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John Claflin

ABSTRACT

Excavation of an area along the Ohio River near Rockport, Indiana, in 1978 revealed the presence of a historic-period campsite. Containing evidence of campfires, animal bone, lead shot, and a few glass beads, the site held the potential for greater significance than was indicated by its size or physical remains. Analysis of the artifacts and animal bone showed that the site was occupied during the latter half of the eighteenth century, probably for less than 24 hours, for the purpose of butchering and presumably consuming bison, along with other locally procured game. Examination of late eighteenth-century ethnographies, as well as letters and journals from the era, suggests that the ethnic identity of the site's occupants was Euroamerican rather than indigenous aboriginal. At this writing, the campsite appears to be the only example found so far of a Euroamerican bison butchering site east of the Mississippi River.

Introduction

Ephemeral sites, i.e. very short-term occupations, are archaeological conundrums. They are difficult to discover, interpret, and evaluate. Thousands of these sites dot the landscape, but their functions, temporal positions, and significance are nearly impossible to determine. In the Midwest, a century and a half of intensive agriculture has ravaged most of these sites. It is, therefore, extremely rare to discover an ephemeral, short-term occupation with its archaeological integrity intact.

The following account documents the excavation of one of three short-term occupations discovered along the bank of the Ohio River near Rockport, Indiana. The site was the first and, so far, only example of its type to be discovered east of the Mississippi River. However, historical sources suggest that dozens, if not hundreds, of similar sites may be present along the Ohio River. Therefore, the Rockport site is anomalous only in that it is the sole representative of its type to be located and excavated to date.

Site Setting

Rockport, seat of Spencer County, is the southernmost town in the southernmost county of Indiana. Situated on the Ohio River, Rockport lies within a re-

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gion termed the "lowlands" by early explorers of the river. Above the present town of Tell City, Indiana, the tall bluffs rise almost at the river's edge. Below Tell City, these steep bluffs recede from the river and are replaced by a 5 to 8-km-wide floodplain; hence the name "lowlands." About 32 km downstream from Tell City, still within the lowlands, a great monolith of Pennsylvanian sandstone rises from the river's edge. It was on and around this nearly 30-m-high outcrop that the town of Rockport was founded and from which it derives its name.

The investigated property lies adjacent to the Ohio River and Rockport (Figure 1). Bisecting the study area and forming part of its boundary is Huffman Ditch/Lake Drain Creek. Prior to coal dock construction, the tract was subject to flooding by the river or the creek or both simultaneously.

The modern physiography of the property was influenced by the creek and the river, and these forces caused extreme changes to the property over the last 200 years. According to the 1805 United States Government Land Survey map, that portion of Huffman Ditch/Lake Drain Creek which now forms the southwest property line was then actually the mouth of Honey Creek. Honey Creek currently enters the Ohio River approximately 4 km upstream from the area of investigation. It appears, therefore, that 200 years ago the property was part of an extremely narrow 3 to 4-km-long peninsula.

By 1876 the mouth of Honey Creek had migrated upstream nearly 3 km. An 1876 Spencer County map (Anonymous 1876a:73) shows Honey Creek entering the Ohio River nearly .8 km south of its current mouth. Huffman Ditch/Lake Drain Creek also has meandered away from its 1805 channel (Figure 2).

It was understood from county maps that tons of silt had been deposited on and near the tract, but it was impossible to determine how or when or at what rate episodes of soil transport had occurred. Fortunately, data derived from the investigations allowed a general reconstruction of the alluvial history of the tract. As shown in Figure 3, four distinct ground surfaces were identified.

Alluvial growth of the tract appears to have occurred slowly prior to the nineteenth century. Over the last two centuries, however, the rate of alluvial deposition accelerated. It may or may not be coincidence that the rapid accumulation of silt began with settlement of the county.

In contrast to the rapid silting of the tract during the nineteenth and twentieth centuries, the eighteenth century was characterized primarily by alluvial stability. Gastropod data taken from the late eighteenth-century ground surface indicated a stable riverine forest of considerable antiquity. Soils beneath this forest were developing in situ rather than being water deposited (Brine 1978).

The environmental conditions suggested by the gastropod analysis were confirmed by the discovery of five decayed and three preserved tree stumps buried under nearly 3 m of silt. The stumps, sawn early in the nineteenth century, were remnants of that stable eighteenth-century forest. One specimen, a tulip poplar (*Liriodendron tulipifera* L.), measured nearly 1.8 m in diameter. The size of the stump attests to the antiquity of that riverine forest.

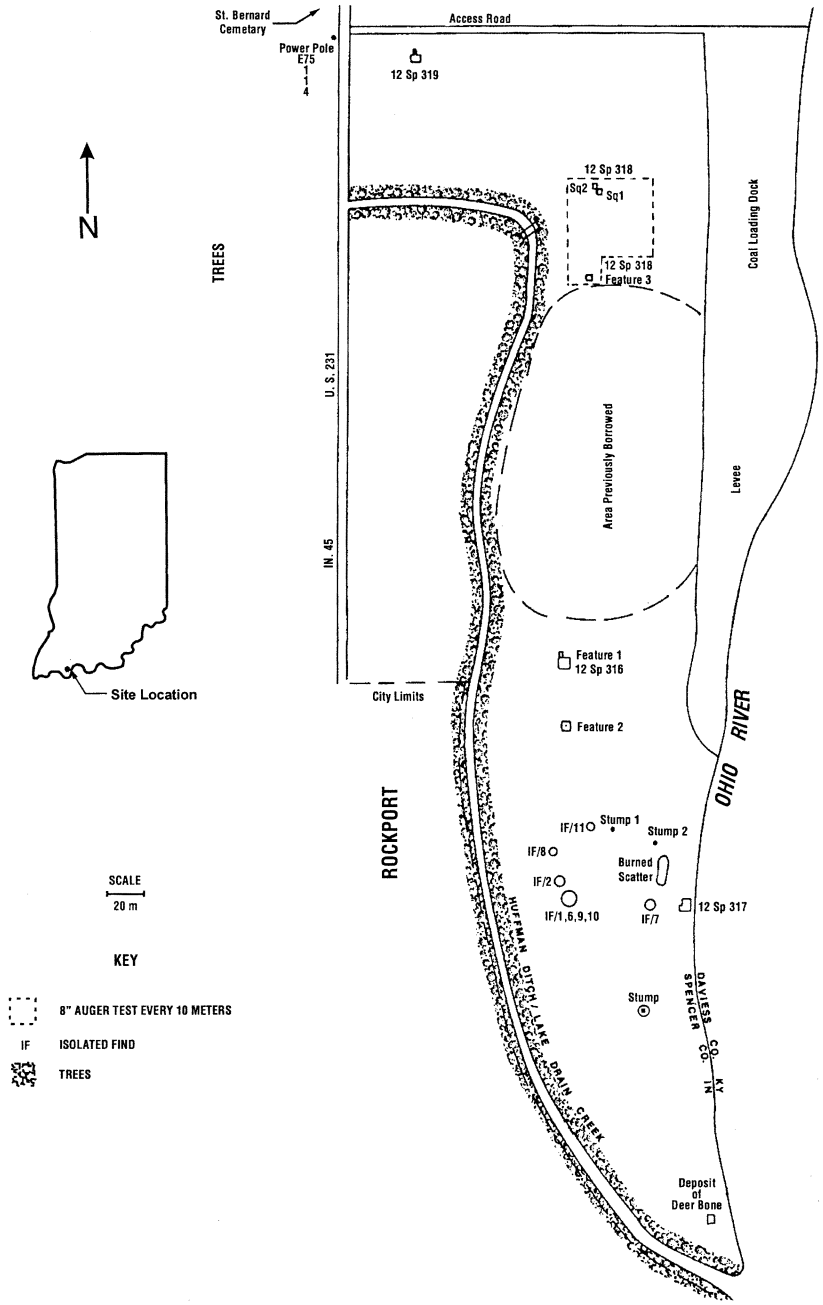

Figure 1. Project and site location.

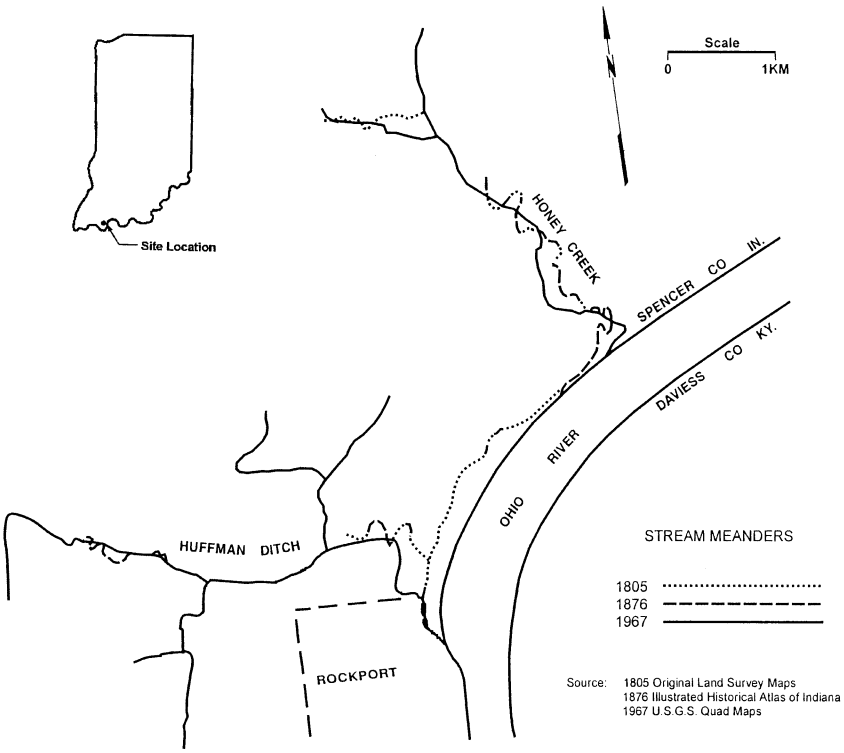

Figure 2. Channel changes of Honey and Lake Drain creeks over the last two centuries.

Methods

The construction of a coal dock in 1978 was the impetus for this archaeological investigation, and it influenced the methodology employed to discover sites buried on the property. Coal docks are facilities along the river for temporary storage and loading of coal onto barges for transport up or down the river. To achieve the height necessary to prevent flooding and create an adequate coal storage area, a huge dirt levee is built at the river's edge. By means of conveyor belts or augers, coal is loaded onto river barges docked at the base of the levee.

At the Rockport coal dock, the owners proposed to borrow dirt from other parts of the construction site to create a levee of sufficient height and area at the river's edge. A cultural resource evaluation of the entire tract was required before dock construction could begin, so a pedestrian survey was authorized. Although the survey failed to locate any archaeological material on the ground surface, a deer femur was found protruding from the river bank along the southern periphery of the property. Based on this find, U.S. Army Corps of Engineers archaeologists determined that further archaeological investigation was neces-

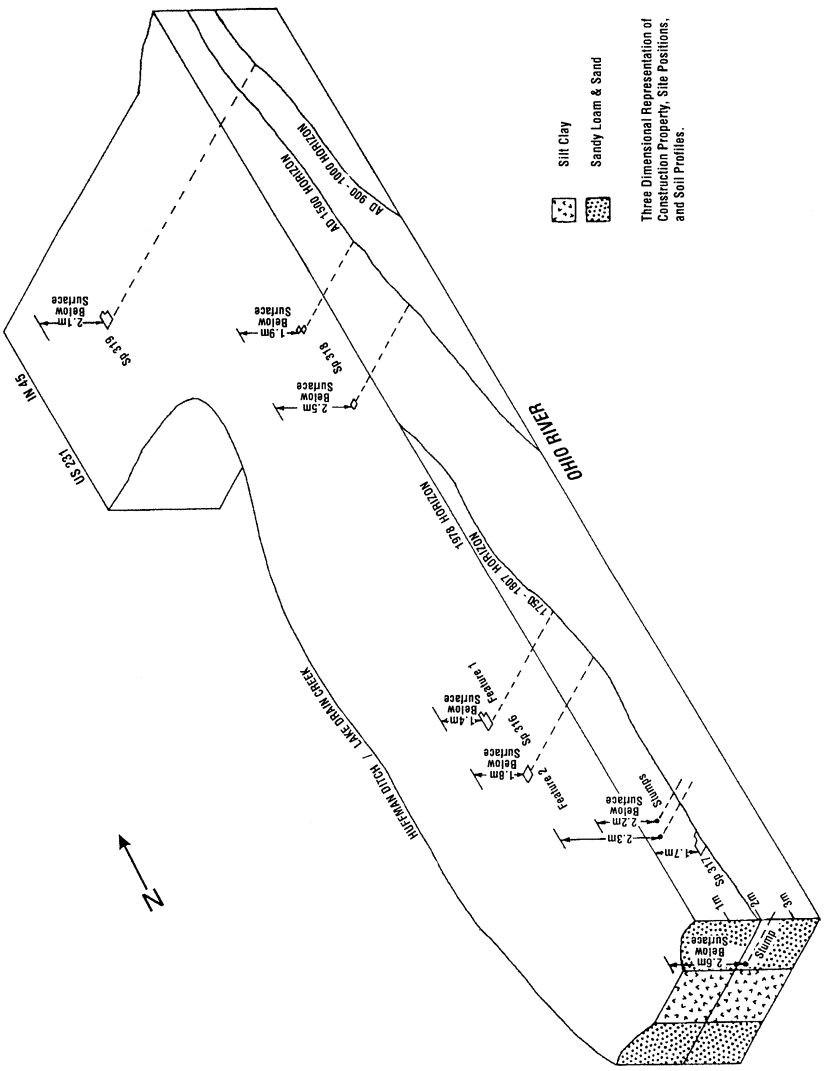

Figure 3. Datable soil horizons at the project site.

sary, as previous surveys along this section of river documented a number of buried prehistoric sites, the most famous being Crib Mound (Kellar 1956:41–55).

Indiana University archaeologists also had recorded a series of buried prehistoric sites washing out of the river bank less than a mile upstream from the coal dock property. One site was buried under nearly 1.5 m of silt. There, the strata observed eroding away included outlines of trash pits, midden debris, chert, stone and ceramic artifacts, and animal bone, including deer (Denbow 1978).

To expedite the dock project, it was agreed that construction could proceed if soil removal at the property was continually overseen by qualified archaeologists. This technique, "monitoring" as it came to be called, was accomplished by visual inspection of each ground surface newly exposed by earthmoving equipment. Most archaeologists have "monitored" the removal of a plow zone or a sterile soil horizon by heavy equipment, but the intensity of the application at Rockport was unprecedented. At the coal dock location investigators followed every scraper and bulldozer on every load. To complete the dock, nearly 8 ha (20 acres) of dirt were borrowed to an average depth of nearly 2.5 m.

Excavation

The borrow tract yielded both prehistoric and historical archaeological sites. Results of the excavation of two prehistoric sites, Sp318 and Sp319, have been reported elsewhere (Claflin 1978). This report documents the investigation of two historic-period campsites, Sp316 and Sp317.

Sp316 was located in the NW 1/4, NE 1/4, SW 1/4 of Section 23, T7S-R6W, on the USGS Rockport quadrangle map. The site area encompassed two large features with associated artifacts and faunal remains. Vertical soil profiles from the excavation units showed that the site was situated on a gentle slope buried 1.2–2 m below the late twentieth-century ground surface.

The deer bone found protruding from the river bank provided the first indication of the existence of Sp317. Its location was approximately 150 m southeast of Sp316. Although exposure of Sp317 for excavation necessitated the removal of nearly 4 m of sterile overburden, transit readings revealed that Sp317 was situated on the same soil level as Sp316.

Initially the physical distance between the two campfire areas (with their associated cultural remains) led to their distinction as independent, distinct phenomena which, therefore, were given separate site numbers. Subsequently, information from the sites strongly suggested that Sp316 and Sp317 were actually two activity areas within one large campsite. Since they were listed in the Indiana archaeological site files as separate sites, the original numbers are used rather than a new designation that might cause confusion.

The soil on the entire tract is generally described as Huntington silt loam (Williamson and Shively 1973). In reality, the soils at Sp316 and Sp317 are radically different from each other. Sp316 soil is a fine silty clay, whereas soil at Sp317 varies from sand to sandy loam. The soil profiles at Sp317 suggest it was

more directly affected by the river than Sp316. The site not only was buried deeper, but the silty clay found all across the tract was absent along the riverbank.

The silty clay at Sp316 was difficult to dig and nearly impossible to water-screen. Permeability was poor and any thunderstorm proved adequate to flood the borrow tract and the excavation units. Drainage was nonexistent and bulldozers had to be used to drain the tract after especially heavy thunderstorms. When the soil finally dried, it quickly hardened and became bricklike. The hardened silty clay had to be soaked in water for nearly a week before it could pass through 1/16-inch mesh hardware cloth.

In contrast, Sp317 was easy to dig and especially easy to water-screen. Therefore, all the soil from the occupation horizon was washed, whereas at Sp316 only samples could be washed. No doubt the difference in the number and kinds of artifacts between the two sites is at least partially attributable to the difference in recovery methods.

Features

Sp316, Feature 1 (Figure 4)

Feature 1 was a large (2.04 x .96 m), ovate concentration of ash, charcoal, and burned earth. The lens of ash and charcoal ranged from 1 to 4 cm in depth and contained small fragments of burned and unburned bone. Sterile, heat-oxidized soil extended to a depth of 16 cm below the charcoal/ash lens, suggesting a very hot fire. The cross section showed a single episode of burning laid on an unmodified ground surface. During the removal of the contents for water-screening, three white glass beads and a small lead pellet were discovered inside the southern edge of the feature.

Sp316, Feature 2

Positioned 32 m south of and on the same ground surface as Feature 1, this remnant fire was similar in size (1.7 x .8 m) and shape. A well-preserved, partly burned log lay on the surface. Feature 2 was exposed, cleaned, photographed, and mapped, but was destroyed by a construction accident before it could be excavated.

Sp317, Feature 1 (Figure 5)

Feature 1 was a large (1.19 x .76 m) campfire, an oval-shaped concentration of ash, charcoal, and unidentifiable burned bone. A small white glass bead and a lead "musket" ball also were discovered in situ in the feature. This feature was structurally identical to Features 1 and 2 at Sp316 and, based on comparisons of stratigraphy, animal remains, and artifacts, is judged to be contemporaneous. The implied functions of the features, i.e., for cooking, are identical.

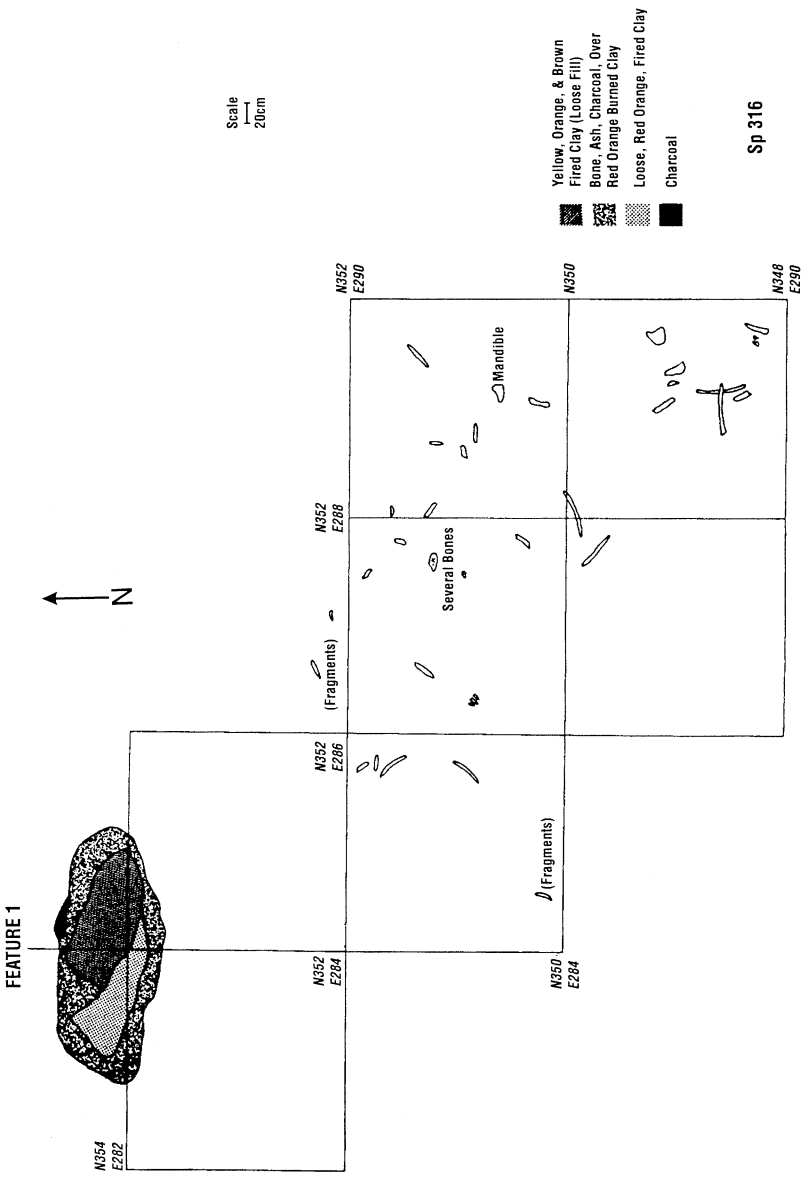

Figure 4. Distribution of faunal remains at Sp316.

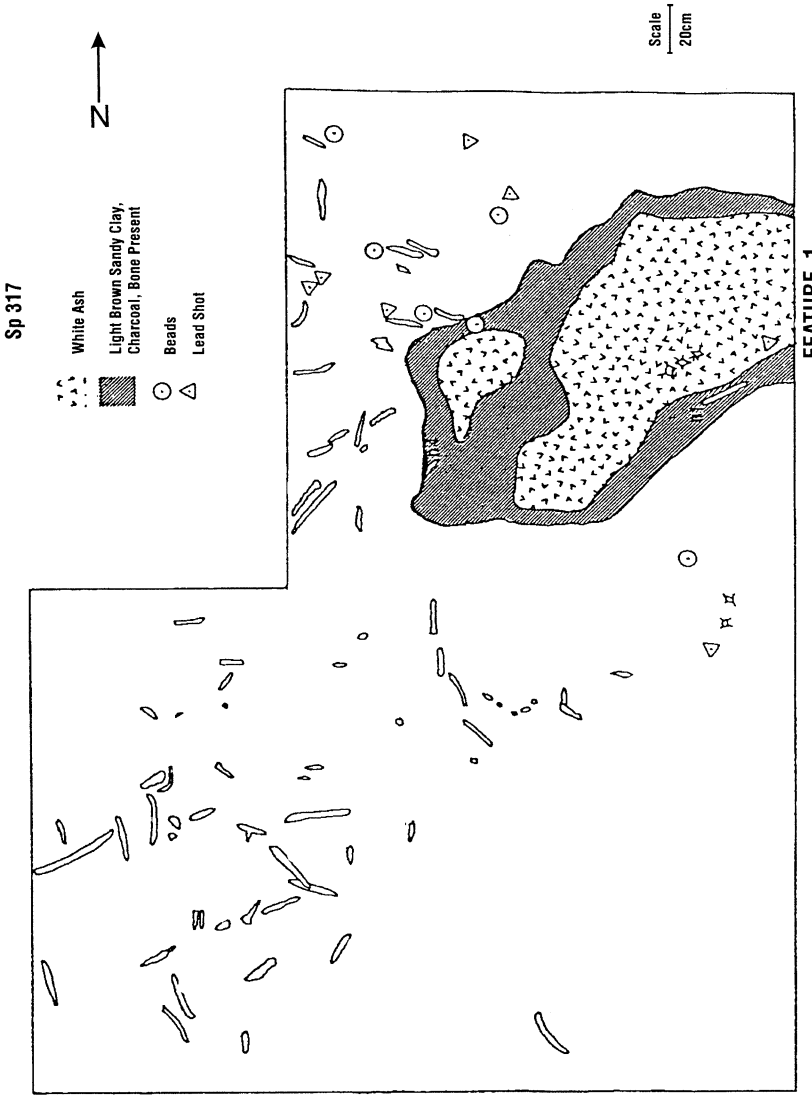

Figure 5. Distribution of faunal remains at Sp317.

Faunal Material

Concentrations of disarticulated animal bone were found near the fires at Sp316 and Sp317. The faunal analysis was conducted by Richard Adams. Cut and/or saw marks on many of these bones imply butchering. Animals represented at Sp316 include bison (*Bison bison*), black bear (*Euractus americanus*), white-tailed deer (*Odocoileus virginianus*), raccoon (*Procyon lotor*), and turkey (*Meleagris gallopavo*). Single elements from a snapping turtle (*Chelydra serpentina*) and a frog (*Rana pipiens*) were also identified.

At Sp317 bison, black bear, white-tailed deer, turkey, and raccoon have been identified. A domesticated dog (*Canis familiaris*) is represented by two incisors and a tarsal. Single elements from a mountain lion (*Felix concolor*), a beaver (*Castor canadensis*), and a domesticated pig (*Sus scrofa*) were also among the faunal remains.

One concentration of bison bones and several individual bison elements were discovered on the late eighteenth-century ground surface between Sp316 and Sp317. Other animal bones were found to the south of the tree stumps, but unfortunately, they were situated under nearly 3.5 m of soil, close to the water table. The bulldozers and scrapers badly rutted this portion of the tract, preventing precise vertical measurement. While it is likely that these bones are related to the Sp316/317 camp complex, it cannot be claimed with certainty. Therefore, these bones have not been included in the interpretation of the campsites. Animals represented by these specimens include white-tailed deer, bison, domesticated pig, domesticated goat (*Capra hirca*), and unidentified bird bone fragments.

There are few indicators of seasonality in this sample. All the wild animals represented can be successfully hunted during all seasons of the year. A warm-weather occupation is hinted at Sp316 by the elements of frog and snapping turtle, but their presence does not provide an absolute seasonal indicator. Fragments of deer antler at Sp317 also imply a late summer/autumn habitation. The strongest argument for a warm-weather occupation is that collectively these animals would have been easiest to hunt during warm weather.

According to Richard Adams (pers. comm.), at least three bison—two adults and a juvenile—were present in the faunal assemblage. Two bears, an adult and a juvenile, also were identified. All other species in the collection represent single individuals. Curiously, no complete or nearly complete animal skeletons appear in the collection. Unfortunately, it cannot be positively determined whether this phenomenon is technical or cultural.

Artifacts

Three glass beads and one lead ball were recovered from Sp316. Glass beads, musket balls, buckshot, birdshot, fragments of lead, copper or brass, and diminutive flakes of chert or flint were recovered from Sp317.

Beads

Twenty-one small, white glass beads of European manufacture appear in the assemblage, both barrel and doughnut forms. Unfortunately, these artifacts are poor temporal indices (Stone 1971:84). They have been recovered from historic archaeological sites dating from 1600 through 1840 (Good 1972:119). The 21 beads found here are identical to Type 1 specimens described by Stone (1971:78).

Lead Shot

Four sizes of lead shot have been identified. It is likely that the different sizes represent four different weapons, since only one mold was usually supplied with each gun. The shot provides only a general picture of the types of firearms present.

Seven pellets of bird shot, the smallest variety of shot, were discovered in situ in the excavation unit and in water-screened soil from Sp317. The drop method was used to make this shot. The variation in the size of the specimens (2–3.9 mm) implies that they were "home-made" rather than commercially manufactured, as commercial shot was size-graded before sale and displays minimal variation in size.

Medium shot was represented at Sp316 by a partially flattened, spheroid, lead pellet discovered in Feature 1. This ball is distinctive because its two hemispheres overlap at the seam, obviously the product of a poorly made mold. It is identical to the single example of medium shot found at Sp317; both were made from the same misaligned mold. The discovery of these two lead balls is particularly fortuitous given the paucity of artifacts from Sp316. It confirms the contemporaneity of the two excavation areas, strengthening the hypothesis that Sp316 and Sp317 reflect a single incidence of human occupation.

Large shot recovered from Sp317 includes an unmodified .45-caliber lead ball and three .50-caliber specimens, as well as a lead ball fragment and 64 tiny pieces of lead.

Copper or Brass Flakes

Six small, flat pieces of copper or brass, each measuring less than 1.1 mm in diameter, were found in the residue of water-washed soil from Sp317. The source of the fragments cannot be determined. Three of the six had an unidentified, fragile, nonmetallic substance attached to them.

Flint or Chert

Ten small flakes of chert were recovered in water screen residue from Sp317. One rectangular flake displays several striking platforms along one lateral edge, not unlike those found on gunflints. Three flakes are gray, similar in color to southern Indiana's naturally occurring gray chert. The remaining flakes are honey colored and could represent a local but less common chert.

It cannot be determined from color alone whether the chert is local or of European origin. European gunflints were commonly made from honey-colored flint

and light gray to black flints (Good 1972; Hamilton 1960a; Witthoft 1967). However, local cherts of nearly the same colors were being made into gunflints for a time during the late eighteenth century (Saugraine 1908:224).

Temporal Position

None of the artifacts from Sp316 and Sp317 is precisely datable. None of the lead shot in the collection is larger than .50 caliber and none of it was commercially manufactured. Firearms of .50 caliber or smaller are considered diagnostic of the late eighteenth century in the Ohio River valley (Hamilton 1960a:117; Hanson 1955:7–8). These light-caliber weapons, generally of French origin, are often recovered from late eighteenth-century Indian sites and may date as early as 1750 in the lower Ohio River valley (Hamilton 1960b:142). Although the seed beads from the sites are poor temporal indicators due to their long period of manufacture, because the temporal range of the lead shot falls within the range of the seed beads, it is suggested that this site can date no earlier than 1750.

The presence of bison bones further narrows the temporal range of the occupation. During the eighteenth century great bison herds inhabited the whole length of the Ohio River. For example, in the upper Ohio River valley, mid- to late eighteenth-century travel journals (e.g., Hanson 1774; Jones 1865; Pope 1888; Washington 1846) record frequent observations of buffalo. Filson's 1784 overview of Kentucky features bison as a prominent animal in the region (Filson 1784).

Below the falls of the Ohio (Louisville), bison were equally numerous along the river. Charles Croghan observed bison in abundance there in 1765 (Croghan 1831). Captain Harry Gordon saw "great herds of buffalo on beaches of river and island" (Gordon 1949:160) near Rockport in 1768. As late as 1792 Moravian missionary John Heckewelder observed bison along the river from as far east as the Virginia-Kentucky border to the Wabash River. Near Rockport, Heckewelder wrote: "We saw, almost continuously, herds of buffalo grazing on the bank" (Heckewelder 1958:278).

By 1796 a significant change seems to have occurred along the river. G. H. Victor Collot, commissioned by the French minister to the United States to assemble a "minutely detailed account of the political, commercial, and military state of the western part of the continent" (Collot 1924, 1:i) journeyed down the Ohio in 1796. He completed a series of remarkably accurate maps and descriptions of the Ohio and Mississippi River valleys. Near the same section of the river where Heckewelder encountered buffalo herds in 1792, Collot noted: "Both sides of the river were covered with game, chiefly water fowl, and in such numbers that it seemed scarcely possible to augment the number: geese, ducks, swans, herons and roebucks were mingled together and lined both sides of the Ohio" (Collot 1924, 1:166).

Farther downstream at the pioneer settlement of Red Banks (Henderson, Kentucky), Collot made his first and only reference to bison on the Ohio. "At our arrival we found a number of these hunters who had assembled to regale them-

selves with the spoils of their chase on the preceding day, when they had killed a very fine buffalo. They had drunk plentifully of whiskey … the greater number were intoxicated" (Collot 1924, 1:172). A later journal entry notes the presence of bison herds along the Mississippi River downstream from St. Louis.

It is strongly suggested that Collot's failure to mention sighting bison along the Ohio was not an oversight but a reflection of reality. First, Collot was a trained observer renowned for his skill. Second, the Red Banks incident implies that bison had become so rare they were nearly extinct in that area. The hunters' celebration of a bison kill seems extreme if bison still occurred there in the numbers encountered by Heckewelder in 1792.

Finally, in contrast to Heckewelder's description of killing bison, bear, deer, and turkeys along the river, Collot mentions killing only bears for food. It seems unlikely that this was attributable to dietary preferences.

The contention that bison had been extirpated along the lower reaches of the Ohio River by the end of 1796 is further supported by Francis Baily who completed his Ohio River trip just a few months after Collot. Arriving at the mouth of the Ohio in April 1797, Baily wrote:

> …our attention was continually attracted by the flight of immense flocks of wild fowl, who, undisturbed, preserved their course through the air, regardless of our near approach; or we might behold the nimble deer browzing on the banks, or the fierce bear darting through the thicket. These were the scenes which would often present themselves. [Baily 1856:259]

Baily, like Heckewelder and Collot, reported hunting forays to acquire food during his journey, but mentioned only deer, bear, and turkeys as food targets. The failure of Collot and Baily to mention bison does not incontrovertibly prove that bison had been eradicated in the region by 1796, but the omission does seem significant when compared with the numerous references to the animal in Ohio River journals written prior to 1796.

The 1796 journal of Andrew Ellicot (Ellicot 1803) is also pertinent, although it does not actually corroborate Collot's and Baily's observations. Instead, it suggests there had been a change in the subsistence strategies of the military contingents traveling the river.

Major Ellicot and his military escort passed the sandstone monolith at Rockport in mid-December 1796 en route to New Orleans. Although his journal contains a compilation of the prominent flora of the region, it provides no topographic descriptions of the region, nor are there references to local fauna. It does, however, note that the Ellicot party chose to purchase food rather than rely on hunting as did earlier parties (Ellicot 1803:19).

It is conceivable that the decision of the Ellicot party to purchase food rather than hunt during the winter of 1796 reflects seasonal differences in availability of game along the river. However, it is also possible, in light of the evidence of previously cited travel accounts, that the decision reflected a major reduction of the bison population between 1792 and 1797.

The extirpation of bison from Spencer County, Indiana, predates the county's

pioneer settlement. Settlers began to arrive in the county by 1807, but bison are not mentioned in the earliest county histories. In contrast, encounters with bears, which were exterminated in Spencer County by 1821 (Anonymous 1876b:3), were apparently important enough during early settlement to be regarded as local historical events. Bear stories were included in the histories of Ohio, Luce, Grass, and Jackson townships in Spencer County (Anonymous 1885).

The evidence presented thus far suggests that campsites Sp316 and Sp317 were inhabited at some time between 1750 and 1797. The glass beads and lead shot argue for a time frame no earlier than 1750. Based on Spencer County histories, the presence of bear bones means the camp predates 1820. The bison bones narrow the temporal range further, indicating an occupation no later than 1797.

It is difficult to imagine that the great herds of bison observed by Heckewelder in 1792 could have become extinct in just four years. The 1806 account of English explorer Thomas Ashe provides insight into how that result might have come about:

> I met with a man who had killed two thousand buffaloes with his own hand; and others, no doubt, have done the same. In consequence of such proceedings, not one buffalo is at this time to be found east of the Mississippi; except a few domesticated by the curious, or carried through the country as a public show. The first settlers, not content with this sanguinary extermination of the animal, also destroyed the food to which it was most partial; which was cane, growing in forests and brakes of immeasurable extent. To this the unsparing wretches set fire in dry seasons; in order to drive out every living creature, and then hunt and persecute them to death. [Ashe 1808:49]

Ethnic Identification

The evidence presented thus far—a 1750–1796 time frame, light-caliber lead shot, glass "trade" beads, and the bones of several animal species—might lead to the conclusion that Sp316/Sp317 represents a short-term historic Indian campsite. Indeed, historic Shawnee, Delaware, Miami, Wyandot, and Potawatomi tribes did include southern Indiana in their hunting territories during the late eighteenth century (Anonymous 1885; Kellar 1973; Temple 1966; Wilson 1919). As late as 1811 a small band of Shawnee was living in Spencer County (Meeks 1968), but they were not alone in the region.

Chronological Evidence

During the eighteenth century, the Ohio River valley and land adjacent to it were sequentially claimed by the French, British, and United States governments. Under French control the region around Spencer County felt little pressure from Euroamericans. After the French and Indian War, use of the Ohio River, then under British control, gradually increased until after the American Revolution. By 1790 thousands of pioneers were traveling downriver every year en route to

and beyond the western frontiers of the newly created United States (Thornbrough 1957:85–86).

The American general Josiah Harmar, stationed near Marietta, Ohio, reported to the U.S. Secretary of War that between October 1786 and July 1788 at least 3,331 boats and 12,205 persons had passed his garrison (Buel 1957:85–86). While most settlers in the late 1780s were bound for Limestone [now Maysville, Kentucky] (Saugraine 1908:223), the arrival of new settlers downriver at Louisville was not uncommon. Antonie Saugraine documented the arrival of 51 boats at Louisville between March and May, 1788, "each more crowded than the other … some come every day" (Saugraine 1908:225). At Louisville, new arrivals would travel into the interior of Kentucky, cross overland into Indiana, or continue downriver to western Kentucky, Illinois, or other territories adjacent to the Mississippi River. By 1792 John Heckewelder (1958:279, 282) reported 30 families living at Red Banks (Henderson, Kentucky), 30 American families living among the 1,500 residents of Post Vincennes, and an additional small settlement near Vincennes populated entirely by Americans.

Although Spencer County, Indiana, remained unsettled by Americans until the first decade of the nineteenth century, the Kentucky bank of the Ohio appears to have been settled nearly a dozen years earlier. There is, however, some confusion regarding the date of initial settlement. A recent history of Davies County, Kentucky, assigns its settlement to 1795 and settlement of Yellow Banks (Owensboro) to 1797–1798 (Potter 1974:2). On the other hand, Victor Collot (Collot 1924, 1:166) noted eight or 10 families at Yellow Banks in 1796, a year earlier. The ethnicity of the Rockport campsite occupants cannot be established solely by documenting its date, because both Indians and Euroamericans were in the region at the time.

Artifactual Evidence

It is commonly accepted that glass beads like those found at the campsites were used by historic Indians in the Midwest to decorate clothing and other personal items. They are found in quantity on many excavated historic Indian villages. Nevertheless, they are of Euroamerican origin, traded or sold to Indians, and hence inadequate as ethnic indices. Additionally, there is a body of evidence showing that many late eighteenth-century frontiersmen were adopting the dress and ornamentation of the native population.

Indiana historian William Cockrum asserted that Indiana pioneers wore jackets "made out of dressed deer skins for summer and fall wear. The skin coats were fantastically ornamented in the fashion of the Indians" (Cockrum 1907: 119). Describing the French Canadian population at Vincennes in 1792, John Heckewelder wrote: "There is hardly one Frenchman in 5 who dresses decently…. If you know the Indian costume, you know theirs" (Heckewelder 1958:282).

Victor Collot's description of the settlers at Red Banks, Kentucky is less stereotypical: "…the inhabitants of Red Banks are forresters. They cultivate no ground, but subsist on the produce of the hunting and fishing and are almost naked" (Collot 1924, 1:172). Reverend Joseph Doddridge also commented on

late eighteenth-century frontier fashion trends:

> On the frontiers and particularly amongst those who were much in the habit of hunting on scouts and campaigns, the dress of the men was partly Indian and partly that of civilized nations.... In the latter years of the Indian War our young men became more enamoured of the Indian dress, ... the Indian breech clout was adopted.... This passed under the belt before and behind leaving the ends for flaps hanging before and behind over the belt. These flaps were ornamented with some coarse kind of embroidery work. ...the upper part of the thighs and part of the hips were naked. The young warrior, instead of being abashed by his nudity, was proud of his Indian-like dress. [Doddridge 1824:113, 115]

Clearly, some late eighteenth-century pioneers along the river did adopt or mimic Indian dress. With this style would go the possible use of glass beads to decorate a buckskin jacket or along with embroidery on a breechclout. Since glass beads do not clarify ethnicity, other data must be examined to determine who was at Sp316/317.

Guns in the .50-caliber range were commonly traded to the Indian tribes of the Ohio River valley, but it cannot be inferred that light-caliber weapons were exclusively used by Indians or, conversely, that guns above .50 caliber were exclusively used by the intruding white population. The first wave of western expansion initiated some of the bloodiest conflicts in the nation's history. The Ohio River, particularly above Louisville, was the theater for raids, massacres, murders, and war. Guns were among the most prized spoils of war, and any gun in the Ohio Valley was valuable. Although light-caliber weapons were frequently traded to Indians, all sizes and types of guns were available to them, as well as to the settlers. Given the equal availability of weapons, it cannot be assumed that guns of .50 caliber or less were Indian, or vice versa. In the same regard, the lead shot found at Sp316/317 also cannot be construed to be an ethnic artifact.

Evidence from Features

Since the artifact assemblage at Sp316 and Sp317 is culturally undiagnostic, the features themselves were evaluated to determine whether there were culturally based differences in the manner in which Indians and Euroamericans constructed fires. Unfortunately, this avenue of research proved inconclusive due to:

1. a lack of excavated historic Indian sites in the Midwest, despite many historic references,
2. sketchy or synoptic reporting of the historic Indian sites which have been excavated,
3. concentration on artifact physical descriptions, with little detail on function or user interface, and
4. under-reporting of features like fires or pits; descriptions list only associated artifacts, with no reference to feature construction.

Ethnohistoric accounts provide fascinating detail but often fail to discuss critical physical information. For example, C. C. Trowbridge provided first-hand observations of late eighteenth-century Shawnee and other Ohio River Indians. Although he claimed the ability to distinguish among Indian tribes by the placement of the cooking kettle over the fire and gave detailed descriptions, Trowbridge failed to record how the fires were constructed (Trowbridge 1939:48).

This dilemma was summed up concisely over 70 years ago by historian Walter Hough. In his monograph, "Fire as an Agent in Human Culture," Hough commented on the deficiencies in ethnographic sources with regard to information on firemaking:

> There is not much information available for the general treatment of this subject. It appears probable, however, that some order in placing fuel on the fire was worked out as the result of endless experiences in the past. Such matters were observed as of no consequence, and what appeared to be normal may have been the result of designed action known to be best for the purpose. For this reason only unusual or striking methods were recorded. [Hough 1926:18]

Faunal Evidence

Since features and artifacts were inconclusive indicators of ethnicity, it became necessary to explore the possibility that the animal bones from Sp316 and Sp317 might provide insights regarding the people who hunted, camped, and cooked on the banks of the Ohio River between 1750 and 1796. Research was directed toward discerning patterns of affinity for or avoidance of the animals present at the site by either Indian or Euroamerican groups.

Aboriginal Hunting and Dietary Patterns. Studies of late eighteenth-century Shawnee and Delaware cultures agree that white-tailed deer was the most important animal food resource for both tribes, although bear was also an important dietary item (Heckewelder 1876; Kinietz 1946; Newcomb 1956). In contrast, Heckewelder (1876:196) reported that some animals common in the region were ignored or considered unfit for consumption by some Indian cultures:

> The Delaware, Mohicans and Shawanos are very particular in the choice of meats and nothing short of the most pressing hunger can induce them to eat certain animals as the horse, dog, wildcat, panther, muskrat, wolf … all of which I have seen the Chippeway feast upon with a seemingly good appetite.

Newcomb (1956:15) observed from period primary accounts that "neither the elk nor the bison formed an important part in Delaware subsistence in the eighteenth century." Observations by the Moravian missionaries David Zeisberger (1885) and John Heckewelder (1876) and others (Gipson 1938) support this assertion. Bison appears to have become an important dietary item for the Shawnee only after they had been pushed into western Missouri and eastern Kansas during the early nineteenth century (Howard 1981). Both Gipson and Howard agree that Shawnee and Delaware hunting patterns changed drastically at the turn of

the nineteenth century as hunting for skins to sell to Euroamerican traders became as important as hunting for subsistence. There appears to be overall agreement among eighteenth-century chroniclers in the region that bison was not a desired game animal for most of the Indian tribes claiming territory along the Ohio River.

Some of the most enlightening descriptions of Ohio River Indians in the eighteenth century are the chronicles of their Euroamerican captives. These accounts describe the dietary habits of the captors and provide information on the kinds of animals that might be found on a short-term Indian encampment. Colonel James Smith, for example, was captured by a party of Delaware, Wyandot, Ottawa, and Caughnewagos Indians during the late 1750s. Smith (1821) reported that during his captivity, his captors subsisted on deer, bears, raccoons, turkeys, and occasionally elk.

Charles Johnston's account of his captivity in 1790 supports Colonel Smith's earlier observations. Enroute to Limestone, Kentucky, Johnston was taken prisoner with a party of settlers by members of the Shawnee, Delaware, Wyandot, and Cherokee tribes. Later taken by the Shawnee contingent, Johnston described their diet: "During the whole march we subsisted on bear meat, venison, turkeys, and raccoons" (Johnston 1827:46).

These accounts are important not only because bison are not among the reported dietary items, but also because they suggest that the physical remains on those single-event campsites would be different from what was found at the Rockport campsite. Unlike Sp316/Sp317 with its amalgam of animal remains, the campsites described by Smith and Johnston would display only one or two species of animals which were consumed there. Johnston reports that in one instance, the meal consumed consisted of a female bear and its two cubs. The next day at a different campsite, another bear was killed and eaten (Johnston 1827:29). Overall, the account suggests that his Indian captors were opportunistic, but conservative, killing and consuming the one or two animals easily located in the vicinity of their camp.

According to Johnston, bears were particularly desirable as "…it is the habit of these Indians to treasure up bears oil which they collect and carry to their villages…" in deerskins (Johnston 1827:37). Similarly, the Smith account reveals that wild game procurement strategies of his captors, and hence the animal remains discarded at their encampments, were different from those found at Rockport. On a formalized hunt over a two-week period, Smith recorded that his captors killed four bears, three deer, and several turkeys and raccoons. A portion of each animal was eaten at each camp, but at the conclusion of the hunt these animals were carried to the winter camp for butchering and consumption or storage (Smith 1821:195).

Newcomb's ethnographic synthesis of Delaware hunting strategies supports the Smith account. "The first fall hunt was for deer and seems to be communal…. After the deer hunt, bears and other game were sought by individual hunters" (Newcomb 1956:15).

The Shawnee appear to have had a similar strategy. Hunting was a more im-

portant subsistence activity in winter and game was returned to the winter house, where it was butchered and cooked (Howard 1981:44). Henry Harvey (1855) reported that Shawnee men lounged around their villages during spring and summer and occasionally hunted deer or fished. A communal hunt was scheduled in winter.

One late eighteenth-century captive noted that consumption of deer may have had ritual significance for the Shawnee and Delaware, and some single-event campsites could reflect this. O. M. Spencer (1917:119 [1834]) related that during his ordeal he observed an attack by his captors on an enemy village. As they approached the enemy encampment, members of the attacking force were sent out to procure 12 deer. These deer were then roasted during the night. The attack commenced upon the completion of the venison breakfast.

To summarize, documentary evidence shows that bison was not sought for food by the Delaware, or by the Shawnee, the only tribe known to have resided in Spencer County. Further, these tribes held communal hunts during autumn and winter, whereas a warm-weather occupation has been established for Sp316/317. In addition, archaeological evidence at Sp316/317 indicates that game was butchered, cooked, and consumed in a manner contrary to the usual procedure of Ohio River valley Indians who typically butchered game animals at village sites rather than at temporary camps. Finally, the "residue" of occupation at the Rockport site was much different than that which is likely to be found at an Indian camp.

Euroamerican Hunting Patterns and Dietary Evidence. It has been established that much of southern Indiana, and Spencer County in particular, was uninhabited by Euroamericans during the late eighteenth century, but military parties, explorers, hunters, adventurers, missionaries, and settlers were passing through the region with increasing frequency. It is therefore necessary to examine the subsistence strategies of those Euroamericans invading the Ohio River valley.

Many of those first Euroamericans in the region lived off the land. The late eighteenth-century journals of George Washington (1846), Thomas Hanson (1774), David Jones (1865), Christopher Gist (1893), David Zeisberger (1885), Charles Frederick Post (1904), and numerous others make specific reference to making camps along the river and hunting and eating game animals found in the vicinity of their camps. These accounts show an unexpected consistency in the animal species hunted and consumed, and they confirm that a variety of species were butchered and at least partially eaten at temporary camps. Furthermore, the journals document that Euroamerican hunting practices differed radically from those of local aboriginal groups.

The most obvious difference in resource exploitation between Euroamericans and the indigenous population was in the use of bison. On his Ohio River trip in 1763, four days after his departure from Fort Pitt, Colonel George Croghan saw that along the river "...buffaloes, bear, turkeys with all other kinds of wild game are extremely plenty. A good hunter, without much fatigue to himself could here supply daily one hundred men with meat" (Croghan 1831:8). Two days later, May 21, 1763, he wrote, "The country hereabouts abounds with buffaloes, bears,

deer, and all sorts of wild game, in such plenty, that we killed out of our boats as much as we wanted" (Croghan 1831:9).

Numerous eighteenth-century personal and military journals also contain references regarding bison exploitation (Clark 1869; Denny 1860; Gist 1893; Hanson 1774; Heckewelder 1958; Jones 1865; Washington 1846). However, other animals, particularly bear and deer, also were killed for food, often at the same time that the bison were taken (Denny 1860; Heckewelder 1958; Jones 1865; Pope 1888).

Many of the mundane aspects of travel on the Ohio River were recorded by Moravian missionary John Heckewelder. The 1792 journal of this prolific writer reveals the hunting strategies of Euroamerican river travelers, describing the kinds of animals hunted and the frequency of the hunts. Heckewelder noted that members of his large flotilla killed bison, bear, and deer almost daily during their trip between Louisville and the mouth of the Wabash River.

While camped at the mouth of the Wabash River, Heckewelder described a particularly sumptuous meal which "consisted of buffalo, bear, deer and pork, turkey, two ducks, a pike and turtle soup, besides various vegetables" (Heckewelder 1958:279).

River travelers, according to Heckewelder, were not the only Euroamericans exploiting the fauna along the river. On three separate occasions during his 1792 trip Heckewelder encountered professional hunters. In one instance hunters had canoes filled with bison and in the others, the hunter's canoes contained "buffaloes," bear, and deer (Heckewelder 1958:279, 286, 288). These hunters apparently sold the meat at various forts and civilian settlements along the river.

Documentary evidence therefore affirms differences between Ohio River valley aboriginal and Euroamerican populations with respect to the use of bison as subsistence targets during the eighteenth century. Whereas Indian tribes in the region rarely if ever hunted bison for food, Euroamerican pioneers considered them a primary subsistence item and hunted them to extinction east of the Mississippi River by 1800. Evidence also indicates that food procurement strategies differed greatly between local Indians and Euroamericans. The differences and preferences likely would be reflected in the archaeological record, and it is therefore hypothesized that Sp316/317 is Euroamerican rather than aboriginal in origin.

Further Identification of Site Occupants

If the hypothesis regarding the ethnicity of the Rockport site's inhabitants is valid, the question that next arises is whether the actual identity of the particular Euroamericans who established the camp can be determined. Primary historical sources document three categories of Euroamericans traveling or exploiting the river below Louisville during the late eighteenth century: commercial hunters, settlers locating permanently in the area, and individuals or groups traveling through the area en route to other regions such as New Orleans or territories further west. The latter category includes military parties, civilian explorers, tour-

ists, traders, merchants, and pioneers. River flotillas frequently included various combinations of the above-mentioned groups as a matter of security or convenience.

Data on late eighteenth-century Euroamerican subsistence habits imply that individuals in any of the three categories could have been responsible for the Rockport campsites. However, historical documentation and certain physical remains from Sp316/317 diminish the likelihood that either commercial hunters or local settlers were responsible for the archaeological remains discovered at Rockport.

The bison bones discovered at Rockport essentially eliminate local settlers from consideration for reasons of chronology. It will be recalled that Davies County, Kentucky, was not settled until the mid-to-late 1790s and Spencer County, Indiana (location of Rockport), was settled after the turn of the nineteenth century. In both instances settlement occurred after the disappearance of bison from the region. Even if it were assumed that settlers had arrived in both counties earlier than the official dates of settlement, the physical characteristics of the site appear to be inconsistent with occupation by this group. Specifically, the apparent on-site butchering, cooking, and assumed consumption would argue against its use by local settlers, as these activities would more logically take place at the settlers' habitation sites.

It is more difficult to dismiss the possible role of commercial hunters in the creation of the campsite. Contacts with commercial hunters are documented in the travel journals of John Pope (1888), Ebenezer Denny (1860), and John Heckewelder. Unfortunately, five brief notations in three journals is too meager a record to reconstruct an industry profile. However, given the environmental conditions along the river and the economics of the time, it is possible to hypothesize with reasonable certainty about the mechanics of commercial hunting forays.

It is not surprising that the hunters' boats observed by Pope, Denney, and Heckewelder contained bison or a collection of meats including bison. Not only were these animals the largest game species available in the region, they were also easily killed from boat or shore. They were the animals that produced the greatest amount of meat for the least amount of effort. Bison were ideal prey for commercial hunters who were supplying military posts and newly established settlements along the river. It would then be reasonable to expect that archaeological remains of a commercial hunter's camp would consist exclusively of elements from the most economically productive varieties of game: bison, bear, and deer.

The same site characteristics that argue against local settlers being the inhabitants of Sp316/317 also argue against commercial hunters as its occupants. The large fires at the camp and their presumed functions seem inconsistent with commercial hunting. Further, although represented by only a few bones, the presence of domesticated dog and pig and even mountain lion cannot easily be reconciled with the picture of a commercial hunter's camp.

A synthesis of previously mentioned eighteenth-century sources reveals that

the third category of Euroamericans—flotillas of settlers, military personnel, and others transshipping through the area—is most likely to be responsible for the archaeological materials discovered at Rockport. The journal of John Heckewelder offers the most detail regarding this type of excursion, and the flotilla in which he traveled may be considered typical for the period.

In 1792, the Secretary of War asked Heckewelder to observe treaty negotiations between the United States and Indian representatives at Post Vincennes (Vincennes, Indiana) on the Wabash River. In August of that year at Cincinnati, Heckewelder joined a flotilla headed by General Rufus Putnam. In addition to military and civilian personnel, the flotilla included Indian women and children taken as prisoners of war in 1791 who were to be repatriated at Vincennes. Heckewelder's journal describes the party and its hunting activities:

> There were now 140 of us altogether, distributed in 4 Kentucky boats, 3 barges and several canoes....The 27th. Our hunters shot 2 bears and a deer, and _____. On the 28th they shot a fat buffalo cow which weighed 436 lbs. Today 2 more bears were shot and some turkeys....On the 29th another buffalo, a deer and 2 bears were shot. ...On the 30th we saw almost continuously herds of buffaloes grazing on the banks. Interpreter Wells shot a fat cow, and I a calf, both fat and good. We had now reached a country where there are no more hills to be seen, but everything is flat and level ... On the 31st ... in the evening we passed Green River....[Heckewelder 1958:278]

Mode of Transportation. The canoes, barges, and Kentucky boats that made up the Heckewelder flotilla were the dominant boat types on the river until the introduction of steam-powered vessels. A brief discussion of these boats is germane to the reconstruction of Sp316/317.

According to Victor Collot, the flat-bottomed Kentucky boat was the type favored by emigrating pioneers. Collot described them as having "°the form of a great oblong, varying its proportions from thirty to fifty feet in length, and from twelve to twenty in width, but never less than four in depth. These boats are constructed without nails which renders them very dangerous...." (Collot 1924,1:32).

The fragility of these boats and their pilots' unfamiliarity with the river and its hazards constituted a deadly set of circumstances for many pioneers. Collot (1924,1:32) noted that "great numbers perished in frequent accidents along the Ohio."

The other common type of boat on the river, and possibly the "barge" referred to by Heckewelder, was the keel boat. It was also favored for commercial traffic on the river. These boats had three oars; two were used for rowing and the third served as the helm.

> The most convenient size for boats with keels destined for New Orleans is from forty to forty-five feet long, twelve broad and four deep; they ought to be strongly built, that is, to have their ribs very close to each other, and the helm of the same form of ordinary vessels. The great oar placed at the stern,

> with which Americans govern the boat, is extremely dangerous. [Collot 1924,1:33]

These descriptions provide an idea of the size, construction, and maneuverability of these craft. In particular, the characteristics of boat depth and handling capability are most relevant. To maneuver such a boat the length of the Ohio River without incident, a pilot required either intimate familiarity with the channel and its prominent features or a first-hand account and an accurate map of the river (or a great deal of luck).

With regard to navigation of the river, it is important to note the location of the Rockport campsite on the right bank of the river as the observer faces downstream. This is the high-energy side along this section of river as the sandstone outcrop forces the river to bend south there. In his 1766 journal, the British officer Captain Harry Gordon cautioned that near the present town of Tell City, Indiana, "the country then grows flat and the river, whose bed widens, is often divided by islands..., but where the flat country begins, boats must keep to the principal channel which is on the right hand going down (Gordon 1949:160–161)." This admonition surely became well known, as Gordon's descriptions of the river were published, along with Thomas Pownall's map and overview of the Ohio Valley, a decade after the Gordon trip.

Captain Gordon, an engineer as well as a military officer, wrote with authority regarding the hydrology of this section of the river. First-time river travelers familiar with Pownall's publication would have heeded Gordon's advice, as his account was the most accurate one then available. Frequent river travelers likely shared his conclusion about "where the lowlands begin" based on their own first-hand experiences on the Ohio.

The importance of Gordon's warning cannot be overstated. Inadequate navigation on this section of the river could be life-threatening. For example, in December 1796, near Rockport, Andrew Ellicot related a potentially disastrous occurrence with a party of settlers:

> About nine o'clock in the morning discovered a Kentucky boat fast upon a log and upon examination found it to be deserted and suspected that the crew were on shore in distress, which we soon found to be the case. The crew consisted of several men, women and children, who left the boat two days before in a small canoe when they found their strength insufficient to get her off. They were without any shelter, to defend themselves from the inclemance of the weather and it was snowing very fast. We spent two hours getting the boat off and taking it to shore, where we received the thanks of the unfortunate crew and left them to pursue their journey. [Ellicot 1803:19]

All Kentucky boats and "barges," then, in order to stay in the channel and successfully navigate this section of the river, would have had to pass nearest the bank on which Sp316/317 is positioned. It follows that any boat docking in this area would have tied up along the right bank.

Other Evidence. Heckewelder's references to hunting deserve further consid-

eration in another regard. If it is accepted that Heckewelder's flotilla, or any flotilla for that matter, had to hold to the right shore, it would be reasonable to expect that the hunters attached to those flotillas confined their efforts to the right shore also. Here the boats could more easily and safely dock to camp, butcher, and cook. In addition to the safety aspect, hunting on the side of the river closest to the boats would be important in terms of staging the tedious chores of field butchering and transporting the processed animals to a shoreline locality where final preparation and consumption would occur. Surplus meat could then be easily transferred to the boats for subsequent meals.

Meat from the animals represented at the Rockport site could have fed a large group of people, suggesting that the party camped there was sizable. The flotillas of Charles Croghan in 1765, Harry Gordon in 1766, Josiah Harmar in 1787, George Rogers Clark in 1788, and Rufus Putnam and John Heckewelder in 1792 were all of sufficient size to have consumed all the game at Sp316/317.

In addition to trips chronicled by their participants, there were many undocumented trips. Mid-eighteenth-century British military flotillas carrying supplies to their western forts were often large (60+ persons), as were the American military flotillas after the Revolutionary War. For the American army, large flotillas were nearly a necessity. As westward settlement expanded after American independence, relations between Ohio River Indian tribes and Americans soured rapidly, particularly above the Falls. Preventing the Indian capture of supply flotillas carrying guns, powder, and shot, but mostly whiskey and other spirits, was of particular concern to the army, and these river convoys were usually heavily guarded.

Given the nearly constant conflict with Indians, American civilians traveling with such military convoys displayed remarkably good sense. Indian attacks on civilian boat traffic were common after the Revolution, and captured Americans were frequently tortured to death or killed immediately upon capture. For example, Thomas Ridout, traveling with 20 civilians on two Kentucky boats, was the only survivor of an Indian attack as he was able to convince his Indian captors that he was a British citizen rather than an American (Ridout 1890). For most civilians traveling the river, avoiding Indian attacks depended on luck, traveling with the military, or assembling convoys large enough to deter aggression.

It should be recalled that although Sp316/317 was suggested to be of Euroamerican origin, the light-caliber shot and the glass beads created a dilemma. Research showed that those objects could denote the presence of either Indians or Euroamericans. Further investigation reinforced those conclusions since "friendly" Indians were frequently employed on flotillas as hunters, guides, and interpreters.

Shawnees were commonly sought by the British military for such service throughout the eighteenth century. Indians accompanied Charles Croghan on his 1765 trip and several served as guides for Harry Gordon. Heckewelder referred to the Indian hunters with his flotilla, as well as the Indian prisoners being transported to Vincennes.

Discussion

The journal of John Heckewelder's 1792 river voyage to the Wabash country has contributed greatly to the reconstruction of Sp316/317 and the question has arisen: Is the site a Heckewelder camp? It seems possible, although it is equally possible that the site represents the remains of an encampment of another late eighteenth-century flotilla. There is circumstantial evidence—factors peculiar to Heckewelder's account—suggesting that his flotilla might actually have camped at Rockport.

Heckewelder departed from Louisville in late August 1792. The faunal remains from Sp316/317 suggest a warm-weather occupation and the few pieces of deer antler present are compatible with a late August occupation.

Heckewelder's flotilla left Louisville on August 26 and passed the mouth of the Green River at late evening on August 31. His river convoy would have passed the sandstone monolith at Rockport on either the twenty-ninth or thirtieth of the month and Heckewelder's journal affirms that they had reached the "lowlands" by August 30. Although the 64-km distance from Rockport to the Green River is an easy two-day trip, it certainly would not be impossible to make it in one very long day, especially in late summer when days are long.

Referring again to Heckewelder's journal, it will also be recalled that upon departure from Louisville, hunters shot game along the river every day until August 31. Heckewelder made no reference to hunting after August 30 and, in fact, noted that upon reaching the mouth of the Wabash, the flotilla's commissary officer purchased bison from professional hunters. From this it can be inferred that enough game had been accumulated to satisfy their needs en route to the Wabash prior to August 31.

Collectively on the twenty-ninth and thirtieth Heckewelder and members of his party killed a minimum of three bison (including a calf), two bears, and one deer. At Sp316/317 the animals represented could easily have fed 140 people, and the faunal remains include a minimum of two bears, three bison (one a calf), and one deer, along with turkey, turtle, raccoon, beaver, and dog. While the identified species of animals at Sp316/317 do not exactly match the Heckewelder account, they are similar enough to elicit tantalizing questions about both the Heckewelder voyage and the site, questions which will likely never be answered.

Another coincidental feature of Sp316/317 is the fact that Heckewelder's description of his meal at the mouth of the Wabash included pork and turtle soup. Nowhere in the journal does the missionary mention livestock or swine with the flotilla, nor does he describe the capture of turtles. Yet those animals were on the menu for the Wabash meal and both appear among the faunal remains at Sp316/317.

Heckewelder's convoy also employed Indian hunters who could have used light-caliber weapons like those suggested at Sp316/317. Heckewelder's account of a hunting foray aborted by the discovery of Indian tracks (Heckewelder 1958:256) implies that even with a military escort, the flotilla was wary of Indian attack. Given that concern, it should be noted that Sp316/317 was strategi-

cally located at the end of a narrow 4-km-long peninsula, an easily defensible position for a military party. With the river on one side and the creek acting as a moat on the other, the peninsula was so narrow that a small group could defend it against a direct overland attack. Further, its position along the high-energy side of the river would allow an easy retreat by boat if an attack seemed imminent.

While the circumstantial evidence is provocative, it does not provide proof and cannot confirm that Sp316/317 was a campsite for John Heckewelder's flotilla. If, on the other hand, a campsite were to be discovered that could be definitely attributed to the Heckewelder convoy, it would doubtless look nearly identical to Sp316/317.

Summary and Conclusions

Excavation of Sp316/Sp317 provided the opportunity to analyze and describe a previously unknown historic-period site type. The research has also demonstrated that ephemeral sites, in this instance a short-term encampment, can help document travelers' survival strategies during the first wave of western expansion.

From the site's archaeological assemblage it has been inferred that the locality was inhabited during the latter half of the eighteenth century prior to the extirpation of bison along the Ohio River. Other site characteristics—the absence of habitation features, the paucity of artifacts, and the presence of what appear to be single-event fireplaces—imply an extremely short occupation, possibly less than 24 hours. Primary historical sources have confirmed the feasibility of this suggestion.

Data derived from primary and secondary historical sources also imply that the site is of Euroamerican rather than aboriginal origin. First-hand accounts from the era have been used to attribute site authorship more specifically to an unidentified Euroamerican river convoy. If this is correct, the site is the only excavated example of a river convoy landing site and the only example of a Euroamerican bison butchering/cooking site east of the Mississippi River. Historic sources do suggest, however, that other examples of this site type could exist elsewhere along the Ohio River.

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