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VIRGINIA BURIAL CAVES: AN INVENTORY OF A DESECRATED RESOURCE

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In an ongoing inventory of Virginia cave resources, 23 burial caves have been field documented by the Marginella Burial Cave Project (MBCP). All but one site have been vandalized to varying degrees. In addition to the burial resource inventory, goals of the MBCP include measures for site protection and education. Problems have been encountered by the MBCP in attaining these goals. The sensitive and sacred nature of these cave resources, however, warrant limiting site specific discussions to protected sites. One burial cave in Montgomery County and two in Lee County are protected by gates because of recent disturbances. Adams Cave (44MY482) served as a party cave, but was not known as a burial site until a student brought a human mandible and two long bone fragments to a college professor and an investigation ensued. Indian Burial Cave (44LE11) was known locally as a burial cave and has suffered desecration for decades. Bone Cave (44LE169) was known locally as a burial site, mistakenly attributed to black slaves, but MBCP and Phase II archaeological investigations documented this Native American burial site and provided information that helped to alter the path of a road realignment through the cave. The examination and analysis of these and other Virginia caves by the MBCP has resulted in significant new knowledge about the use and distribution of caves as Native American burial sites.

The Commonwealth of Virginia is rich in natural resources. Among these resources are more than 3400 caves. To most of our contemporary humankind, shelter and natural resources are not the primary images generated by the sight of a cave entrance. Rather than as resources, most of our peers perceive caves as portals to the unknown-an unknown in which resource opportunity is overshadowed by manifestations of our personal fears. But has this always been the case? There is substantial evidence that some caves in Virginia and adjacent states were utilized by Native Americans for their resources (in this volume: Faulkner: 148-153; Barber & Hubbard: 132-136) as well as portals to the unknown in ceremonial context (Faulkner, 1986; in this volume: Faulkner: 148-153) and later mortuary contexts.

Of the Native American burial caves examined by the Marginella Burial Cave Project (MBCP) between its inception in 1992 and the initial preparation of this presentation in 1995, only three are discussed in detail in this paper. These were selected because they are gated and visitation is restricted, so discussion of these sites will not likely result in additional unintentional or intentional visitor impacts. As a limited sample, however, they provide a representation of the cave environments and settings used by Native Americans for burial purposes. A discussion of this specialized use of caves is important to inform the caving community about the significance of these extremely sensitive resources. Cave burial sites, as any other burial site, must be treated with the utmost respect. They are regarded as sacred by Native Americans, a perspective the caving community would do well to acknowledge. Most of these sites were first recognized by cavers rather than professional archaeologists. Unfortunately, the majority of these caves were disturbed by looters prior to their documentation. The disturbance of mortuary sites, even casually, is a felony violation of the Commonwealth of Virginia and federal laws.

THE MARGINELLA BURIAL CAVE PROJECT

The Marginella Burial Cave Project (MBCP), a project to document the extent of Native American burial caves in Virginia, was initiated in February of 1992. Between September 1992 and June 1995, the MBCP had expanded in scope to include the study of exposed and disturbed human skeletal remains and associated artifacts in Virginia caves, munder permits issued by the Department of Conservation and Recreation (DCR) and the Department of Historic Resources (DHR) of the Commonwealth of Virginia. The existence of this project was first revealed to cavers in the 1993 NSS Members Manual.

The project missions can be summarized as data collection, site protection, and education. The goals have been progressively implemented since the project's inception and include: the inventory of mortuary caves; education of cave owners about resource sensitivity and protection by law; education of state and federal law enforcement agents about cave resource sensitivity and protection by law; education of cavers about mortuary caves and protection by law.

The inventory has resulted in field visits to 23 Virginia burial caves, of which only eight were known previously to the archaeological community. All but one of these sites had been

vandalized. Disturbance ranged from extensive digging and looting, potentially destroying the evidence of mortuary context, to unintentional damage by cavers handling what was discovered to be a calvarium (partial skull). The absolute degree of disturbance at each site was indeterminate because excavations have not been made during MBCP inventories. One site contained evidence of erosion by dripping water, gravity movement, and rodent activity, but there was no visible evidence of looting.

Exposed, disturbed skeletal material was removed from 12 caves. Two previously existing collections of human skeletal material also were recovered. One of these collections was retrieved from the State Police and is also a site sampled by the MBCP. The other recovered collection was made during 1955. All collections of removed and retrieved skeletal material were submitted for osteological study (Boyd & Boyd, this volume: 160-165). Stable isotope analysis of skeletal materials has been conducted on material from one site and is discussed by Trimble and Macko (this volume: 137-142).

The education of owners about the sensitivity of burial caves and their protection by law has been approached from two different perspectives. The first of these is a moral perspective, wherein mortuary caves and the human interments they contain should be attributed the same status and respect given burials in any community cemetery. The second is to convey information on existing laws that protect cave resources and cave burials. It is emphasized that the laws enable landowners to protect these important resources in their caves. In the few instances, where local contacts indicated that owners had allowed collectors to loot their mortuary caves, particular care was taken in discussing implications of the scope of the law and that a protection strategy minimizes the possibility of being implicated as an accessory to the felonious exploitation of a burial site. A primary tool in these communications was a supply of back copies of a Virginia Cave Owner's Newsletter containing two articles on cave resources and their protection. This newsletter was previously distributed to all known cave owners in Virginia during the spring of 1993. One article (Hubbard, 1993a) discusses a range of cave resources, including burial caves, while the second article (Hubbard, 1993b) presents information on the laws protecting burial caves in a question and answer format. A copy of this issue has been left with the owners of burial caves inventoried by the MBCP.

Significant problems have been encountered in working with local law enforcement agents and state agencies with respect to the protection of Virginia's mortuary caves. A solution to logistical problems with local law enforcement programs has recently evolved with the advent of the Virginia Department of Criminal Justice Services developing a curriculum on "Theft of Historic Resources" for the training of law enforcement agents within the Commonwealth of Virginia.

Problems with state agencies with respect to the protection of Virginia's caves generally center on a lack of knowledge of the Virginia Cave Protection Act and the extent of the range of resources present and protected by the statutes. An example of a more serious state agency problem with mortuary cave protection is discussed in the following section.

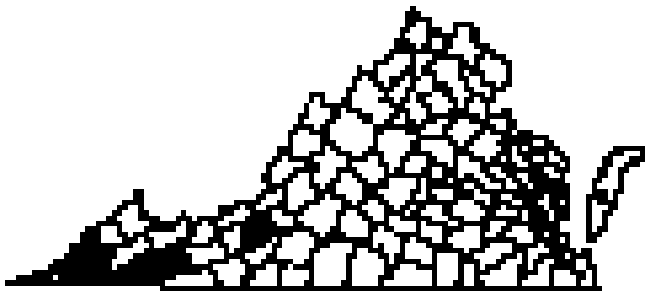

Figure 1. Shaded Virginia counties contained one or more burial caves examined by the Marginella Burial Cave Project. 1. One of the burial caves discussed is in Montgomery County; 2. Two of the burial caves discussed are in Lee County.

The education of the general public about Virginia's mortuary cave resources is a desirable goal that may not be implemented, due to the jeopardy such information creates for our inadequately protected cave resources.

THE MORTUARY CAVES

Only three of the 23 mortuary caves studied are discussed in this paper (Figure 1). Each of the three sites is gated and visitation is restricted. Adams, Indian Burial, and Bone caves were found to contain disturbed and exposed human skeletal elements indicating they were used as mortuary sites by Native American peoples.

ADAMS CAVE

Adams Cave (44MY482) is located in Montgomery County, Virginia, well beyond the historically known geographic extent of mortuary cave use in southwest Virginia (Boyd & Boyd, this volume: Figure 1, western most area). It is a small cave, containing 96 meters of passage, developed in dolostone of the Cambrian-aged Elbrook Formation. The cave was previously reported to contain 18 meters of passage and to attain a depth of 3.6 meters (Douglas 1964).

Long known to area youth, the cave contains considerable evidence of misuse and vandalism including litter and graffiti. The caving community has traditionally regarded this cave as insignificant. Serious attention was directed to this site after a student brought two human long bones and a mandible to Radford University anthropologist C. Clifford Boyd. The initial MBCP inventory of the cave, in November 1993, revealed that it contained evidence of saltpetre mining, but no additional human bone material was found. A subsequent trip, in December 1993, with the student that had found the skeletal material yielded an additional 21 exposed human skeletal elements. Osteological analysis of the recovered bones indicates that the minimum number of individuals buried at this site is

Figure 2. Human remains in Adams Cave were found in the mining spoils behind the 0.3 by 0.4 m menu board, at the junction of floor and ceiling.

four (Boyd & Boyd, this volume).

The site of the osteological discoveries was beyond a crawl in the dark zone of the cave. The skeletal material was exposed in saltpetre mining spoil along a low margin of the cave where a sloping ceiling met the floor (Figure 2). Two rock slabs adjacent to the disturbed skeletal material may represent the original site of placement, prior to disturbance. The location of the disturbed skeletal material in mining spoil implies the burials were disturbed during mining. The age of this saltpetre mining is unknown. No associated wooden artifacts other than torch stubs were noted, but the degree of weathering of mattock marks imply that mining may predate the Civil War (1861-1865) and may date to the War of 1812. MBCP information and recommendations were instrumental in protection of this site by gating in September 1994.

INDIAN BURIAL CAVE

Indian Burial Cave (44LE11), in Lee County, Virginia, is within the established distribution of Native American mortuary caves in southwest Virginia. It is an intermediate-sized cave containing about 400 meters of passage developed in the upper Ordovician-aged Woodway Limestone. The speleological literature (Douglas 1964: 301) describes the cave to the burial chamber only and notes that "...this dirt slope [into the room] may have archaeological possibilities." This site has been locally known as a burial cave for decades. Local lore, related by a former owner of the cave, held that the Native American burials were first observed in extended positions on large flat rocks. The site was documented as a mortuary site in 1970 by C.G. Holland, who referred to the cave as Cedar Hill Cave and remarked that shell beads had been reportedly found with burials. Holland collected "...about 500 human bone fragments..." and a New River Series rimsherd from this site. The site had been "...ransacked by pothunters..." prior to his visit. Holland reported that a local collector, Morgan Edds, "...owns a small complete Dallas Culture jar found in..." this site (44LE11 Site Report). In a literature review of archaeological resources in Virginia caves, Clark (1978) listed this as a Late Woodland period (AD 1000 - AD 1650) site.

During the MBCP inventory, in January 1993, disturbed human skeletal material was removed from the Burial Chamber. This room is doughnut-shaped and isolated from the main entrance by a tight sloping crawl. The skylight entrance in the ceiling of the chamber provides partial lighting of the room. During subsequent visits to map the cave (November 1993) and to educate representatives of the new landowner about the cave's sensitivity and significance (February 1994), we noted new evidence of looting and newly dug piles of skeletal material (Figure 3). During the gating of this site in April 1994, two individuals visited the entrance equipped with flashlights and packs. The gaters reported that they suspected this pair were looters because they became quite agitated when they were informed the cave was being gated to protect it from misuse (Roy Powers, 1995, personal communication). A total of 98 exposed human skeletal fragments were recovered from this site during MBCP activities. Osteological analysis indi-

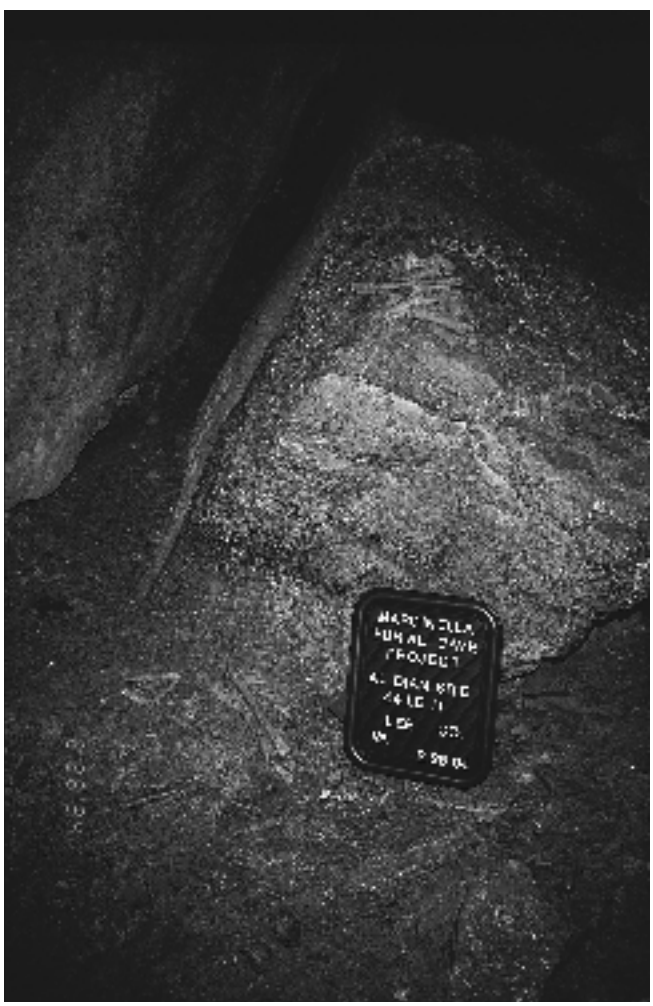

Figure 3. Evidence of looting consisting of newly dug human remains discovered in piles, to left and on edge of rock above the 0.3 by 0.4 m menu board, during an indoctrination tour for representatives of the new owners of Indian Burial Cave.

cates that the minimum number of individuals buried at this site is six (Boyd & Boyd, this volume). Based on the distribution of some of the disturbed skeletal fragments, two suspected burial sites are known within this chamber. One is a large rock slab, the other is a ledge in the passage through the pillar in the center of the chamber.

BONE CAVE

Bone Cave (44LE169) is located in Lee County, Virginia. It is a small cave containing about 15 meters of passage and is developed in the upper Ordovician-aged Woodway Limestone. The cave is described (Holsinger 1975: 118) as "...a single, dry passage trending to the west for 50 to 75 feet [15 to 23 meters]...." It is not the same site referred to as Bone Cave (44LE16) by Holland (1970).

This site is locally known as a human burial cave, but local lore held that it is the site where Art Faulkerson buried his slaves. A visit to the cave in March 1993 (Figure 4) established that the site contained disturbed human skeletal materials. Subsequently, it was learned that the site was within the realignment path of U.S. Highway 58. It was discovered that the Archaeological Survey for the realignment had not inventoried Bone Cave. Negotiations between the Virginia Cave Board (VCB) and representatives of the Virginia Department of Highways (VDOT) in January 1994 resulted in an agreement that a Phase II Investigation would be conducted in Bone Cave prior to any attempt to remove the ceiling of the cave for stabilization and grading. The Phase II Investigations involved the excavation of two test pits in the cave to determine the extent and significance of the human use of the site. The excavations yielded 1494 probable human skeletal fragments, prehistoric artifacts (marine shell beads, pottery, and cut mica), and thousands of other vertebrate and invertebrate remains (Kimball & Whyte, 1994). The dental characteristics and prehistoric artifacts examined in these excavations indicated that the skeletal remains in Bone Cave are of prehistoric Native Americans. The minimum number of individuals buried at this site is six (Boyd & Boyd, this volume). Kimball and Whyte (1994) reported that the pottery sherds indicate that Bone Cave was used by Middle and/or Late Woodland (AD 350 - AD 1000) peoples. They concluded from their excavations "...that Bone Cave is an extremely significant archaeological and biological resource." Following the Phase II investigation, a VDOT representative communicated to the VCB that the U.S. Highway 58 realignment would be altered to spare Bone Cave from destruction. Prior to the erection of a permanent gate in June 1994, it was learned that the Phase II investigators had left the human skeletal and artifactual material in plastic sample bags in the test pits. A letter from the VCB to DHR (14 October 1994) about concerns for the stability of these Native American materials in plastic bags resulted in no action.

Subsequent to the presentation of this paper in Blacksburg in July 1995, Bone Cave has been subjected to a number of violations. In August of 1995, rumors were circulating that someone had dug under the gate and plundered the cave and

Figure 4. View of the area where disturbed human remains were found exposed in Bone Cave. The rock wall, on which the 0.3 by 0.4 m menu board rests, is believed to have been constructed by kids and/or hobos using the cave. It was subsequently dismantled by archaeologists during the Phase II investigation.

that the cave had been blown up during highway construction. A visit to the site in September 1995 revealed that a thin space had been excavated under the gate and one of the test pits had been disturbed. Additionally, about half a cubic meter of rock and soil rested beneath a new dome in the ceiling. Further investigation revealed fresh rock fragments distributed around the interior of the cave as well as many impact marks on the cave walls. The remains of a blasting cap were found within the cave, beyond the gate. A drill hole through the ceiling, from which water dripped, was located about five feet beyond the blast margin. Because of the unstable looking rock in the new dome in the ceiling, a VDOT representative subsequently was asked to have the loose rock removed from the excavations above the cave to determine the thickness of the remaining ceiling. A return visit in October 1995 revealed the cone of rock debris extended from the floor to the old ceiling level, obscuring the new dome (Figure 5). A quick level survey indicated an approximate remaining cave roof thickness of 0.8 meters of material beneath road excavation. Unfortunately, the floor of the surface excavation was not bedrock, but rock fragments and soil, so the intact thickness of the cave's structural ceiling could not be determined more precisely than less than 0.75 meters without excavation. This visit established that the cave ceiling had been breached at the new dome, because the unstable dome visible during the September visit had extended higher than 0.75 meters above the old level of the cave ceiling. Beyond the collapsed ceiling in the cave, two seeps of a dark viscous fluid were dripping from a fracture in the cave ceiling during the October 1995 visit and are believed to be motor oil or hydraulic fluid from construction equipment.

As of November 1995, the Bone Cave gate has been modified to prevent further undermining (Roy Powers, 1995, personal communication). As of this writing, the VCB is prepar-

Figure 5. Similar view of Bone Cave as Figure 4, but post Phase II and ceiling collapse. One rock and wood filled test pit is located diagonally to the left of the foreground strobe, while the second rock and wood filled test pit is located diagonally to the right of the distal strobe. The cone of blast and collapse debris extends to less than a meter to the right of the distal strobe. For a comparison of the blast and collapse damage, the location of the debris cone is just beyond the menu board in Figure 4 and occupies approximately a third of the area illuminated by the right portion of the distal strobe in Figure 4.

ing to negotiate repairs and safeguards to Bone Cave, but the desire of VDOT and its contractor to safeguard this sacred mortuary cave is in doubt. The human skeletal and artifactual materials that were not stolen when the gate was undermined, remain in plastic sample bags in the test pits.

COMPARISON AND DISCUSSION OF THE MORTUARY SITES

The three examples of Native American mortuary caves presented represent a range of the sites known in Virginia. Of the two Lee County examples, Indian Burial Cave was reported to have contained ceramics and shell beads, while Bone Cave was found to have ceramics, shell beads, and cut mica. Such artifactual associations in a mortuary context imply attitudes of elaborate ceremonialism typically linked to the Middle and Late Woodland period in the upper Tennessee River Basin.

The Montgomery County example, Adams Cave, did not yield any associated artifacts and is well outside the recognized area of mortuary use of caves. No information currently known about this site is useful in assigning any cultural affiliation. There was no local knowledge of this cave as a mortuary site, as in the cases of the other two caves. No artifacts were found at any of these three sites during the field investigations of the MBCP.

Both Lee County sites were within the twilight zone of their respective caves, but many of the burials in Lee and other southwestern Virginia counties were in the dark zones, as were those of Adams Cave.

In addition to the knowledge obtained from the exposed, disturbed skeletal and artifactual materials removed from inventoried burial caves, the study of these materials prior to reburial has provided additional benefit to the resources. Such recovered materials are no longer subjected to unintentional damage or casual disturbance and vandalism by cave visitors. At a number of inventoried sites, there was evidence of secondary and less systematic disturbance of burials. It is thought that these secondary disturbances were prompted by interest and curiosity in skeletal materials left exposed by earlier looting. The presentation of this work at the 1995 NSS Convention marked the end of the permitted removal of exposed and disturbed human skeletal remains from Virginia burial caves and their subsequent osteological analysis. Although the MBCP is continuing to document cave burial sites in the Commonwealth of Virginia, documentation no longer involves professional osteological analysis and MNI determinations.

Two potentially significant aspects of some Native American cave burial sites investigated by the MBCP were not reflected in the three examples. One aspect concerns the mode of placement, the second relates to the sealing of sites. Because most of the sites investigated were disturbed and no excavations were made, it was not determined whether individual burials were primary (whole person) or secondary (representative or significant bone bundles) interments, and in many cases the distribution of skeletal elements precludes a determination of where the original interment occurred. In most of the caves with relatively horizonal passage orientation, burials were assumed to have been placed at specific spots in the cave, as in the three examples. A number of burial sites were in caves with vertical entrances, where burial remains are spread along slopes at the base of vertical pitches. At some vertical sites, remains were found distally to the pitches, implying that the vertical pitches were successfully negotiated to enable interments to be placed within the cave. In a cave with a 25 foot pit entrance, an apparent burial chamber was located in an alcove 15 feet above the cave floor. Access to this virtually inaccessible chamber was accomplished by throwing a length of webbing over a thin arch above the passage entrance and scaling the overhung wall. Only four human teeth were found exposed, apparently by dripping water and gravity movement, in the alcove. This burial cave is believed to be relatively intact with no evidence of human disturbance observed during the MBCP inventory. The placement of human remains remote from entrance drops requiring at least technical descents, seems to indicate the use of ladders or other climbing aids at some burial sites.

Informant information about one investigated site indicates the cave's entrance was concealed by a rock pile at the time of its initial rediscovery. A number of other investigated burial cave sites have small entrances that could easily have been sealed after burials were interred. Although the entrances to these burial sites were open upon their discovery by cavers, many of these sites had been looted. Whether the looters dug

open these caves, seals were eroded open, or entrances have remained open since interment is unknown. The authors have visited one remarkable cave that had obviously been sealed prior to its rediscovery. The non-caver who partially opened and resealed the cave invited the authors to investigate the site. Viewed from inside, the cave entrance had been nearly sealed by a stacked rock wall that had been constructed from within. Rock debris and slabs concealed the wall on the outside and were covered with soil and vegetation. The discoverer reported the cave was completely concealed, but he moved a couple of rocks and revealed the site on an impulse. The small portion of accessible cave did not contain any exposed evidence of human burials. An apparent passage was blocked by a rock dropped into a vertical slot and would require wedging the rock out and a minor bit of digging to enter. It was decided not to disturb the site further, however, and the cave was resealed. Although this sealed cave has not been documented to be an archaeological site, it is within the recognized area of mortuary caves and may be an intact burial site.

CONCLUSIONS

The Marginella Burial Cave Project has documented a significant number of previously unknown burial caves as well as a considerable volume of new data about previously recorded burial caves in Virginia. The use of caves as Native American burial sites is considerably more extensive and widespread than was previously known. Perhaps the most distressing discovery is that the looting of these sites is so extensive and is continuing. Cavers must learn to recognize burial caves, while minimizing their impacts to such sites. Suspected cave burial sites should be reported to cave archaeologists as soon as possible so that they can be verified and appropriately protected. Presently, there are very few resources available to protect archaeological sites in caves. Yet these highly sensitive and sacred sites need immediate protection to remain intact.

The termination of osteological analysis of the human skeletal materials left exposed by looting activities is believed to be very unfortunate. Not only is the fragmentary forensic knowledge about these destroyed archaeological sites being lost, but so is the opportunity for the legal systematic reburial of Native American remains disturbed by looting. Unfortunately, disturbed sacred cave sites will continue to undergo further casual destruction because of interest and curiosity in skeletal materials left exposed by looting, and because unintentional physical damage is done by visitors who accidentally tread upon these sacred materials.

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REFERENCES

Barber, M.B. & Hubbard, D.A., Jr. (1997). Overview of the human use of caves in Virginia: A 10,500 year history. *Journal of Cave and Karst Studies 59*(3): 132-136.

Boyd, C.C. & Boyd, D.C. (1997). Osteological comparison of prehistoric Native Americans from southwest Virginia and east Tennessee mortuary caves. *Journal of Cave and Karst Studies 59*(3): 160-165.

Clark, W.E. (1978). An assessment of the archaeological resources in the caves of Virginia. Report to The Sub-committees on Cave Protection Methods and on Cave Management of the Virginia Commission on Conservation of Caves: 27 p.

Douglas, H.H. (1964). *Caves of Virginia*. Virginia Cave Survey, Falls Church, Virginia: 761 p.

Faulkner, C.H. (1986). *The Prehistoric Native American Art of Mud Glyph Cave*. University of Tennessee Press, Knoxville: 124 p.

Faulkner, C. H. (1997). Four thousand years of Native American caving. *Journal of Cave and Karst Studies 59*(3): 148-153.

Holland, C.G. (1970). *An Archaeological Survey of Southwest Virginia*. Smithsonian Contributions to Anthropology 12: 194 p.

Holsinger, J.S. (1975). Descriptions of Virginia caves. *Virginia Division of Mineral Resources Bulletin 75*: 450 p.

Hubbard, D.A., Jr. (1993a). So, you've 'bought into' a sacred trust. *Virginia Cave Board, Virginia Cave Owner's Newsletter 10*: 1-2.

Hubbard, D.A., Jr. (1993b). Criminal Prosecution. *Virginia Cave Board, Virginia Cave Owner's Newsletter 10*: 2, 4.

Kimball, L.R. & Whyte, T.R. (1994). Phase II Archaeological Investigations at Bone Cave (44LE169), Lee County, Virginia. Draft Report to Virginia Department of Transportation, April 25, 1994: 53 p.

Trimble, C.C.& Macko, S.A. (1997). Stable Isotope Analysis: A tool for cave archaeology. *Journal of Cave and Karst Studies 59*(3): 137-142