

**An Archaeological Survey of
CenTex Properties Hardy Oak Tract
Bexar County, Texas**

By

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Abstract

Abasolo Archaeological Consultants conducted a Phase I archaeological survey of the Hardy Oak Tract for Centex Properties of San Antonio, Texas. The survey was under the aegis of Frost Geosciences and was done at the request of the City of San Antonio. Hardy Oak is a 21 acres tract in the Stone Oak area in northern Bexar County, Texas. A 100% pedestrian survey was made of the property and one archaeological site, 41BX1664, a small burned rock midden, was recorded. The midden has been slightly disturbed, and possibly dates to the Late Prehistoric period. Although limited testing of the midden might yield artifacts that would be time-diagnostic, no further work is required for this site at this time.

Introduction

Abasolo Archaeological Consultants conducted a Phase I archaeological survey of the Centex Properties Hardy Oak Tract for Frost Geosciences at the request of the City of San Antonio. Hardy Oak is a 21 acres tract in the Stone Oak area (Fig. 1). The assessment was carried out in accordance with the "Archeological Survey Standards for Texas" in order to assess the significance of the site regarding consideration for nomination to National Register of Historic Places. A 100% surface pedestrian survey was conducted on the property with a survey team consisting of Thomas Hester, Harry Shafer, and Steve Frost.

Hardy Oak is located at the western end of Hardy Oak Boulevard in the Balcones canyonlands environment in northern Bexar County. The soils consist of Tarrant association, gently undulating (1 to 3 percent slope) and rolling (5 to 15 percent slope; (Fig. 2; Taylor et al., 1991). These shallow soils are dark brown, clayey, and calcareous, and cap hard Edwards limestone.

The property consists of a oak-juniper parkland with good surface exposure for survey purposes (Fig. 3). It is surrounded by extensive development on two sides and open pasture land on the west. The latter is also soon to be developed

Archaeological Background

Regional Cultural Patterns and Chronology

The broad outline of the archaeology of northern Bexar County can be discerned. Major time periods and site types are briefly noted here (cf. Hester 1986).

The **Paleoindian** period, 9,200-6,800 B.C., has distinctive chipped stone spear points used in hunting mammoth and other late Ice Age mammals early in the period. Other spear types appear with a shift to bison, deer and other game after the Ice Age ended around 8000 B.C. Known site types in northern Bexar County are *campsites* with flint-chipping debris from stone-tool making and repair. One site of Clovis age (9,200 B.C.) was excavated near FM1604 and Leon Creek. A later site, dating around 7,500 B.C., was investigated on the grounds of St. Mary's Hall on Salado Creek. Most recently, the Chandler site on Culebra Creek has been partially excavated, yielding artifacts between 7,500-6,800 B.C.

Sites of the following **Archaic** period are common in northern Bexar County. These peoples were hunters and gatherers as in the earlier Paleoindian period, but lived in an environment very similar to those of modern times. Projectile points used to tip spears (often erroneously called "arrowheads") change in shape through time, from 6,800 B.C. to 500 A.D. Archaeologists use these forms to recognize more specific time frames

within the Archaic (e.g., Early, Middle and Late Archaic). In northern Bexar County, the most distinctive Archaic site is the *burned rock midden*. These large accumulations of fire-cracked limestone result from the use of earth-oven cooking starting around 3,000 B.C. (Black et al. 1997). Such features were part of *larger campsites*, with large amounts of flint debris from tool-making; sometimes, animal bone (dietary remains) and charcoal that can be used for radiocarbon dating. Other Archaic site types include *lithic procurement* areas (quarries; where flint cobbles eroded out of the Edwards limestone and were processed), *lithic scatters* (lightly-used areas probably representing short-term hunting and gathering activities), and rarely, *sinkhole burials* (Archaic peoples often disposed of their dead by placing them in sinkholes and caverns).

By 700 A.D., there began to be some changes in the long hunter-gatherer lifeway. The **Late Prehistoric** is first recognized with the introduction of the bow and arrow. The stone arrow points are very small (mistakenly called “bird points”), but could be used in hunting game of any size. By 1300 A.D., the economy emphasized buffalo-hunting. Most sites of this era include *campsites*, often in areas previously used by Archaic peoples, *lithic scatters* of this age; and the *lithic procurement areas* of earlier times continued to be used.

During the Historic period, the best known archaeological remains are *ranch and farm houses of cut stone*, dating from the 1840s through the 1880s. Stacked-stone fences also occur. Such sites, including those without surviving structures, are recognized from 19th century pottery fragments, artifacts of glass and metal, etc. Later Historic houses and farmsteads, through the early 1900s, are also found.

Archaeological Sites in the Vicinity

Very little archaeological research has been done in the region surrounding the Hardy Oak Tract, in stark contrast to some other portions of northern Bexar County. City, state and federal regulations of the 1980s, at the time the original Stone Oak properties were developed, did not require any sort of prior cultural resource study. In 1987, Joseph Labadie, then at the Center for Archaeological Research, The University of Texas at San Antonio, supervised a very limited survey on the western edge of Stone Oak (and west of Hardy Oak). Working with local avocational archaeologists, Labadie recorded nine sites. A formal report was not published, but the site data are available on the Texas Archeological Site Atlas (Texas Historical Commission, Austin). Sites were mostly upland locales, not in close proximity to streams or permanent water sources.

One site (41BX753) is a upland campsite used most heavily in Early Archaic times (Guadalupe and Clear Fork tools and Early Archaic point types; Turner and Hester 1993). There was also evidence that intermittent use of the site area continued through the Archaic and into Late Prehistoric times. However, the sites recorded by Labadie are best characterized as “mixed function” sites. Lithic procurement (quarrying) was taking place at most sites, but yet there were a number of time-diagnostic points and other artifacts reflective of occupation episodes. No burned rock middens or other major site types were found.

One of the authors (Hester) had the opportunity in the 1970s and 1980s to look at numerous artifacts found in the Stone Oak area by contractors, construction workers, and artifact collectors. Particularly noticeable were the dominance of Early Archaic point types, especially Gower and Martindale (Turner and Hester 1993), with most of these showing extensive reworking and heavy white patina. Labadie notes the presence of patinated artifacts at most of his sites. We suspect many of these sites had been heavily surface-collected in the years prior to Labadie's survey.

To the east of the Hardy Oak Tract, two sites have been recorded near US Highway 281. One of these (41BX777) is an Archaic campsite on Mud Creek, and another (41BX449) is near Floodwater Retarding Structure #9 (Hester et al. 1974) and represents lithic procurement (quarrying) of exposed chert cobbles in the area.

Also of special note is the Walker Ranch Historical District located south of FM1604 on Panther Springs Creek. The site most heavily investigated was 41BX228 (Black and McGraw 1985), with burned rock midden and adjacent occupation deposits. It represents the whole span of the Archaic period, and continued as a campsite well into the Late Prehistoric.

Survey Findings

The pedestrian survey yielded minor traces of prehistoric activity in the western and southern sections of the property in the form of isolated flakes and cores. No concentrations of either were noted to indicate intensive prehistoric quarry activity.

The most significant finding was a small burned rock midden on the left bank of a small drainage at the southern point of the triangular-shaped property (Figs. 4, 5). This midden is designated as 41BX1664. It measures about 13 meters east-west and 14 meters north-south. Maximum thickness is estimated to be about 30-40 cm. The midden is slightly disturbed by recent re-channeling of the drainage and by three small potholes. A small amount of debitage, some burned, was noted among the heavily fractured rock. The character of the burned rock midden is different from those that date to the Archaic Period in this portion of the canyonlands. The rock is heavily fractured and the matrix is very ashy. We suspect, although we cannot prove, that the midden is Late Prehistoric, probably associated with the Edwards interval in the local chronology, dating to somewhere between A.D. 800-1300.

The area in proximity of the midden was closely inspected for evidence of campsite activity, such as scattered burned rock, chipped stone residue, or chipped stone artifacts. A single early stage biface (Fig. 6) was observed across the small drainage from the burned rock midden. It was not possible to relate the biface to activities associated with the midden, however.

Although the midden is only slightly disturbed, we do not recommend further work at the site. The one advantage of additional work, however, would be to secure materials for dating, such as either diagnostic artifacts such as Edwards arrow points or charcoal. While the burned rock midden itself is small, the feature is a large earth oven or cooking pit. The function is apparent from the mounded burned rock and ash. Very little evidence of a campsite was found surrounding the midden. This observation is consistent with other burned rock midden sites in the canyonlands where campsites tend to be in the form of sheet deposits of chipped stone debitage and an occasional diagnostic artifact. Midden deposits were typically scraped up onto and incorporated into the cooking pit for insulation, thereby depositing diagnostic artifacts in the midden feature itself (Leach and Bousman 1998: 119-145).

Archaeological Recommendations

The one site found on the Hardy Oak tract is a small burned rock midden. These midden features are actually large earth ovens used to bake succulent plants such as sotol among other items. The middens are composed of churned up deposits that, by themselves, do not yield stratification and may incorporate artifacts of several different time periods. Single, short-term use middens such as 41BX1664, however, may be a single component feature and could yield artifacts diagnostic for the time of construction. No further work is recommended for the site at this time, although it would be desirable to conduct test excavations in the midden to obtain either charcoal or time-diagnostic artifact styles.

References Cited

- Black, S. L., and A. McGraw
 1985 *The Panther Springs Site: Cultural Change and Continuity within the Upper Salado Creek Watershed, South-Central Texas*. Archaeological Survey Report 100. Center for Archaeological Research, The University of Texas at San Antonio.
- Black, S. L., L. W. Ellis, D. G. Creel, and G. T. Goode
 1997 *Hot Rock Cooking on the Greater Edwards Plateau: Four Burned Rock Midden Sites in West Central Texas*. Two volumes. Studies in Archeology 22, Texas Archeological Research Laboratory, The University of Texas at Austin, and Archeology Studies Program, Report 2, Environmental Affairs Department, Texas Department of Transportation. Austin.
- Hester, T. R.
 1986 *Early Human Populations Along the Balcones Escarpment*. In *The Balcones Escarpment*, ed. By P. L. Abbott and C. M. Woodruff, Jr., pp. 55-62. Geological Society of America, San Antonio, Texas.

Hester, T. R., with the collaboration of F. A. Bass, Jr., A. A. Fox, T. C. Kelly, M. F. Chadderdon and E. S. Harris

1974 *Archaeological Survey of Areas Proposed for Modification in the Salado Creek Watershed, Bexar County, Texas*. Archaeological Survey Report 3. Center for Archaeological Research, The University Of Texas at San Antonio.

Leach, J. D., and C. Britt Bousman

1998 Cultural and Secondary Formation Processes: On the Dynamic Accumulation of Burned Rock Middens. In *Test Excavations at the Culebra Creek Site, 41BX126, Bexar County, Texas*, by D. L. Nickels, C. Britt Bousman, J. D. Leach, and D. A. Cargill, pp. 119-145. Archaeological Survey Report 265, Center for Archaeological Research, The University of Texas at San Antonio, Archeology Studies Program, Report 3, Environmental Affairs Division, Texas Department of Transportation, Austin.

Taylor, F. B., R. B. Hailey, and D. L. Richmond

1962 *Survey of Bexar County*. Series 1962, No. 12. United States Department of Agriculture, Soil Conservation Service, Washington, D.C.

Turner, E. S. and T. R. Hester

1993 *Field Guide to Stone Artifacts of Texas Indians*. 2nd ed. Rowman and Littlefield, Lanham, MD.

Figures

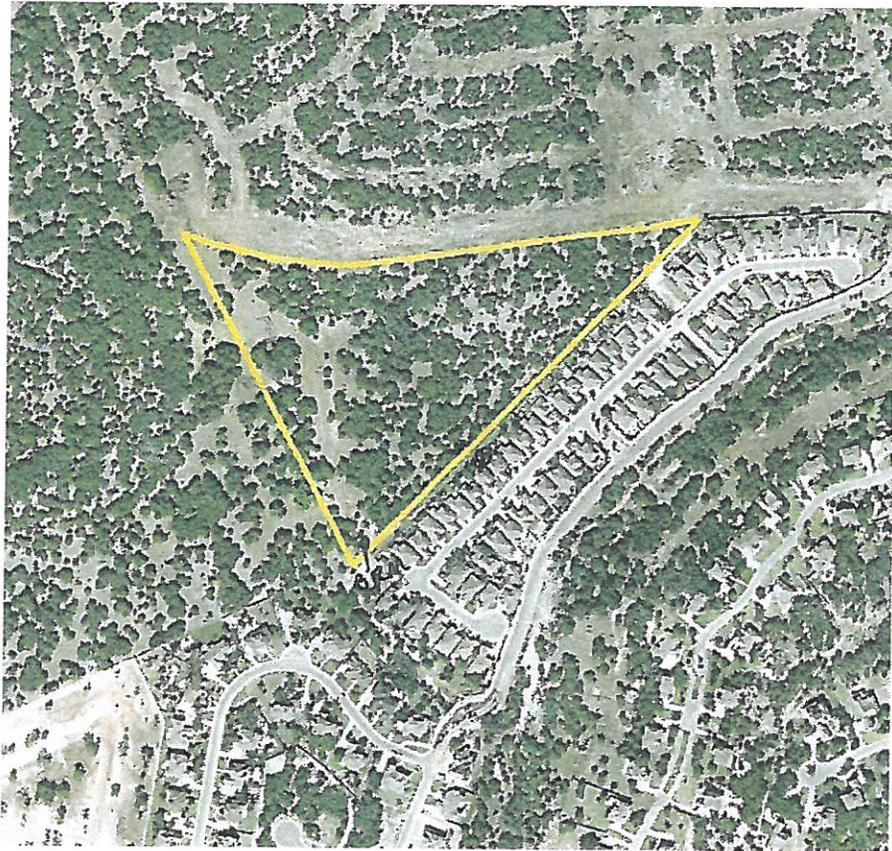


Figure 1. Aerial map of the Hardy Oak tract. Image provided by Frost GeoSciences.

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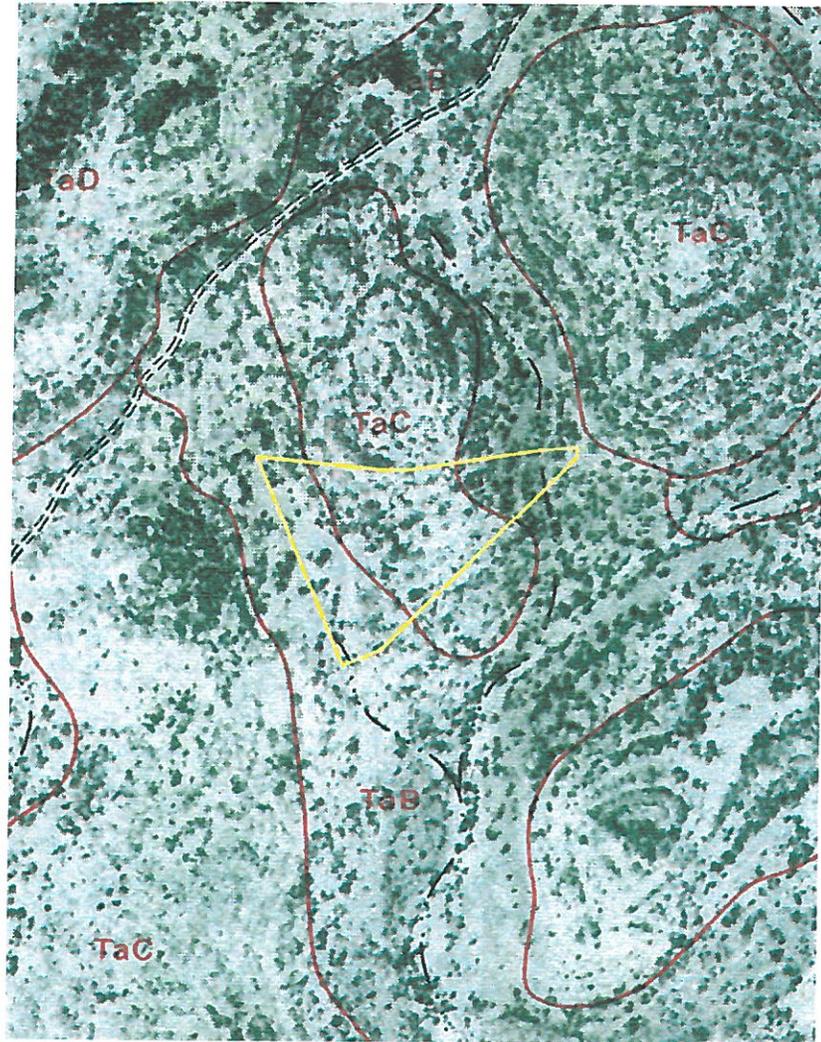


Figure 2. Soils map of the Hardy Oaks tract showing dominance of Tarrant association soils. Image provided by Frost GeoSciences.



Figure 3. View of the Hardy Oaks tract illustrating survey conditions.

IMAGE RESTRICTED

Figure 4. Site 41BX1664, a small burned rock midden or cooking pit. Harry Shafer is the scale in the image.



Figure 5. 41BX1664, a small burned rock midden or earth oven cooking pit.



Figure 6. Biface blank observed in the proximity of 41BX1664.