and machine; T=tools; E=electrical; H=household items.

² Only datable ceramics and bottle glass were used in the calculation of mean beginning dates.

Faunal Remains: A total of 69 bones were recorded for 41DN429. Of these, 17% had been burned, and 36% were identified (Table 8.33).

Table 8.33
Identified Vertebrates from 41DN429

Taxa	Provenience	Count ¹
Large bird	U.9, Lv.1	1
Carp (<i>Cyprinus carpio</i>)	U.16, Lv.2	1
Chicken (<i>Gallus gallus</i>)	U.21, Lv.2	1
	U.23, Lv.1	1
Fox squirrel (<i>Sciurus niger</i>)	U.14, Lv.3	1B
	U.17, Lv.3	1
Pig (<i>Sus scrofa</i>)	U.17, Lv.2	1
	(cut) U.18, Lv.2	1
	(cut) U.18, Lv.3	1
	U.20, Lv.4	1B
Large mammal (cut) Surface ¹	U.14, Lv.3	2B
	(cut) U.15, Lv.3	2
	(cut) U.18, Lv.3	2B
	U.18, Lv.4	1
	(cut) U.19, Lv.3	2B
	(2 cut) U.20, Lv.2	3
	(cut) U.20, Lv.3	2

¹ B=burned bone.

There is no indication that any of the domestic animals identified in this assemblage were raised or butchered on site.

No non-meaty or waste elements were identified. Saw and cleaver marks were prevalent on the recovered large mammal and pig elements. Several of these are also burned (marked "B" in Table 8.33). All of the large mammal and pig remains were recovered from the trash disposal area. It is probable that this meat was purchased or at least butchered off-site. The chicken bones were recovered from test pits placed under the structure.

The nondomesticates in the sample were recovered in the trash area, suggesting that carp and squirrel were disposed of with other food refuse. Carp is an introduced fish, having been dumped into rivers from railcars during the 1880s by federal fish and game commissioners in hopes of creating a commercial freshwater fishery (Hubbs, personal communication).

Archaeological Summary: The features and artifact assemblage reflects a late nineteenth century to 1940s farmstead. Several features dating to the early occupation were found, including the original dwelling area. The house mound and piers are located in the southern site area (see Figure 8.37). The sixth pier, in the southeastern corner, has been removed. Sheet refuse was recovered from the units excavated in the house mound, on the edge of this structure, and to the east (Units 3, 4, and 13). Unit 13 was located under an east addition to the dwelling. The well, northeast of the house, is capped.

The second mound, northeast of the dwelling, was surface collected and contained mixed sheet refuse deposits. An outbuilding may have been located here. The dense trash deposit contains a mixed assemblage composed of sheet refuse spanning site occupation and trash from near the end of occupation.

Recommendations: This site was occupied between the 1870s and 1940s. More intensive excavation is recommended to recover additional information on site layout, complexity, depositional history, and spatial patterning necessary for making intra- and intersite comparisons with other farmsteads in the project area, and with sites in the Ray Roberts, Joe Pool Lake, and Richland-Chambers reservoirs. Site 41DN429 represents one of only several well-preserved farmsteads in the Lewisville project area, and represents an important site for addressing major research questions.

41DN430

Map Quad	Lewisville East 7.5', #3396-222
Elevation above MSL	525-531'
Vegetation	Locust, Grasses
Cultural Affiliation	Historic (ca. 1890s-1950s)
Recommendations	No further work

Description: The site is located on a southeast-trending peninsula that extends from the old Lake Dallas Dam north of Westlake Park (see Figure 8.1). It is situated above the southern margin of the Elm Fork of the Trinity River floodplain. The present site area was estimated at 50 m east-west x 40 m north-south based on surface features and artifacts (Figure 8.41). The only feature identified during survey is a scatter of machine-made bricks located in the southwestern site area. A two-track dirt road extends along the northern site limits.

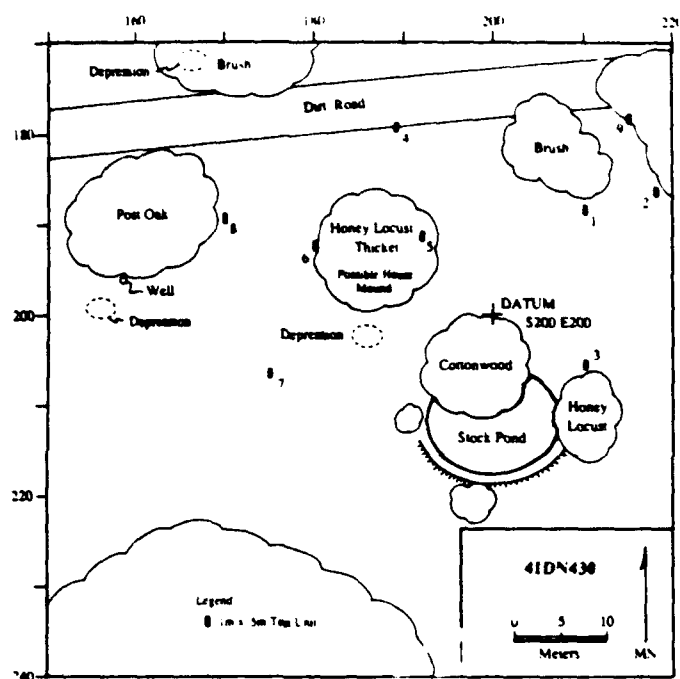


Figure 8.41 Map of site 41DN430.

Several additional features were visible when the site was revisited in January, 1988, including a filled well west of the brick scatter, and a stockpond southeast of the brick, and a small house mound associated with the brick scatter.

The surface collection recovered during survey was extremely limited, including two ceramics (one dating 1880-

1930, and one dating 1920-1989). Buried artifacts included one diagnostic bottle glass fragment (1940-1989), one manganese non-diagnostic bottle glass fragment (1880-1920), and one porcelain doll part.

Previous Investigations: The site was recorded during survey. Six shovel test pits were dug, and a sample of diagnostic surface artifacts was collected. Five additional shovel test pits were dug when the site was revisited in January, 1988. Shovel Test Pits 1, 2, and 6 contained artifacts. The others were sterile.

Archival Investigations: Site 41DN430 is located on the William B. Weldon survey A-1351 (see Figures 8.30 and 8.38). An overview of the chain of title is presented in Table 8.34 and indicates that the 320-acre survey was granted to Weldon in 1850.

The land was granted to G. W. McCurley in 1855, and following his death, the land was partitioned among his many heirs in 1862. The property remained in the possession of the McCurley family until 1945. The site is located on Tract 2. No evidence was found that the site was occupied during the nineteenth century. The site is shown on the 1918, 1925, 1936 and 1946 maps.

Testing Method: Nine 1x.5-m units were judgmentally placed to maximize site coverage.

Testing Results: The artifact assemblage recovered during testing is presented in Table 8.35. These data indicate that Units 2, 8 and 9 contain low density sheet refuse deposits. These units are located near the periphery of the site. The site was plowed, and the other units contain mixed sheet refuse and modern material (see Figures 8.5 and 8.7).

Table 8.34

Land Tract History for 41DN430

William B. Weldon survey A-1351

Date	Grantor	Grantee	Price	Land Description	Ref.
1850	State of Texas	W. B. Weldon		320 ac survey	E/20
1855	J. H. Wilcox (surveyor) & wife Susan E.	G. W. McCurley	\$450.	320/entire survey	L/403
1862	Partitioning of land among heirs of G. W. McCurley	M. A. Perry (nee McCurley)		53.33 ac; Tract 3 of original subdiv./ part of Tract 2 in new division	75/26
1871	S. Perry & wife Margaret A.	G. C. McCurley	\$200. indenture	640 ac; 320 ac of W. B. Weldon & 320 ac of J. S. Weldon surveys	M/339
1900	A. J. McCurley	R. L. & W. L. McCurley	\$260.	134 ac; central part of W. B. Weldon survey; includes Tracts 2, 3, & 4 in new division	80/245
1933	Heirs of G. C. McCurley (W. L., & R. L. McCurley, E. & J. A. Mansfield, A. H. & R. Mansfield)	A. J. McCurley	\$10.	45.4 ac; Tract 2 in new division & 6.5 ac in A. W. Robertson survey (partition of estate)	303/381
1945	A. J. McCurley & wife Maud	E. V. Pockrus & wife Margie	\$4000.	45.4 ac; Tract 2 in new division & 6.5 ac in A. W. Robertson survey	317/72
1951	E. V. Pockrus & wife Margie	USA	\$13590.	45.4 ac; same as above	376/146

Table 8.35

Artifacts From Test Units at 41DN430^{1,2}

Unit	R	S	Po	B	T	L	U	W	WN	MB	BM	P	TH	TC	H	MW	MH	A
1	10			94	4			9	34	4	6	13	7	14	1			
2				5								2						
3	18	1		10			1	18			5	1	28			1		
4		1							1				10					
5			1	29		1	5	3	29	1								
6	1	1		64	2			6	26	18	50	1	2	4	3		4	1
7		10		23	2	1		5	18		26	1	27				1	
8				1														
9		1		3				1										

¹ Only units and artifact categories containing remains are included in table; R=refined earthenware; S=stoneware; Po=porcelain; B=bottle glass; T=table glass; L=lamp glass; U=unid. glass; W=window glass; WN=wire nails; MB=machine-made brick; BM=building material; P=personal items; TH=thin and heavy metal; TC=tin cans; H=household; MW=machine and wagon; MH=metal hardware; A=ammunition.

² Only datable ceramics and bottle glass were used in the calculation of mean beginning dates.

The refined earthenwares (n=29 sherds) yielded a mean beginning date of 1876, and the stonewares (n=12 sherds) dated 1896. The diagnostic bottle glass (n=42 sherds) yielded a date of 1905, excluding five sherds that dated post-1940. Inclusion of these sherds produced a date of 1909. The architectural remains all dated to the twentieth century, including the brick-lined well and the house remains.

Archaeological Summary: The site was occupied from the turn of the century to the 1950s. It has been disturbed by recent activities, including plowing. No significant archaeological deposits were found.

Recommendations: This site does not meet the criteria for nomination to the National Register of Historic Places. No further work is recommended.

CHAPTER 9

SITE OVERVIEWS, ASSESSMENTS AND RECOMMENDATIONS FOR HISTORIC SITES

by
Susan A. Lebo

Site Overviews

An overview of the work conducted at the sixteen historic sites test excavated is presented in this chapter followed by site assessments and recommendations for additional work. Documentation of the Little Elm Cemetery, 41DN395, is presented in Appendix E.

Testing efforts conducted at each site are presented in Table 9.1. The work effort was variable depending on site integrity, size, age, initial assessments of research potential, and previous investigations. Disturbed or eroded sites received the least testing effort, while emphasis was placed on early sites (41DN392 and 41DN410), or sites with features and well-defined subsurface deposits.

Table 9.1
Summary of Historic Testing¹

Site	TP	HDT	BHT	Mag.	SC	Recommend
43/44	10		2			No
392	12		2	Y		No
401	17		5		Y	Yes
402	7					No
403	5					No
404	8	2	2			Yes
407	14					No
409	6					No
410	34	1	2	Y	Y	No
411	5					No
423	8			3		No
424	9			2		No
428	10		2	Y		No
429	14	1	2	Y	Y	Yes
430	9					No

¹ TP=Test Pit; HDT=Hand-dug Trench; BHT=Backhoe Trench; Mag.=Magnetometer Survey; SC=Surface Collection; Recommend=Recommend for National Register; Y=Yes.

Hand-excavated trenches were dug in dense sheet refuse middens or buried trash features. Backhoe trenches were excavated to reveal subsurface cultural and geological stratigraphy and to recover information on subsurface integrity. Magnetometer surveys were conducted at early sites with no surface features (41DN392 and 41DN410), and sites with preliminary assessments of high research potential (41DN428 and 41DN429). Surface collections were obtained at sites with in situ surface deposits (41DN401 and 41DN429), or sites with extremely low artifact densities and evidence of

surface material, 41DN410. Archival research, including examination of historic maps, was conducted to assess further site potential.

Site Assessments

Assessments are based on the research potential of each site, which is based on National Register criteria and the apparent capacity of the site to yield significant new information. National Register Criterion D is most applicable to these historic sites. Three aspects of Criterion D are addressed: (1) eligibility based on site integrity, content, and context, (2) ability to yield significant new information, and (3) ability to address major research questions.

Assessments were based on the assumption that research potential is a combination of these three aspects, and consideration must be given to the recorded resource base for the project area or region. A discussion of the National Register criteria, research design, and preliminary assessments for historic sites in the project area is presented in Chapter 6. Assessments for the historic sites test excavated are presented in Table 9.2.

Three sites, 41DN401, 41DN404, and 41DN429, were judged as exhibiting high research potential and eligible for nomination to the NRHP based on archaeological integrity, discrete archaeological components, preserved sheet-refuse deposits, and features. The remaining sites were judged ineligible for the NRHP because they exhibited one or more of the following attributes: poor integrity, lack of features, lack of discrete components, or lack of well-preserved deposits.

Recommendations

Further investigations are needed at sites exhibiting high research potential which cannot be avoided or preserved in place. The three sites, 41DN401, 41DN404, and 41DN429, recommended for mitigation have archaeological integrity and exhibit potential for addressing the major research questions presented in Chapter 6. These sites are located within the impact area. They contain intact surface and subsurface features, well preserved artifact deposits, minimal or no evidence of disturbance, and can be used for making intrasite, intersite, and inter-reservoir comparisons with farmsteads at Lake Ray Roberts, Joe Pool Lake, and the Richland-Chambers Creek reservoirs, thereby broadening our understanding of late nineteenth and early twentieth century occupations in this region.

Sites of low research potential are determined not to warrant further consideration. No precautions or avoidance measures are presented for this group of sites.

Table 9.2

Assessments of Integrity, Content, and Context for Historic Test Excavated Sites

Site	Date Range	Integrity	Content	Context
DN43/44	ca. 1870-1940	poor, eroded	surface scatters, trash dump, sandstone foundation, dirt roads	dispersed, mixed historic and prehistoric
DN392	ca. 1860s-1920	poor, eroded	surface scatter, dirt road	disturbed, mixed, prehistoric and historic
DN401	ca. 1870s-1940s	good	house mound, piers, chimney, cellar, well, fence lines, windmill foundation	well defined sheet-refuse deposit and dwelling area
DN402	ca. 1880-1940	none	concrete well pads, pilings, trash dump, fence line	destroyed by bulldozers, house area and sheet-refuse deposit are truncated
DN403	ca. 1880s-1940s	poor, recent disturbance	windmill foundation, concrete and brick scatter, road, fence lines	low density sheet-refuse deposit, no well defined dwelling area
DN404	ca. 1870-1930	good	sandstone and brick scatter, 2 buried trash features, possibly 2 house areas, road	well defined sheet refuse and dwelling areas
DN407	ca. 1870s-1940s	none	brick scatter, fence lines, trash dumps, hog shelter	disturbed by bulldozers, no house area found
DN409	ca. 1880-1940	poor, eroded	brick scatter, road, well, modern debris	poor, limited sheet-refuse deposit, dwelling area not found
DN410	ca. 1870-1910	poor, eroded	surface scatter	poor, no well-defined sheet refuse deposit or dwelling area
DN411	ca. 1880-1849	poor	campfire ring, brick scatters, household debris, modern debris, 2 historic occupations, concrete well, stock pond, house mound, fence lines, brick scatters, piers	mixed, disturbed, prehistoric and historic, only more recent historic component was found
DN423	ca. 1880-1940	poor		poor, mixed, older component is masked and has been partially removed by the more recent component
DN424	ca. 1880-1940s	poor	depressions, concrete slab, fence line, cellar, stock pond	disturbed, mixed components
DN428	ca. 1870-1940	poor	road, recent dump, depression, artifact scatters	disturbed, mixed components, truncated A-horizon
DN429	ca. 1870s-1940s	good	house mound, well, cellar, road, 2nd mound, trash dump, chimney fall	well defined sheet-refuse deposit and dwelling area
DN430	ca. 1890s-1950s	poor	well, depressions, brick scatter, stock pond, house mound	disturbed, mixed with recent debris

The proposed mitigation for the National Register eligible sites, 41DN401, 41DN428, and 41DN429, is presented below. Attention is directed to sheet refuse deposits, features, and structural remains. Field recovery will include systematic surface collecting of intact surface deposits, hand excavation and mechanized excavation of trenches to recover additional geologic and cultural stratigraphic data, mechanized scraping to expose features visible in the B-horizon, hand excavation of shovel test pits, and excavation of 1x.5-m units, 1x1m-units, or larger units in sheet refuse and feature deposits.

Excavation of 1x.5-m units will include a combination of judgementally placed units and systematically placed units. Judgemental units will be excavated to rapidly recover a sample of the sheet-refuse deposit and surface features. Following this, the sheet refuse strategy developed for the Richland-Chambers Creek Project, which utilizes small excavation units dug on a systematic grid (Moir 1982, 1983a, 1983b; Jurney and Moir 1987; Moir and Jurney 1987), will be used to recover a larger sample of the deposit. Fine-screen samples will be collected where appropriate within features.

41DN401

The surface and subsurface assemblages indicate a multicomponent farmstead with an earlier component, ca. 1880 to 1920, and a more recent, ca. 1930 to 1940. The dwelling area exhibits integrity and potential for yielding information on house orientation, size, and layout. The sheet-refuse deposit is moderate to dense with good integrity, and several features have been identified.

Attention will be directed to the house area and the immediate yards. Additional 1x.5-m units will be excavated on a systematic grid to recover sheet refuse data. Other 1x.5-m units will be judgementally placed to define wall lines and recover a representative sample of architectural remains associated with the original dwelling and later additions. Shovel-scraped units, 10 to 20 cm deep, will be excavated in the backyard between the dwelling and the artifact concentration present in the hand-excavated trench, ca. 12 m behind the house, to recover spatial data and a representative sample of the domestic deposit associated with the dwelling.

41DN404

Several intact features remain, including a brick scatter associated with the former dwelling in the southeastern site area and a kitchen-related deposit in the northwest. The surface and subsurface assemblages indicate a ca. 1870 to early twentieth century farmstead. No evidence of multiple components was found. This site is the best example of a short-term domestic site with good integrity in the project area.

Emphasis will be directed to three areas of the site: (1) the northwestern area, (2) the southeastern, and (3) the area between these two components. Work in the northwestern area will include excavation of additional judgmentally placed 1x.5-m units and a shovel-scraped block. The test units will be placed to maximize site coverage in this area. The block will be excavated to recover spatial information that can be compared with data from the southeastern area. The deposit in the northwestern area is extremely shallow, and these units will not exceed 10 cm in depth. Machine scraping and backhoe trenching will be used to examine yard areas, to look for subsurface features, and to recover geological data.

Feature 1, partially exposed during testing, will be excavated further. The hand-excavated trench in this feature will be enlarged, and the feature will be cross-sectioned. Flotation and/or fine-screen samples will be recovered from each level.

Work in the southeastern area will be directed to additional sheet refuse and feature investigations. A small number of 1x.5-m units will be excavated on a systematic grid to delimit this component and recover a representative sample of the sheet-refuse deposit. Following this, a block of 2x2-m or 4x4-m units will be shovel scraped to obtain information on the former dwelling. The kitchen-related feature, northwest of the dwelling, will be hand excavated, and fine-screen samples will be recovered.

Further investigation of the area between the northwest and southeast site areas will be accomplished using heavy machinery. Backhoe trenching and machine scraping will be used to look for buried deposits and features and to recover geological data. Scraped areas 1 and 2 will be re-exposed and enlarged to look for features. A small number of judgmentally placed 1x.5-m units will be excavated to examine sheet refuse deposits.

41DN429

Members of the McCurley family occupied this site between the 1870s and 1940s. Extant features include a house mound, piers, chimney fall, a capped well, cellar, a second structure mound, and a dense trash deposit northwest of the dwelling. The sheet-refuse deposit and dwelling area exhibited good integrity. The northeastern site area has been impacted by construction activity, trash burning, and a two-track road.

Mitigative efforts will be directed to the dwelling area and the sheet-refuse deposit. Areas north of the cellar and east of the road will not be examined further. Additional 1x.5-m units will be excavated on a systematic grid to further delimit the sheet-refuse deposit and to examine the dwelling remains. A shovel-scraped block will be excavated to examine the sheet-refuse deposit in the oldest portion of the site to identify possible additional subsurface features, and to investigate

further the dwelling remains. Backhoe trenching and machine scraping will be used to look for subsurface features, to recover geological data, and to examine site limits.

Summary

Site assessments based on survey and testing indicate that only 41DN401, 41DN404, and 41DN429 exhibit potential for yielding significant data for making intra- and inter-site comparisons, for addressing major research questions, and they are recommended eligible for nomination to the National Register. The remaining historic sites are not National Register eligible and additional work these sites is not warranted (see Lebo and Brown 1990; Chapter 8 this volume; and Table 9.2).

The mitigation strategy for each site, outlined above, is directed to maximizing the recovery of information on site content and context. In addition, mitigation efforts have been designed to be compatible with the testing and mitigation strategies developed for the Lake Ray Roberts project as well as Joe Pool Lake and Richland-Chambers Creek reservoirs. This approach has been selected to maximize the comparability between the data bases from each of these cultural resources projects, facilitating regional or inter-reservoir comparisons.

Unlike the other reservoirs mentioned above, Lewisville Lake is located in a metropolitan area and has been severely impacted by residential and industrial development. In addition, this reservoir was constructed before Federal and State laws were established requiring the identification and assessment of adverse impacts to cultural resources prior to construction efforts. In addition, because rural historic archaeological resources were not routinely addressed during this period, little information was recovered for the historic sites located within the reservoir below the 522-ft contour. As a result, much of our understanding of the historic archaeological record in the Lewisville Lake area will be based on the mitigation work at 41DN401, 41DN404, and 41DN429, and the comparison of these sites with sites in surrounding reservoirs.

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APPENDICES

APPENDIX A

PREHISTORIC ARTIFACT CLASSIFICATION AND TYPOLOGY

by
Kenneth Lynn Brown

Introduction

The following are descriptions of classes of artifacts recovered during field investigations at Lake Lewisville. The classes of artifacts are based on morphological and functional characteristics. Artifacts were initially sorted into eight categories: 1) debitage; 2) tools; 3) projectile points; 4) ceramics; 5) fire cracked rock (FCR); 6) mussel shell; 7) unidentifiable bone (UNID); and 8) identifiable bone (ID). Each of these categories was treated separately with a special computer coding form devised for each. The following section describes the variables recorded for each of the above categories on their respective computer coding forms.

The method for recording provenience information was the same for all of the above artifact categories with the exception of faunal remains. For all of the categories except faunal remains the first 20 columns of the computer coding forms were devoted to provenience information. This information was recorded in the following manner.

Column	Information
1	site type (not used)
2	county (1=Denton, 2=Cooke, 3=Grayson)
3-5	site number (sequential within the county)
6	block number (sequential within the site)
7-8	unit number (stratigraphic unit within the block)
9-10	excavation level number (sequential within the block)
11-13	base of level below site datum in cm
14-15	East axis coordinate from site datum in m
16-17	South axis coordinate from site datum in m
18	quad number (1=NW corner of 1x1-m, 2=NE corner of 1x1-m, 3=SE corner of 1x1-m, and 4=SW corner of 1x1-m)
19	feature number (sequential within the block or level)
20	recovery (not used)

Debitage

Debitage consists of flakes and chunks/shatter. A flake is any piece of chert, flint, or other raw material that has been removed from a larger mass by the application of force and that has at least one of several distinguishing characteristics: (1) a striking platform remnant; (2) a point of percussion or force; (3) a erralieu; (4) a bulb of force; (5) compression rings; (6) a termination; (7) platform preparation; (8) previous flake scars; or (9) arris. Chunks/shatter are any piece of chert, flint, or raw material that is cubical or irregularly shaped and lacks any well-defined pattern of negative or positive bulbs of force, striking platforms, or systematic alignment of

cleavage scars on the various faces (Binford and Quimby 1963).

Debitage was initially sorted into two major groups based on type of raw material, chert and quartzite. These groups were further sorted into types of debitage based upon size and cortex. Large flakes were sorted from small flakes on the basis of length along the axis of force. Flakes 1.5 cm long or greater were considered large flakes while flakes less than 1.5 cm were considered small.

Column	Information
23-25	large interior chert flakes
26-28	small interior chert flakes
29-31	large chert flakes with cortex
32-34	small chert flakes with cortex
35-36	chunks of chert
39-41	large interior quartzite flakes
42-44	small interior quartzite flakes
45-47	large quartzite flakes with cortex
48-50	small quartzite flakes with cortex
51-52	chunks of quartzite
55-59	lot number (assigned in the field)

Lithic Tools

Classification of tool types was based on both functional and morphological attributes. Length and thickness measurements were made with a calipers. A goniometer was used for measuring the use-edge angles to the nearest 5 degrees, and a balance beam scale was used to record weight.

A large number of variables were recorded for stone tools. Variables include raw material type, technological characteristics such as platform type, percent of cortex present, blank type, tool type (functional type), tool part, weight, edge angle, and evidence of heat treating.

Column	Information
21	artifact class
	1=debitage
	2=core
	3=blank/dart-spear point preform
	4=blank/arrow point preform
	5=bifacial tool
	6=indeterminate biface fragment
	7=unifacial tool
	8=ground or pecked stone
	9=varia
22-23	raw material
	01=indeterminate

	02=Ogallala Quartzite (fine grained)		scraper)
	03=other quartzite (coarse grained)		16=uniface (scraper) resharpening flake
	04=petrified wood		17=biface resharpening/thinning flake
	05=novaculite (milky/opaque)		18=unilateral retouched piece
	06=jasper		19=bilateral retouched piece
	07=translucent chert		20=distal retouched piece
	08=chert A, gray with tan cortex		21=distal-lateral retouched piece
	09=chert B, black siliceous shale		22=alternate retouched piece
	10=chert C, yellow		23=other retouch
	11=sandstone		24=unilaterally utilized flake
	12=other		25=denticulate
	13=vein quartz (clear/white)		26=notch/spokeshave
	14=ferruginous sandstone		27=simple burin
	15=siltstone		28=burin on biface
	16=black/gray/dark brown Woodford chert		29=multiple tools (composite tools)
	17=quartzitic sandstone		30=varia
	18=Big Fork chert, green variety		31=bilaterally utilized flake
	19=red chert (non-heated)		32=distally utilized flake
	20=red ochre		33=distally-laterally utilized flake
	21=black chert	42-43	tool types, ground stone
	22=translucent gray-blue, Johns Valley chert		01=simple unifacial mano
	23=tan chert		02=simple bifacial mano
	24=white fossiliferous chert		03=mano and pitted stone
	25=white opaque chert		04=simple metate
	26=obsidian		05=prepared metate
24	platform		06=hammerstone
	0=missing		07=pitted stone
	1=unfacetted		08=celt
	2=facetted		09=grooved abrader
	3=cortex present	44-45	10=other
	4=crushed		core types
25	dorsal cortex		01=tested cobble
	0=indeterminate		02=core-blank-preform
	1=none		03=single platform flake
	2=1-25%		04=opposed platform flake (bipolar)
	3=26-50%		05=multiple platform flake
	4=51-75%		06=discoidal
	5=76-100%		07=single platform blade
27-29	length in mm		08=opposed platform blade
30-32	width in mm		09=gobular
33-35	thickness to nearest 0.1 mm		10=core fragment
36-38	tool number (sequential by excavation unit and level)	46-47	11=other
			blank-preform types
39	blank form		01=bifacial point preform
	0=indeterminate		02=unifacial point preform
	1=stream cobble		03=indeterminate preform
	2=nodule	48	04=other
	3=tabular	49	flake decortication (not used)
	4=reworked biface		tool part
	5=flake		1=complete
40-41	chipped stone tool types		2=proximal fragment
	01=dart/spear point		3=medial fragment
	02=arrowpoint		4=distal fragment
	03=gouge	50	5=indeterminate
	04=bifacial drill	51-56	flake type (not used)
	05=bifacial perforator	57-59	weight to nearest 0.1 g
	06=unifacial perforator	60	working edge angle
	07=graver		heat Treatment
	08=stemmed knife		1=no
	09=other knife (absence of discernible hafting)	61-65	2=yes
	10=adze		lot number (assigned in the field)
	11=simple end scraper		
	12=end scraper with retouch		
	13=thumbnail scraper		
	14=simple side scraper		
	15=end and side scraper (disto-lateral		

Projectile Points

Projectile point data were coded on two pages. The first page was the same as for other stone tools (see above), while the second page contained additional attributes specific to

projectile points. Calipers were used for recording all measurements on the second page. A 10X hand lens was used, when necessary, to examine the extent of basal grinding.

Column	Information
01-05	lot number (bag number assigned in the field)
07-08	tool type 01=dart/spear point 02=arrowpoint
09-11	tool number (sequential number by excavation unit and level)
12-13	projectile point group (number assigned on the basis of point type)
16-17	blade length in mm
18-19	blade width in mm
20-21	haft length in mm
22-23	haft width in mm
24-25	neck width in mm
26-27	depth of basal concavity in mm
29-30	basal grinding 00=absent 01=present 02=indeterminate
31-32	lateral grinding 00=absent 01=present 02=indeterminate
33-34	resharpening 00=absent 01=present 02=indeterminate
35-36	serrated 00=absent 01=present 02=indeterminate
37-38	beveling 00=absent 01=present 02=indeterminate
39-40	tip configuration 00=not broken 01=impact fracture 02=burinated fracture 03=tip/blade broken
41-42	point breakage pattern (see Figure A.3)
44-45	extent of lateral grinding in mm
46-47	point shape 00=indeterminate 01=triangular 02=lanceolate 03=side-notched 04=corner-notched 05=laurel leaf 06=other
48-49	blade shape 00=indeterminate 01=straight-symmetrical 02=convex-symmetrical 03=concave-symmetrical 04=straight-convex 05=straight-concave 06=convex-concave 07=other
50-51	stem shape 00=indeterminate 01=straight

52-53	02=contracting 03=expanding 04=other base shape 00=indeterminate 01=straight 02=concave 03=convex 04=single notched 05=double notched 06=other
54-55	flake pattern 00=indeterminate 01=random 02=collateral 03=horizontal transverse 04=oblique transverse 05=other
56-58	site number (sequential within each county)

Ceramics

Determination of tempering materials was based on examination of a fresh break on the edge of the sherd with the aid of a Bausch and Lomb binocular microscope at 20X-50X. A calipers was used to determine sherd size and thickness.

Technological, stylistic, and functional variables were recorded for ceramics. Technological variables include temper type and thickness. Stylistic variables include interior and exterior surface treatment, base shape, and type of base. Functional variables include temper type, thickness, base shape, and type of base. Two pages of coding information was provided to record the attributes.

Column	Information
21-22	number of sherds with no temper (01)
23-24	number of sherds with grog/grit/bone temper (02)
25-26	number of sherds with grog temper (03)
27-28	number of sherds with grit temper (04)
29-30	number of sherds with bone temper (05)
31-32	number of sherds with shell temper (06)
33-34	number of sherds with sand temper (07)
35-36	number of sherds with limestone temper (08)
37-38	number of sherds with indeterminate temper (09)
39-40	number of sherds with shell/grit temper (10)
41-42	number of sherds with sand/shell temper (11)
43-44	number of sherds with sherd/shell/bone temper (12)
45-46	number of sherds with sherd/grit/bone temper (13)
47-48	number of sherds with shell/bone temper (14)
49-50	number of sherds with sand/shell/bone temper (15)
51-52	number of sherds with sand/bone temper (16)
53-54	number of sherds with sand/grog temper (17)
55-56	number of sherds with bone/grog temper (18)
61	base shape 1=disk 2=square 3=circular 4=indeterminate
62	type of base

	1=flat 2=round 3=other 4=indeterminate
63-66	lot number (assigned in the field)
Column	Information
1-5	lot number (assigned in the field)
7-8	sherd location on the vessel 01=(not used) 02=rim 03=body 04=body/base 05=base 06=appendage 07=rim appendage 08=indeterminate
10-11	temper type (see page 1 coding above, 01-18)
12-13	number of sherds less than 2.5 cm in size
14-15	number of sherds between 2.5 and 5.0 cm in size
16-17	number of sherds between 5.0 and 10.0 cm in size
18-19	number of sherds greater than 10.0 cm in size
20-22	average thickness (mean) in mm
23-25	thinnest sherd in mm
26-28	thickest sherd in mm
29-30	number of sherds with smoothed (floated) exteriors
31-32	number of sherds with scraped exteriors
33-34	number of sherds with burnished exteriors
35-36	number of sherds with polished exteriors
37-38	number of sherds with smoothed (floated) interiors
39-40	number of sherds with scraped interiors
41-42	number of sherds with burnished interiors
43-44	number of sherds with polished interiors
46-47	number of sherds with charred organics present on interior surface
48-49	number of sherds with charred organics present on exterior surface
50-51	number of sherds with charred organics present on both interior and exterior surfaces
52-53	number of sherds with indeterminate charred organics
55-56	number of sherds with fire clouds present on interior surface
57-58	number of sherds with fire clouds present on exterior surface
9-60	number of sherds with fire clouds present on both interior and exterior surface
61-62	number of sherds with indeterminate fire clouds
63-66	site number (sequential within each county)

Faunal Remains

Faunal remains were divided into unidentifiable and identifiable elements. The first key is for unidentifiable bone. Unidentifiable bone was sorted into burned and unburned pieces and then weighed. The second key is for identifiable bone.

Column	Information
1	site type (not used)
2	county (1=Denton, 2=Cooke, 3=Grayson)
3-5	site number (sequential within the county)
6	block number (sequential within the site)
7-9	unit number (stratigraphic unit within the block)
10-11	excavation level number (sequential within the block)
12-14	base of level below site datum in cm
15	quad number (1=NW corner of 1x1-m, 2=NE corner of 1x1-m, 3=SE corner of 1x1-m, and 4=SW corner of 1x1-m)
16-17	feature number (sequential within the block or level)
18-21	south axis coordinate from site datum in m
22-25	east axis coordinate from site datum in m
26	recovery
27-28	number of identifiable specimens
29-31	number of unidentifiable, unburned specimens
32-34	number of unidentifiable, burned specimens
35-40	weight of unidentifiable bone to nearest 0.1 gram
41-44	lot number (assigned in the field)

The following key was used for recording identifiable bone. The first 26 columns are the same as those above for unidentifiable bone.

Column	Information
27	class
28-30	taxon
	000=unidentifiable
	100= <u>Homo sapiens</u>
	101=Insectivora (insect)
	001=Indeterminate fish
	002=Fish (sp.) large
	003=Fish (sp.) small
	004= <u>Lepisosteus</u> sp. (gar)
	005= <u>Amia calva</u> (bowfin)
	006=Ictaluridae (catfishes)
	007= <u>Aplocheilichthys grunniens</u> (drum)
	008=Catostomidae (suckerfishes)
	010=Centrarchidae (bass/sunfishes)
	011=Centrarchidae (see notes)
	015= <u>Dorosoma</u> sp. (shad)
	017=Esocidae (pikes/pickerels)
	018= <u>Mugil cephalus</u> (striped mullet)
	020=Anura (toad/frog sp.)
	021=Frog (sp.)
	022= <u>Rana catesbeiana</u> (bullfrog)
	023=Anura (see notes)
	024=Bufonidae (toads)
	025=Caudata (salamander sp.)
	026=Caudata (see notes)
	027=Amphystomatidae (mole salamanders)
	030= <u>Chrysemys</u> sp. (slider turtle)
	031=Chelydridae (snapping turtles)
	032=Kinosternidae (musk/mud turtles)
	033= <u>Terrapene</u> sp. (box turtle)
	034= <u>Trionyx</u> sp. (softshell turtle)
	038=Testudines (see notes)
	380= <u>Kinosternon</u> sp. (mud turtle)

- 381=Sternotherus sp. (musk turtle)
 382=Graptomys sp. (map turtle)
 383=Chrysemys scripta (red-eared turtle)
 039=Indeterminate turtle
 040=Indeterminate snake
 401=Elaphe sp. (rat snakes)
 041=Colubridae (non-poisonous snakes)
 042=Viperidae (vipers)
 043=Nerodia sp. (water snake)
 045=Serpentes (see notes)
 046=Sceloporus olivaceus (Texas spiny lizard)
 047=Phrynosoma sp. (horned lizard)
 048=Indeterminate lizard
 049=Lacertilia (see notes)
 490=Cnemidophorus sp. (whiptail lizard)
 050=Anseriformes (ducks/geese)
 053=Colinus virginianus (bobwhite quail)
 054=Ardea herodias (great blue heron)
 544=Florida caerulea (little blue heron)
 545=Bubulcus ibis (cattle egret)
 546=Sternella sp. (meadowlark)
 547=Philohela minor (woodcock)
 548=Zenaidura macroura (mourning dove)
 549=Cathartidae (vultures)
 055=Tympanuchus sp. (prairie chicken)
 550=Buteo jamaicensis (red-tailed hawk)
 551=Richmondia cardinalis (cardinal)
 552=Sternella sp. (meadowlark; duplicate)
 553=Strigiformes (owls)
 554=Fulica americana (coot)
 555=Gallus gallus (domestic chicken)
 556=Raptor
 056=Meleagris gallopavo (wild turkey)
 057=Accipitridae (hawks)
 571=Accipiter sp. (small hawks)
 572=Buteo sp. (large hawks)
 059=Bird (sp.) large
 060=Bird (sp.) medium
 061=Bird (sp.) small
 064=Picidae (woodpecker)
 066=Passeriformes (perching birds)
 069=Aves (see notes)
 070=Didelphis virginianus (opossum)
 700=Indeterminate rodent
 071=SORICIDAE (shrews)
 710=Scalopus aquaticus (eastern mole)
 072=Chiroptera (bats)
 073=Dasypus novemcinctus (armadillo)
 074=Sylvilagus floridanus (eastern cottontail)
 075=Lagomorpha (swamp or jack rabbit)
 751=Sylvilagus aquaticus (swamp rabbit)
 752=Lepus californicus (black-tailed jack rabbit)
 076=Sciuridae (squirrels)
 761=Sciurus niger (fox squirrel)
 762=Sciurus carolinensis (gray squirrel)
 763=Spermophilus sp. (ground squirrel)
 764=Glaucomys volans (so. flying squirrel)
 765=Cynomys ludovicianus (black-tailed prairie dog)
 077=Geomys bursarius (plains pocket gopher)
- 777=Oryzomys palustris (rice rat)
 778=Reithrodontomys sp. (harvest mouse)
 779=Onychomys sp. (grasshopper mouse)
 078=Perognathus sp. (pocket mouse)
 079=Peromyscus sp. (deer mouse)
 799=Rodentia (see notes)
 080=Castor canadensis (beaver)
 800=Mammalia (see notes)
 081=Neotoma sp. (woodrat)
 811=Rattus rattus (black rat)
 082=Sigmodon hispidus (cotton rat)
 083=Microtus sp. (vole)
 084=Mammal (sp.) small
 085=Canidae (dogs)
 851=Carnivora (carnivoresA)
 885=Canis familiaris (domestic dog)
 856=Canis latrans (coyote)
 086=Procyon lotor (raccoon)
 087=Mephitis mephitis (striped skunk)
 870=Mustelidae (mustelids)
 877=Mustela vison (mink)
 088=Mammal (sp.) medium
 880=Vulpes sp. (fox)
 888=Urocyon cinereoargenteus (gray fox)
 089=Felidae (cats)
 090=Taxidea taxus (badger)
 900=Deer or pronghorn
 901=Deer sp.
 902=Cervus elaphus (wapiti)
 903=Bos taurus (domestic cattle)
 904=Cervidae (deer or wapiti)
 091=Ursus americanus (black bear)
 092=Sus scrofa (domestic or feral pig)
 093=Sheep or goat
 936=Ovis/Capra/Antilocapra
 094=Mammal (sp.) large
 095=Odocoileus virginianus (white-tailed deer)
 096=Antilocapra americana (pronghorn)
 097=Bos/Bison/Cervus
 098=Bison bison (American bison)
 099=Equus caballus (horse)
 999=Invertebrata (crayfish, etc.)
- side
 1=right
 2=left
 3=axial
 4=indeterminate element
 001=horn core/antler
 002=cranium
 222=dentary
 003=mandible
 004=tooth permanent maxillary
 005=tooth permanent mandibular
 006=tooth deciduous maxillary
 007=tooth deciduous mandibular
 008=tooth permanent (maxillary or mandibular)
 009=tooth deciduous (maxillary or mandibular)
 010=sternum
 011=hyoid
 012=petrous
 013=jugal

31

32-34

131=squamosal
 014=maxilla
 015=clavicle/cleithrum
 016=coracoid
 017=scapula
 018=furculum
 019=eggshell
 020=humerus
 021=ulna
 022=radius
 023=radius and ulna
 024=carpal
 241=lunate
 242=unciform
 243=trapezoid/magnum
 244=pisiform
 245=scaphoid
 246=cuneiform
 025=carpometacarpus
 256=navicular
 260=cuboid
 026=navals
 027=tooth?
 270=tooth mandibular (deciduous/
 permanent)
 271=tooth maxillary (deciduous/permanent)
 028=carpal/tarsal?
 030=metacarpal
 301=1st metacarpal
 302=2nd metacarpal
 303=3rd metacarpal
 304=4th metacarpal
 305=5th metacarpal
 031=phalange?
 032=phalange 1
 033=phalange 2
 034=phalange 3
 035=pollux/dew claw III
 351=dew claw I
 352=dew claw II
 036=tibiotarsus
 038=sesamoid
 039=metapodial
 040=ilium
 041=ischium
 042=pubis
 043=acetabulum with ischium
 044=acetabulum with pubis
 045=os penis
 046=acetabulum with ilium
 047=acetabulum socket only
 477=innominate
 048=femur
 049=patella
 050=tibia
 051=fibula
 052=tibiofibula
 053=lateral malleolus
 054=astragalus
 055=calcaneum
 056=other tarsals
 057=tarsometatarsals
 058=metatarsals
 581=1st metatarsal
 582=2nd metatarsal
 583=3rd metatarsal
 584=4th metatarsal
 585=5th metatarsal

5-36

059=dew claw splint
 060=naviculocuboid
 061=proatlas
 062=atlas
 063=axis
 064=epistrophus
 065=second vertebra
 066=cervical
 661=3rd cervical
 662=4th cervical
 663=5th cervical
 664=6th cervical
 665=7th cervical
 067=thoracic
 068=lumbar
 069=caudal
 070=coccygeal
 071=pygostyle
 072=precaudal
 073=penultimate
 074=ultimate
 075=indeterminate vertebra
 076=sacrum
 077=urostyle
 080=ribs
 081=long bone (non-mammal)
 082=long bone (mammal)
 083=crayfish claw
 084=turtle infraskelton
 085=turtle carapace
 086=turtle plastron
 861=hyoplastron
 862=hyoplastron
 863=epiplastron
 864=xiphiplastron
 865=keratin scute
 866=pleural
 867=entoplastron
 868=neural
 869=suprapygial
 870=pygal
 871=peripheral
 087=turtle shell
 088=mammal exoskeleton
 888=long bone
 089=nuchal
 090=lepidotrich
 091=axonost
 092=anterior anal spine
 093=pterygiophore
 094=spine I.D.?
 095=scale
 096=otolith
 097=pectoral spine
 098=ray
 099=fragment (with modification)
 aspect
 01=complete
 02=proximal
 03=distal
 04=proximal fragment
 05=distal fragment
 06=fragment
 07=shaft fragment
 08=condyle fragment
 09=scapula neck
 10=see inventory
 11=incisor

37-38	12=premolar 1 or 2	39-40	28=open roots no wear
	13=premolar 3 or 4		30=rugose adult condition
	14=premolar ?		01=not burned
	15=molar 1 or 2		02=white
	16=molar 3		03=blue/gray
	17=molar ?		04=internal only
	18=tooth I.D.? complete		05=red-brown
	19=tooth I.D.? fragment		06=shiny black
	20=canine		07=charred
	21=root only		08=differential
	22=tooth row		09=partly calcified
	23=molars 1-3		11=flat black
	24=socket incisor		12=partially petrified
	25=socket jaw		13=green or blue modification
	26=jaw without teeth		01=none
	30=centrum epiphysis		02=tool
	31=centrum fragment		03=worked piece-grooved
	32=transverse process		04=worked piece-polished area
	33=vertebral or rib facet		05=slight cut
	34=neural spine		06=deep cut
	40=axial notch		07=ring and snap cut (prepared)
	41=ascending ramus		08=ring and snap cut (complete)
	42=basal ramus		09=bitumen present
	43=anterior portion		10=possibly worked
	44=posterior portion		11=impact depression
	51=proximal posterior lateral		12=sliced
	52=proximal posterior medial		13=sawed
	53=proximal anterior lateral		14=pitted
	54=proximal anterior medial		15=shiny, polished
	55=proximal shaft		16=charred break
	56=central shaft		17=ground
	57=distal shaft		18=ochre present
	58=distal anterior lateral		19=charred breaks and cuts
	59=distal anterior medial		20=skinning marks
	60=distal posterior lateral		21=dismembering
	61=distal posterior medial		22=filleting
	62=proximal epiphysis		23=see notes
	63=distal epiphysis		taphonomy
	64=proximal half		00=no evidence of weathering
	65=distal half		01=long cracks
	66=long bone splinter		02=exfoliated
	67=no proximal epiphysis		03=patches of complete exfoliation
	68=no distal epiphysis		04=fibrous with splinters
	69=proximal third		05=large splinters, complete exfoliation
	70=distal third		06=greasy fresh obvious intrusive
	71=proximal lateral		07=pressure splinters, unweathered
	72=proximal medial		08=root etched
	73=proximal anterior		09=stained
	74=proximal posterior		10=etched and stained
	75=distal lateral		11-17=etched + 1-7
	76=distal medial		21-27=stained + 1-7
	77=distal anterior		31-37=etched and stained + 1-7
	78=distal posterior		40=gnailed
	age		41-59=gnailed + combinations
	01=indeterminate		60-99=rolled and worn + combinations
	02=adult		specimen number (sequential for unit and level)
	03=fetal/neo-natal		lot number (assigned in the field)
	04=fused element but small		count, number of specimens
	05=sub-adult		
	09=unfused epiphyseal		
	19=< 1 year		
	20=1-1.5 years		
	21=2-3.5 years		
	22=4-6.5 years		
	23=> 7 years		
	25=slight tooth wear		
	26=moderate tooth wear		
	27=advanced tooth wear		

Mussell Shell

Mussell shell was weighed and valves were determined as being left or right. Mussel shell was examined for the presence of modification into tools or ornaments and the presence of

having been heated. These variables were recorded in the following manner.

Column Information

21-25	total weight to nearest 0.1 gram
26-28	number of right valves
29-31	number of left valves
32	heated
	0=no
	1=yes
33	modification
	0=no
	1=yes

Fire-Cracked Rock

Fire-cracked rock (FCR) was weighed and recorded by provenience.

Column Information

47-53	total rock weight to nearest gram
54-58	lot number (bag number assigned in the field)

Other Remains

Other remains saved but not specifically coded include charcoal, seeds, burned earth, daub, and snails.

Dart/Spear Point Types

Point types are from Turner and Hester (1985), Bell (1958, 1960), and Perino (1968, 1971). Figure A.1 shows projectile point outlines/types for dart/spear points.

Type Name

1	Gary, narrow contracting stem, prominent shoulders, round base
2	Gary, contracting stem, prominent shoulders, straight base
3	Gary, broad contracting stem, prominent shoulders, rounded to straight base
4	Kent
5	Dallas/Langtry
6	Gary, broad contracting stem, no shoulders, rounded base
7	Morrill/Kent
8	Gary, broad contracting stem, rounded base, prominent barbs
9	Wells
10	Palmillas
11	Fairland
12	expanding stemmed, straight base, shoulders
13	Marshall
14	Martindale/Edgewood
15	Ensor
16	Elam/Travis
17	Yarbrough
18	Carrollton/Langtry
19	Ellis
20	leaf-shaped, small side notched, expanding

	stem
21	Godley/Trinity
22	Pedernales
23	Refugio
24	Kinney
25	Pandale
26	expanding stem, concave base, rounded shoulders
27	lanceolate shaped, slightly contracting stem, straight base
28	Meserve
29	straight stem and base, square shoulders
30	straight stem, concave base
31	Bulverde
32	Neches River
33	Dart
34	concave base, concave blade, pointed barbs
35	slight rounded shoulders, broad contracting stem, rounded base
36	a single side-notch, straight stem and base
37	Castroville
38	asymmetrical contracting stem, straight to rounded base
39	Motley

Arrowpoint Types

Point types are from Turner and Hester (1985), Bell (1958, 1960), and Perino (1968, 1971). Figure A.2 shows projectile point outlines/types for arrowpoints.

Type Name

1	Hayes
2	Bonham
3	Perdiz
4	Bassett
5	Alba
6	Friley
7	Scallorn
8	Fresno
9	Washita
10	Young
11	Maud/Talco
12	Hayes, prominent barbs, bulber base
13	expanding stem, rounded base, shoulders
14	Livermore
15	Clifton
16	Catahoula
17	Toyah
18	Keota
19	Starr
20	Harrell
21	Huffaker
22	straight stem, prominent shoulders, straight to slightly rounded base
23	one side/corner notch, asymmetrical, straight base
24	expanding stem, concave base, minimally modified flake blank
25	corner-notched, straight base, basal notch
26	expanding stem, concave base, rounded shoulders
27	Colbert
28	asymmetrical blade, expanding stem, rounded base

- 29 asymmetrical serrated blade, expanding stem, straight base
- 30 asymmetrical blade, expanding stem, concave base
- 31 Garza
- 33 triangular point with expanding base, concave base

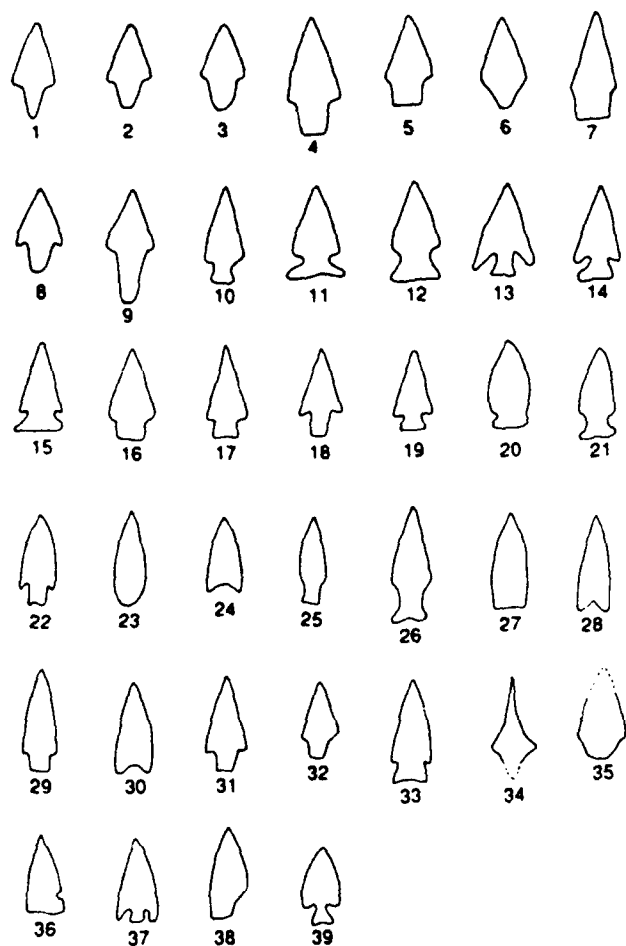


Figure A.1 Outlines of Dart/spear points.

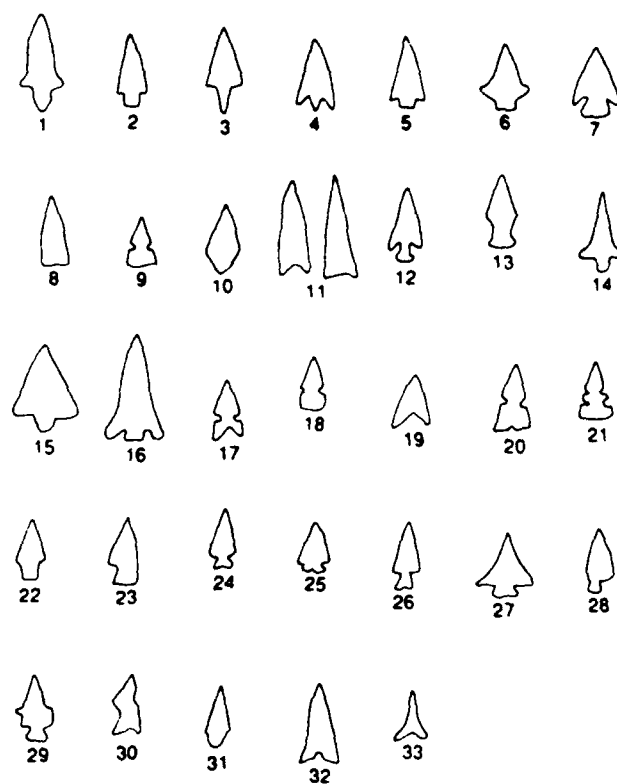


Figure A.2 Outlines of arrowpoints.

APPENDIX B

IDENTIFIED VERTEBRATES FROM 41DN372

by
Bonnie C. Yates

The following data document the proveniences of identified vertebrates recovered from test excavations at 41DN372. The units correspond to excavated 1x1-m test squares illustrated in Figure 4.26. The number of identified specimens (NISP) is the count of fragments/elements assigned to a particular taxon.

Gar (*Lepisosteus* sp.)

Unit	Level	NISP
6	5	1
8	5	1
9	7	1
10	3	1
10	5	2
13	6	1
15	9	1

Catfish (*Ictalurus* sp.)

Unit	Level	NISP
6	4	1
8	6	1
8	10	2
10	5	1
11	3	1
12	2	2
12	3	2
12	4	2
12	5	3
13	2	3
13	4	1
13	5	1
15	9	1
15	12	1
16	10	1
17	2	1
17	4	2

Drum (*Aplodinotus grunniens*)

Unit	Level	NISP
10	3	1
12	6	1
13	4	1

Bass/Sunfish (Centrarchidae)

Unit	Level	NISP
12	2	1

Indeterminate fish

Unit	Level	NISP
2	10	2
6	4	1
7	11	2
8	5	3
8	6	1
8	7	1
8	8	2
8	9	1
8	10	1
9	6	1
10	3	3

Indeterminate fish (contd.)

10	5	1
10	6	2
10	7	1
11	3	4
11	4	1
12	2	9
12	3	9
12	4	5
12	5	6
12	6	1
13	3	1
13	4	7
13	5	2
15	8	1
15	9	1
17	2	1
17	3	2
17	8	1

Toad/Frog (Anura)

Unit	Level	NISP
8	10	1
10	5	1

Cooter/Slider turtle

(*Chrysemys/Trachemys* sp.)

Unit	Level	NISP
2	6	1
2	11	1
3	6	2
3	7	1
3	8	1
3	9	3
3	10	1
4	9	1
8	6	2
10	7	1
12	2	1
12	3	1
12	4	1
12	5	1
13	5	2

Red-eared turtle (*Chrysemys scripta*)

Unit	Level	NISP
12	2	2
13	6	1

Musk/Mud turtle (Kinosternidae)

Unit	Level	NISP
2	11	1
3	6	2

Musk/Mud turtle (*Kinosternidae*)(contd.)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
3	7	1
3	8	1
10	4	1
10	5	1
11	2	3
11	3	1
11	4	2
12	1	2
12	2	2
12	3	3
12	5	4
13	4	1
13	5	1
16	9	1

Musk turtle
(*Sternotherus odoratus*)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
3	6	1
3	7	1
3	9	1
4	9	1
8	7	1
10	2	1
10	4	1

Mud turtle
(*Kinosternon* sp.)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
3	9	1
8	5	1
8	6	1
10	2	2
12	3	1
12	5	1
13	5	1

Box turtle (*Terrapene* sp.)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
2	5	1
2	6	13
2	7	2
2	8	3
2	10	3
3	3	1
3	4	1
3	5	1
3	6	1
3	7	2
3	8	3
3	9	3
4	5	1
4	7	1
8	6	4
8	9	1
9	5	1
10	3	5
10	5	4
10	6	2
10	7	1
11	2	3
11	3	4
11	4	1
12	2	13
12	3	10
12	4	11

Box turtle (*Terrapene* sp.)(contd.)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
12	5	9
13	3	1
13	5	3
13	6	2
14	3	1
14	4	2
16	8	2
17	6	1
Block 8		2

Soft-shell turtle
(*Trionyx* sp.)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
3	6	2
3	7	1
3	9	1
8	6	1
8	8	1
12	6	1
17	4	1

Indeterminate turtle

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
2	2	1
2	3	3
2	4	5
2	5	11
2	6	45
2	7	16
2	8	18
2	9	6
2	10	9
2	11	5
2	12	1
3	2	1
3	3	11
3	4	7
3	5	10
3	6	21
3	7	24
3	8	7
3	9	43
3	10	4
4	6	1
4	8	2
6	3	2
6	4	2
6	5	2
6	6	2
6	7	2
6	8	2
7	1	1
7	2	1
7	3	1
7	4	6
7	5	4
7	6	16
7	7	1
7	8	1
7	10	4
7	11	4
7	12	9
8	1	1
8	2	1
8	3	4
8	4	3

Indeterminate turtle (contd.)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
8	5	10
8	6	15
8	7	7
8	8	11
8	9	14
8	10	10
9	2	1
9	4	4
9	5	1
9	6	1
9	7	2
10	2	8
10	3	27
10	4	20
10	5	32
10	6	20
10	7	18
11	1	1
11	2	19
11	3	27
11	4	15
12	1	16
12	2	69
12	3	45
12	4	33
12	5	33
12	6	9
13	2	6
13	3	6
13	4	20
13	5	41
13	6	19
14	2	6
14	3	6
14	4	14
14	6	9
14	7	9
14	9	1
14	10	1
15	2	2
15	3	4
15	4	2
15	6	4
15	7	9
15	8	4
15	9	13
15	10	6
15	11	6
15	12	12
16	2	1
16	3	6
16	4	1
16	5	3
16	6	6
16	7	14
16	8	23
16	9	18
16	10	2
17	2	17
17	3	10
17	4	4
17	5	12
17	6	1
17	7	2
17	8	7

Indeterminate lizard

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
11	2	1
12	3	1

Racer (?)

(cf. *Coluber constrictor*)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
2	9	1

Non-poisonous snakes
(Colubridae)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
2	10	2
3	6	2
8	7	1
8	8	1
8	9	2
8	10	2
10	3	1
10	5	2
10	6	2
10	7	5
11	4	2
12	2	1
12	3	4
12	6	2
13	5	6
14	4	1
14	10	1
17	3	1

Poisonous snakes
(Viperidae)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
8	6	2
10	5	1
10	7	1
12	3	1
12	6	

Indeterminate snakes

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
3	6	1
6	5	1
7	1	1
7	4	1
7	10	1
7	12	1
8	5	1
8	6	3
8	8	1
8	9	3
8	10	3
9	7	1
10	3	1
10	4	3
10	5	4
10	6	1
10	7	3
11	2	1
11	4	1
12	2	1
12	3	1
12	4	3
13	4	4
13	5	10

Indeterminate snakes (contd.)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
13	6	2
14	10	1
15	10	2
15	11	1
15	12	1
16	4	1
17	5	1
17	7	1
17	8	2

Perching birds (Passerines)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
12	4	1

Indeterminate bird (medium)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
6	2	1

Indeterminate bird (small)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
16	7	1

Least shrew (*Cryptotis parva*)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
12	2	1

Armadillo (*Dasypus novemcinctus*)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
16	6	2

Cottontail (*Sylvilagus floridanus*)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
2	10	1
3	9	1
7	10	1
8	4	1
8	5	1
8	8	1
10	4	3
10	5	1
11	2	1
11	3	3
12	2	2
12	3	1
12	4	4
12	5	2
13	4	3
15	4	1
15	7	1
15	8	1
15	9	7
15	11	1
15	12	3
16	7	1
16	8	8
16	9	2
16	10	1

Jackrabbit (*Lepus californicus*)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
2	10	1
3	8	2
4	50cm	1
6	5	1

Jackrabbit (*Lepus californicus*)(contd.)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
7	6	1
8	7	1
10	4	1
10	6	1
12	3	1
12	4	1
12	5	1
13	3	1
13	4	1
13	5	2

Swamp/Jack rabbit (Lagomorpha)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
12	6	1
13	5	1

Ground squirrel

(*Spermophilus tridecemlineatus*)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
8	8	1
16	7	1

Beaver (*Castor canadensis*)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
12	3	1

Pocket gopher (*Geomys bursarius*)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
2	10	2
3	6	1
4	7	1
6	8	2
6	5	1
7	4	1
7	5	1
8	3	1
8	4	5
8	6	3
8	7	2
8	8	3
8	9	2
8	10	7
9	6	1
10	2	2
10	5	2
10	7	1
11	3	1
11	4	3
11	4	1
12	2	3
12	3	2
12	4	3
12	5	7
12	6	4
13	2	1
13	4	5
13	5	2
13	6	1
15	9	1
15	10	3
16	7	1
17	8	1

Pocket mouse (*Perognathus* sp.)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
2	10	2
6	6	1
8	6	3
8	8	3
12	2	1
12	5	1

Vole (*Microtus* sp.)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
8	6	3
8	7	1
8	8	5
10	5	1
10	7	1
11	3	2
12	3	1
12	4	2
12	5	5
13	5	1
16	7	1
17	3	1

Woodrat (*Neotoma floridana*)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
7	10	1
12	2	1

Cotton rat (*Sigmodon hispidus*)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
7	6	1
7	10	1
8	6	2
8	7	4
8	8	5
8	10	1
11	2	2
11	3	1
12	4	1
12	5	2
13	5	1
15	6	1
15	11	1
16	6	1
16	7	1
16	10	1
17	4	1

Indeterminate rodent (Rodentia)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
2	10	6
4	8	1
6	5	1
7	10	4
7	12	1
8	5	3
8	6	4
8	7	2
8	8	2
8	9	2
8	10	2
11	3	3
12	2	1
12	3	3
12	4	4
12	5	6

Indeterminate rodent (Rodentia)(contd.)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
13	2	1
13	4	2
13	5	8
13	6	2
14	2	1
14	7	2
15	8	1
15	9	1
15	10	1
15	11	1
16	3	2
16	4	1
16	5	2
16	9	1
17	2	1
17	3	1
17	5	2
17	7	2
17	8	1

Striped skunk (*Mephitis mephitis*)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
15	8	1

Dog/Coyote (Canidae)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
2	6	1
2	7	2
2	8	3
2	11	1
8	10	1
12	5	1

Deer (*Odocoileus* cf. *virginianus*)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
2	2	1
2	3	4
2	5	4
2	6	15
2	7	2
2	8	2
2	9	1
3	4	1
3	5	3
3	6	2
3	7	2
3	8	1
3	9	1
3	10	1
4	6	1
4	8	2
4	9	1
6	3	1
6	4	2
6	5	3
6	6	2
7	4	3
7	5	4
7	12	1
8	3	1
8	4	4
8	5	1
8	6	6
8	7	5
8	10	1
9	2	3

Deer (*Odocoileus cf. virginianus*) (contd.)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
10	2	1
10	3	11
10	5	1
10	6	6
10	7	8
11	1	1
11	2	3
11	3	2
11	4	7
12	1	5
12	2	14
12	3	13
12	4	3
12	5	15
12	6	4
13	3	1
13	4	3
13	5	7
13	6	12
14	2	1
14	3	1
14	4	1
14	8	1
15	6	1
16	3	2
16	9	1
16	10	2
17	2	6
17	3	2
17	4	5
17	6	2
17	8	1
BHT6		2

Cow/Bison/Elk (*Artiodactyla*)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
2	3	1
3	2	3
10	3	2
11	3	1
12	2	1
12	4	1
14	3	1
14	4	2
15	7	1
17	3	2

Indeterminate large animal

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
2	5	1
2	6	3
6	2	1
6	8	1
7	2	1
7	3	1
7	6	1
7	11	2
7	12	1
8	2	4
8	3	10
8	4	5
8	5	11
8	6	10
8	7	1
8	9	1
9	2	1

Indeterminate large animal (contd.)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
9	3	6
9	4	6
9	6	5
9	7	1
10	2	5
10	4	5
10	6	8
11	2	6
11	3	9
11	4	1
12	2	8
12	3	1
12	4	2
12	5	5
12	6	4
13	2	4
13	3	3
13	4	5
13	5	5
13	6	2
14	3	7
14	4	3
14	6	7
14	8	2
15	7	6
15	10	4
15	12	3
16	9	29
17	2	2
17	3	14
17	5	10
17	6	6
17	7	5
17	10	1

Indeterminate medium animal

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
2	7	1
2	8	1
2	10	5
3	6	4
4	8	1
6	8	1
6	5	2
7	4	4
7	6	1
7	11	6
7	12	1
8	3	5
8	6	3
8	7	1
8	9	1
10	2	1
10	3	4
10	5	6
10	6	3
10	7	1
11	2	4
11	3	3
11	4	1
12	2	10
12	3	2
12	4	2
12	5	1
13	4	1
13	5	2

Indeterminate medium animal (contd.)

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
14	2	2
14	4	7
14	7	8
14	10	2
15	3	3
15	5	1
15	8	2
15	9	1
15	12	6
15	13	1
16	3	6
16	5	1
16	6	5
16	7	6
16	8	6
16	9	2
17	2	9
17	4	10
17	5	1
17	7	5
17	8	9

Indeterminate small animal

<u>Unit</u>	<u>Level</u>	<u>NISP</u>
2	10	2
6	2	1
6	5	1
7	4	1
7	6	1
7	10	1
7	11	2
8	5	1
8	7	1
9	7	1
10	5	4
11	2	2
11	4	1
12	2	1
12	5	1
12	6	1
13	2	1
13	4	3
13	5	3
14	4	1
14	6	1
14	10	1
15	3	1
15	8	1
15	11	8
15	12	2
16	3	1
16	4	1
16	5	3
16	7	1
16	9	2
16	10	2
17	4	1
17	8	1
17	7	1

Total Bone = 12,986 (20%ID)

APPENDIX C

STRATIGRAPHIC DISTRIBUTION OF ARTIFACTS FROM SELECTED TEST PITS AT PREHISTORIC SITES

by
Kenneth Lynn Brown

The following graphs display the frequency data for various artifact categories from test pits at the sites discussed in this study. They are offered as a measure of the distribution of artifacts throughout the excavated levels.

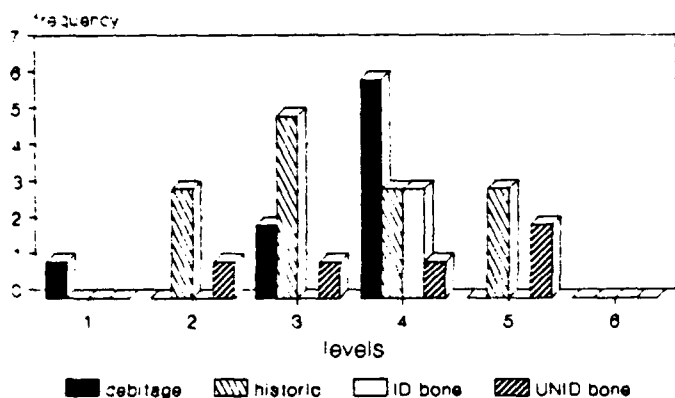


Figure C.1a Distribution of artifacts in Test Pit 2, Area 1, 41DN2.

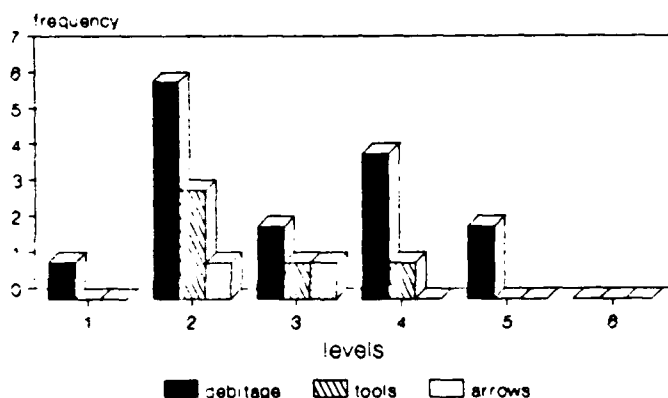


Figure C.1b Distribution of artifacts in Test Pit 4, Area 2, 41DN2.

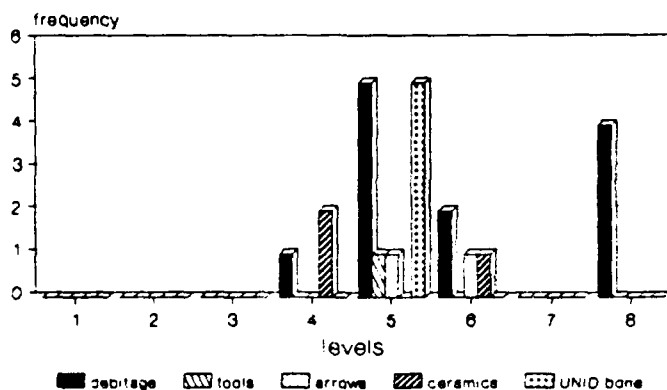


Figure C.1c Distribution of artifacts in Test Pit 5, Area 3, 41DN2.

c.2a,b,c

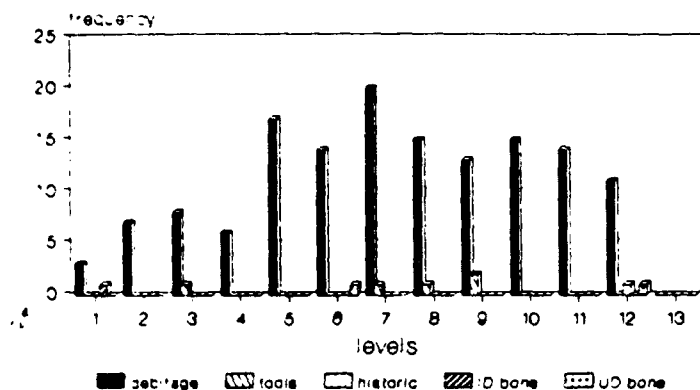


Figure C.2a Distribution of artifacts in Test Pit 5, 41DN20.

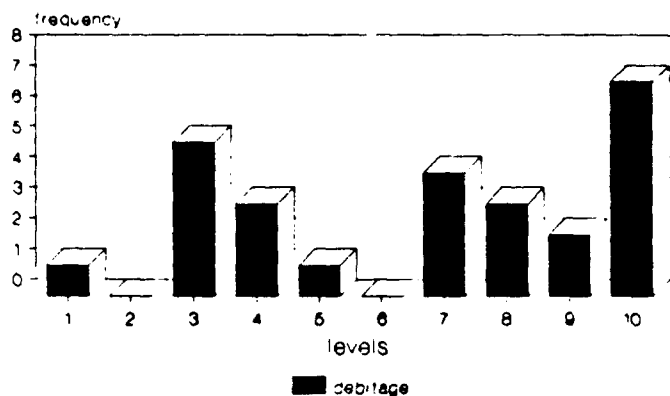


Figure C.2b Distribution of artifacts in Test Pit 1, 41DN21.

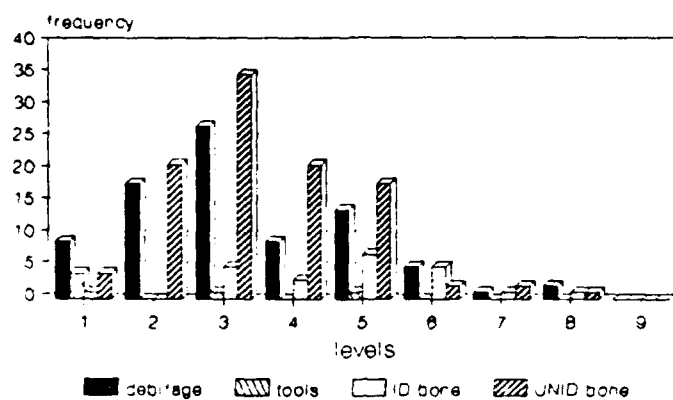


Figure C.2c Distribution of artifacts in Test Pit 3, 41DN26.

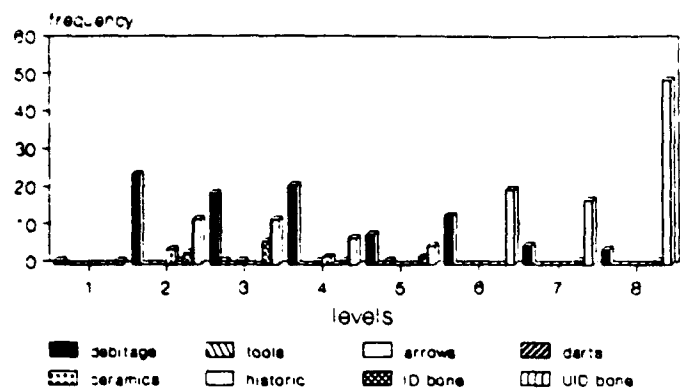


Figure C.3a Distribution of artifacts in Test Pit 5, 41DN27;

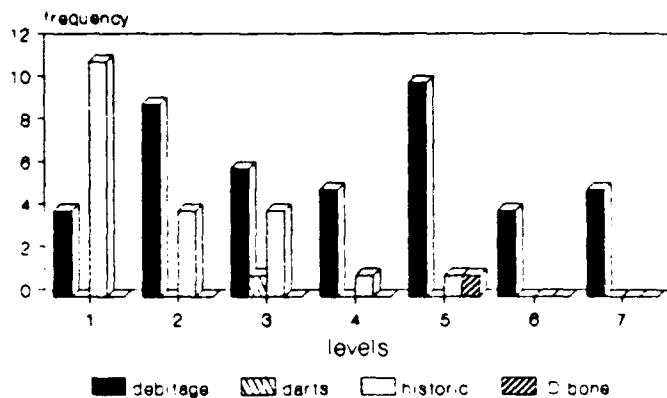


Figure C.3b Distribution of artifacts in Test Pit 6, 41DN37.

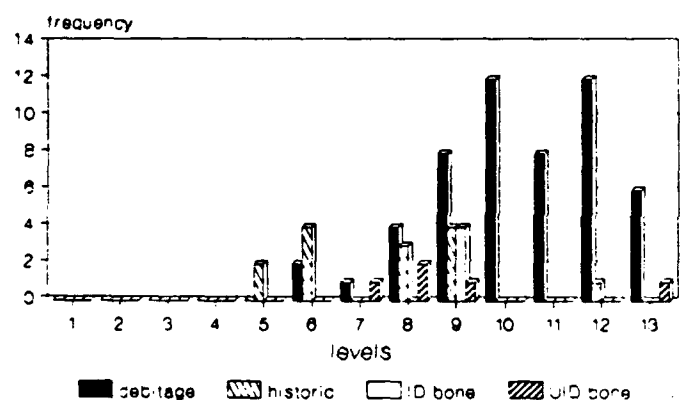


Figure C.4a Distribution of artifacts in Test Pit 3, 41DN40;

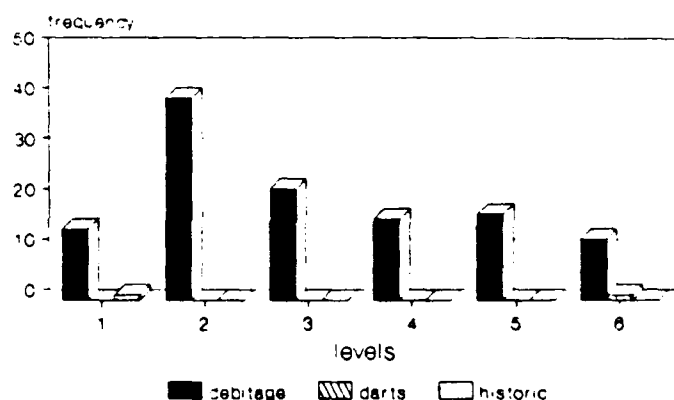


Figure C.4b Distribution of artifacts in Test Pit 4, 41DN40.

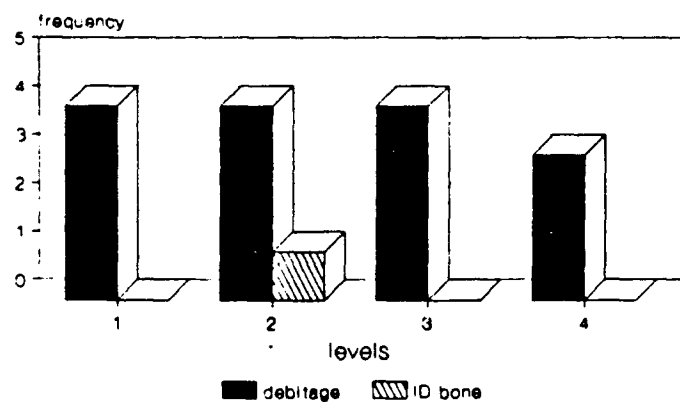


Figure C.5a Distribution of artifacts in Test Pit 3, 41DN374;

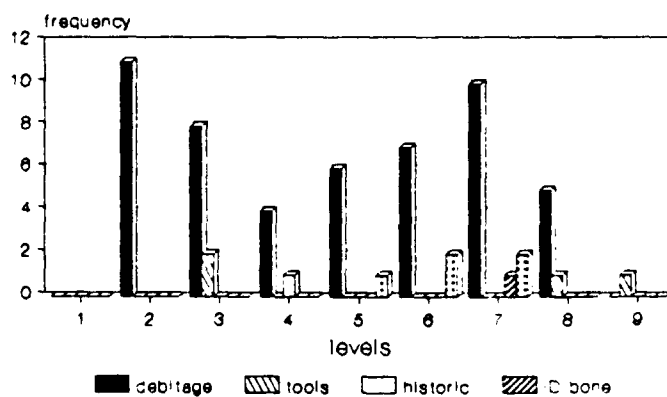


Figure C.5b Distribution of artifacts in Test Pit 3, 41DN377.

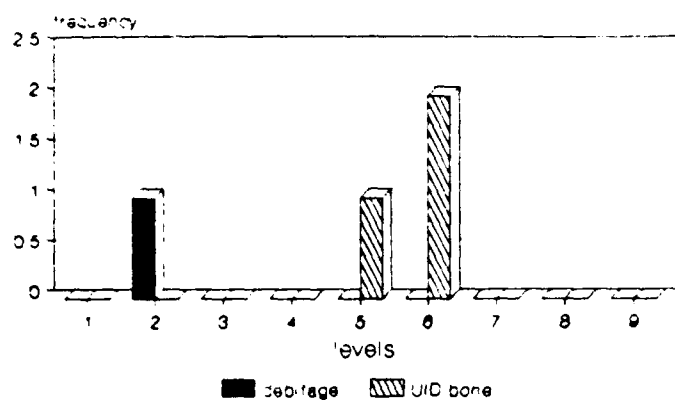


Figure C.6a Distribution of artifacts in Test Pit 1, 41DN378.

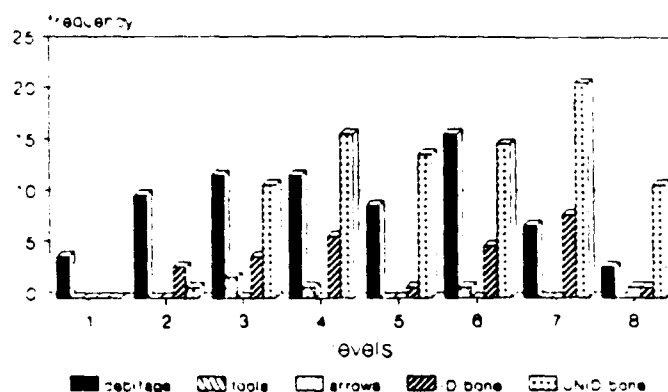


Figure C.7a Distribution of artifacts in Test Pit 2, 41DN387.

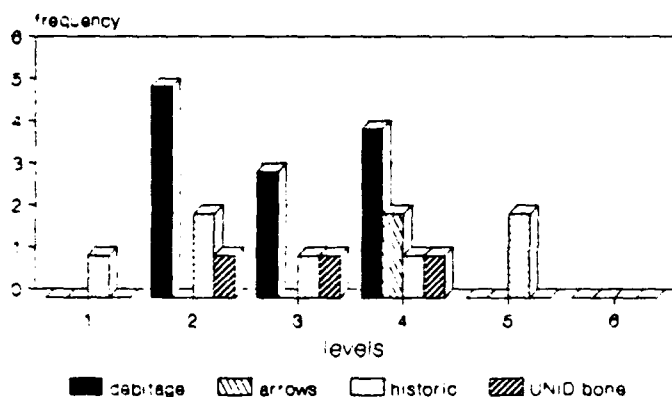


Figure C.6b Distribution of artifacts in Test Pit 1, 41DN384.

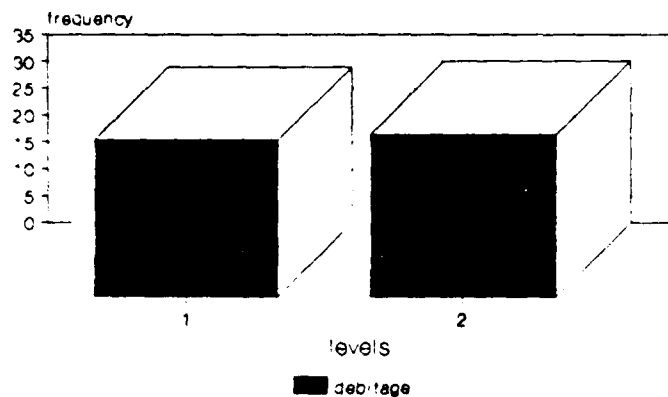


Figure C.7b Distribution of artifacts in Test Pit 5, 41DN436.

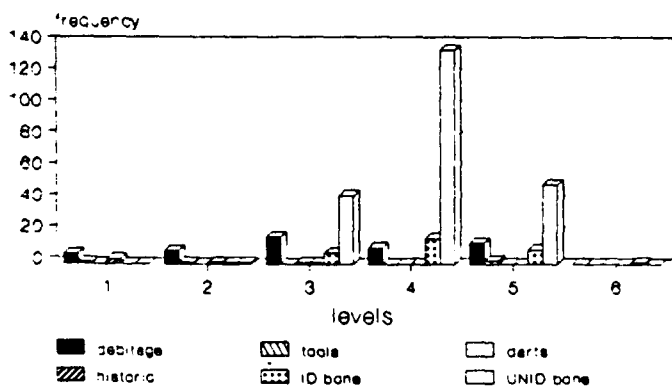


Figure C.6c Distribution of artifacts in Test Pit 1, 41DN386.

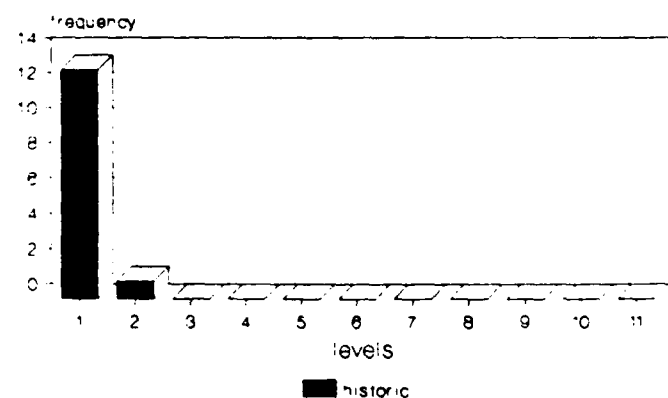


Figure C.7c Distribution of artifacts in Test Pit 1, 41DN422.

c.8a,b,c

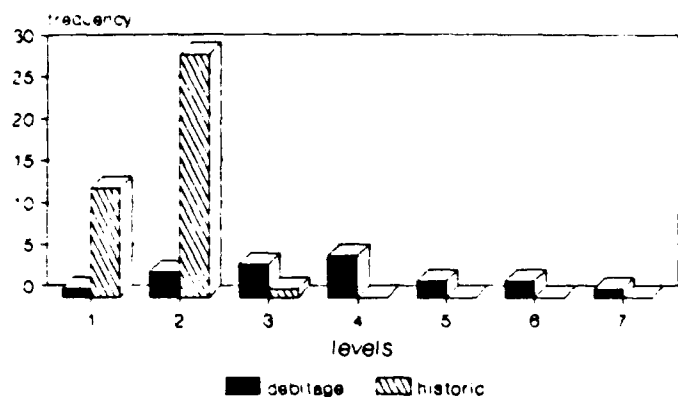


Figure C.8a Distribution of artifacts in Test Pit 1, 41DN446.

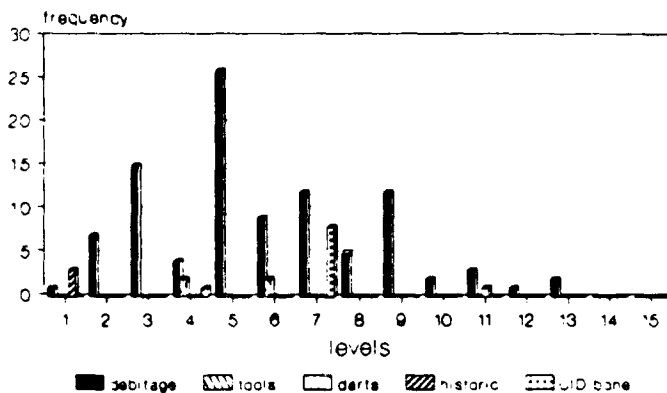


Figure C.8b Distribution of artifacts in Test Pit 4, 41DN446.

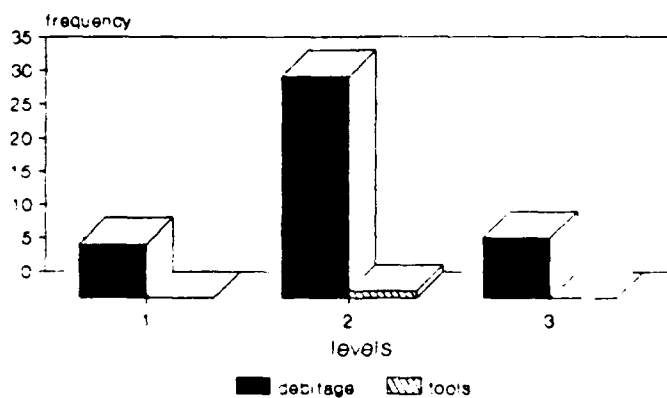


Figure C.8c Distribution of artifacts in Test Pit 1, 41DN447.

Appendix D

Historic Artifact Classification

by
Susan A. Lebo

1 - Ceramics

Subclass:

1. Coarse earthenwares
2. Semicoarse yellowwares
3. Refined earthenwares
4. Stonewares
5. Porcelains

Type:

Coarse Earthenware:

1. Buffware (flowerpots)
2. Bennington type
3. Terra-cotta (flowerpots)
4. Tin enamel (Faience)
5. Traditional redware

Semi-Coarse Yellowware:

1. Plain or clear glazed; unmolded
2. Plain or clear glazed; molded
3. Bennington type/Rockingham type

Refined Earthenware:

1. Dark creamware
2. Light creamware
3. Pearlware
4. Transitional pearlware/early whiteware (1820-1870)
5. Ironstone whiteware (1840-1910) [high fired, vitrified white ironstone]
6. Flow blue (1840-1870)
7. Bluish tinted high fired ironstone (1850-1910)
8. Bluish tinted, non-vitrified ironstone (1850-1910)
9. Pure white whiteware (1890-1989)
10. Imitation flow blue (1890-1925)
11. Light ivory tinted whiteware (1920-1989)
12. Dark ivory tinted whiteware (1930-1989)
13. Very light blue tinted whiteware (1880-1930)
14. Fiesta [colored] glazed whiteware (1930-1960)
15. Unknown
16. Semi-porcelain
17. Colored paste (e.g., pink paste)

Stoneware:

1. Unglazed interior/unglazed exterior
2. Unglazed interior/salt glazed exterior (1850-1875)
3. Unglazed interior/natural clay slip exterior (1850-1875)
4. Salt glazed interior/salt glazed exterior
5. Natural clay slip interior/natural clay slip exterior (1875-1900)

6. Natural clay slip interior/salt glazed exterior (1865-1900)
8. Alkaline glazed interior/alkaline glazed exterior (1840-1900)
9. Natural clay slip/interior/alkaline glazed exterior (1890-1900) [#7 and #9 were duplicates]
10. Natural clay slip interior/bristol glazed exterior (1890-1915)
11. Bristol glazed interior/bristol glazed exterior (1900-1989)
12. Bristol glazed interior/bristol and cobalt blue exterior (1915-1989)
13. Two tone with natural clay slip interior/natural clay slip and salt glazed exterior (1890-1900)
14. Two tone with natural clay slip interior/natural clay slip and bristol glazed exterior (1890-1915)
15. European salt glaze with brown salt glazed exterior (1820-1920)
16. Unglazed interior/no exterior present
17. Natural clay slipped interior/no exterior present
18. Alkaline glazed interior/no exterior present
19. Bristol glazed interior/no exterior present
20. Unknown
21. Salt glazed interior/no exterior present
22. No interior present/unglazed exterior
23. No interior present/natural clay slipped exterior
24. No interior present/alkaline glazed exterior
25. No interior present/bristol glazes exterior
26. No interior present/salt glazes exterior
27. British ale bottle with bristol interior and two tone exterior
28. Bristol interior/unglazed exterior
29. No interior present/no exterior present
30. No interior present/bristol glazed exterior with cobalt blue
31. Bristol interior/natural clay slipped exterior
32. Alkaline interior/salt glaze exterior
33. Salt glaze interior/natural clay slipped exterior
34. Bristol and cobalt blue interior and exterior (1915-1989)

Porcelains:

1. All porcelains [do not separate by paste color]

Decoration:

(Use numbers 2-20 for refined earthenwares & porcelains and numbers 26-37 for coarse earthenware, yellowware and stoneware vessels)

1. None [leave blank]
2. Thin hand painted band
3. Hand painted motif
4. Spatter or sponge
5. Stencil
6. Transfer print
7. Floral decalcomania (1895-1950)
8. Geometric decalcomania (1940-1989)
9. Luster

10. Scalloped
11. Molded polygon
12. Relief molding
13. Annular or banded
14. Mocha
15. Gilding (1890-1989)
16. Colored glaze or wash (Fiestaware; 1930-1960)
17. Finger painting
18. Applique
19. Shell edge
20. Incising/rouletting
26. Slip or glaze on interior
27. Slip or glaze on exterior
28. Thick applied slip banding
29. Sponge or spatter (e.g., Bennington)
30. Hand painted
31. Stencil
32. Relief molding
33. Cobalt blue mocha type swirls on yellowware (1860-1900)
34. Folk Americana painting (e.g., use of household or art paint to paint over glazed surface)
35. Incising (e.g., incised lines or bands on stonewares)
36. Stamped (impressed maker's mark number)
37. Annular or banded ware

Color of Decoration: (do not include the color of the paste--this is for added decoration only)

1. None [leave blank]
2. Polychrome [include faded decalcomania]
3. Light blue
4. Blue
5. Dark blue
6. Pink
10. Red
11. Light green
12. Green
13. Blue green
14. Dark, forest green
15. Black
16. Light yellow
17. Bright yellow
18. Gold
19. Silver
20. Cobalt blue
21. White
22. Orange
23. Chartreuse green
24. Tan
25. Brown
26. Gray

Maker's Mark:

1. Impressed mark present
2. Stenciled mark present
3. Impressed mark and a stenciled mark are present

Sherd Type:

1. Body
2. Rim
3. Base (no foot ring; include all flat refined earthenware sherds and all stoneware bases in this category)
4. Base with foot ring present
5. Handle
6. Finial

7. Rim with handle
8. Body with handle
9. Lid
10. Spout
11. Lip/rim
12. [not used]
13. [not used]
14. Whole vessel
15. Unknown

2 - Bottle Glass

Color:

Clear, White:

1. Clear (1880-1989)
2. Clear with gray ash tint (1915-1989)
3. Vaseline colored milk glass (often inset caps; 1870-1930)
4. Translucent white milk glass (1870-1930)
5. Opaque white milk glass
6. Opaque white milk glass with painted exterior (ca. 1920-1950)
31. Clear with opaque milk glass (flashed glass)
32. Frosted

Pink, Manganese, Purple:

7. Manganese decolorized (1880-1920)
8. Pink (depression/most probably tableglass; 1920-1950)
9. Purple

Green, Blue:

10. Dark green to black olive (1700s to 1900)
11. Medium olive green
12. Light olive green
13. Emerald or bright green (for bottles only; soda 1930-1989)
14. Light green
15. Green milk glass (1920-1950)
16. Aqua (light and dark)
17. Crystal blue
18. Dark blue or cobalt; blue
19. Blue milk glass

Brown, Amber, Yellow:

20. Brown, amber
21. Yellow (1916-1930)
22. Straw

Other:

23. Red
24. Black
25. Flash (clear glass dipped and coated with a second color)
26. Carnival (multicolored)

Sherd Type:

1. Whole vessel
2. Lip/rim
3. Neck/shoulder
4. Body

5. Base
6. Handle
7. Fruit jar inset cap
8. Fruit jar cover (i.e., lightening bail)
9. Glass stopper for bottle/jar
10. Seal for wine bottle
11. Lip/rim with handle
12. Non-fruit jar inset cap (e.g., milk bottle)
13. Non-fruit jar glass lid (e.g., milk bottle)
14. Lid/cover

First Diagnostic

1. None

Pontils:

2. Negative scar (1600-1880)
3. Solid glass rod or glass tip (1600-1880)
4. Ring or hollow shaft (1820-1890)
5. Fire polished (1840-1890)
6. Graphite tipped pontil (1870-1885)
7. Bare iron pontil nipple (1845-1875)
8. Pushup/kickup
9. Improved pontil or pushup
10. Pontil, type unknown (-1890)

Mold seams and bases:

11. Snap case (1850-1900)
12. Post bottom plate mold (1820-1890)
13. Bottom hinge mold (1820-1880)
14. Cup bottom mold (1850-1900)
15. Large Owens ring (1910-1989)
16. Small valve mark (1930-1945)
17. Ground base
18. Stippling on or near base (1940-1989)
19. Machine made (if valve mark or Owens ring is present use those dates; 1910-1989)
20. Handmade bottle (often to fragmentary to further identify; 1850-1910)
21. Semi-automatic (not a "true" machine-made bottle; 1890-1905)
22. Combination post-bottom plate and cup bottom mold (1850-1890)

Lip, Neck, shoulder:

23. Machine made lip/neck/shoulder (1910-1989)
24. Minimally or nontooled applied string rim (1600-1810)
25. Finely tooled applied string rim (1790-1860)
26. Applied string rim with folded lip (1800-1850)
27. Crudely tooled lip finish with no string applied lip (1840-1860)
28. Ground lip (1850-1904)
29. Applied lip with twisted neck (1810-1880)
30. Nonapplied turn molded lip finish (i.e., twisted neck; 1880-1910)
31. Unknown (too fragmentary to identify)

Body sherds (include lids):

32. Handmade body sherd (-1910)
33. Machine made (1910-1989; with stippling 1940- 1989)

Second Diagnostic

Medicinal and Extract Related:

34. Handmade embossed prescription or extract panel bottle (1860-1900)
35. Handmade non-embossed prescription or extract panel (1860-1900)
36. Handmade, embossed or non-embossed, round or oval prescription or extract bottle (1860-1900)
37. Handmade 6 or 8 sided medicinal bottle
38. Machine made graduated (ounces) medicinal bottle
86. Machine made medicine bottle (include varieties of panel, oval, semi-panel; 1910-1989)
87. [not used]
88. [not used]

Fruit Jar Related:

39. Genuine Boyd fruit jar inset cap (1900-1950)
40. Other fruit jar inset cap (1870-1930)
41. Aqua, flint colored continuous threaded fruit jar (1905-1935)
42. Aqua, flint colored lightening bail fruit jar (1882-1942)
43. Aqua, flint colored continuous thread fruit jar with ground lip (1870-1904)
44. Aqua, flint colored lightening bail fruit jar with ground lip (1870-1904)
45. Aqua, flint colored, non-shouldered fruit jar body sherds (1890-1920; shoulder seal sherds 1870-1920)
46. Aqua, flint colored round fruit jar base (1870-1935)
47. Aqua, flint colored square fruit jar base
48. Clear continuous threaded fruit jar (1870-1989)
49. Clear lightening bail fruit jar
50. Clear continuous threaded fruit jar with ground lip
51. Clear lightening bail fruit jar with ground lip
52. Clear round fruit jar base
53. Clear square fruit jar base (1870-1925)
54. Manganese continuous threaded fruit jar (1880-1920)
55. Manganese lightening bail fruit jar
56. Manganese continuous threaded fruit jar with ground lip
57. Manganese lightening bail fruit jar with ground lip
58. Manganese round fruit jar base
59. Manganese square fruit jar base
60. Clear lightening bail glass lid
61. Manganese lightening bail glass lid
62. Aqua or flint lightening bail glass lid
63. Manganese fruit jar with ground lip
64. Inverted dome fruit jar inset cap (1895)
65. Clear fruit jar glass lid (sits inside zinc ring cap)
90. Amber fruit jar
92. Wax seal fruit jar rim/lip
93. Clear fruit jar spring clip closure (1905)
94. Aqua or flint non-standard threaded lip
95. Aqua or flint lid with interior screw threads

Snuff related:

66. Brown snuff bottle with beaded lip (1870-1920)
67. Brown snuff bottle with rounded machine-made lip (1920-1989)
68. Brown chamfered cornered snuff bottle base, side or beaded lip (1870-1920)
69. Brown sharp angular snuff bottle base of side (1880-1910)

70. Brown semi-rounded snuff bottle base or side (1890-1989)
71. Brown well rounded snuff bottle base of side (1920-1989)
72. Brown unidentifiable snuff bottle base or side
73. Olive green chamfered cornered snuff bottle base, side or beaded lip
74. Clear interior ribbed snuff jar rim wheel engraved or milled (1900-1989)
75. Clear interior ribbed snuff jar rim with no wheel engraving or milling (1900-1989)
76. Clear interior ribbed snuff jar body (1900-1989)
77. Clear interior ribbed snuff jar base with sunburst (1900-1989)
78. Clear snuff jar rim with wheel engraving or milling and no interior ribbing (1900-1989)
79. Clear interior ribbed snuff jar (whole) with wheel engraving and sunburst pattern on base (1900-1989)
80. Clear chamfered cornered snuff base with sunburst (1900-1989)
81. Clear interior ribbed snuff jar base without sunburst pattern (1900-1989)

Other:

82. Glass stopper
83. Cosmetic related jar/bottle
84. General household bottle
85. Jug
89. Milk Bottle
91. Threaded, handmade stopper (-1903)

Bottle Lip Finish:

1. Not identifiable (too fragmentary)
2. Blob top (has a rounded lip/rim and slightly flared neck handmade 1870s-1880s; beverage)
3. Hutchinson stopper & Baltimore loop (similar to blob top with interior curvature designed to hold metal stopper; handmade 1880-1910; beverage)
4. Codd stopper (designed with interior curvature to hold marble stopper; 1880-1910; beverage)
5. Crown (handmade 1892 to 1920; beverage)
6. Crown (machine made 1905-1989; beverage)
7. Oil Type (flat rim with rounded sides and straight neck; handmade 1892-1920; medicinal-extract)
8. Oil Type (flat rim with rounded sides and straight neck; machine made 1905-1989; medicinal-extract)
9. Round ring with sloped interior (cork closure with bead ring and straight neck; medicinal-extract)
10. Round ring with flat top (cork closure with bead ring and straight neck; medicinal-extract)
11. Round ring with round top (cork closure with bead ring and straight neck; medicinal-extract)
12. Patent (cork closure with square ring and straight neck; medicinal-extract)
13. Brandy and Bitters (cork closure with flared lip over round bead ring and flared neck)
14. Brandy with collar (cork closure with flared lip over collar and flared neck; liquor-beverage)
15. Brandy with second ring (cork closure with flared lip over round bead ring, widely separated second bead ring and flared neck; liquor-beverage)
16. Champagne or wine (type 1; single applied string rim; liquor)
17. Champagne or wine (type 2; liquor)
18. Gin (single protruding bead ring; liquor)
19. Prescription (cork closure with square bead and flared neck; medicinal-extract)
20. Double ring (cork closure with wide round ring over smaller round ring and straight neck; handmade 1850-1920; medicinal-extract)
21. Double ring (wide over small, cork closure with large round bead over small round bead and straight neck; machine made 1920-1940; medicinal-extract)
22. Double ring (equal sized ring; cork closure with two equal sized round bead rings and straight neck; machine made 1910-1940; medicinal-extract)
23. Collar over ring (cork closure with collar over single round bead ring and straight neck; medicinal-extract)
24. Pressure type (widely separated double ring; cork closure with two widely separated round bead rings and straight neck; medicinal-extract)
25. Non-standardized screw thread (machine made 1903-1920; multiple-need to specify)
26. Standardized or continuous screw thread (machine made 1919-1988; multiple need to specify)
27. Lug type (machine made 1906-1988; multiple-need to specify)
28. Plain or shear neck (cut neck with no rim or lip; multiple-need to specify)
29. Internal scar (press on lid type with internal rim for holding lid; milk)
30. Packers (cork closure with square bead; and straight neck; medicinal-extract)
31. Packers with widely separated ring (cork closure with square bead and a small round bead widely separated down the neck; medicinal-extract)
32. Snuff lip type 1 (cork or paper closure with small bead olive green or brown snuff)
33. Snuff lip type 2 (with or without milling; clear snuff)
34. Snap on lid rim (snap on metal lid closure (e.g., jelly jar) and straight neck/sides; multiple-need to specify)
35. Round ring over collar (cork closure with round bead ring over collar and straight neck; medicinal-extract)
36. Triple ring (cork closure with two bead rings over a third round bead ring and straight neck; machine made 1910-1940; medicinal-extract)
37. Ring with collar and second ring (cork closure with round bead ring and collar over widely separated round bead ring and straight neck; medicinal-extract)
38. Packers over ring (cork closure with a packers square bead over a single round bead ring and straight neck; medicinal-extract)
39. Double ring over collar (cork closure with two equal sized round rings over a collar and straight neck; medicinal-extract)
40. Snap-on lid rim for wide mouth jar (multiple-need to specify)
41. Wax seal (wax seal closure fruit jar rim; handmade 1855-1880; fruit jar)
42. Lightening bail (lightening bail closure for fruit jar; handmade 1875-1915; fruit jar)
43. Lightening bail (lightening bail closure for fruit jar; machine made 1903-1988; fruit jar)
44. Ground lip (can occur with a variety of closure styles and represents those bottles where the rim edge has been ground down; handmade 1858-1915; multiple-need to specify)
45. Ground lip with threads (non-standardized threads with ground lip; handmade 1858-1915; multiple-need to specify)
46. Internal threads (closure with threads on the interior of the rim/neck; handmade 1660-1980s; multiple-need to specify)
47. Mineral water type 1 (cork closure with flared rim and

- flared neck; beverage)
- 48. Mineral water type 2 (cork closure with flared rim over half collar and flared neck; beverage)
- 49. Generic brandy/mineral water (too fragmentary to distinguish; beverage)
- 50. Round ring with sloped interior, half collar and flared neck (medicinal-extract)
- 51. Square ring with sloped interior (cork closure with bead ring and straight neck; medicinal-extract)
- 52. Germicide (see drawing)
- 53. Cork closure with flat ring and round edges over square ring and widely separated bead ring and slightly flared neck (medicinal-extract)
- 54. Cork closure with ring bead and sloped interior over a separated collar and a second, small ring bead with flared neck (medicinal-extract)
- 55. Clear fruit jar spring clip closure (1905; fruit jar)
- 56. Indented collar with straight neck (bluing bottle)
- 57. Packers type with straight neck (condiment)
- 58. Cork closure with flared brandy style lip, collar and ring bead and straight neck (medicinal-extract, bitters)
- 59. Cork closure with flat top and flat protruding bead below the rim and straight neck (liquor?)
- 60. Folded rim (multiple-need to specify)
- 61. Round ring with sloped interior and widely separated ring on a straight neck (medicinal)

Vessel Morphology: For rim sherds and fruit jar caps

- 1. Not applicable: (not a lip/neck)
- 2. Wide mouth vessel (greater than diameter of soda can)
- 3. Narrow mouth vessel (less or equal in diameter to soda can)
- 4. Indeterminate; too small to identify

Vessel Type:

- 1. Beverage
- 2. Medicinal/extract
- 3. Snuff
- 4. Fruit jar
- 5. Unknown
- 6. Cosmetic/toiletry
- 7. Wide mouth foodstuffs (non-fruit jar)
- 8. Narrow mouth household bottle (e.g., sauce)
- 9. Jug style bottle (handle)
- 10. >1/2 gallon bottle
- 11. Condiment jar
- 12. Serum bottle
- 13. Milk related
- 14. Dye or blacking bottle
- 15. Poison
- 16. Germicide
- 17. Bitters
- 18. Ink bottle/well
- 19. Case bottle

Maker's Mark: For base sherds only; (Specify; do not include single letters or numbers unless they represent identifiable maker's mark)

3 - Architecture

Subclass:

1-Nails:

Wrought (pre-1840)
Machine cut (square; 1840-1880)
Wire (1880-1988)

2-Brick:

Handmade (1840-1900)
hand molded (pre-1875)
hand pressed (pre-1876)
transitional, extruded brick (1876-1903)
Machine-made (1890-1989)
machine, steam-pressed (1876-1903)
machine, hydraulic-pressed (1903-1989)

3-Staples and Screws:

Unknown
Fence staple
Large non-fence staple
Wood staple
Flat-headed screw
Round-headed screw
Filister-head screw
Square-headed screw
Hexagon-head screw
Oval-head screw
Misc. staple (e.g., carpet tacks)
Wood to metal stud
Wood split brad

4-Window Glass:

Regular (<3.3mm)
Non-safety plate glass
Safety plate glass
Wire mesh reinforced window glass
Decorative window glass (e.g., bathroom glass)
Type unknown

5-Building Material:

Cinder block
Plaster
Wood shingles
Flooring slate
Plywood
Cut stone
Grout
Sheet metal
Cement
Flagstone
Tarpaper
Sewer pipe
Lumber
Cloth or vinyl wallpaper
Masonite
Putty/glazing
Concrete
Asphalt shingles
Corrugated metal roofing or siding
Wood molding or trim
Metal plumbing
Fiberglass
Lead head for roofing nail
Mortar
Asbestos siding
Roofing slate
Particle board
Newspaper
Pvc piping
Metal disk with nail for taking down tarpaper
Linoleum/formica

6-Metal Hardware:

Hollow metal doorknob
 Metal indoor fixtures
 Door lock set
 Sash pulley
 Door/gate hinge
 Window screen
 Door plate/latch
 Escutcheon
 Lightning rod
 Hanger strap
 Hinge parts
 Door or window framing
 Screen door spring
 Gate post closure
 Window shade part
 Window latch
 Gutter
 Decorative finial for gate or fence
 Sheet metal
 Padlock/key

7-Other Hardware:

Porcelain doorknob
 Agate (redware) doorknob
 Ceramic drainage pipe
 Ceramic tile
 Porcelain fixtures

8-Wire:

Plain, bailing and twisted wire with no barbs
 Barbed wire (specify barb type)
 Hog
 Chicken
 Decorative/ornamental
 Non-electrical copper wire
 Brass
 Wire spool (plain or barbed)

4 - Personal Remains**Material:**

1. Aluminum
2. Antler
3. Asbestos
4. Asphalt
5. Bakelite
6. Bone
7. Brass
8. Brass plate
9. Brick
10. Carbon
11. Celluloid
12. Cellophane
13. Cement
14. Chalk
15. Charcoal
16. Chrome plate
17. Cinderblock
18. Cloth
19. Coal
20. Coarse earthenware
21. Concrete
22. Copper
23. Copper plate
24. Cork
25. Enamel plate
26. Fiber (natural)

27. Fiberglass
28. Foodstuff
29. Glass
30. Gold
31. Gold plate
32. Graphite
33. Grout
34. Horn
35. Iron
36. Lead
37. Leather
38. Lignite
39. Limestone
40. Linoleum
41. Marble
42. Mortar
43. Masonite
44. Mother of pearl
45. Nickel
46. Nickel plate
47. Paint
48. Painted iron (e.g., tobacco tags)
49. Paper (product)
50. Particle board
51. Petrified wood
52. Pewter
53. Plaster
54. Plaster of Paris
55. Plastic (hard)
56. Plastic (soft)
57. Plexiglas
58. Plywood
59. Polypropylene
60. Polyurethane foam
61. Porcelain
62. Pot metal
63. Putty/caulk
64. Quartzite
65. Refined earthenware
66. Resin
67. Rubber/rubber base
68. Sandstone/siltstone
69. Semi-coarse earthenware
70. Shale
71. Shell
72. Silver (coin silver)
73. Silver plate
74. Simulated shell
75. Slag
76. Slate
77. Solder
78. Stainless steel
79. Stoneware
80. Straw
81. Styrofoam (polystyrene)
82. Tar
83. Tarpaper
84. Tin
85. Tin plate
86. Vinyl
87. Wax
88. White metal
89. Wood
90. Zinc
91. Zinc plate
92. Composite (e.g., plated spoon with bone handle)
93. Kaolin
94. Stone (not identified by type)

95. Ceramic (not identifiable by type)

Type:

1-Buttons:

Type unknown

Single hole

Two hole

Three hole

Four hole

Five hole

Single hole, cloth covered w/shank

Single hole, metal w/shank

Single hole, glass w/shank

Single hole, ceramic w/shank

Stud (collar button)

Cufflink

Single hole, plastic w/shank

Single hole, shell w/shank

Single hole, bone w/shank

Single hole front/double hole back

2-Metal Fasteners:

Type unknown (too fragmentary)

Garment rivet

Snap lock plate (corset fastener)

Garter fastener

Hook (to hook and eye)

Eye (to hook and eye)

Large safety pin

Small safety pin

Zipper or zipper part

Snap

Suspender clip or fastener (non-button variety)

Sew-on sequin metal

Cam clip

3-Shoe and Boot Parts:

Eyelet

Hook eye

Shoe button

Shoe button hook

Shoe sole or heel part (including heel tap, tacks, nails)

Leather part (upper, tongue, inner sole)

Laces and parts

Shoe buckle

Rubber boot/galoshes buckle

Complete shoe/boot

Shoe horn

4-Buckles, Straps, and Parts:

Leather belt part

Fabric belt part

Metal belt end (half moon-shaped)

Belt buckle

Strap buckle (pack or knapsack type)

Strap D-ring

Strap snap hook (pack or knapsack type)

Strap adjuster

5-Fabric:

Cloth (undifferentiated fragment)

Cloth (discernable item; specify)

Leather (undifferentiated fragment)

Leather (discernable item; specify)

6-Smoking Related:

Tobacco pipe

Cigarette and parts

Cigars and parts

Tobacco tags

Cigar or cigarette case

Matches

Lighter

Ashtray

Cigar box

7-Toys and Collectibles:

Child-size toy vessels (incl. utensils)

Doll-size toy vessels (incl. utensils)

Marbles

Figurine

Vehicle (e.g., cars, trucks)

Game tokens and playing pieces

Guns

Non-ceramic dolls

Ball

Model (plastic or wood)

Tricycle

Toy beads

Unidentifiable toy part (e.g., decorative chain)

Unidentifiable knick-knacks

8-Dolls:

Solid-molded ceramic

Slipcast-molded ceramic

Celluloid, plastic

Cloth

Wood

Organic (e.g., husk, nut, apple)

Cloth and china

Bone

8A-Doll Decoration:

1. None
2. Molded or incised (no color present)
3. Hand-painted
4. Molded or incised and hand-painted

8B-Doll Decoration Color:

1. None
2. Black
3. Blue
4. Brown
5. Red
6. Pink
7. Polychrome
8. Gray

8C-Doll Body Parts:

1. Head
2. Body (torso)
3. Arm
4. Leg (include foot and boot fragments)
5. Arm or leg (fragment too small to distinguish between arm or leg)
6. Eye
7. Complete
8. Unknown
9. Ear
10. Joint for limbs/head
11. Nose

9-Musical Items:

Mouth harp

Harmonica part

Woodwind reed

Free reed instrument (e.g., accordion)

Double-sided 78 record on graphite disk (1915-1955)

Single-sided 78 record on graphite disk (1900-1923)

Cylinder-type record (1890-1915)

33 1/3 microgroove record (1948-1990)

45 rpm record (1950-1990)

Compact disc (1963-)

Unknown record type

10-School Items:

Slate pencil

Wooden lead pencil or part (e.g., eraser, ferrule)

Pen or pen part

Chalk

Slate board (without ruled lines)

Slate board (with ruled lines)

Paper brad

Pencil lead only

Ruler

Small paint brush part (e.g., art brush)

11-Jewelry and Personal Adornment:

Watch parts

Ring

Chain

Clasp to chain

Broach

Tie tack/bolo tie part

Bead

Stickpin

Garment stud

Charm

I.D. tag

Decorative hair comb

Hat pin

12-Miscellaneous Personal Possessions:

Coin (specify type and date)

Token (specify)

Medallion (specify)

Coin purse/handbag parts

Eyeglass parts

Military/police insignia or equipment

Wallet

Book, diploma, certificate parts

Exercise equipment

Key to jewelry box or wardrobe

Mechanic pen or pencil

Newspaper

Campaign button

Camera part

10-Grooming and Hygiene Items:

Toothbrush parts

Razor

Razorblade

Comb

Brush

Syringe, needles, hypodermic

Eyedropper

Medicine tube, cream tube

Hair curlers, barrettes, other hair fasteners

Mirror

Compact, makeup case

Lipstick dispenser

Lice comb

Pacifier part

Personal metal container

5 - Faunal and Floral Remains

1. Bone (include turtle and armadillo shell)

2. Shell-gastropods

3. Shell-mollusk

4. Eggshell

5. Glass gizzard stone

6. Ceramic gizzard stone

7. Seeds

8. Pits (e.g., peach/specify)

9. Nuts (e.g., walnut/specify)

10. Corn cob

6 - Metal Containers & Tin Cans**Material:** (see list under heading 4-Personal)**Diagnostic Attributes:** (for whole cans only)

1. Can with snap-on lid
2. Can with pop top or pull tab (1962-1990)
3. Oval-hinged tobacco-style can (1909-1990)
4. Tin can with key or metal strip-style opener (1866-1990)
5. Crimped rim or sanitary can (1902-1990)
6. Folded edge/rim (e.g., hole-in-top evaporated milk can)
7. Locked side seam can
8. Lapped side seam can
9. Rolled rim can with wire in rim
10. Rolled rim can without wire in rim
11. Cardboard can with metal lid
12. Hole-in-cap can
13. Hand-crimped rim with rubber gasket (pre-1896)
14. Aerosol can

7 - Unidentifiable Thin and Heavy Metal**Material:** (see list under heading 4-Personal)**Type:**

1. Thin metal (less than 1/8 inch thick)
2. Heavy metal (greater than 1/8 inch thick)
3. Thin metal strap
4. Bar stock with holes
5. Bar stock without holes
6. Small chunk or blob (e.g., lead)

8 - Household Items**Material:** (see list under heading 4-Personal)**1-Silverware/Flatware:**

Teaspoon

Butter knife

Handle

Tablespoon

Carving knife

Ladle

Dinner fork

Serving spoon

Dinner knife

Carving fork

2-Stove Part:

Stove frame/body
Lid handle
Burner, plate, griddle
Pipe
Door
Gas burner
Leg
Damper
Draft register

3-Vessels (excluding ceramic and glass):

Cooking pot/pan
Mixing/serving dish
Coffee pot
Cup
Bowl
Vessel handle
Plate
Salt/pepper shaker
Baking dish
Glass

4-Kitchen Utensils:

Foodstuff container part (e.g., spout)
Can/bottle opener
Kitchen scale
Egg beater

5-Bottle/Tube Closures:

Kerr fruit jar cap with open center (1915-1990)
Kerr fruit jar lid insert (1915-1990)
Solid zinc fruit jar lid (1870-1930)
Indeterminate fruit jar lid type
Hutchinson stopper (1875-1891)
Screw-on lid
Crown cap
Codd stopper
Rubber fruit jar seal
Snap-on cap
Vacuum-style cap
Spout (e.g., salt box)

6-Furnishings:

Appliance-related (specify)
Door stop
Door key
Lighting fixture (lamp, chandelier)
Decorative furniture part
Furniture caster
Kerosene or oil lamp part (e.g., wick, burner base; specify)
Heater parts (e.g., gas jet, valve)
Pull chains
Furniture latch or lock plate
Curtain rod, shade, or drape part
Bed or other furniture springs
Upholstery button or tack
Tabletop slate
Cabinet or drawer handle, pull, or latch
Clock parts
Bed frame hook, brace, fastener
Furniture hinge
Mirror
Picture or mirror hooks, mounting parts

7-Sewing and Clothing Maintenance:

Sad iron part
Darning needle

Clothes hanger
Washtub part
Electric iron part
Scissors or shears
Knitting needles
Sacking needles
Washboard
Sewing machine part
Straight pin
Tracing wheel
Ironing board part
Crochet needle
Sewing needle
Clothespin part
Washer/dryer part

8-Household Maintenance:

Paint can
Paint brush
Ladder
Bucket/pail
Mop or broom part
Vacuum cleaner part

9-Miscellaneous Other:

Aluminum foil

9 - Machine, Wagon and Hardware

Material: (see list under heading 4-Personal)

Type:

1-Machine Hardware:

Mower blade
Tie rod
Bushing
Hitch
Screw thread adjuster
Mower teeth
Mower guard
Ladder chain socket
Ladder chain
Plow blade
Gear
Pins and bolts
Clevis
Flange
Flywheel
Harrow teeth
Unidentifiable

2-Wagon Hardware:

Wiffle tree clip
Other clips
Box brace
Other braces
Spring
Bow staple
Drift pin/bolt
Ox yoke ring
Wiffle tree eyebolt
Box rod
Box iron
Clevis
Hub parts (e.g., rings, nuts)
Unidentifiable

3-Automotive Hardware (Including tractors):

Whole vehicle
 Engine, mechanical part (specify)
 Engine, electrical part (specify)
 Engine, cooling system part (specify)
 Chassis, mechanical part (specify)
 Chassis, electrical part (specify)
 Fuel and exhaust parts
 Oil or grease cans
 Wheel parts
 License plate
 Instrument parts
 Coachworks parts
 Accessories

4-Miscellaneous Hardware:

Bolt and nuts
 Misc. springs
 Pipe coupling
 Clevis (non-machine or wagon)
 Tapered pin
 Pipe hanger
 Washers
 Pipe, tubing
 Rivets
 Cotter pins
 Barrel hoops
 Ball bearings
 Wing nuts
 Pipe cap, plug
 Grommets
 Metal hooks
 Valve stem
 Box rivet
 Chain, chainlink
 Bracket, brace, coupling or shackle

10 - Metal Tools

Material: (see list under heading 4-Personal)

1-Personal Accessories:

Pocket knife

2-Fishing and Hunting:

Fishing hook
 Fishing weight
 Fishing tackle
 Fishing reel
 Fishing pole part
 Trap part

3-Garden and Yard Maintenance:

Garden hoe
 Pitch fork
 Grub hoe
 Shovel
 Rake

4-Blacksmithing, Farriering:

Anvil
 Brazing rod
 Hammer, mallet
 Worked, damaged, modified raw material
 Cut, snipped raw material
 Prongs
 Bellow part

5-Other Tools:

Hammer
 Mallet
 Axe, hatchet
 Regular screwdriver
 Phillips screwdriver
 Bastard file
 Triangular file
 Non-adjustable wrench
 Adjustable wrench
 Pliers
 Wire cutters
 Saw part
 Chisel or wedge
 Drill part
 Ferrule
 Scoop
 Funnel
 Whetstone
 Cast iron shoe last
 Magnet
 Nail set/punch

11 - Horse and Stable Gear**Type:**

Horse shoe
 Mule shoe
 Shoe nails
 Harness or rein buckle
 Harness or hame ring
 Rivet
 Snap hook
 Spur
 Rein with ring
 Rein with rivet
 Rein with rivet and buckle
 Rein with rivet, buckle, and ring
 Rivet burr
 Ear tag
 Mending brass
 Cow tie (chain, ring, lariat swivel)
 Cowbell
 Halter strap bolt
 Bit

12 - Firearms

Material: (see list under heading 4-Personal)

Type:

Rimfire cartridge
 Center fire cartridge
 Shot gun shell
 Percussion cap
 Grape shot
 Lead shot (.32 cal. or larger)
 Skeet, clay pigeon
 Lead ball projectile (.32 cal. or larger)
 Minnie ball projectile (hollow base)
 Conical bullet (fixed ammunition-current)
 Shotgun wad
 Shotgun shell paper cap
 Lead bullet
 Gun flint
 Unidentifiable

Caliber or Gauge: (specify)

Maker's Mark: (specify)

None, not applicable
Not legible

1-Single Letter:

U (1867-1902)

F

G

A

(diamond); (1908-1925 if rimfire)

W (1898-1988)

H (1875-1940; long rifle 1917-1988)

(iron cross); (1902-1907)

P (1887-1934)

R (1906-1916; long rifle 1900-1988)

N

C (long rifle 1917-1988)

N with slash through center

D

F (long rifle 1917-1988)

2-PETERS:

Peters/HV (1897-1935)

Peters/Nc. 15/Ideal (1897-1935)

Peters/32/ACP (1903-1988)

Peters/HV (.22 long; 1930-1988)

Peters/League/No. 12

Peters/38

Peters/Referee/No.12

Peters/Victor/No.20/Made in USA

Peters/High gun/No.12

Peters/Target/No.20

Peters/Target/No.12

Peters/QS/32-2-(Centerfire rifle or pistol)

Peters/Victor/16/Made in USA

Peters/32-20

Peters/Victor/12/Made in USA

Peters/No. 16/Referee

3-REM-UMC:

Rem/Umc/New Club (1910-1960)

Rem/Umc/7.65mm (1910-1976)

Rem/Umc/32ACF (1910-1960)

Rem-Umc/32S+W (1910-1960)

Rem-Umc/38 WCF (1910-1960)

Rem-Umc/380-Auto (1910-1960)

Rem-Umc/Shur Shot/20 (1910-1960)

Rem-Umc/Super Shot/12

Rem-Umc/38S+W (1910-1960)

Rem-Umc/32 WCF (1911-1960)

Rem-Umc/New Club/No.12

Rem/Umc/date

Rem/Umc/45/Colt/(1940-1988)

Rem-Umc/Nitro Club/No.12 (1910-1960)

Rem-Umc/38 Long

Rem-Umc/38S+W Special (1910-1960)

Rem-Umc/32-7.65mm (1910-1976)

Rem-Umc/Nitro/.410 (1910-1960)

Rem-Umc/Nitro Club/No.20 (1910-1960)

Rem-Umc/Shurshot/No.12

Rem-Umc (1913-1935)

Rem-Umc/25ACP

Rem-Umc/No.20/Arrow

Rem-Umc/300 Sav

Rem-Umc/New club/No.10

Rem-Umc/New Club/No.16

Rem-Umc/38-40

4-US:

U.S (1869-1936, if rimfire)

U.S./41 Long D.A. (1877-1935)

U.S. (C.G.?) /No.12/Star (1864-1930)

U.S./Defiance/Made in USA/No.12 (1869-1936)

U.S./Climax/No.12 (1869-1936)

U.S./WCF/No.12 (1869-1936)

U.S./S+W/.38 Special (1902-1988)

U.S./S+W/.32

U.S. (C or G) C.O./25 C.A.

U.S./38 S+W

5-WRA Co:

WRA Co/44 WCF (1875-1940)

WRA 410/Made in USA (1940-1988)

WRA CO/32 WCF (1875-1940)

WRA Co/38 S+W (1877-1940)

WRA Co/Rival/No.12 (1875-1940)

WRA Co/38 Special/S+W (1902-1940)

WRA CO/32 S+WL (1896-1940)

WRA CO/32 AC (1903-1940)

WRA 40/Super Speed/Made in USA (1940-1988)

WRA CO/44 S+W Special

WRA CO/44 WCF (1911-1940)

WRA CO.41 LBA

WRA CO/38 WCF (1911-1940)

WRA CO/Star/No.12

WRA CO/38 Special

WRA CO/45 Colt

WRA CO/S+W/38

WRA CO/Rival/No.10

WRA Co/.38 S

WRA/38-40 WIN

6-WINCHESTER:

Winchester/Blue Rival/10

Winchester/Ranger/No.12

Winchester/New Rival/No.12 (1901-1988)

Winchester/Repeater/No.12

Winchester/Repeater/No.16

Winchester/Leader/No.12

Winchester/Blue Rival/No.12

Winchester/Leader/No.20

Winchester Nublack/No.16

Winchester/Made in USA/No.12/Super Speed

Winchester/No.12/Nublack

Winchester/No.16/Ranger

Winchester/Western/12 GA

F C 30-30 Win

7-WW:

WW Super/30-38 Win

WW/20 Gauge

WW/Super X

WW/410

WW/Super/357 Magnum

Ww/16 Gauge

8-WC Co:

WC CO/38 Colt

WC CO/38-40

WC Co/Sureshot/No.12

WC CO/No.12/Essex

WC CO/32/S+W

9-WESTERN:

Western/Made in USA/Xpert/No.12
 Western/New Chief/No.12 (1898-1940)
 Western/Xpert/No.12 (1898-1940)
 Western/.380 Auto (1908-1988)
 Western/Super X/No.12
 Western/Field Load/No.12
 Western/32 Auto
 Western/Made in USA/Xpert/No.16
 Western/New Chief/No.16

10-REMINGTON:

Remington/Umc/New Club/No.16 (1910-1960)
 Remington/UMC/New Club/No.12
 Remington/Peters/20 Gauge
 Remington Express/310
 Rem (on .22 cal rimfire cartridge)
 Remington Peters/12
 Remington/16 GA/Peters

11-UMC:

UMC/32 S+W (1867-1911)
 UMC/41 Short (1884-1911)
 UMC/45 Colt (1873-1911)
 UMC/.38-40
 UMC/38 S+W (1873-1940)
 UMC/.38 CRW (1911-1930)
 UMC/.41 LC (1877-1935)
 UMC/32 WCF
 UMC/380 CAPH
 UMC/45 WCF
 UMC/38 Short
 UMC/SH/38 Long
 UMC/32-20
 UMC/44 CFW
 UMC/SH/38 S+W

12-UMC CO:

UMC CO/Nitro Club (1867-1911)
 UMC CO/New Club/No.10 (1867-1911)
 UMC CO/New Club/No.12 (1867-1911)
 UMC CO/New Club/No.16 (1867-1911)
 UMC CO/New Club/No.16
 UMC CO/Club/No.12
 UMC CO/No.12

13-R-P:

R-P/38 Special (1960-1988)
 R-P/30-50 SPRG 91960-1988)
 R-P/38 Auto

14-S+W:

S+W/NRA/38
 S+W/RHA CO/32 (1887-1916)
 S+W/36
 S+W/SPL+P/38

15-GA:

(dove) GA/MADE IN USA/20
 GA/NITRO/EXPRESS/20
 (dove)/GA/MADE IN USA/12

16-OTHER:

HP (1922-1988)
 XL
 XR
 XB

SUPER X

U/HV/SPEED (1910-1960)
 PCC/LEAGUE/12 (1897-1935)
 NEW RIVAL/NO.12 (1901-1935)
 AMERICAN EAGLE/No.12 (1875-1930)
 AL
 RA/17
 FEDERAL/MONARK/NO.20
 FM UMC/32
 WRA/18
 RWS/38 M+H
 RELIANCE REDHEAD/NO.16
 SPRG/RP/30-06
 SPRG/SUPER X/30-06
 FO/410
 RA/42
 SEARS/20 GA
 SHAFFER/LADY ESTHER USA/38
 FC/32 AUTO
 MW
 FEDERAL/MONARK/NO.12
 (BEE)
 FC 308 WIN
 FC CO. Prize 12 G
 FEDERAL/Hi-POWER/NO.16
 D.C.CO/38 M+H (38 cal)
 F A 30 (45 CAL. AUTO CART PISTOL/FRANKFORD
 ARSENAL)
 WRA/38-40 WIN
 G-I-L/CANUCK/16
 F C 30-30 WIN

13 - Fuel**Type:**

Coal
 Lignite
 Slag

14 - Electrical**Type:**

Battery part
 Electrical wire
 Insulator, cleats, pins or brackets
 Electrical switch, plug, box slog, socket or terminal part
 Electrical motor part (household-related)
 Fuse (household-related)
 Electrical light fixture/light bulb part
 Grounding rod, lightening rod
 Armature wire
 Unidentifiable

APPENDIX E

OVERVIEW OF LITTLE ELM CEMETERY

by

Susan A. Lebo and Stephen A. Lohse

Introduction

The Little Elm Cemetery, 41DN395, is situated southeast of the town of Little Elm on a finger of Lake Lewisville, east of Cottonwood Creek (Figure E.1). The cemetery is located on the north side of old State Highway 24, which ran east-west through this part of the lake but is now blocked off at the northern end of the cemetery.

The cemetery is triangular with the gate at the south end, and the main road is oriented north-south (Figure E.2). Burials occur in Sections A-F, while Sections H-K are not yet in use.

The rows within each section run north-south, and the graves are oriented east-west with the headstones at the west ends of the graves. This is true throughout the cemetery. The inscriptions generally occur on the west faces of the headstones. Enclosed family plots are common, and most have concrete borders.

The cemetery was impacted by the construction of Lake Lewisville, and the northwestern portion was relocated. This area was located within the boundaries of our intensive survey of the shoreline between the 515- and 532-ft contours (Lebo and Brown 1990).

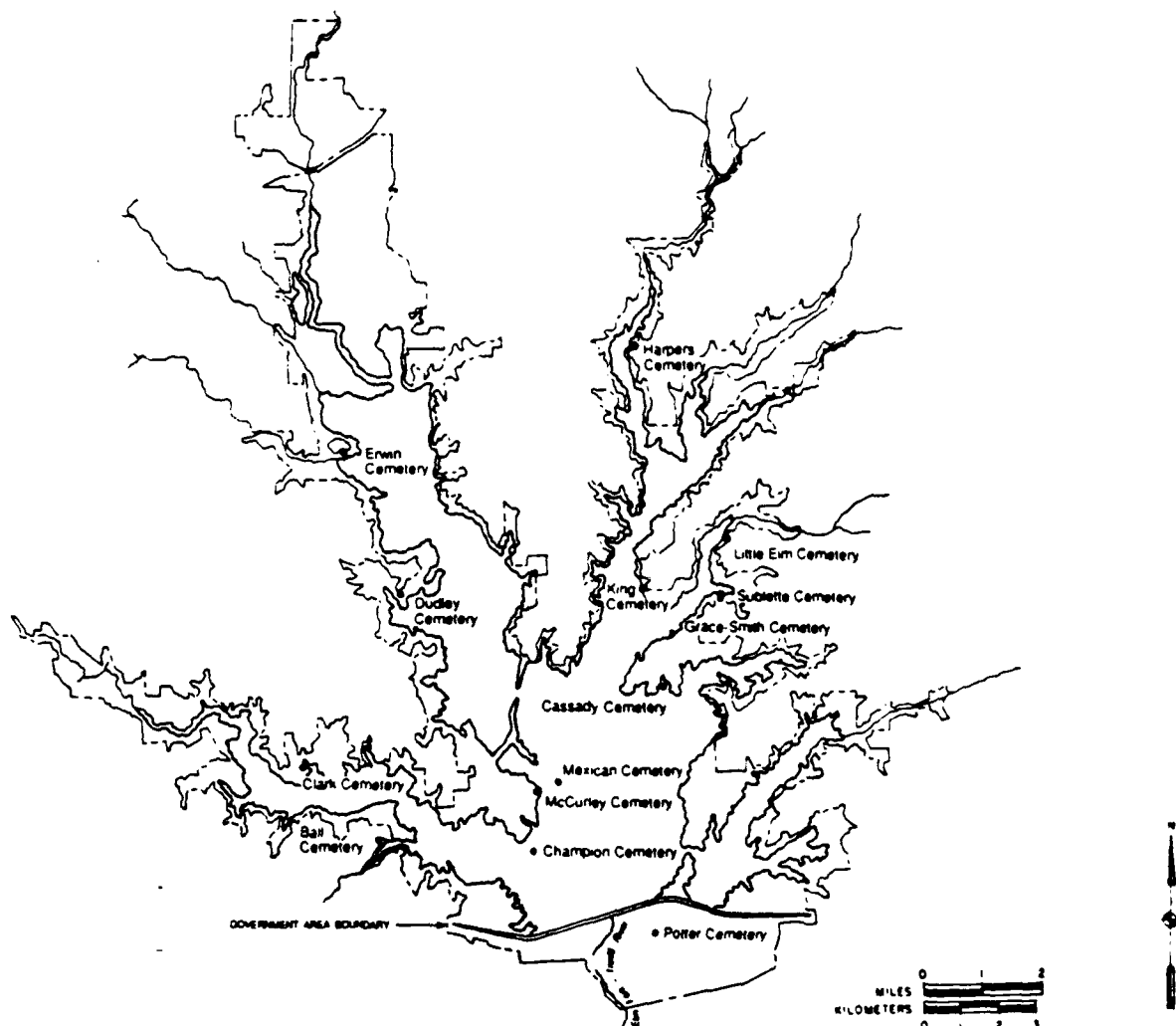


Figure E.1 Location of cemeteries near Lewisville Lake.

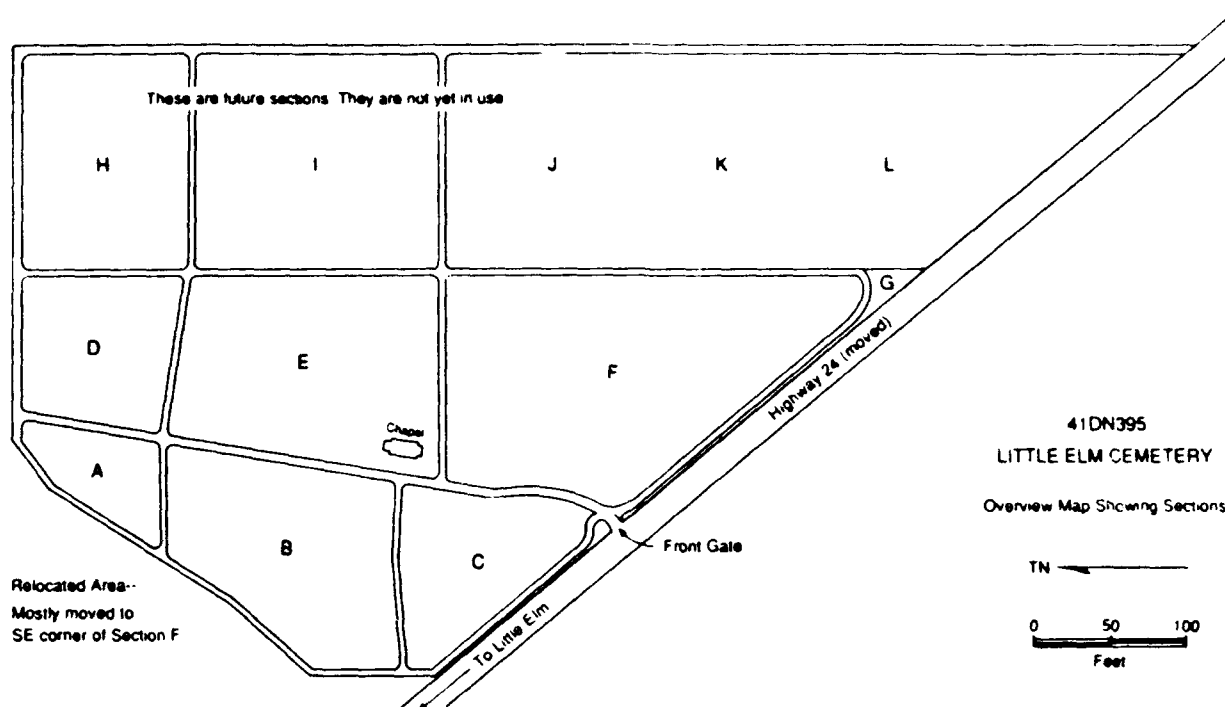


Figure E.2 Layout of the Little Elm Cemetery.

Additional documentation was recommended, including recovery of information about the number of graves moved, where they were relocated, as well as data on the existing cemetery. Recovery of information on the layout of individual graves and family plots, gravestone inscriptions, stone types, fencing, mounding, placement, orientation, and maintenance was recommended.

Attention was directed to graves dating 1900 or earlier, including relocated graves within the existing cemetery. This research incorporated existing documentation available from cemetery records and documents on file at the U.S. Army Corps of Engineers, Fort Worth District. Oral history information was provided by Mr. Stubblefield, the caretaker. Archival research was conducted at the Denton County Courthouse and the Carroll Courts Building in Denton.

History

The cemetery is located in the southeast corner of the M. Jones survey A-667, patented in 1856. Matthew Jones came to Texas from Illinois in 1846 or 1847 with his wife, Emily Jane, and one child, Martha. They settled first in Alton and then in Little Elm on the M. Jones survey. According to Mrs. J. M. Stover (Martha),

My father, grandmother and grandfather, also an Uncle John House started back to Illinois on business. My father (Matthew Jones) took sick and was buried somewhere in Arkansas. Joel S. Clark came back with them and in 1851 he and my mother, Emily [Jane Teel] Jones, were married. (Mrs. J. M. Stover's notes cited in Harris 1986). [not in original]

Joel S. Clark was born in Jackson County, Tennessee in 1824. His and Emily's children included Richard H., Mary E. (Thomas), Peter T., Matilda F. (Carruthers), Emily F. (Gibson),

Nancy Minnie (Butler), and Edna Orpha (Seagraves) (Harris 1986:140).

Joel S. Clark acquired the entire Matthew Jones survey A-667. He also patented his own survey in 1860. The first acre of land for the cemetery was given by Clark and his wife. The cemetery was originally called Cottonwood Cemetery. The land continued to be owned by the Clark family until 1910 when it was divided as part of Joel S. Clark's estate. The cemetery is located on Tracts 12, 13-1, 13A, and 13B. The deed/title history for these tracts are provided in Table E.1.

Relocation

The older portion of the cemetery, the northwest corner, was located within the area impacted by the construction of Lake Lewisville and was moved by the U.S. Army Corps of Engineers in the 1950s. Graves located between the 509- and 545-ft contours were relocated to other sections of the cemetery, primarily the southeast corner of Section F. The impact area is shown in Figure E.3. Unmarked graves identified during relocation and about 700 marked graves were moved.

A pedestrian survey in the relocated area revealed that it had been cleared. No graves remain. Scattered piles of concrete rubble from the borders of old plots, flower pot material, metal, ceramic grave marker fragments, and an occasional piece of granite occurred. The vegetation was also cleared. No cedars or junipers remain, several scattered rose bushes occur, and the remainder is weeds.

Documentation

The Little Elm Cemetery records provide a wealth of information beyond the scope of this report. All plots (with a

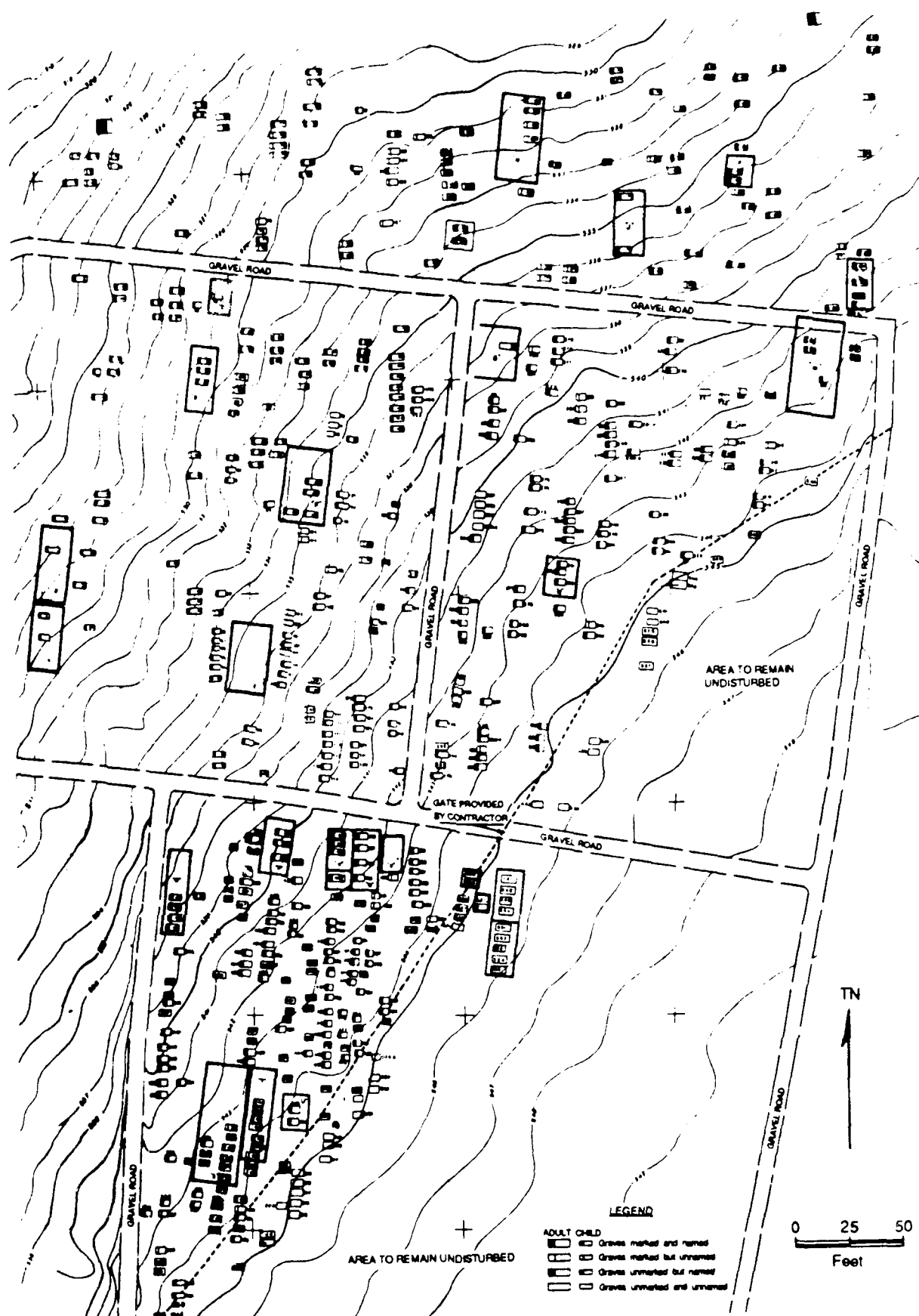


Figure E.3 Area of Little Elm Cemetery relocated by the U.S. Army Corps of Engineers in the 1950s.

Table E.1
Land Tract History for the Little Elm Cemetery

Date	Grantor	Grantee	Description	Ref.
1910	Heirs of Joel S. Clark (dec'd) S. Clark	Edna O. Seagraves Seagraves	68.75 ac of M. Jones survey, being the SE corner	105/64
1911	E. T. and Edna O. Seagraves	A. J. Wilkinson	64.75 ac of M. Jones survey, same as above	120/171
1912	A. J. and Mattie E. Wilkinson	Little Elm Cemetery Association	3.23 ac (Tract 12; also called 3.96 ac)	122/391
1918	J. T. and Mattie Thomas	W. A. Brooks	65.52 ac (Tract 13A), excluding cemetery	163/20
1921	Alvin Thomas, Emily Thomas, Irma Thomas	Little Elm Cemetery Association	3.23 ac, same as above as above	122/485
1945	Blanche L. Brooks, et al. (estate of W. A. Brooks)	W. T. Stone	25.9 ac (Tract 13A)	313/117
1952	W. T. and M. V. Stone	E. L. Calburn, and R. E. Shumaker	8.1 ac (Tract 13 B)	384/403
1952	Property was condemned		3.96 ac (Tract 13A)	383/51
1953	E. L. Calburn, R. E. Shumaker	Little Elm Cemetery Association	8.1 ac (Tract 13B)	389/118

few exceptions) have been recorded, including information on location (Section, Row, Site), first and last name, date of birth, date of death, and epitaph. This information has been computerized, and cross-indexing has been generated for specific variables. We were interested in documenting graves which date 1900 or earlier, and a printout ordered by date of death was provided for us by Mr. Stubblefield.

The nineteenth century graves are listed in (Table E.2), and their locations are shown in Figure E.4. A total of 177

graves are included here. The analyses that follow pertain to these graves. Early graves that do not have markers or illegible inscriptions are not included.

The cemetery records were used to locate the nineteenth century graves in each section. A description was recorded for each using a tape recorder. Written transcriptions of these tapes, along with photographs, are on file at the Institute of Applied Sciences, University of North Texas.

Table E.2
Nineteenth Century Graves at Little Elm Cemetery¹

Sect	Row Site	Last Name	First Name	Date of Birth	Date of Death
D	K7	Unknown	A. S.	1808	1862
D	E6	Venable	Martha A.	1849-06-07	1863-08-15
F	J9M	McNiel	John T.	1866-09-07	1867-02-14
D	P2	Harper	Pamela	1833-06-30	1868-01-28
D	O6	King	Martha A.	1844-09-03	1868-06-03
F	J81	Griggs	O. S.	1870-03-09	1870-04-01
F	H82	Smith	Christopher	1830-03-31	1870-04-10
FF	F9A	Shahan	William D.	1869-06-05	1870-05-28
B	J35	Grace	Charles N.	1866-05-11	1870-07-31
D	O2	Harper	Harriet	1809-03-24	1871-07-31
F	G9B	Sprouse	J. M.	1827-11-26	1871-09-04
B	S31	Stover	John M.	1871-03-30	1871-09-22
B	O33	Martin	William	1837-07-14	1871-10-15
B	O34	Martin	Isabella	1855-11-13	1871-10-15
F	D9G	Sprouse	Maud E.	1870-05-28	1871-11-03
F	C86	Balch	John B.	1828-03-05	1873-02-05
F	F88	Shahan	Isaac H.	1869-11-02	1873-02-25
F	J83	Robertson	Emer	1870-04-10	1873-12-15
B	T36	Clark	Malissa L.	1855-04-23	1874-03-13
F	F82	Smith	Christopher	1874-11-15	1875-02-11
F	H9B	Sprouse	Mikager	1857-03-05	1875-02-28
B	P44	Erwin	Nathaniel	1873-05-24	1875-03-18

Table E.2 (contd.)

Sect	Row Site	Last Name	First Name	Date of Birth	Date of Death
F	J9L	McNiel	Clarence H.	1874-08-16	1875-04-22
B	S63	Gilbert	Otis E.	1871-06-30	1875-06-13
A	A28	Potter	Ida May	1873-10-27	1875-09-10
B	N29	Johnson	F. M.	1841-01-05	1875-12-11
B	S34	(Unknown)	????	1875	
B	T45	Russell	Mattie	1874-09-04	1876-01-14
F	F9B	Shahan	Charles	1875-10-24	1876-08-16
B	O44	Erwin	Martha A.	1861-04-04	1876-08-22
B	N14	Bone	James A.	1854-03-05	1876-10-02
B	L28	Carter	Mary E.	1813	1877-02-14
F	J82	Wilks	Lillie	1876-07-30	1877-06-23
F	H83	Smith	Granvell B.	1877-11-02	1877-11-12
F	J72	Holmes	Martha E.	1823-01-22	1877-11-13
F	G9C	Huffington	William C.	1873-06-25	1878-09-16
D	Q1	Harper	Dr. George	????-03-08	1879-01-28
B	J26	Sargent	Isiah	1821-08	1879-10-09
B	R25	Robertson	Charles S.	1879-02-04	1879-11-07
B	R26	Robertson	John A.	1876-12-04	1879-11-07
B	J2	Coberly	Caroline	1826-04-23	1880-03-03
F	E85	Robertson	Goldie	1879-12-13	1880-06-10
F	S64	Sublette	Thomas H.	1832-03-19	1880-07-26
C	F20	Clark	J. L.	1879-10-02	1880-09-06
B	U36	Caruthers	Clement C.	1880-12	1880-12
F	J53	White	Robert	1879	1880
B	N32	Chappell	Jimie O.	1879-03-30	1881-01-07
B	S60	Gerald	Madora	1881-01-22	1881-01-22
B	U38	Caruthers	Hughey A.	1851-04-01	1881-03-28
B	K30	Smith	L. E.	1844-06-08	1881-05-17
B	O27	Clark	Leroy B.	1873-06-16	1881-06-30
B	N13	Baker	Mrs. H. A.	1832-09-20	1881-11-09
B	U45	Russell	Mary J.	1877-11-20	1882-05-28
B	V61	Hunsaker	Bennie	1878	1882
F	M9G	Brashear	Susie A.	1853-01-24	1883-03-10
B	L5	Smith	Chancy	1820-06-24	1883-09-14
B	K8	Shahan	Mary H.	????	1883-11-20
B	L7	Smith	George A.	1856-12-25	1883-11-25
B	N15	Wilkins	Louisa Bone	1830-08-14	1883-12-12
B	J45	Hill	Wady	1883-12-19	1884-02-09
B	T37	Clark	Martha A.	1856-03-17	1884-02-09
B	U37	Caruthers	Matilda F.	1860-07-04	1884-03-22
B	S61	Gilbert	Ella	1869-09-05	1884-05-07
B	U55	Mercer	Lessie M.	1878-07-21	1884-05-22
C	F19	Clark	N. C.	1882-09-21	1884-08-12
F	J9C	Apple	G. A.	????-02-19	1884-10-15
B	L4	Smith	Hannah	1825-01-26	1884-11-30
B	L8	Smith	Lillian E.	1882-04-27	1885-01-29
B	M8	Beale	Elva E.	1885-10-07	1885-10-15
A	A27	King	Delilah	1806	1885
F	F80	Smith	Nannie	1852-01-15	1886-04-20
F	F83	Smith	Clarence	1886-04-25	1886-07-27
B	M9	Beale	Goldie E.	1886-10-17	1886-10-25
B	G33	Saunders	Sallie W.	1851	1886
B	L11	Robertson	Elisha	1803	1886
F	K91	McNiel	Lewis H.	1826-01-23	1887-09-05
F	E86	Robertson	Alfred	1884-06-17	1887-11-02
F	E9B	Shahan	Ann M.	1850-06-15	1888-01-02
B	K10	Robertson	(infant son)	1888-08-08	1888-08-08
B	I8	Cleveland	W. E.	1833-04-20	1888-08-14
B	L27	Carter	Bud	1865-07-15	1889-01-03
B	B29	Potter	(infant son)	1889-05-12	1889-05-12
D	D3	Cox	Caleb	1810-01-13	1889-12-06
F	H84	Gough	James Willie	1870-05-22	1889-12-15
B	L9	Beale	Nancy E.	1834-12-28	1890-02-28
F	F79	Smith	F. M.	1846-05-14	1890-02-28

Table E.2 (contd.)

Sect	Row Site	Last Name	First Name	Date of Birth	Date of Death
B	O36	Harriss	Woodson	1814-12-23	1890-04-27
B	F18	Pair	Willey	1889-01-18	1890-07-16
B	J40	Midkiff	J. J.	1854-12-28	1890-08-15
B	U40	Clark	Joel A.	1889-07-08	1890-10-24
B	V54	Staggs	Alexander	1846-01-26	1891-01-31
E	E51	Presley	Nancy	1824-09-08	1891-05-17
F	I84	Carpenter	Edgar C.	1886-02-11	1891-08-13
B	I5	Coberly	Alvin	1891-07-13	1891-11-07
F	N73	Bailey	Lillie J.	1887-06-07	1892-05-15
E	F51	Fortson	Lillie A.	1892-03-04	1892-06-13
A	H33	Bruce	E. B.	1892-11-17	1892-11-17
A	G33	Pollock	N. E.	1860	1892
B	K43	Baird	Sarah J.	1833-06-24	1893-01-23
A	F33	Derryberry	Josephene	1856-05-23	1893-03-07
B	F4	Saint John	J. L.	1855-04-03	1893-09-09
A	D15	Price	Mattie J.	1862-01-08	1893-11-10
F	J73	Holmes	P. T.	1818-03-01	1893-12-11
F	C9C	Balch	Willie H.	1891-08-28	1894-03-21
F	N9H	Thomas	H. O.	1858-09-18	1894-04-04
B	J42	Hill, Sr.	Henry	1835-02-28	1894-05-29
F	H86	Gough	Malcomb E.	1880-11-03	1894-07-19
A	C33	Yount	S. R.	1894-08-09	1894-08-09
F	E52	Kidd	Ella B.	1859-11-07	1894-08-27
A	D32	Chastain	Bessie A.	1894-05-06	1894-10-02
B	J27	Sargent	Abraham	1860-09-16	1894-10-10
B	D5	Allen	W. W.	1861-07-06	1894-10-22
F	K9F	Showalter	J. D.	1861-05-04	1894-10-28
F	Q89	Padgett	Earnest A.	????	1894-11-11
B	K11	Robertson	Mary E.	1894-08-10	1894-11-12
F	R78	Rogers	Graham	1893	1894
F	G68	Stover	Nola	1873-04-30	1895-06-04
B	E14	Holcomb	Gilson W.	1839-10-01	1895-07-63
B	O32	Martin	(infant dau)	1895-08-29	1895-08-29
B	P47	Greer	T. E.	1858-04-08	1895-09-05
B	N28	Johnson	Rebecca	1818-02-15	1895-09-09
B	J59	Hill	Hannibal	1843-07-09	1895-09-21
B	O43	Erwin	Johnathon W.	1834-03-01	1895-11-22
B	K12	Robertson	Josie	1862-10-11	1895-12-25
F	R77	Rogers	(infant dau)	1894	1895
E	F60	Gibson	John Freeman	1895-02-09	1896-02-05
F	J71	Holmes	Cathrine O.	1845-08-08	1896-03-04
F	F77	Smith	Justin	1827-08-16	1896-07-31
B	J28	Sargent	Gemina C.	1868-02-23	1897-02-08
B	J1	Coberly	Floyd	1861-06-26	1897-02-23
F	P67	Martin	Edna E.	1878-10-17	1897-04-20
F	P66	Martin	(infant dau)	1897-04-07	1897-06-18
F	C64	Fox	Carl	1896-03-31	1897-06-23
B	J25	Sargent	Barbara E.	1823-09-13	1897-07-22
A	F25	Robb	Lula B.	1879-12-05	1897-10-27
F	J55	Newman	John Lenox	1814	1897
F	K66	Campbell	Brad	1865	1897
B	C11	Meadows	Sarah J.	1841-03-26	1898-02-04
F	T65	Sommerwill	H. Y.	1857-09-11	1898-02-05
A	C32	Yount	Minnie Jane	1875-01-27	1898-03-16
A	C24	Daniel	Clamentary T.	1823-02-18	1898-05-09
B	L19	Baker	Charles S.	1886-02-15	1898-05-15
B	L39	Reed	L. C.	1841-02-20	1898-05-23
E	H55	Baker	Ollie M.	1897-07-01	1898-05-23
F	A84	Balch	Horace Lee	1896-04-09	1898-06-22
A	E33	Farrington	Oliver C.	1870-06-11	1898-07-11
F	J56	Williams	(infant son)	1898-08-04	1898-08-04
B	O29	Clark	William H.	1853-02-18	1898-12-12
F	N60	Holder	(infant)	1899-02-01	1899-02-15
F	A45	Pullen	Lula V.	1894-06-10	1899-03-16

Table E.2 (contd.)

Sect	Row Site	Last Name	First Name	Date of Birth	Date of Death
B	J3	Coberly	Aaron	1823-02-22	1899-03-20
F	P74	Smith	Eddie W.	1894-07-05	1899-03-22
F	D46	Barnum	Frank	1886-06-19	1899-03-23
F	B40	Selby	John E.	1867-01-17	1899-05-22
B	H3	Coker	Charles	1895-09-10	1899-07-02
B	C42	Salmons	Ella	1864-12-01	1899-07-19
B	J61	Hill	Emlie	1836-08-27	1899-07-21
E	F50	Fortson	Arthur F.	1897-07-30	1899-07-21
B	H5	Coker	F. H.	1869-03-7	1899-08-09
B	L10	Beale	Robert T.	1831-01-17	1899-08-19
A	C15	Robertson	Anney Wayne	1897-10-09	1899-09-01
F	E88	Shahan	Lillie J.	1883-07-03	1899-11-02
B	J64	Allen	Little Sis	1899-11-20	1899-11-20
A	E25	Atkins	Susannah C.	1837-07-09	1899-12-30
F	F81	Smith	Agnes	1898	1899
E	E60	Thomas	W. I.	1853-10-28	1900-01-24
E	C45	Grace	Ida M.	1871-04-08	1900-01-27
A	D14	Robertson	J. C.	1876-09-22	1900-02-19
F	K44	Carr	Pisidia C.	1822-01-25	1900-03-19
A	E14	Robertson	Willie Baby	1899-11-01	1900-06-08
B	I7	Cleveland	S. J.	1831-11-05	1900-06-21
B	Q47	Greer	Rebecca	1849-03-24	1900-07-24
F	C77	Beale	L. E.	1875-12-06	1900-07-26
A	A15	Robertson	Martha A.	1852-01-28	1900-10-06
B	F17	Scott	Viola	1855-09-27	1900-10-10
A	A14	Robertson	Vergie E.	1888-03-14	1900-11-01
F	G65	Chappell	Barbara E.	1848	1900-12-02

¹ Listing is from Little Elm Cemetery records; unknowns are not listed here, see original.

Between the earliest datable grave, 1862, and 1901, the greatest number of deaths occurred in 1889 and 1899 (Table E.3). More than ten deaths were recorded for only five years, 1889, 1894, 1898, 1899, and 1900. The 1860s and 1870s period is probably underrepresented, with many of the unmarked graves and graves marked only by fieldstones dating to this period.

Death dates by age are shown in Table E.4 and indicate that 39.5% of the population in the cemetery sample died before age 10. Including stillbirths, 55.9% of the children under 10 died before age 1. Excluding stillbirths, 39.7% died before age 1. Child deaths accounted for 22.1% of the sample. Again, excluding stillbirths, children represented 16.6%.

Excluding stillbirths, death dates indicate that 36.2% of the cemetery sample died before age 11 (n=59). Death rates decreased for ages 11-20 (9.2%) and 21-30 (9.2%), increased for ages 31-40 (15.6%), followed by a decrease for ages 41-50 (5.5%), and a steady increase after age 50. Ages 51-60 represented 10.4% of the deaths with ages over 60 accounting for 13.5% of the sample.

It is important to note these numbers simply reflect the number of deaths within the sample. It is not known how many individuals were born during this period and lived past 1900. This could be calculated from the available cemetery records, but this was outside the scope of this study.

A comparison of births and deaths by month is shown in Table E.5. The highest percentage of births occurred in March and the lowest in May and August, while the highest percentage of deaths occurred in February and November

and the fewest in April. The greatest number of stillbirths occurred in August (44.4%).

Table E.3

Death Dates for Marked Graves Dating Before 1901

Year	N	Year	N	Year	N	Year	N
1862	1	1872		1882	2	1892	4
1863		1873	3	1883	5	1893	5
1864		1874	1	1884	8	1894	13
1865		1875	8	1885	3	1895	9
1866		1876	4	1886	5	1896	3
1867	1	1877	4	1887	2	1897	9
1868	2	1878	1	1888	3	1898	11
1869		1879	4	1889	17	1899	17
1870	4	1880	6	1890	6	1900	12
1871	6	1881	6	1891	4		

To obtain a more personal look, data on the births and deaths of members of the Robertson families were examined (Table E.6). This family was selected because it was one of the best represented within the study sample.

The most interesting observation was that members of six families were represented, and with the exception of two mothers, all of the burials were children. Each of the fathers lived past 1900. Elisha Robertson and John Lenox Newman, 83 years old, were the oldest individuals in the study sample.

Table E.4
Death Dates by Age and Month (N=160)

Age	Jan	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
0	1				1			4			2	1
<2 mos.		2		1						2	1	
<1 yr.		3		1	2	5	1	1	2	1	3	
1	2		1			1	2	1	2	1	1	
2	1					1					1	
3		1	1			1	1				1	1
4			2		2		1					
5					1			1	1			
6-10						1						
11-15			2		2		1	2		1	1	
16-20		1	1	1						1	1	1
21-25	1	1	1			2	1			1		
26-30	1	2	2				1	1			1	
31-35	1	1	2	1	1	1	1	4	1	2		
36-40	1	1	2	1	1				2			
41-45		2							1	1		1
46-50	1						1			1	1	
51-55	1	1	1	2	1	1	1	2				
56-60	1	1			2					1	1	
61-65		1					2		2		1	1
66-70					1	1	1	1				
71-75				1	1		1					1
76-80			2						1			1
Total	11	17	15	7	14	12	16	13	13	14	17	11

Table E.5

Comparison of Births and Deaths by Month,
excluding stillborns

Month	Births		Deaths	
	N	%	N	%
January	15	9.9	11	6.9
February	13	8.6	17	10.6
March	19	12.6	15	9.4
April	14	9.3	7	4.4
May	8	5.3	14	8.8
June	16	10.6	12	7.5
July	14	9.3	16	10.0
August	8	5.3	13	8.1
September	14	9.3	13	8.1
October	10	6.6	14	8.8
November	10	6.6	17	10.6
December	10	6.6	11	6.9

Table E.6

Birth and Death Data for Robertson Families

Name	Birth Date	Death Date	Age	Relationship ¹
Elisha Robertson	1803	1886		
Anthony W. Robertson				father
Martha A. Robertson	1852	1900	48	mother
Vergie E. Robertson	1888	1900	12	son

Table E.6 (contd.)

Name	Birth Date	Death Date	Age	Relationship ¹
Anney Wayne Robertson	1897	1899	1	daughter
J. S. Robertson				father
Mary Robertson				mother
J. C. Robertson	1876	1900	23	son
William M. Robertson				father
Lucy Robertson				mother
Willie Baby	1899	1900	<1	daughter
H. M. Robertson		1915		father
Josie Robertson	1862	1895	33	mother
infant son	1888	1888	0	son
Mary E. Robertson	1894	1894	<1	daughter
L. C. Robertson				f or m
M. E. Robertson				f or m
John A. Robertson	1876	1879	2	son
Charles S. Robertson	1879	1879	<1	son
A. W. Robertson				f or m
M. A. Robertson				f or m
Emer Robertson	1870	1873	3	daughter
Goldie Robertson	1879	1880	<1	daughter
Alfred Robertson	1884	1887	3	son

¹ Parent's whose sex was not known were listed as f or m for father/mother.

Martha A. died in October, 1900, and her son, Vergie, died less than a month later in November, 1900. Charles S. and John A., sons of L. C. and M. E. Robertson, died on the same day, November 7, 1879. The youngest child was the infant son of H. M. and Josie Robertson, which was probably stillborn. Only two children lived past age 3, and both died in young adulthood. These data suggest that if an individual lived past childhood, particularly past age 5, they had a good chance of living to middle age.

For more detailed information about the Little Elm Cemetery and particular families, the reader is directed to the Little Elm Cemetery Association and their records, as well as the photographs and transcripts pertaining to the pre-1900 graves on file at the Institute of Applied Sciences, University of North Texas and those of Ardent Data Service (1985), which are on file at the Denton County Historical Commission.



Figure E.4 Location of marked pre-1901 graves in the Little Elm Cemetery, including some relocated from other cemeteries.