

Buried Hearths and Pottery in Alluvium of the Finlay Mountains, Texas

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In the summer of 1940 hearths and artifacts were found buried in alluvium in the western Finlay Mountains of Texas. The sites occur along the banks of Campagrande Draw, approximately at 31° 24' north latitude, and 105° 37' 30" west longitude. (See Fort Hancock Quadrangle.)

Although the climate is one of semi-aridity, the sporadic erosive power of ephemeral streams like the Campagrande is great. One flood may destroy any of the archaeological features which are today displayed along the stream valley. Because of their imminent destruction it is desirable to give a preliminary account of the buried campsites.

Specimens of pottery and fire-cracked hearthstones which occur *in situ* were dug from the alluvium and sent to Professor T. N. Campbell of the Department of Anthropology, University of Texas. Subsequently Professor Campbell sent the pottery to Dr. H. P. Mera of the Anthropological Laboratory in Santa Fe for identification and comparison. To these men and to Dr. C. C. Albritton, Jr., who suggested the study, the authors are deeply grateful for their interest, help, and advice.

Alluvial Fill

The northern portion of the Campagrande Valley is generally narrow. In two places, however, the draw crosses relatively large intramontane flats from one-fourth to one-half mile wide. The sites to be described occur in the lower and more westerly of these. The floors of the flats are composed of alluvium, sections of which are displayed along the vertical walls of the arroyo.

The alluvium consists for the most part of unconsolidated silt and sand with interbedded lenses of pebble, cobble, and boulder gravel. In places the gravel is partially cemented with caliche.

The alluvium ranges in thickness from fifteen or twenty feet along the axis of Campagrande Draw to a few inches

along the margins of the valley flat. The fill wedges out against slopes which lead up to remnants of a pediment developed on Permian and Cretaceous bedrock.

Buried Hearths

Hearths buried in the alluvium show in section along the arroyo banks. The example shown in Figure 1 appears in section as an obtuse pyramid. It is about six feet across



Fig. 2. Layer of fire-cracked rocks and ash exposed in section at base of arroyo hearth extends from hammer on left to man's hand on right.

and a foot and a half high in the center. The stones which make up the hearth are charred and blackened with charcoal and ashes; many are fire-cracked. All the stones in this hearth are of about the same size, averaging two inches wide and three inches long. The hearth contains ash, as well as charcoal particles up to an inch long and a half inch thick. This material can be traced a few feet beyond the western limit of the hearth, whence it was washed by currents responsible for burial. A section of the arroyo bank at this site reveals the following sequence in ascending order: three feet of silt, gravel, and boulders in no definite arrangement; four feet of grayish-brown silt (in which the hearth is found); a foot and a half of alternating bands of silt and gravel. The uppermost layers of silt and

pebbles are being eroded. No artifacts were found in this hearth.

Approximately seventy-five feet west of the hearth above described another layer of fire-cracked stones extends for seventeen feet almost at the level of the arroyo

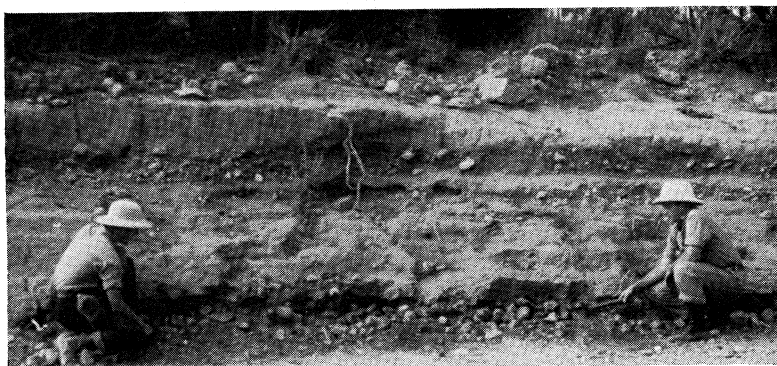


Fig. 1. Section of hearth exposed in bank of Campgrande Draw. Base of bank, Campgrande Draw.

floor (Fig. 2). Mingled with the hearthstones are charcoal, ash, silt, and a few fragments of pottery. The hearth is a foot thick and lacks the pyramidal section of the one first described. It also rests at a lower horizon, six and a half feet below the surface of the valley flat. The sediments underlying the hearth are unexposed. Those overlying the hearth are well exposed, and well stratified. The silt is the dominant sediment, occurring in layers from five inches to two and one-half feet thick; strata of pebbles break the succession locally. This hearth appears to be large in area and may represent a sotol pit.

Pottery in the Alluvial Fill

No artifacts were found at Site 1. Potsherd 1 was found one and one-half feet below the top of the arroyo bank opposite Site 2. The remaining five sherds were found scattered throughout the buried hearth of Site 2. Identification and description of the pottery are best given in a letter to Professor Campbell from Dr. Mera, parts of which are here quoted.

“ . . . No. 1 sherd is representative of the Chihuahua Polychrome series. As it has no decoration a definite type cannot be established. The latest of the series (Ramos Polychrome) continued on into the 15th century but no dates have been given out regarding the earlier stages.

“No. 2 is typical of a style of treatment which centers in a region including the headwaters of the Gila River in New Mexico and is, with little question, an intrusion into the Finlay area, probably through trade. This type, unnamed as yet, is not an uncommon find on El Paso sites. So far, there are no dates for this type.

“Nos. 3, 4, 5, and 6 are El Paso fragments. No. 3 bears a design which would include it in the Polychrome category. This form . . . is rather unsatisfactory for dating but lately it has been found that the beginning of decorated El Paso seems to equal in time value a transitional stage between Mimbres pottery of the Boldface type and the classic style. This would appear to place the full development of El Paso Polychrome by the middle of the 12th century . . . This date is purely inferential being based on deduction . . . I do not believe anything earlier than that century could be indicated through any evidence we have at this time.”

Correlation of the Alluvial Fill

The lithology of the alluvial fill and the pottery found therein indicate that this body of alluvium should be correlated with the Kokernot formation of the Davis Mountains, as described by Albritton and Bryan.¹ Of the three Quarternary formations found in the Davis Mountains, the Kokernot is the youngest. The Neville formation, the oldest, contains distinctive vertebrate fossils; the Calamity and the Kokernot formations contain artifacts which may serve as “guide fossils” for correlation. Of the various artifacts found in the Calamity and Kokernot formations, El Paso Polychrome pottery is restricted to the Kokernot; thus it is reasonable to suppose that the hearth-containing sediment herein described is of Kokernot age.

¹Albritton, C. C., Jr., and Bryan, Kirk (1939) “Quaternary Stratigraphy in The Davis Mountains, Trans-Pecos Texas,” *Geol. Soc. Am., Bull.*, Vol 50, pp. 1450-1451.

Although the Kokernot is the only one of the Davis Mountain Quaternary formations recognized as having equivalents in the area here described, the authors believe that further field investigation may disclose the presence of older Quaternary formations in the Finlay Mountain area.

Stability of Boulders on Slopes in the Finlay Mountains, Texas*

Ben R. Howard, Jr.

In a recent note¹ the writer and his associates showed that Indian petroglyphs might be used as criteria to indicate the stability of boulders resting on relatively steep slopes. Space did not permit a full account of the data which led to this suggestion. Accordingly, it is the purpose of this paper to amplify these data with a more complete description.

Location and Description of Site

A large Indian campsite is located at the Wilkie ranch house in the Finlay Mountains of West Texas. The approximate latitude, as determined on the Fort Hancock topographic sheet, is 31° 24' N, and the longitude, 105° 38' W. The site is upon the steeper slope of a cuesta facing the east (Figs. 1 and 2). It is located at the northwestern end of the mountains, about 400 yards west of Campgrande Draw.

A resistant cliff-forming sandstone caps this cuesta, and a similar stratum crops out about one-third the way down the slope. Joint blocks of sandstone that have broken away from the lower cliff litter the slope below. The campsite

*The writer is greatly indebted to Dr. C. C. Albritton, Jr., for his assistance and criticisms; to Professor T. N. Campbell, of the Department of Anthropology, The University of Texas, for guidance in treating the archaeology of the site; and to Dr. H. P. Mera of the Laboratory of Anthropology, Santa Fe, New Mexico, for identifying the pottery. Gratitude is also due to David Trexler, Dodd Osburn, Robert Trace, and William Ham for their help in the field work.

¹Campbell, T. N., Howard, B. R., Albritton, C. C., Jr., and Osburn, D. N., "Petroglyphs as Criteria for Slope Stability," *Science*, n. s., Vol. 93 (1941) p. 400.