

**What Price Victory:
Human Remains Uncovered at Big Hole National Battlefield, 1991**

By

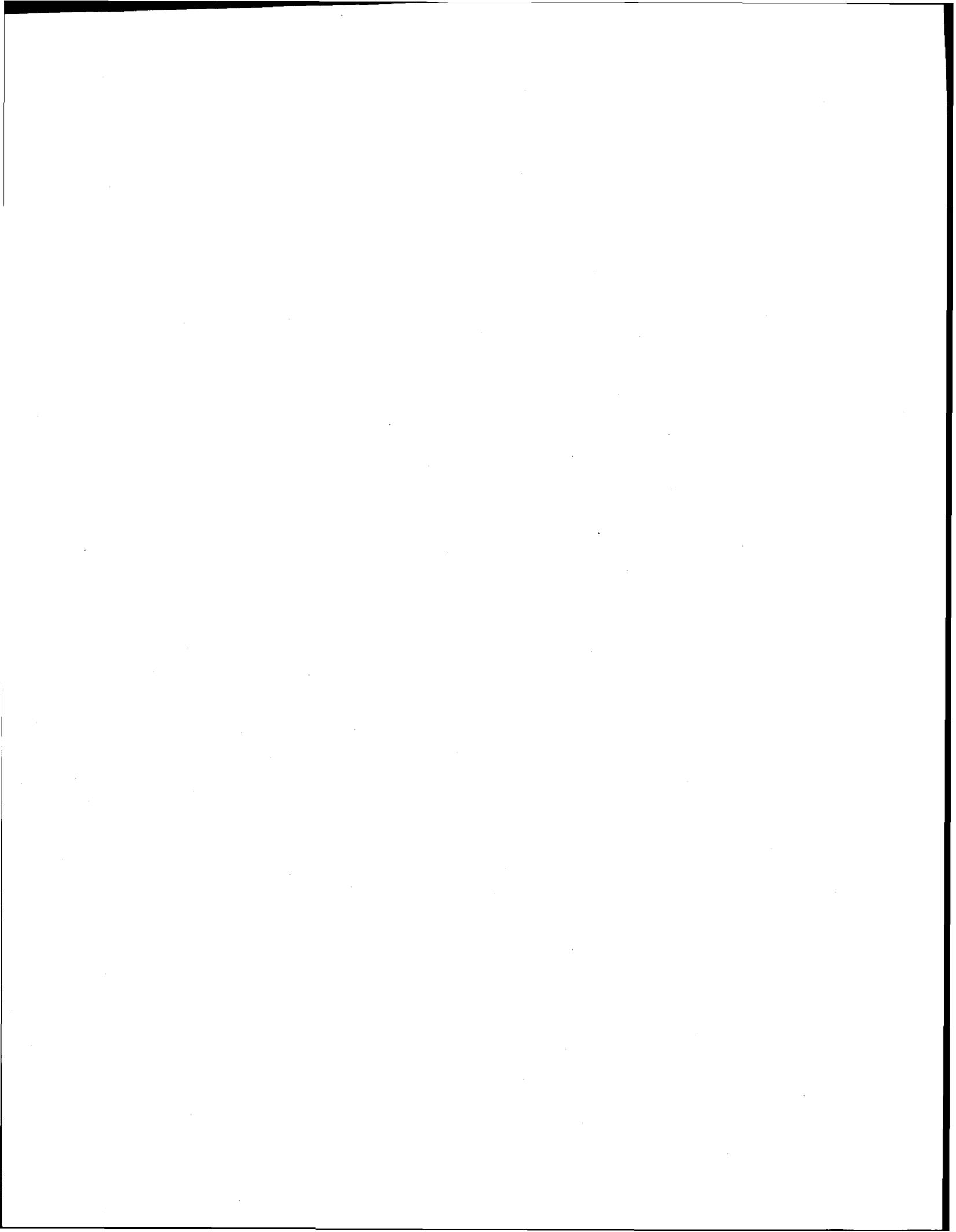
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ABSTRACT

During the August, 1991, metal detector inventory of Big Hole National Battlefield, a partial human skeleton was uncovered. The remains are those of an unidentified girl in her late teens. The skeleton was on top of a camas oven, which is consistent with historical accounts of the disposal of some of the bodies from the battle. The body showed evidence of extensive post-mortem mutilation. The arms had been cut off and laid below the pelvis, one leg had been detached and was not with the remains, and a minimum of three hatchet marks was found on the ventral side of the vertebrae. The extensive post-mortem trauma is typical of trauma found at other Indian Wars battlefield sites. In many Native American cultures, bodies of enemies were mutilated to ensure that the deceased did not fully enjoy the afterlife.

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INTRODUCTION

The Nez Perce won the Battle of the Big Hole on August 9 to 10, 1877. But the price of victory was high. Many Nez Perce were lost in the battle, including many non-combatants. This report documents a human skeleton found during the 1991 metal detector inventory of the battlefield. Detailed analysis of the remains was not possible, due to the request of the Nez Perce tribe for immediate reburial. However, even the cursory analysis completed documents the battle in a way that elicits a pathos missing from the history books. This is the story of an individual who died amid the melee and horror of the battle.

In a larger context, the remains also document a lifestyle that no longer exists. Again, many of the genetic and dietary analyses possible with today's technology were not completed for lack of time. Still, the health of the individual and the traumas observed can be placed into a larger cultural context and yield insight into the Native American lifestyle of the nineteenth century.

The Metal Detector Inventory

The Big Hole archeological inventory was completed in August, 1991, with funding from Hank Williams, Jr., and help from a cadre of volunteers. The results of the inventory are documented in a separate report. The purpose of this inventory was to use archeological material to complement the historical accounts of the battle and to add detail and resolution to the accounts of how the battle was carried out (Scott 1991).

During the course of the inventory, a human burial was found near the village site. The remains were located during the metal detector inventory when a detector uncovered a table knife. During the excavation of the knife, the tip broke and the excavators dug a larger area to recover the tip. In doing this, they uncovered bone. Dr. Douglas Scott, Research Archeologist for the National Park Service, was called to the scene to determine whether the material was human or not. From the exposed ribs, he could tell the material was that of a medium-sized mammal. He excavated a slightly larger area and uncovered a portion of an ilium. The configuration was obviously human, and Dr. Scott, in accordance with the Memorandum of Agreement among the Advisory Council for Historic Preservation, the Montana State Historic Preservation Office, the National Park Service, and the Nez Perce tribe, immediately reburied the remains.

In accordance with the agreement, the Nez Perce tribe and state and federal officials were notified. The shallowness of the remains and their proximity to an actively eroding channel of the North Fork of the Big Hole River suggested that concern about their eventual erosion into the river was warranted. This concern led to the suggestion, by the Nez Perce tribe, that the remains be excavated and reburied on the site in a more geomorphologically stable location. The Midwest Archeological Center was asked to remove

the remains but permission was given for field documentation only. The goal of the Nez Perce tribe was to rebury the remains as quickly as possible. The remains were to be reburied as soon as the tribe's religious leaders could be at the battlefield.

The excavations were completed August 28 and 29, 1991. The remains were reburied on August 30, 1991, with Alan Slickpoo and Alan Slickpoo, Jr., both of the Nez Perce tribe, conducting the reburial ceremony. This report describes the observations of the remains gathered over the two-day period given the archeological team for excavation and analysis.

Only a very superficial analysis was possible under these circumstances. The archeological team did not expect to uncover human remains, so specialized calipers, bone boards for measurements, and many of the basic references necessary for a thorough analysis were not available in the field. It was also impossible to import these materials in the available time period, due to the isolation of the battlefield. None of the sophisticated chemical or genetic studies in today's arsenal of forensic weaponry was possible under the circumstances.

The Battle of the Big Hole

A short summary of the battle cannot do justice to what is an extremely well documented conflict, with the historical record containing accounts from participants on both sides. As Haines (1991) points out, the Big Hole Battle was a turning point in the Nez Perce War, but a Pyrrhic victory at best. The war started in Idaho, over land and gold. The Nez Perce moved into the Montana Territory believing that they had left the war behind in Idaho. They found out differently while camped in the Big Hole valley.

During the night of August 8, 1877, a force of U.S. Infantry and volunteer soldiers moved into position on the west side of the village. They attacked in the early morning hours of August 9, charging across the North Fork of the Big Hole River and shooting into the tepees on the valley floor. Surprised and sleepy, the Nez Perce stumbled out of their blankets, gathered their weapons, and in a short time (about three and one half hours) were able to regroup and send the soldiers retreating across the river.

A group of warriors pinned the soldiers down while the remaining Nez Perce gathered their belongings, buried their dead, and moved hastily out of the valley. The actions of the Indians could be heard by the soldiers pinned in the timber to the west:

Few of us will soon forget the wail of mingled grief, rage, and horror which came from the camp four or five hundred yards from us when the Indians returned to it and recognized their slaughtered warriors, women, and children. Above this wail of horror we could hear the passionate appeal of the leaders

urging their followers to fight, and the warwhoops in answer which boded us no good (Colonel John Gibbon, Seventh Infantry, in Haines 1991:87).

The Nez Perce continued on the run from the Big Hole valley into Idaho, then through Yellowstone National Park, and back north into the Montana Territory. The flight ended 40 miles from the Canadian border, when at two o'clock, October 5, Chief Joseph surrendered his rifle to Colonel Nelson A. Miles of the U.S. 5th Infantry.

The Big Hole was the first battle of the Nez Perce War that cost the Nez Perce heavily in terms of people. There is no accurate count of the Nez Perce dead, but there is no doubt that it is high, given the size of the group. The U.S. Army estimated the Nez Perce dead at about 80 to 90 people, based on body counts after the battle. The Nez Perce accounts of the number of dead range between 60 and 90 people (Haines 1991:111).

The Nez Perce dead were quickly buried by their relatives before their flight. Many of the bodies were reportedly interred under the river bank. Other bodies were reportedly interred in camas ovens. In either case, it appears that Bannock warriors, who were acting as scouts for the army, mutilated many of the dead after the Nez Perce left (Howard 1972:210-211).

The human remains from the battle were shallowly interred, and their exposure became a constant problem. In September, 1877, a month after the battle, 1st Lieutenant John Van Orsdale led a party to reinter exposed soldier remains. Orsdale found 80 Nez Perce remains exposed at that time (Haines 1991:111).

By 1879, the shallowly interred bones were still uncovered. Andrew Garcia visited the battlefield with his wife, In-who-lise, searching for her sister's grave. In-who-lise's sister, Lucy, was shot during the battle. Garcia noted that the exposure of human remains was still a problem at that time:

...The sight was awful to see. Human bones were scattered among the long grass and among the willows across the creek and on this side of the creek human bones and leering skulls were scattered around as though they had never been buried (Garcia 1967:337).

Garcia makes no mention of attempting to re-cover the exposed remains. However, it would be likely that other visitors, either Nez Perce or local whites, might police the area and rebury exposed remains. It is also likely that some remains, especially skulls, were taken by visitors as battlefield souvenirs.

In 1883, the Big Hole battlefield was established as a military reserve, which included mainly the Siege Area and not the Nez Perce Camp area. The reserve was authorized as a National Battlefield on June 23, 1910, by Executive Order 1216. In 1912, a skull was

found near the monument in the Siege Area. Based on the location, the remains were presumed to be those of a soldier, although no forensic analyses were completed.

Meanwhile, the Nez Perce Camp area went into private ownership about 1910 and was used as a pasture. One of the early private landowners built a small blacksmith shop in the Nez Perce Camp area. The shop was along an 1883 wagon road that went through the Nez Perce Camp, crossed a bridge on the southern end of the camp, and went up into the trees in the Siege Area. Administration of the battlefield was transferred from the U.S. Forest Service to the National Park Service in 1933. By 1963, the Nez Perce Camp area was legislated into the Battlefield, but the land was not purchased by the government until 1972 (Schleger 1984).

While the site was still in private ownership, relic hunters (specifically Gordon Pouliot and Than White) did remove artifacts, but there is no mention of human remains being found. Neither were human remains encountered in archeological investigations by National Park Service personnel Aubrey Haines and Kermit Edmonds in 1964-1965. In 1984, the park superintendent was able to state that "no human remains of any kind have been found in the Nez Perce Camp area" (Schleger 1984:24). Thus, the remains documented in this report appear to be the only remains found in the Indian Camp area in the last century.

THE REMAINS

Location

The burial was west of an abandoned river meander situated between the west side of the village and the North Fork of the Big Hole River. The remains were opposite Tepee 5 which is identified as the maternity tepee (Figure 1) (Haines 1991:166). There is no historically documented tepee in the immediate area.

An intermittent, overflow channel of the Big Hole River, to the east of the burial, was dry in August, but had apparently been active earlier in the year. There was a large mammal long bone fragment, unidentifiable to species, in the middle of this channel. It was oriented in the direction of water flow, and there was no evidence that it was associated with the burial. The fragment was approximately six cm long by three cm wide. The exterior of the bone showed signs of extreme weathering, including cracking throughout the piece and a hard, white color. In terms of coloration and condition, the piece was not consistent with the human remains. The fragment is probably a part of an animal bone washed down the river in the spring floods and considerably more recent than the burial.

The burial was covered with four to six inches of a fine-grained, alluvial soil. This is probably a loam, although samples for particle size analysis were not taken. There was a thick cover of grasses, including camas and other edible roots, over the soil, and large willows were scattered throughout the area.

The remains lay on top of a large rock hearth about two meters (6.5 feet) in diameter (Figure 2). Hearths with a similar construction are ethnographically documented as having been used in roasting camas and other root crops (Steward 1938). The size of the earth oven varied with the size of the group utilizing the oven. Ethnographies describe a range between 1.8 square meters (1.5 square yards) and 7.4 square meters (6.2 square yards) (Spinden 1908). The large ovens involved cooperation among several women for preparing large harvests.

The meadow around the camp presently contains large amounts of camas, yampa, and other root crops. Wounded Head's wife, Penahwemonmi, recalled that on August 8th many women dug camas and baked it overnight...

...many women who had camas were killed. Their camas were left where they had baked it when we had to leave (McWhorter 1991:371).

This archeological feature undoubtedly was a camas oven which was in use during the days previous to the battle. The bones showed no signs of charring, so it is unlikely that the rocks were hot when the body was deposited. The sequence of camas processing often called for digging the earth oven and gathering the wood and rocks one evening, then lighting the fire to start heating the rocks the next morning, as the fire needed to be fed frequently during the first twelve hours (Downing and Furniss 1968). The oven may have

been prepared the day before the battle, and the fire may never have been lit. A small amount of charcoal was found in the excavation. This amount may have become mixed in the soil from charcoal in the oven working its way up through bioturbation, in which case it may be concluded that the oven had been lit. However, it may also have become mixed in the soil following post-battle grass fires. Only by excavating the oven would the question of whether or not it was fired be answered. This was not done.

The location of the body confirms the historical accounts of burial of remains inside camas ovens. Throughout the village, the soil is fine-grained and difficult to excavate. In addition, the thick grass cover is difficult to cut through. Thus, it is unlikely that people in a hurry would dig a large hole, when either the riverbank or the camas ovens were available. That the time was taken to ensure burial, even under the pressing circumstances, emphasizes the importance of the burial of the remains in the Nez Perce culture.

This individual appears to have been buried alone, although the oven was large enough for at least one other body. The historical accounts suggest that each family buried its own members. Perhaps this woman was the only member of her family to die in the battle. That this woman was alone might also suggest that it was not difficult for the families to find expedient places to bury the dead. Several such camas ovens, as well as the riverbank, may have been used for burial.

Taphonomy

In archeology, the term 'taphonomy' is used to mean depositional and post-depositional processes that affect bones. In this case, it means the condition in which the remains were buried, how often they may have been reburied, and whether rodents or carnivores affected the condition of the bones. The study of taphonomy allows reconstruction of the post-depositional events affecting the remains.

The bones were examined as they were removed from the ground for cut marks, rodent gnawing, or perforations that might be associated with canine tooth marks. Cut marks are discussed below as trauma; no other marks were noted. Many of the bones, particularly the ribs, were lightly etched. The lightness of the marks and the lack of orientation suggest that the etching was caused by plant roots. No indication was found of either rodent gnawing or carnivore chewing, suggesting that the body had not lain in the open with soft tissue attached.

Portions of the skeleton were in anatomical position, suggesting that they were deposited while at least some of the soft tissue was still on the remains (Figure 3). The articulated portion included the entire spinal column from the third cervical vertebra through the pelvis, including the ribs. The first two cervical vertebrae (the atlas and the axis) were not articulated with the remainder of the spinal column, but one lay to the left of the thorax and the other to the right. There was no evidence of decapitation on any of

the cervical vertebrae. It appears that the torso, minimally from the neck to the hips, and possibly from the head to the hips, was originally buried intact.

The left femur was still articulated with the left acetabulum; however, the right femur was missing. The right leg, then, was removed from the torso. The left leg was intact to, but not including, the knee. The right shoulder girdle and arm, including the scapula, the humerus, the radius, and ulna, was still articulated, but laid below the pelvis. Neither of the collarbones (clavicles) were articulated with the shoulders, but they were laying in their general vicinity, underneath the pelvis. Other bones, including several hand bones (metacarpals) and a skull fragment (basal occipital), were present, but not articulated (Figure 4).

That the arm bones were generally in correct anatomical position suggests that they were laid below the pelvis while still connected by soft tissue. In this connection, it is interesting that the basal occipital was also found in this area. Since the basal occipital would have to be deposited at the same time in order not to disturb the anatomical position of the arm and the pelvis, the head may have been disarticulated at this time. However, it is unlikely that the skull could have been disarticulated while still connected by soft tissue without leaving marks on the cervical vertebrae. It is clear that from the information we have at present that we cannot determine whether the remains were buried with or without the head. This is an issue where more extensive forensic study of the remains would have been useful.

The deteriorated condition of some of the bones, particularly the ribs, suggested that portions of the body lay in the open at some time after the soft tissue had decayed. The ribs showed a differential deterioration most commonly associated with weathering (Figure 5). This condition was most noticeable on the right side of the rib cage, and was not noticed at all on the long bones. The right side of the rib cage had fallen downward and away from the body, while the left side of the rib cage had fallen down into the body cavity. In 1879, Andrew Garcia visited the battlefield and noted many partially exposed skeletons, and this may be one of those or it may have been exposed in a similar fashion. If so, it was re-covered at some point.

The overall condition of the bones and the inconsistent articulation suggest there may have been several episodes of exposure and burial, probably due to the shallowness of the original grave. The body was probably interred before the Nez Perce left, and disinterred by the Bannock immediately afterward. The body was then shallowly reinterred fairly soon after the mutilation, before the soft tissues decayed. However, the right side of the rib cage and the cervical vertebrae were slightly shallower than the remainder of the body and became exposed sometime after or during the decay of the soft tissue. This position would allow the right side of the rib cage to splay out and the atlas and axis to fall to either side of the thorax. At some point the bones were re-covered with soil, either through human action or by stream deposition during spring overflow.

The taphonomic study of the remains is one area that suffered from the lack of analysis due to the quick reburial. Documenting the location of the indications of weathering, examining the bones further for rodent gnawing, and a less hurried excavation with elevations taken on each element would have greatly added to our reconstruction of what happened to the body after the original burial by the Nez Perce.

Sex

As most adults have noticed, one of the best areas to differentiate between male and female is in the hips, and this is also true in the human skeleton. In general, the female pelvis is broader than the male, as a result of adaptations for childbirth. These differences are present from birth, as opposed to many other skeletal sexual criteria which only begin to develop after puberty (Krogman 1962). The Big Hole remains were identified as female, based on the width of the greater sciatic notch and the wide subpubic angle (Figure 6).

The second-best criteria for determining sex in a skeleton lie in the characteristics of the skull. As the skull is not included with the remains, these characteristics are not considered. Less accurate methods of sexing skeletal remains include the use of the circumference of the middle of the shaft of the thighbone. Black (1978) was able to sex a prehistoric population in Ohio using this method. He measured the circumference at mid-shaft with a cloth tape to follow the contour of the bone. He found that for 85 to 90 percent of the population, femoral shaft measurements of over 81 mm designated a male, and shaft measurements of less than 81 mm designated a female. The shaft measurement for the individual found at Big Hole was 87 mm. Similar studies on the diameter of the femoral head suggest that diameters of over 45.5 mm are male, and diameters of less than 41.5 are female (Pearson 1917-1919:Table 27). The individual found at the Big Hole had a femoral head diameter of 38.35 mm. Other measurements on the length of the clavicle, the diameter of the humeral head, and the sacrum may also indicate sex, but the time given for analysis did not allow all these measurements to be taken.

The strongest indications of sex are the features of the pelvis, which are definitely female in the individual under study. The measurements of the circumference of the femoral head supports the determination of female. The only suggestion of a male skeleton is the circumference of the mid-shaft of the femur. This may reflect either variation between Black's study population and the Nez Perce or the crudeness of the field measurements.

Race

The best skeletal criteria for examining race are contained in the skull, and the lack of the skull inhibited the determination of race from the skeletal remains. The remains, however, were identified as Nez Perce Indian based on the process of elimination. No

white females are known to have died in this area, and there is ample historical documentation for the deaths of a number of Nez Perce women in this area. There are also some racial differences in metric traits of the pelvis and long bones (see Krogman 1962:188-208). These involve a series of measurements which it was not possible to complete under the field conditions.

Age

In children, long bones are made up of three parts, a diaphysis (the shaft) and two epiphyses (the ends). Growth occurs in the diaphysis, and it is not until growth is finished that the diaphysis fuses with the epiphyses. The fusion of a given bone occurs at approximately the same age in different individuals, yielding an accurate method of determining age.

A determination of late teens for this individual was made on the basis of the epiphysial fusion seen in the skeletal remains (Table 1). The iliac crest and the proximal end of the humerus were in late stages of fusing. The medial end of the clavicle was missing and did not appear to have fused. The distal end of the left femur did not appear to be fused and the epiphysis was detached from the diaphysis when excavated.

There are other, more reliable age indicators, such as tooth eruption or the condition of the pubic symphyses. However, there were no teeth in the assemblage recovered, and the pubic symphyses were too deteriorated to attempt the analysis.

Stature

There are two methods of determining the stature of the individual that the skeleton represents. One method is based on mathematics and the other on anatomy. The anatomical method consists of putting the bones together, allowing for the curve of the spine and the soft tissue, and measuring the stature. This was not possible in the case of the individual at Big Hole, because of the lack of the skull and the lower legs. The mathematical method of stature determination rests on the proportion of a given long bone to the height of an individual. This method obviously includes a lot of variation, as there are persons of a given height with short legs and persons of the same height with long legs. However, the procedure gives at least an estimate of a person's stature.

The most reliable measurement for the mathematical method is the length of the femur (thighbone). Unfortunately, in this case, the femur was incomplete, as the distal epiphysis was not fused to the diaphysis and had deteriorated. However, using the tables in Bass (1987), the following estimates were made. The length of the femur, without the distal epiphysis was 1.6 feet (487.68 mm). The distal epiphysis was not fused, and was too deteriorated to be able to be measured with the bone. The length of the right humerus was

1.15 feet (350.52 mm). Both suggest a stature of 5'8" (circa 174 cm). Even allowing for the crudeness of the field estimates, both stature estimates suggest a tall person.

Trauma

A number of probable cut marks were noted on the remains during excavation (Figure 7). The locations of most of these marks suggest that the primary purpose of the cuts was to aid in post-mortem disarticulation of the body.

Marks on the upper body include those on the proximal end of the humerus, on the clavicle, and near the glenoid cavity of the scapula. These may represent an attempt to separate the arm from the shoulder. There were also cut marks on the distal end of the left ulna which may represent an attempt to separate the hand from the arm. A few (three?) scattered carpals were located, one of which also contained cut marks.

Cut marks occurred on the rim of both acetabula and on the proximal end of the femur that was present (Figure 8a). These probably represent attempts to separate the leg from the hip, which were successful on the right side.

Finally, there was a series of marks on the ventral side of the lower vertebrae (T9-L1), which represent cuts made by a larger instrument, perhaps a hatchet (Figure 8b). There are a minimum of three cuts at an oblique angle to the bones. These represent blows that went through the stomach to the backbone. These are probably not related to disarticulation, as this would be a difficult place to separate parts of the body. They may instead represent an expression of rage and mutilation. Given the amount of soft tissue in this area, it is likely that the cuts were made after death.

The historical record suggests that most of the trauma indicated on the remains took place after death. There are records of the Shoshone-Bannock scouts employed by the U.S. Army arriving at the battlefield after the Nez Perce had abandoned the area and mutilating the Nez Perce dead.

Look on the other side. See there women's bodies disinterred by our own ferocious Bannock scouts: See how they pierce and dishonor their poor, harmless form, and carry off their scalps! Our officers sadly look upon the scene, and then, as if by a common impulse, deepen their bed and cover them with earth (Howard 1972:210-211).

The historical record would suggest that death was probably by gunshot during the Battle of the Big Hole. However, no gunshot wounds were noted during excavation. As the skull is missing except for the basal occipital, a head wound is possible. This may have been confirmed by X-raying the remains to look for lead fragments.

Pathologies

There was a lesion on the radius (lower arm bone) which suggested a pre-mortem infection or trauma. Lesions like these can be the result of healed fractures or serious infections, often aggravated to this point by poor nutrition or other factors that slow healing. If the lesion had been examined by a forensic specialist, it may have been possible to determine whether this was an active infection at the time of death. In fact, it may have been the result of an injury received earlier in the Nez Perce War, with infection aggravated by hard travel and poor nutrition (P. Willey, personal communication, October 1991). This could not be determined by the field analysis conducted.

As the vertebrae and other remains were removed, a quick examination was conducted for evidence of osteoarthritis or other signs of aging. None were found, adding to the evidence suggesting a relatively young individual.

Associated Artifacts

There are no artifacts unequivocally associated with the body. There was no material, including bullets, buttons, or jewelry, actually intermingled with the bones.

Reburied with the remains were any artifacts found in the vicinity, although their association with the burial is questionable. These artifacts consist of nine four-hole buttons and a round-pointed table knife (Figure 9). The knife is a table or butter knife with a blade about 13 cm long. There is a wooden handle about 10 cm long. The handle is attached to the tang by three, equidistantly-spaced, metal rivets.

The buttons were found scattered around the area up to about five meters from the remains (Figure 10). Six of the buttons are made of stamped white metal with a stippled design on the front. Four retain remnants of a faded blue cloth on the back. Three buttons are iron, two-piece, four-hole buttons. These buttons were probably from a soldier's trousers, and may represent a pair of trousers captured at the White Bird Canyon battle or a pair stripped from a dead soldier killed in the attack on the Big Hole village. In all probability the buttons are only coincidentally associated with the remains.

Disposition of the Remains

As the burial was excavated, it was examined on site, photographed on site, and placed in a yellow blanket in a grey wooden box. During excavation, the box was stored on site. After excavation and before the reburial, the box was removed to the curatorial room in the Big Hole Battlefield administrative offices, as the building provided better security.

During the reburial ceremony, the remains were relocated to a grave in the village area near the existing trail. The grave itself was about one meter square and one meter deep, and directly beside a small cinquefoil bush. The remains were removed from the wooden box, but kept inside the yellow blanket. The yellow blanket was placed inside a larger Pendleton blanket, and this bundle was placed in the grave. Native foods and herbs were placed over the blanket as part of the reburial ceremony, and the grave was closed. The sod was removed from the grave area and rolled back, so that when the grave was refilled, the sod was easily replaced. The area was mapped in by the archeological team prior to reburial.

IDENTIFICATION OF THE REMAINS

The historical record is sketchy as to the number of Nez Perce killed and who they were. Thus, it is impossible to actually identify the remains. We can, however, narrow the field of possible identities through the process of elimination. This can be done through examining the documentation about the women killed at the Big Hole and comparing the information known about them to the information known about the burial.

It is impossible to determine how many women were killed at the Big Hole. If the military body count of 80-90 Indian dead is accepted, then a rough estimate would be that about half, or 40, were women. Garcia (1967:287) says that 42 women and children fell during the battle. If several of these were children, then the number of women killed may be in the 30s. Yellow Wolf remembered 16 individual women killed at the Big Hole Battle (McWhorter 1991). This included two women who died of their wounds on the trail leaving the valley and were buried on the trail. Shields (1889) discusses some of the same women killed and appears to mention an additional three. Table 2 lists the references to these 17 women killed and buried at Big Hole. If the estimates given above of the number of women killed are roughly correct, Table 2 may list about half of the women killed on the field.

To identify the woman in this study, it would be useful to have information on the age, stature, physical condition, and previous injuries of the group of women who were killed and buried at the Big Hole. However, the notes in Table 2 document the little that is known about these women in those terms. Two items help to eliminate some women from being the individual found in 1991. First, the woman is very young, in her late teens. Second, there were no gunshot wounds evident in the post-cranial material found. There may still have been a wound, however, to the soft tissue surrounding the bone. In an extended analysis, this would have been evident through X-rays, where small pieces of lead may have been seen in the bone near the wound.

A third item to note is the lack of scars of parturition on the pelvis. While not always true, in many cases, childbirth leaves scars (called scars of parturition) in two places on the hipbones. The first is on the dorsal side of the symphysis pubis near the margins of the articular surfaces, and the second is in the preauricular grooves of the ilia. This skeleton had scarring in neither place, suggesting, although not proving, that she had not given birth.

The most viable candidate for the identity of the burial found in 1991 would be a young woman in her late teens or early twenties, who had not had children, and was possibly shot in the head. None of the women in Table 2 exactly fit this description although there is too little information on most of the women to make a determination of whether they fit this criteria. There is almost no information documented on either the women shot in the shallow gully or the group of women found dead in a clump of brush. This individual may have been among these groups and later buried alone by her family. The closest individual to the description is Lucy, In-who-lise's 15-year-old sister, who was

shot in the head while running to the creek and the willows to hide. At 15, however, Lucy is probably about two years too young for this individual. A 15-year-old would probably not have had any closure at the proximal end of the humerus at the iliac crest. Another possibility is the young woman in the maternity tepee, particularly given the proximity of the burial to the maternity tepee. If she was killed hours after the birth of her first child, she may not exhibit scars of parturition. Although there is just enough information to be tantalizing, this analysis does not yield enough information to identify the remains.

THE CULTURAL CONTEXT OF MUTILATION

Mutilation is horrific, particularly to those of us living in the twentieth century, in the United States, and who have never been in battle. But to understand why mutilation occurs, it cannot be examined from our own point of view, but rather must be examined in the cultural context in which it occurred. Discussions of the cultural context of mutilation among North American Indians can be found in Scott and others (1989:85) and Phillips (1987), and this discussion draws heavily on these sources. These discussions are worth reiterating here in order to fully understand the events at the Big Hole valley in August, 1877.

The extent of the mutilation on the body is surprising. While there is ample documentation for some mutilation of the Nez Perce remains, the references that are specific mention scalping, not extensive dismemberment. However, post-battle mutilation is a wide-spread phenomenon, both on the North American continent and world-wide (Turney-High 1949:193-204).

Certainly, the literature of the American West abounds with descriptions of post-battle mutilation.

In 1835 some Pawnees and Arickaras stole 40 or 50 of the Brulees horses from the camp on the L'eau qui Court. The latter pursued, overtook, and defeated them within a short distance of the village. Twenty-two enemies were killed, their horses recovered, and the successful warriors returned bringing the head, hands, feet, and other parts of the enemies' bodies into camp. The hands and feet were stuck on sticks and paraded through the village by old women. The scalpless heads were dragged about with cords attached, followed by small boys shooting them with arrows, with guns loaded with powder, pounding them with rocks and tomahawks, encouraged by old hags who followed heaping abuse on the now helpless and haggard remains of their once feared enemies (Denig 1961:18).

In 1867, a group of soldiers from Fort Phil Kearny was drawn into a battle with the Sioux. None of the soldiers survived, and extensive mutilation was inflicted on their remains. The official report includes a list of the mutilations inflicted: eyes torn out and laid on rocks; noses cut off; ears cut off; chins hewn off; teeth chopped out; joints of fingers cut off; brains taken out and placed on rocks, with members of the body; entrails taken out and exposed; hands cut off; feet cut off; arms taken out from sockets; private parts severed, and indecently placed on the person; eyes, ears, mouth, and arms penetrated with spearheads, sticks, and arrows; ribs slashed to separation with knives; skulls severed in every form, from chin to crown; muscles of calves, thighs, stomach, breast, back, arms, and cheek taken out; and punctures of every sensitive part of the body, even to the soles of the feet and palms of the hand (Carrington 1973:25).

At the Battle of the Little Bighorn, the most common mutilation, both in the historical accounts and in the archeological record, was a crushed skull (Scott et al. 1989:85-86). Other forms of mutilation included arrow and knife wounds, decapitation, and dismemberment. Forensic evidence for mutilation was found in about 21 percent of the remains recovered on the battlefield. Since not all injuries were likely to have affected the bone, it appears that a significant number of the soldiers were probably mutilated.

The archeological evidence suggests that the practice of mutilation in North America goes back long before the invasion of the European populations. Sites that appear to represent prehistoric battles and include mutilated remains include Crow Creek (Zimmerman et al. 1981; Willey 1982), Fay Tolton (Wood 1976), Wright (Montgomery 1986), and Larson (Owsley et al. 1977). Phillips (1987) demonstrates that the archeological criteria frequently used to demonstrate cannibalism, in fact, coincide with the evidence seen at sites where mutilation is known to have taken place. If world-wide archeological evidence is reinterpreted with this in mind, then the evidence for post-battle mutilation becomes quite widespread, both in time and space.

The obvious reason for battlefield mutilation is rage and anger. Several accounts by Indian participants in the Battle of the Little Bighorn suggest this as a reason for some of the battlefield mutilations there (Graham 1953; Powell 1969:117). Henry Carrington, an Army officer during the Indian Wars, was curious about the reasons for mutilation:

I asked a member of Red Cloud's band why this was done, and the key to the mutilations was startling and impressive. Their idea of the spirit land is that it is a physical paradise; but we enter its mysteries just in the condition we hold when we die. In the Indian paradise every physical taste or longing is promptly met. If he wants food, it is at hand; water springs up ready for use; ponies and game abound; blossoms, leaves, and fruit never fail; all is perennial and perpetual. But what is the Indian hell? It is the same in place and profusion of mercies, but the bad cannot partake. Like Dives, who saw, craved, and panted for relief, he cannot enjoy. In the light of this idea, those tortured bodies had a new significance. With the muscles of the arms cut out, the victim could not pull a bowstring or trigger; with other muscles gone, he could not put foot in a stirrup or stoop to drink; so that, while every sense was in agony for relief from hunger or thirst, there could be no relief at all (Carrington 1973:16-17).

Thus, at least in Plains Indian culture, rage and revenge tend to be mixed with deeper cultural traditions about the afterlife to produce the mutilation of defeated enemies. The Bannock scouts were undoubtedly releasing pent-up rage after the battle, but also working to ensure that the defeated Nez Perce stayed defeated even in the afterlife.

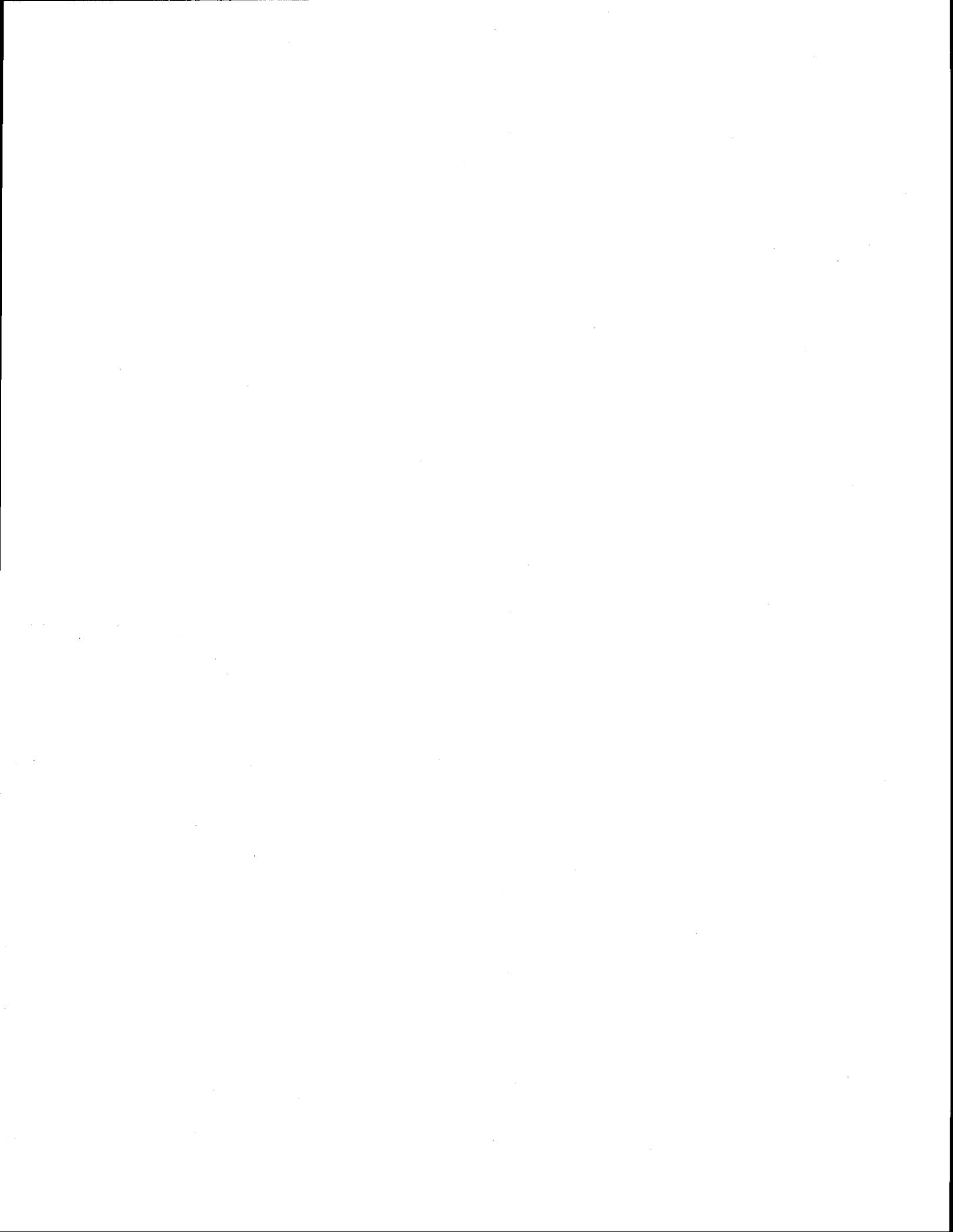
CONCLUSIONS

This report documents human remains found during the 1991 metal detector inventory of Big Hole National Battlefield. The remains were buried very shallowly, less than six inches from the ground surface. They were also inside a meander of the North Fork of the Big Hole River and would eventually be washed away. The purpose of excavating the remains was to move them to a more stable, and deeper, location.

The analyses completed were done in the 48 hours between the beginning of the excavations and the reburial. The remains were those of a girl in her late teens. The girl was buried on top of a camas oven. She was apparently reburied in the same location after extensive mutilation.

Laboratory analyses would have yielded much more information to either corroborate or expand the historical texts. Chemical analyses and X-rays would have yielded information on the nutrition and health of the individual. This would give us information on the Nez Perce lifestyle of the nineteenth century in a manner not found in historical accounts. Also, genetic matter (DNA) can occasionally be obtained from archeological specimens. If DNA had been extracted from these remains, then it would be possible to identify the living relatives of the individual.

The analyses that were completed are important for two reasons. First, these analyses corroborated the historical accounts of burial, mutilation, and shallow reburial. They also yielded information not present in the historical accounts on the extent and type of mutilation. No historical account mentions the extensive dismemberment seen in the remains. Second, the burial and the analysis is important in interpreting the battle through a single individual. The analyses bring to light the story of a young girl who died amid the melee and horror of the battle. Her story elicits an empathy and understanding of the battle unparalleled in history books.



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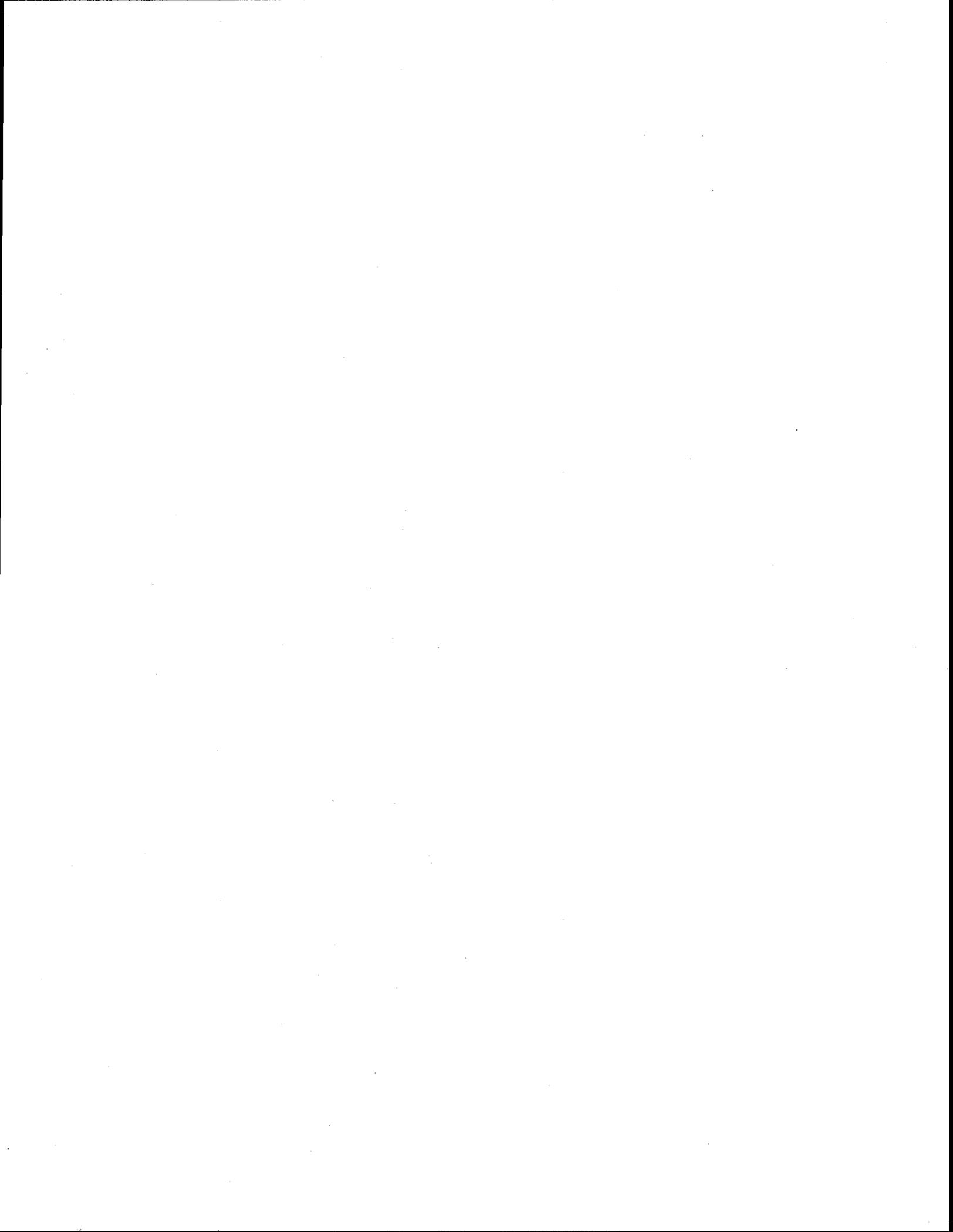


Table 1. Age Estimation Based on Epiphyseal Fusion.

Observed Fusion	Stage	Estimated Age*
Clavicle, medial end	Unfused	<23
Humerus, proximal end	Late	14-23
Iliac Crest	Partial Union	14-23
Femur, distal end	Unfused	14-18

*Based on fusion of bone in modern women (Bass 1987).

Table 2. Women Killed and Buried at Big Hole Battlefield.

Name	Notes	Reference
Unknown	Young woman in maternity tepee	McWhorter 1991:132
Unknown	Old woman in maternity tepee	McWhorter 1991:132
Pa-tsa-kon-mi	Old woman shot in chest	McWhorter 1991:144
Martha Joseph (Chee-nah)	Shot through left shoulder	McWhorter 1991:146
Unknown	Wife of Wetyetmas; died in Tepee 22	McWhorter 1991:122
Unknown	Wetahlatput's sister; a widow	McWhorter 1991:132
Unknown	Wah-Lit-It's wife; pregnant, shot in back and base of throat	McWhorter 1991:133
Unknown	Mother killed with baby on breast	McWhorter 1991:136
Tumokult (I Block Up)	Killed with four other, unnamed women in shallow gully	McWhorter 1991:142
Unknown	Three women dead in clump of brush	Shields 1979:181
Lucy	In-who-lise's 15-yr-old sister; shot in the head.	Garcia 1967:288

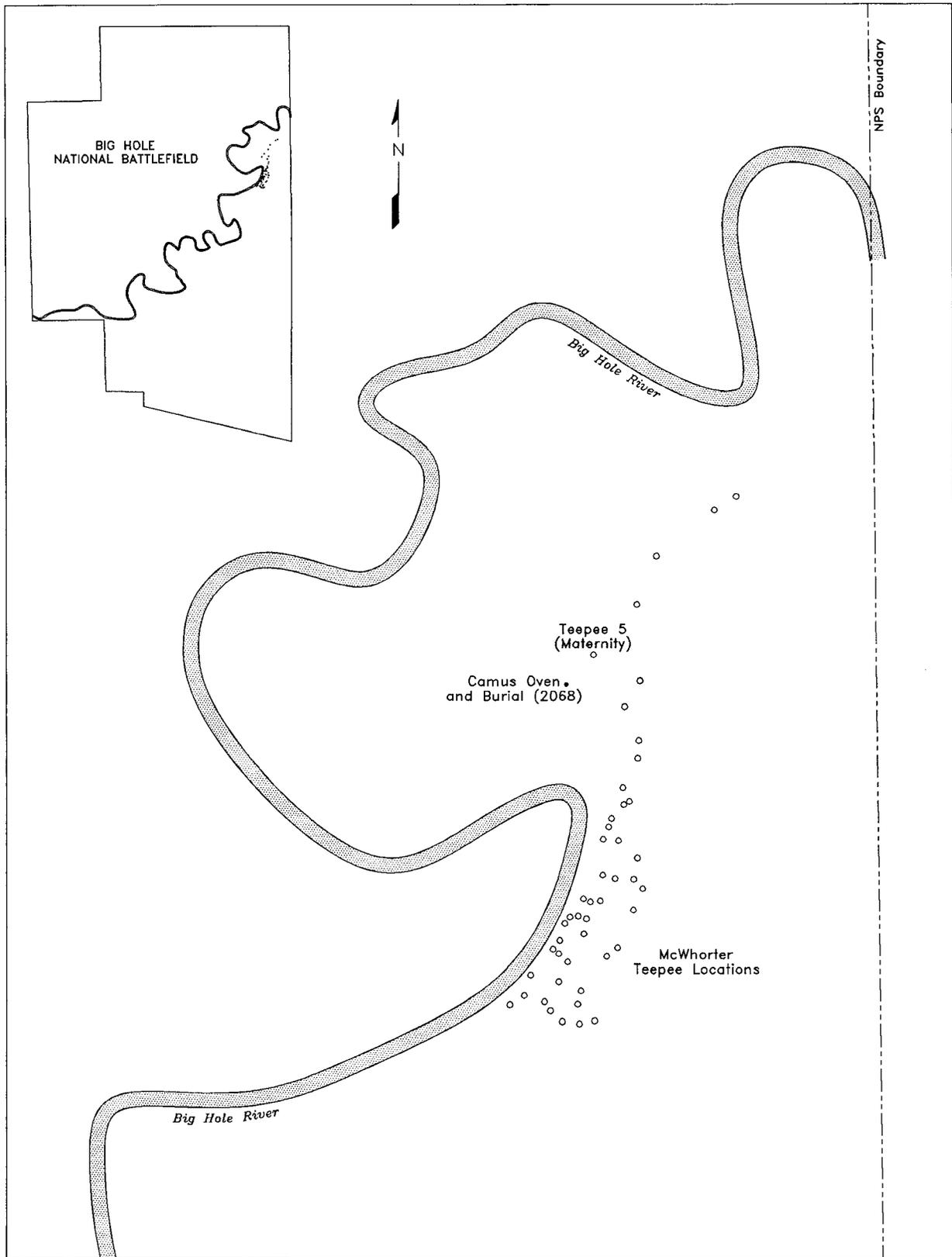


Figure 1. McWhorter's map with location of remains and grave marked.



Figure 2. Camas oven with remains covering it.

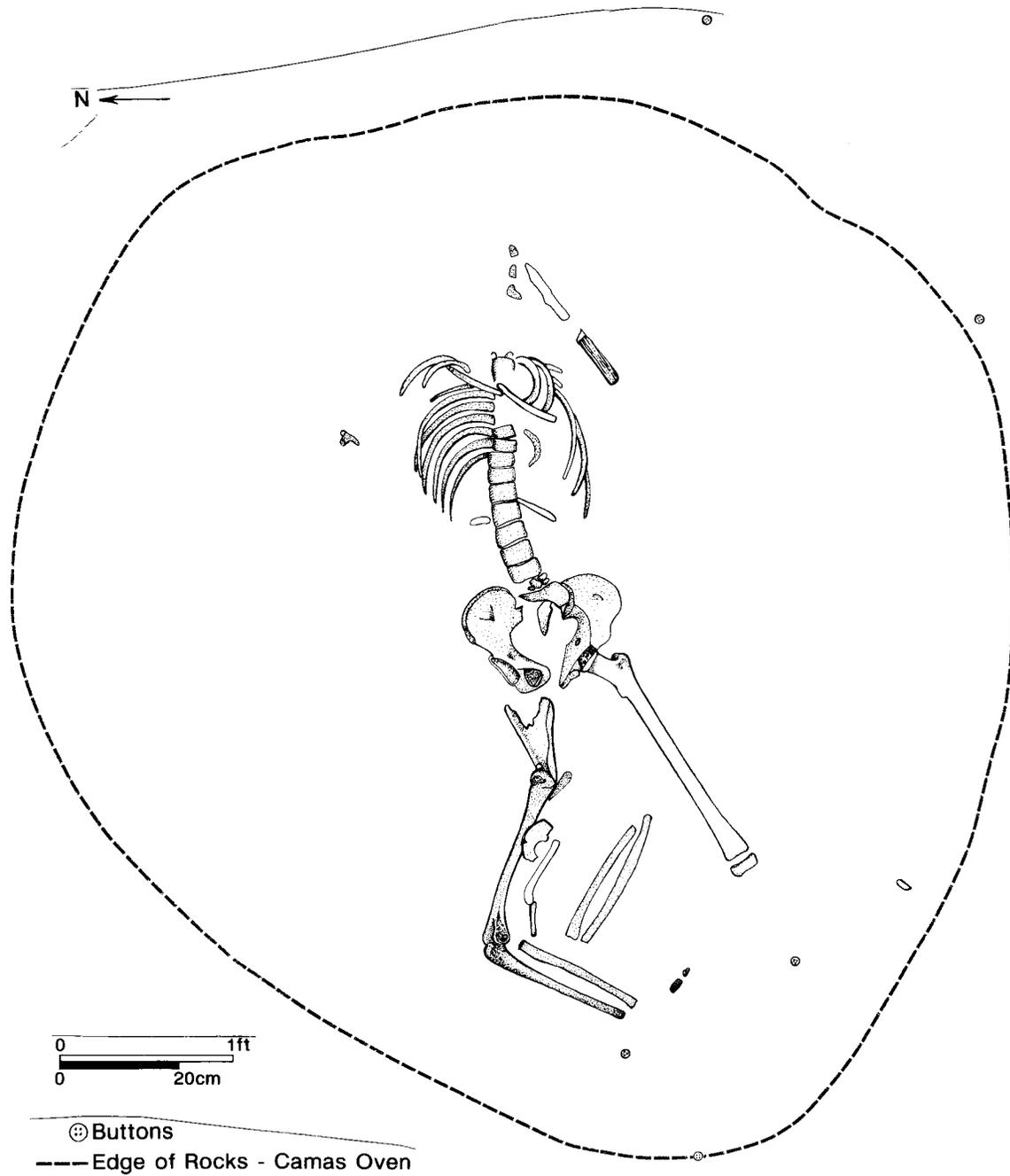
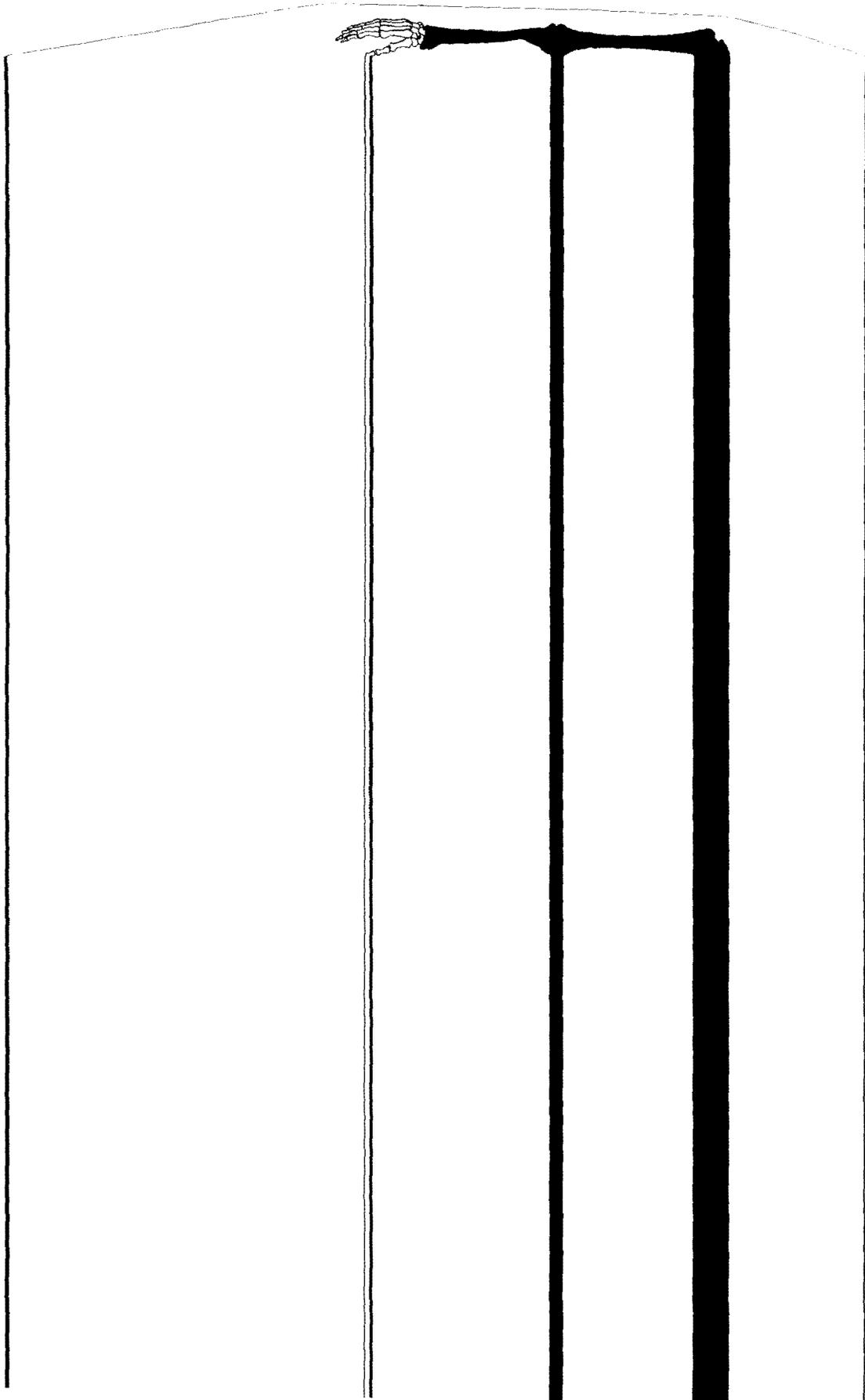


Figure 3. Excavation sketch of the remains. By Ralph Heinz.

Figur



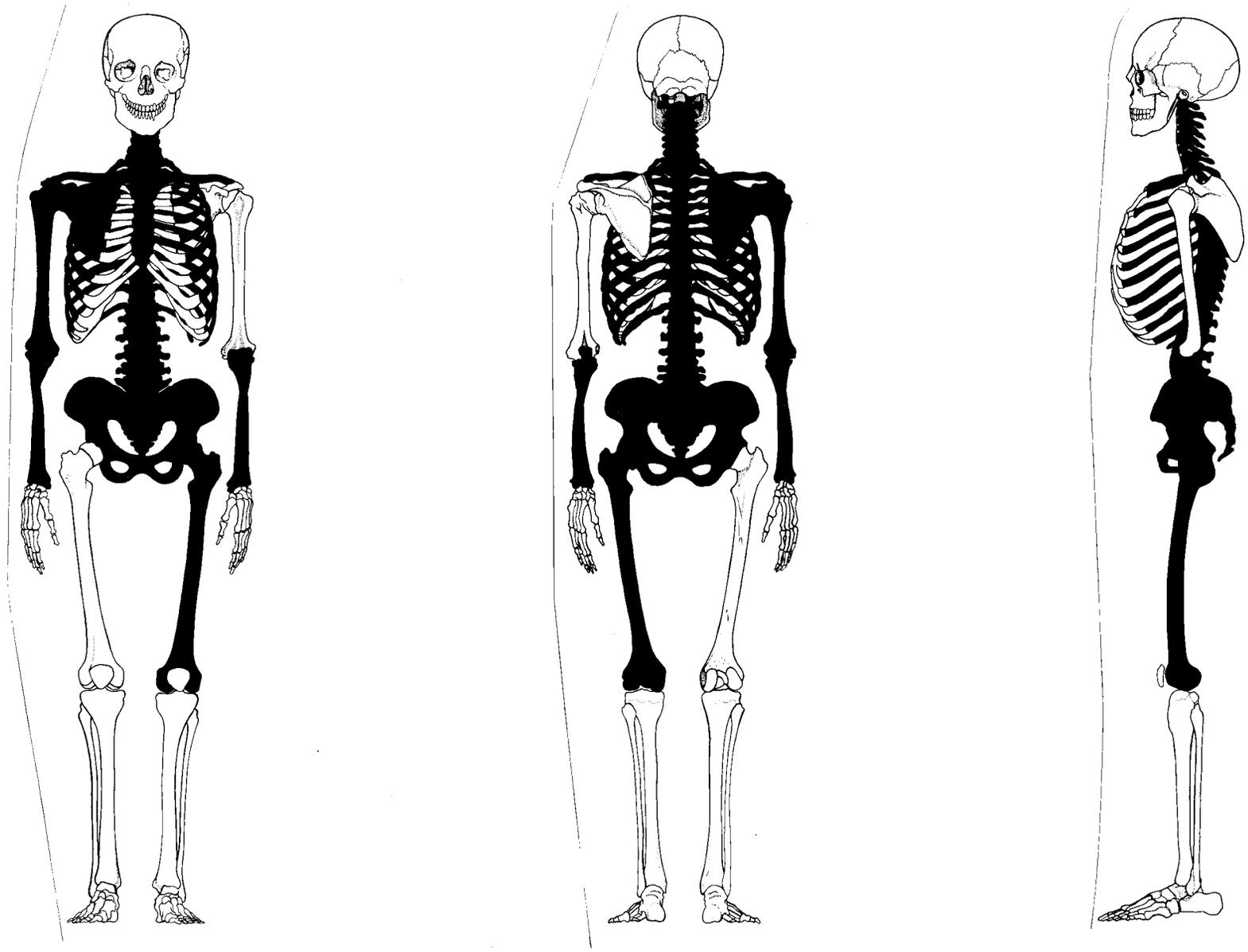


Figure 4. Skeletal inventory. Dark areas indicate elements recovered.

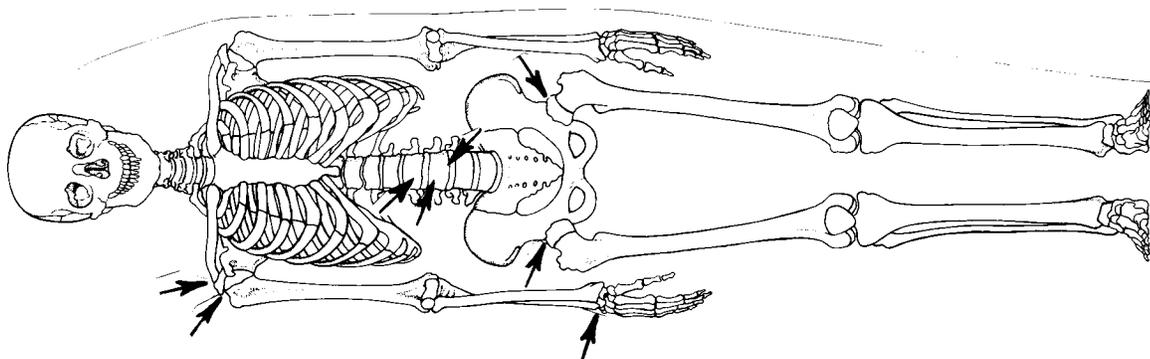
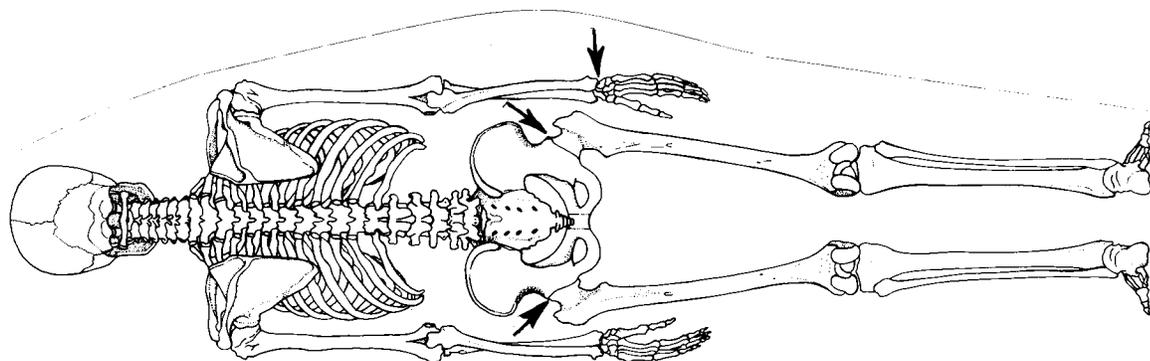
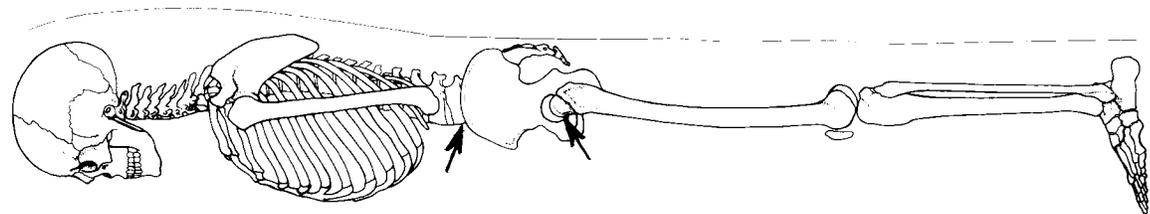


Figure 7. Location of cut marks on the skeleton.



Figure 5. Close-up of rib. Note deterioration due to weathering.



Figure 6. Close-up photograph of pelvis showing greater sciatic notch.

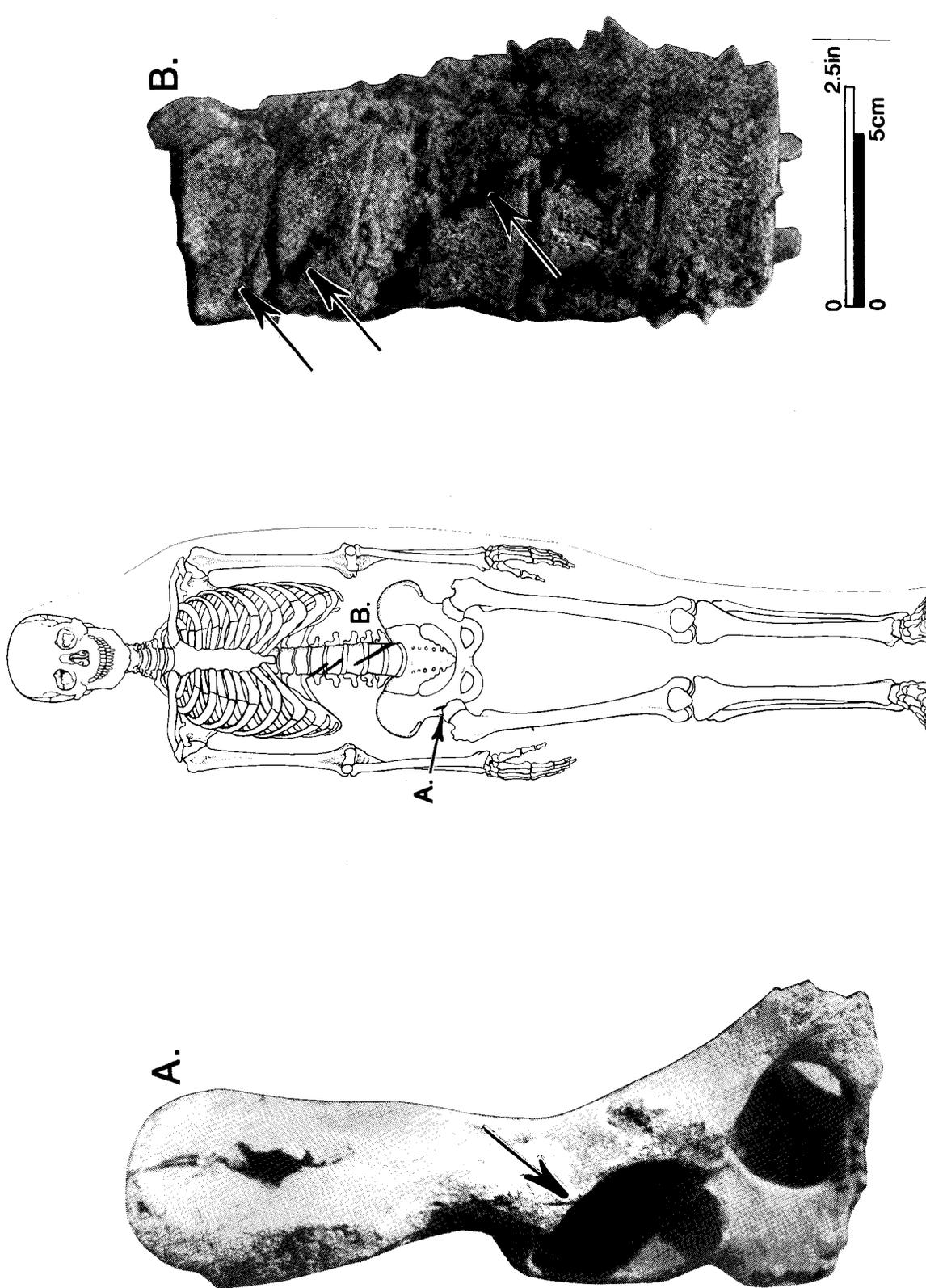
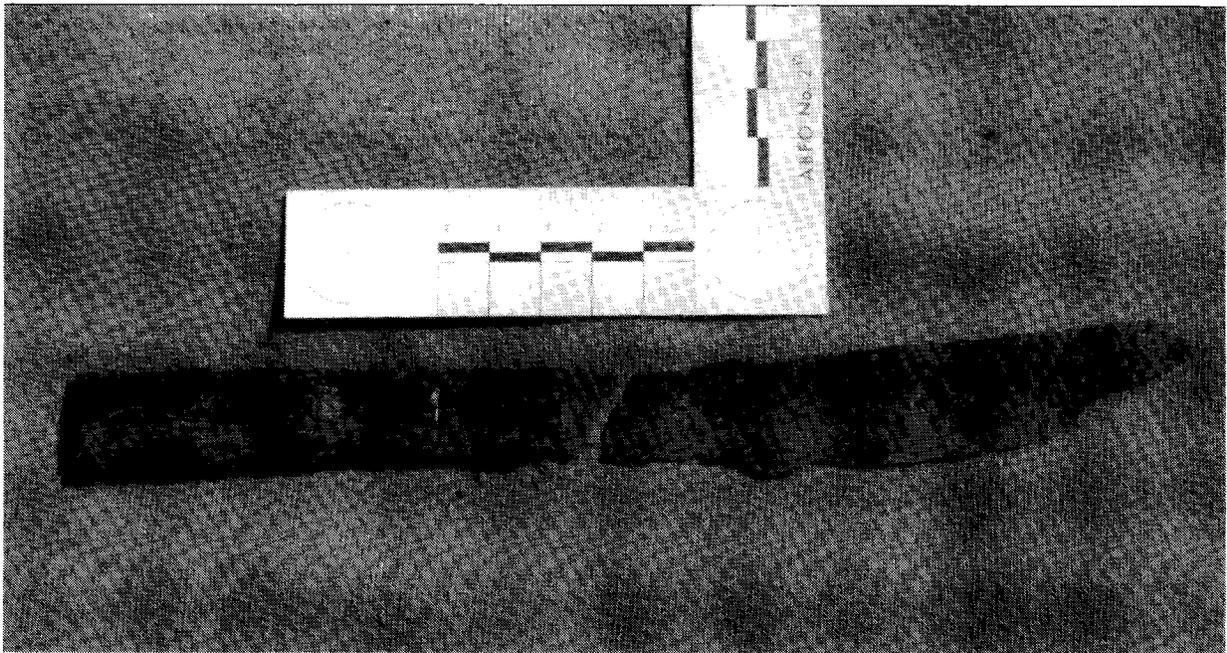


Figure 8. a. Cut marks on ilia. b. Cut marks on vertebra.



a



b

Figure 9. Round-pointed table knife. a. In situ photograph, b. Photograph showing detail.

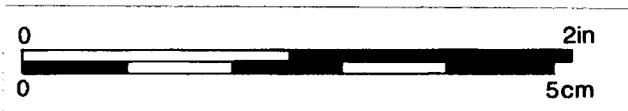
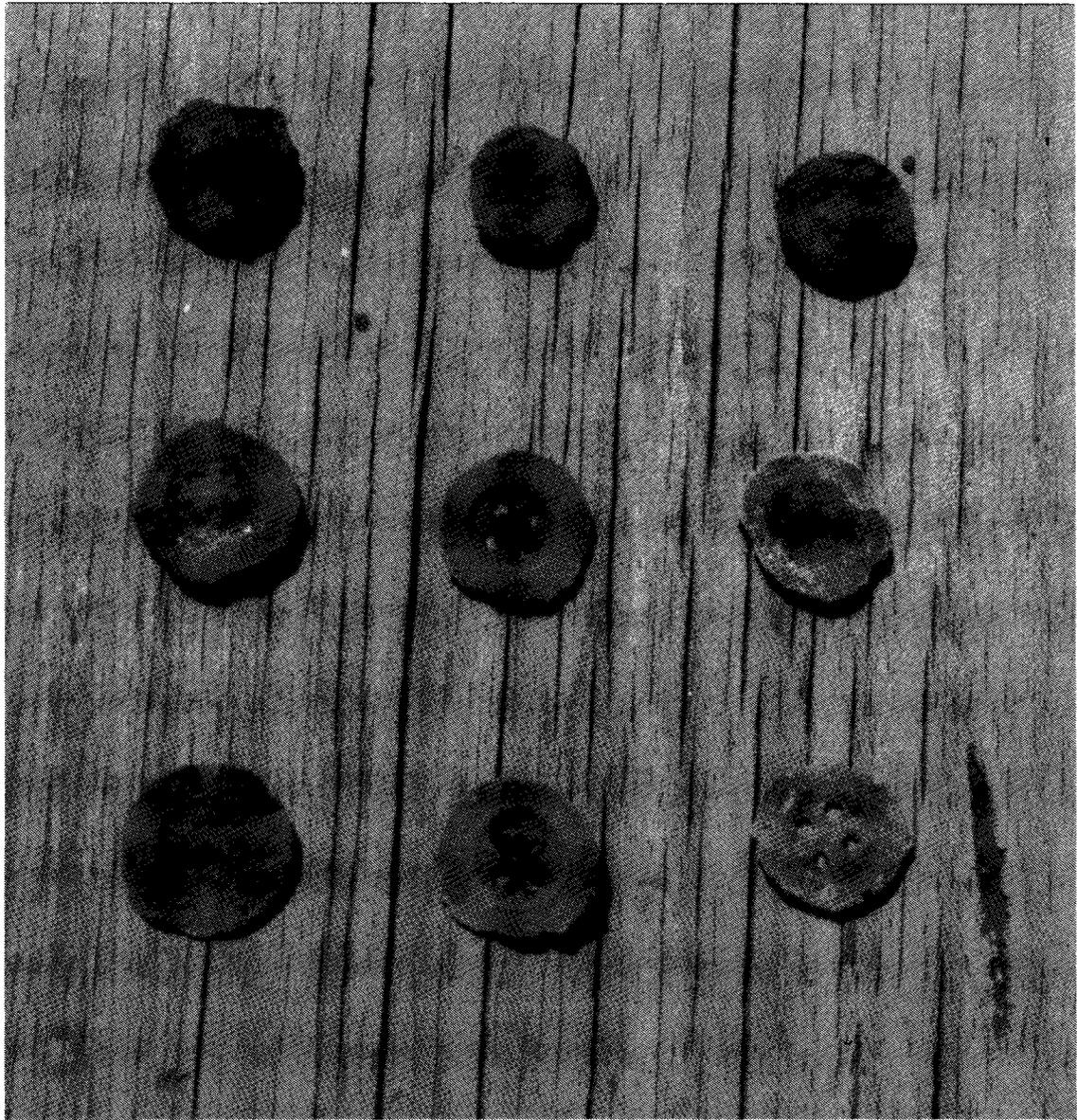


Figure 10. Buttons.

REPORT CERTIFICATION

I certify that "What Price Victory: Human Remains Uncovered at
Big Hole National Battlefield, 1991" by Melissa A. Connor

has been reviewed against the criteria contained in 43 CFR Part 7(a)(1) and upon
recommendation of the Regional Archeologist has been classified as
available.



Regional Director

10/20/92

Date

Classification Key Words:

"Available"--Making the report available to the public meets the criteria of 43 CFR 7.18(a)(1).

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"Not Available"--Making the report available does not meet the criteria of 43 CFR (a)(1).