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# FOUR THOUSAND YEARS OF NATIVE AMERICAN CAVE ART IN THE SOUTHERN APPALACHIANS

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*The seminal work of archaeologists in Mammoth and Salts caves, Kentucky, in the 1960s, revealed that prehistoric Native Americans not only buried their dead in these caverns, but also intensively explored and mined the "dark zones" beginning 4,000 years ago. When the glyph caves of Tennessee and Virginia were studied in the 1980s, research revealed these underground sanctuaries were also sacred areas of non-mortuary ritual. It was concluded at that time that Native American cave use during the past 4,000 years probably shifted from exploration to intensive mining of cave minerals. At about the beginning of the common era, the increasing use of caves as burial places eventually led to their abandonment as sources for minerals. By circa 1,000 years ago only a few of these caves continued to be used for ceremonial purposes. The recent discoveries of two additional glyph caves in Tennessee, one in Virginia, and two in Kentucky, have resulted in a reassessment of this chronological sequence of prehistoric cave use, and have also underscored the fact that southern Appalachian caves still contain important undiscovered archaeological remains.*

If there is a universal truth in the study of prehistory it is that theories about cultural development are constantly being revised as archaeologists uncover new evidence about our past. The story of North American prehistory still has many missing chapters, but our efforts to plug these gaps are constantly rewarded as previously unknown archaeological sites are discovered and studied. Some of the most exciting and potentially informative of these newly discovered archaeological sites are in the dark zones of caves in the southeastern United States, mysterious places that were explored, mined, and venerated by Native American cavers for several thousand years.

The knowledge that Native Americans in the Eastern Woodlands were our first and perhaps most daring cavers is not new, however. Early in the 19th century several so-called "mummies," desiccated bodies of prehistoric Native Americans, were discovered in the deep inner passages of caves in Kentucky (Meloy, 1971; Robbins, 1971). After the turn of the century, Colonel Bennett Young described the prehistoric archaeological remains in the vestibule of Salts Cave (Young, 1910), and Nels C. Nelson conducted the first excavation of the entry chamber of Mammoth Cave (Nelson, 1917). These studies laid the groundwork for later systematic archaeological research in the deep inner galleries of these same Kentucky caves by Patty Jo Watson in the 1960s (Watson, 1969, 1974). Watson's research in Salts Cave revealed the diet of the Native American cavers who intensively exploited the dark zone for minerals more than 2,000 years ago, and her archaeological study of Mammoth Cave indicated these redoubtable miners were exploring remote passages more than two kilometers from the entrance.

Although Native American drawings in soft mud ("mud glyphs") had been reported on the walls of Williams Cave in Virginia as early as 1979 (Bunnell, 1979), it was the exploration and study of Mud Glyph Cave in East Tennessee in the early 1980s that first revealed the dark zone to be the scene of prehistoric ceremonial activity (Faulkner et al. 1984; Faulkner, 1986). One hundred and twenty meters from the entrance of this small cave is the 96 m long "glyph gallery," a narrow walking passage decorated by a palimpsest of trailed and incised glyphs on the clay-covered walls and banks. Abstract meanders or "macaroni," cross-hatching, and lattice-work con-

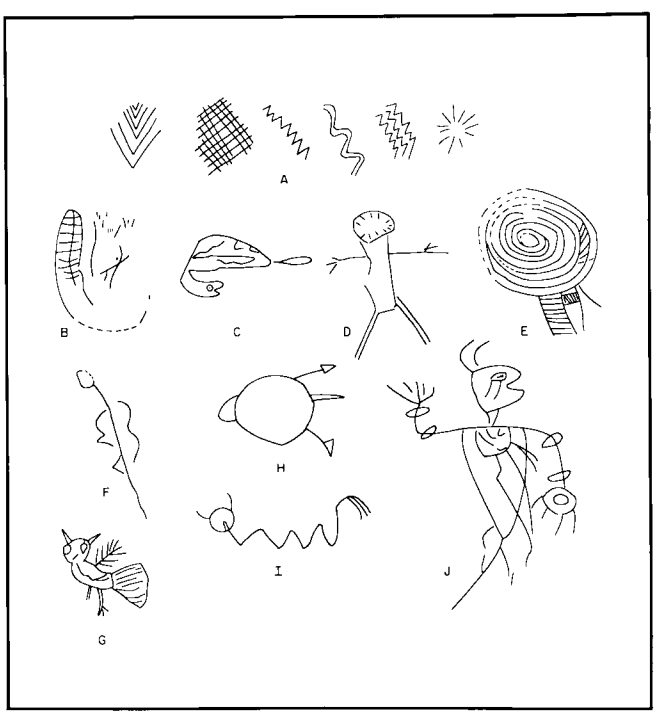


**Figure 1. A. Roger's Cave; B-D. Crumps Cave; E. Williams Cave; F-J. Mud Glyph Cave. (A) Abstract/Geometric Forms; (B) Serpent; (C) Turtle; (D) Anthropomorphic Figure; (E) Spiral; (F) Mace; (G) Owl; (H) Turtle; (I) Serpent; (J) Anthropomorphic Figure (not to scale.**

stitute the majority of the abstract designs. Renderings identified as late prehistoric Mississippian period, Southeastern Ceremonial Complex motifs include the forked or "weeping" eye, mace, concentric circles, and round suns with rays (Figure 1, F). During the Mississippian period, the southeastern Native Americans were intensive farmers who lived in large villages often containing public and sacred buildings constructed on flat-topped mounds. They had an elaborate religious art produced on shell, copper, and ceramic artifacts reflecting the "Southern Cult" or Southeastern Ceremonial Complex (SECC). Zoomorphic forms in Mud Glyph Cave are represented by horned serpents, turtles, owls, and woodpeckers (Figure 1, G-I). The human figures are the most numerous of the naturalistic drawings in the cave and range from very detailed SECC "eagle beings" or "falcon dancers" to a detailed stick figure of a running ball player holding a ball stick, to simplistic caricatures with finger-poked eyes and pinched noses (Figure 1, J; Figure 2). Cane torch charcoal associated with the glyphs dates from A.D. 465 to A.D. 1760 with five of the eight dates falling between the 12th and 14th centuries (Faulkner et al., 1986: Table 1).

During the National Geographic Society (NGS) funded research in Mud Glyph Cave, other cave surveys and information provided by sport cavers indicated that Mud Glyph Cave was not an isolated example of subterranean ceremonialism. In 1984, the NGS funded a study of seven additional decorated caves in the southeastern United States (Faulkner, 1988). Since that time, an additional five caves containing glyphs have been reported and described in this region.

The NGS project provided the initial data base for an assessment of the age, cultural association, and function/meaning of the glyphs in these caves. Williams is the only one of the seven containing mud glyphs, the most striking glyph being a large spiral with an attached lattice design (Fig. 1, E)

**Table 1. Glyph Cave Radiocarbon Dates.**

| Cave | Uncalibrated Date | Source |
|---|---|---|
| Adair Glyph Cave | 1610 BC ± 100 yrs. | DiBlasi 1996 |
| Third Unnamed, TN | 1243 BC (av of 5 dates) | (per. communication) |
| Crumps, KY | 30 BC ± 60 yrs. | (per. communication) |
| Mud Glyph, TN | AD 465 ± 60 yrs. | (Faulkner, et al. 1986) |
| Devil Step Hollow, TN | AD 920 ± 90 yrs. | (Faulkner 1988) |
| Little Mountain, VA | AD 975 ± 120 yrs. | (per. communication) |
| Second Unnamed, TN | AD 980 ± 60 yrs. | (Faulkner 1995) |
| Williams, VA | AD 995 ± 75 yrs. | (Faulkner 1988) |
| Indian, TN | AD 1010 ± 60 yrs. | (Faulkner 1988) |
| Little Mountain, VA | AD 1030 ± 120 yrs. | (per. communication) |
| Williams, VA | AD 1030 ± 65 yrs. | (Faulkner 1988) |
| Williams, VA | AD 1060 ± 70 yrs. | (Faulkner 1988) |
| Mud Glyph, TN | AD 1155 ± 60 yrs. | (Faulkner, et al. 1986) |
| Mud Glyph, TN | AD 1200 ± 45 yrs. | (Faulkner, et al. 1986) |
| Mud Glyph, TN | AD 1235 ± 60 yrs. | (Faulkner, et al. 1986) |
| Little Mountain, VA | AD 1235 ± 110 yrs. | (per. communication) |
| Mud Glyph, TN | AD 1315 ± 50 yrs. | (Faulkner, et al. 1986) |
| Devil Step Hollow, TN | AD 1330 ± 150 yrs. | (Faulkner 1988) |
| Mud Glyph, TN | AD 1335 ± 60 yrs. | (Faulkner, et al. 1986) |
| Indian, TN | AD 1360 ± 80 yrs. | (Faulkner 1988) |
| Little Mountain, VA | AD 1425 ± 90 yrs. | (per. communication) |
| Mud Glyph, TN | AD 1605 ± 65 yrs. | (Faulkner, et al. 1986) |
| First Unnamed, TN | AD 1690 ± 50 yrs. | (Faulkner & Simek 1996) |
| Mud Glyph, TN | AD 1760 ± 80 yrs. | (Faulkner, et al. 1986) |

**Figure 2. Bird man or falcon dancer, Mud Glyph Cave. Note gorget on chest and bracelets and armlets on arms.**

(Faulkner, 1988). Three other caves contain significant groups of petroglyphs and pictographs in deep inner passages. Petroglyphs are incised or pecked into the cave wall; pictographs are drawn on the wall, usually with charcoal.

The most significant cave from the standpoint of naturalistic SECC figures incised into the walls is Devil Step Hollow in the Cumberland Plateau escarpment of middle Tennessee. The petroglyphs are all found on the low ceiling of a large chamber reached by a crawl and stoop passageway. These include two woodpeckers, a monolithic axe/warrior with roach and beaded forelock, an eagle being with weeping eye holding a mace in each hand (Figure 3); a monolithic axe with human face characteristics; a mace superimposed over or part of an eagle being's tail; a cross-in-circle; and a toothed mask with weeping eye (Faulkner, 1988). Beyond the petroglyph chamber are two pictographs drawn in charcoal on the ceiling: a dog or wolf and another woodpecker.

Indian Cave on the Eastern Highland Rim of Middle Tennessee contains a large number of petroglyphs scattered over the walls from the mouth to about 100 m from the

**Figure 3. Eagle being holding maces, Devil Step Hollow Cave.**

entrance. Many of these glyphs also appear to be SECC in their inspiration, but unlike those in Mud Glyph and Devil Step Hollow caves, they are more crudely and/or abstractly rendered. They include several abstract bird/human "falcon or eagle dancers" with little V-shaped heads and possible plumage indicated by chevron designs (Figure 4). Other petroglyphs are a sun symbol near the cave mouth and a serpent with an embellishment on the tail that could be rattles, and branch-like antlers on a small oval head.

The major prehistoric activity in Third Unnamed Cave on the Cumberland Plateau in Tennessee was the mining of chert nodules in a large room over 1000 m from the entrance. While this chert quarry and workshop area was being studied by archaeologists in 1981, petroglyphs were noticed on the low ceiling of the quarry chamber. These include a lightly incised "sun," nested circle or spiral, a serpentine line, possibly a snake, an "arrow", and several groups of cross-hatched, wavy, and parallel lines (Faulkner, 1988).

In addition to recording the glyphs found in these caves, the NGS project also focused on collecting torch charcoal for radiocarbon dating of the activity in the glyph caves. It is important to remember that in none of these caves, including Mud Glyph, was this charcoal directly associated with these drawings. Thus it could be reasonably argued that the activity associated with the deposition of the torch charcoal had nothing to do with the drawing of the glyphs. However, in Mud Glyph and Williams caves, the torch charcoal was heavily concentrated under the glyphs and because the production of these drawings appears to be the only prehistoric activity that is presently recognized in most of these caves, it is assumed that these torches provided the light for the prehistoric artists.

At the completion of the NGS project, a total of 21 radiocarbon dates had been obtained from charcoal believed to have been deposited when the glyphs were drawn (Table 1). Some of this charcoal from torches and fires in Mud Glyph and Williams Caves was in close association with the glyphs, other samples such as those from Third Unnamed and Indian Caves dated other activity, but it was presumed that the walls were decorated at the same time. If we exclude these two caves from consideration for the moment, it can be seen that the remaining 13 dates, except the sixth century date from Mud Glyph, range from A.D. 920 in Devil Step Hollow Cave to A.D. 1760 in Mud Glyph Cave. This approximate 800 year range falls squarely within the Mississippian period, and the association of these dates with the glyphs is strengthened by the SECC motifs in Mud Glyph and Devil Step Hollow.

While the earlier dates were generally ignored, it was conceded that Late Archaic cave explorers and miners may have occasionally decorated the walls with simple abstract or geometric designs. Virtually all of the dark zone art work, however, was believed to be the result of Mississippian period artists who drew the naturalistic/realistic figures that also decorated ceremonial artifacts. This apparent sudden or at least prolific appearance of ceremonial cave art suggested a major shift in the utilization of caves between the Archaic and Mississippian periods. Patty Jo Watson envisioned an early period (from Late Archaic to early Middle Woodland; circa 2000 B.C. to A.D. 300-400) when caves were intensively mined for minerals and a later period (later Middle Woodland to Mississippian; circa A.D. 300 or 400 to A.D. 1500) when caves were used as burial sites or contact points with the supernatural (Watson, 1986). Expanding on this interpretation, we suggested that this shift in cave function signaled a cognitive change in the Native American's conceptualization of caves: what had formerly been a prosaic part of their natural world now became an awesome place, perhaps the entrance to the underworld (Faulkner et al., 1984). This is heady stuff, to venture beyond function and actually interpret meaning in the archaeological record. The working hypothesis of changing activities in caves was further tested by George Crothers, who used a number of "fixed split" hypotheses to test whether the combined radiocarbon ages between deep cave sites exhibiting similar activities were effectively estimating the same date. His statistical data supported a consistent diachronic pattern of deep cave utilization (Crothers, 1987).

**Figure 4. Abstract bird/human figure, Indian Cave.**

Because of the NGS funded glyph cave projects in the early 1980s, five additional decorated caves have been found and studied in Tennessee, Kentucky, and Virginia. Research in these caves is still on-going, but enough data have been collected to submit three additional conclusions about the art in these caves. One is that these decorated caves are more numerous than was first thought. Another is that a diachronic change from early resource extraction to later ceremonialism in the dark zone may be more complex than previously suggested. And finally, the art forms on the walls do not necessarily evolve from simple abstract designs in the Archaic and Woodland periods to naturalistic expressions in the Mississippian, and certain motifs may even be associated with specific activities such as burial of the dead.

Adair Glyph Cave in Adair County, Kentucky contains mud glyphs on the floor of a remote passage more than one kilometer from the entrance (DiBlasi, 1996). The glyphs appear to be like those in Third Unnamed Cave: "geometric" symbols including trailed lines, zig-zags, hatching and crosshatching, and chevrons (Figure 1, A). Torch charcoal on the floor of the glyph passage has been dated at 1610 B.C. ± 100 years (DiBlasi, 1996).

Crumps Cave is a large cavern in Warren County, Kentucky that contains glyphs on the clay banks of a passage 1000 m from the entrance. First reported in 1989, a majority of the glyphs are trailed meanders and clusters of short, straight lines; however, some crudely executed naturalistic figures have also been identified (Davis & Haskins, 1993). These include a horned serpent with rattlesnake tail and possible wings, a turtle, and eight human figures, some with scooped-out heads and abdomens; two of these figures exhibit nipples and are thought to be pregnant females (Figure 1, B-D) (Haskins, 1992, personal communication). Bark from a deep incision in one of these figures produced a radiocarbon date of 30 B.C. ± 60 years (Haskins, 1994 personal communication). This date is especially significant because it is the only charcoal actually retrieved from within a glyph.

Prehistoric rock art, also possibly attributable to Late Archaic-Early Woodland cavers, has been recently recognized on the walls of Salts and Mammoth Caves in Kentucky. In the former cavern, a set of glyphs 841 m from the entrance include zoomorphic and possibly anthropomorphic pictographs in charcoal and incised crosshatched petroglyphs. Mammoth Cave also contains geometric charcoal drawings that may be prehistoric in age (DiBlasi, 1996).

Another important recent discovery is the apparent association of some cave glyphs with prehistoric burials. In 1987, cavers discovered vandalized human skeletal remains in a shallow pit cave in White County, Tennessee. The main burial chamber in the twilight zone of Officer Cave contains four human head/face petroglyphs scratched on a limestone wall (Willey et al., 1988). Two of the glyphs have weeping eyes, a toothy "grinning" mouth, and wavy lines extending downward from the chin (Figure 5). These are very similar to the so-called toothed mask in Devil Step Hollow Cave. That this burial association is not fortuitous is indicated by the discovery in 1991 of another pit burial cave only 100 m from Officer Cave, this latter cave also containing a crude human figure and a "grinning" mouth scratched on the wall of the main burial chamber (Faulkner & Grant, n.d.).

Within the past two years three additional mud glyph caves have been discovered in Tennessee and Virginia. While the archaeological research in these caves is in various stages of completion, a preliminary summary of our findings should be presented here because it bears on our changing interpretations of the ceremonial use of these underground sites. The amount of drawing varies from decoration of a single chamber to more extensive renderings through the main passage. All seem to be characterized by a preponderance of abstract designs: curvilinear meanders or zig-zags drawn with the fingers or a stick, although a more detailed study of the glyphs will probably reveal more crudely executed naturalistic figures. One cave, First Unnamed in East Tennessee, has several crude naturalistic figures within the palimpsest of meanders, including the human effigy, serpent, bird, and bird/man (Faulkner & Simek, 1996). Little Mountain Cave in southwestern Virginia has a combination of trailed lines that might represent an anthropomorph or bird (?), and the barred oval motif may also be present there. Preliminary reports have been written on the mud glyphs in Second Unnamed Cave on the Eastern Highland Rim in middle Tennessee (Faulkner, 1994, 1995). The glyphs consist of three groups of meanders on the mud-coated ceiling and on a narrow rock ledge. On one area of the ceiling, a possible human or bird figure was incised within the meanders.

Torch charcoal was collected for dating from these three glyph caves. Radiocarbon dates from the two Tennessee caves have been recently received, courtesy of the University of Arizona Radiocarbon Dating Laboratory and the Tennessee Valley Authority. The First Unnamed sample was collected from the floor of the passage in an area of intensive artistic activity. The date is 260 ± 50 B.P. (A.D. 1690) (Simek et al., 1995). The end of a cane torch had been stuck into the ceiling

**Figure 5. Human head/face petroglyphs, Officer Cave.**

mud of Second Unnamed Cave, a sample of this charcoal gave a date of 970 ± 60 B.P. (A.D. 980) (Faulkner 1995). Four radiocarbon dates are available from Little Mountain Cave; two are Emergent Mississippian dates (A.D. 975 and A.D. 1030) and two are later in the Mississippian period (A.D. 1235 and A.D. 1425) (G. Tolley, personal communication). Like the seven dates from Mud Glyph Cave, these dates bracket the span of Mississippian occupation in the eastern Tennessee Valley.

## CONCLUSIONS

The recent discovery of additional mud glyph caves in the southeastern United States has prompted a reassessment of what at first appeared to be a consistent diachronic pattern of prehistoric cave utilization from earlier resource exploitation to later ritual activity. The similarity of the Late Archaic drawings in Adair Glyph Cave to those in Third Unnamed Cave suggest that these early cavers may have already been venerating elements in the underworld as well as exploring and mining it. The direct date from the human figure in Crumps Cave is additional evidence that such ritual activity continued into the Middle Woodland period. This gives more credence to the A.D. 465 date from Mud Glyph Cave. The similarity of some of the crude stick figures in Mud Glyph to the anthropomorphs in Crumps might also suggest that Middle Woodland cavers were embellishing the walls of the former cave as well. The crude, abstract drawings in Second Unnamed Cave are a caveat to the simple assumption that Mississippian period cave art can always be distinguished by identifiable naturalistic figures. That this art did not simply evolve from the abstract and geometric to the naturalistic is also indicated by the crude First Unnamed drawings that appear to date as late as the 17th century. This late date for activity in First Unnamed also supports the evidence for 17th and 18th century traffic in Mud Glyph Cave, and thus makes a case that some of the drawings in the latter may be early historic in age. Taking all of the radiocarbon dates that have thus far been obtained for the glyph caves at face value, it is probable that the ceremonial decoration of cave walls in the southeastern United States was practiced for several thousand years, from the Late Archaic through the early historic periods, with an intensification of this activity after A.D. 900.

Before we can accurately determine when and how these caves were utilized by Native American cavers, we must have an adequate sample of these sites for study. Presently we are aware of only a few tantalizing caves that contain evidence of prehistoric ritual activity. Based on the discovery of new glyph caves during the past couple of years, however, there is every reason to believe that more of these glyph caves will be identified in the future. This optimism is based on the fact that modern cavers are increasingly aware of the presence and importance of these archaeological remains. We must not forget that it was the discovery and reporting of glyph caves by NSS members that first alerted archaeologists to the existence of these fascinating underground sites.

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