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P. Willey Chico State University,, pwilley@csuchico.edu

Douglas D. Scott University of Nebraska-Lincoln, dscott5@unl.edu

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LAST WORD SOCIETY

P. Willey,¹ *Ph.D. and Douglas D. Scott*,² *Ph.D.*

Who's Buried in Custer's Grave?*

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ABSTRACT: On 10 October 1877, the year after the Battle of the Little Bighorn, General George A. Custer's coffin was transported from a temporary grave in Poughkeepsie, NY, by steamer and cortege to permanent interment in the U.S. Military Academy's Post Cemetery. The ceremony included the appropriate military and funerary rituals. There were, nevertheless, reasons to believe that Custer's skeleton may not have been in the coffin-thus, he may have missed his own funeral. Custer's remains, or part of them, may have been overlooked during the exhumation and left on the battlefield, only to be recovered around 1940. These bones, as well as those of another individual, were unceremoniously buried in a grave which is now marked "Two Unknown U.S. Soldiers" in the National Cemetery adjacent to the Little Bighorn Battlefield in Montana. That cemetery, perhaps appropriately enough, is named the Custer National Cemetery. This paper presents information concerning Custer's original interment on the Little Bighorn Battlefield, his supposed disinterment, and the osteological evidence that his remains, or at least part of them, were left on the Little Bighorn Battlefield.

KEYWORDS: forensic science, forensic anthropology, George A. Custer, Battle of the Little Bighorn, skeletal analysis, Last Word Society

When General George Armstrong Custer (Fig. 1) rode to defeat during the Battle of the Little Bighorn on 25 June 1876, he left a legacy and many unanswered questions. Many of those questions remain even to this day, more than 120 years later. Included among those historic questions are some which require archaeological, historic, forensic, and osteological evidence to resolve. Using information gleaned from all of these disciplines, this paper discusses what happened to Custer's body following the battle and whether or not it is the one buried in Custer's grave at West Point. As background to these issues, the battle, and the events there in the days and months following the fight are presented first, then Custer's West Point funeral described. The osteology of a partial skeleton found on the battlefield prior to 1940 is analyzed and compared with Custer as well as three other possible persons.

The Battle of the Little Bighorn

The Battle of the Little Bighorn is legendary, its images embedded in every American school child's mind. The events leading to and the basic outline of the battle are well documented and well known (1-6).

Custer and the Seventh Cavalry were a small part of the Campaign of 1876, a three-pronged attempt to force Plains Native Americans living off the reservations onto the reservations. These so-called "Hostiles" included portions of the Dakota, Northern Cheyenne and Arapaho tribes. When the campaign strategy was being developed, the Hostiles were thought to be in the Yellowstone River drainages of what is now Southern Montana and Northern Wyoming. The Seventh Cavalry was a part of the column approaching that region from the east under the command of General Alfred Terry, while the other columns approached from the south and west (Fig. 2).

Following the merging of Terry's column with the western column under Colonel John Gibbon's command, Custer and most of the Seventh Cavalry were released on 22 June from the combined columns and ordered to reconnoiter the upper reaches of Rosebud and Tullock Creeks (Fig. 2). Custer's command was to rendezvous with the rest of the column on the Little Bighorn River. On the morning of 25 June after locating the Hostiles' camp in the Little Bighorn Valley, Custer decided to attack.

In preparation for his attack, Custer divided the Seventh Cavalry into three battalions, sending one under Capt. Frederick Benteen to search the Little Bighorn Valley on the left flank. He ordered the second battalion under Major Marcus Reno to cross the river and charge the village (Fig. 3). Meanwhile, Custer took direct command of the third battalion and proceeded on the right flank. Reno's attack on the village was quickly routed and after some maneuvers, he retreated across the Little Bighorn River to the high bluffs on the east side of the river (Fig. 3). Following Benteen's fruitless search, he headed north, joining Reno on the bluff top. Meanwhile, Custer and his battalion continued a flanking move on the east side of the river. He and the approximately 210 men under his direct command were surrounded and annihilated, this portion of the battle occurring four miles north of the Reno-Benteen Hilltop (Fig. 3).

The combined Reno-Benteen battalions entrenched on the hilltop and continued fighting the rest of that day and most of the next. Toward the end of the second day, the Hostiles' village was dismantled and except for sporadic firing, the Hostiles abandoned the valley and the fight. The next day, 27 June the rest of the Terry-Gibbon column (Fig. 2) entered the abandoned village, rescued the Reno-Benteen battalions, and discovered the bodies of Custer's troops.

¹ Professor, Anthropology Department, Chico State University, Chico, CA.

²Great Plains Program Leader, Midwest Archeological Center, National Park Service, and Professor, Anthropology Department, University of Nebraska, Lincoln, NE.

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FIG. 1—Portrait of Bvt. Gen. George Armstrong Custer. New York, 1875.

Custer's Body and His 1876 Burial

On 27 June and the next day, Custer's body and most of his dead officers were identified by the Seventh Cavalry survivors and members of the relief column. Most of the observers recalled that Custer had been stripped, had at least two gunshot wounds—one in the head and another in the chest, and otherwise his body was little or not mutilated. Custer's body was buried in a grave with his brother, Thomas.

As bodies in our trade often do, the soldiers' bodies proved restless and these corpses were no exceptions. In short order they began to make their encore battlefield appearances, appearances which continue into this century and decade.

Custer's Exhumation and Reburial in 1877

The War Department authorized the exhumation and transfer of most of the officers' remains in 1877. The Seventh Cavalry's reconstituted Company I was sent that summer to recover the remains of the officers. According to some observers, however, there were problems identifying Custer's battlefield grave as well as his body.

"Although the remains of General Custer and most of his friends there, as elsewhere, had evidently been disfigured by the coyotes or savages, and probably both, and many, if not most of the skulls there and throughout all the fields were smashed to fragments, mangled or missing, still what was decided to be and probably were the main portions of the bones of General Custer and his two brothers were secured (7)."

This information apparently came as word-of-mouth from a soldier who had been at the exhumation to that writer.

Most of the other, unofficial accounts agree that by 1877 the General's remains were scattered, partial and incomplete. And perhaps considering the taphonomic processes involved, these results should have been expected. But there was an even more disturbing problem than the incompleteness of the remains. That problem was whether Custer's remains were correctly identified at all.

Sgt. Michael Caddle, also a member of the exhumation detail, said:

"When they came to the body marked Number One in the list and on the stake at its head, and supposed to be that of General Custer, it was placed in the coffin, and then on the ground was found a blouse on which it had been lying. An examination of the blouse revealed the name of the wearer in an inside pocket; it was that of a corporal. . . they 'found another body and placed it in a coffin. I think we got the right body the second time (8).""

So, at least according to some accounts, Custer's remains may or may not have been found in 1877 and even if they were correctly identified then, it appears that only a portion of the skeleton was recovered. Other parts, if not the entire corpse, were left behind on the battlefield. Despite these problems, the rough pine boxes, bearing human remains, were nailed shut and transported east.

At his widow's request, General Custer's remains were transported east, to be reinterred at the U.S. Military Academy, West Point, NY. Because Custer's remains arrived late in the summer of 1877, when the Academy was not in session and a full-blown ceremony could not be marshaled, the funeral was postponed until the fall (9). Meanwhile, Custer's coffin was temporarily placed in a Poughkeepsie, NY, vault owned by a friend. On 10 October 1877, the coffin was moved by steamship up the Hudson River to West Point. There the coffin was transferred to the chapel where the funeral ceremony was conducted, attended by many of the military notables of the day. Following the ceremony, the coffin was escorted to the U.S. Military Academy Post Cemetery (Fig. 4), final words spoken, guns fired in final salute (Fig. 5), dust scattered, and the ceremonies concluded (10, 11). Within a few decades a large granite obelisk resting on a granite base was erected over the grave (12). Such monumentous tributes were perhaps undeserved, especially if the remains were not those of Custer.

A partial skeleton discovered on the battlefield sometime before 1940 is relevant to this discussion. It may be a part of Custer which was overlooked in 1877.

Custer National Cemetery Grave 517A, Burial 8B

History

The historic documentation concerning this grave is frustratingly poor. The first and only time the skeleton was mentioned in the National Cemetery records was in June 1940 when the superintendent of the Custer Battlefield National Cemetery (renamed the Custer National Cemetery in 1992) sent a memo discussing the replacement of the temporary wooden headboard on Grave 517A with a

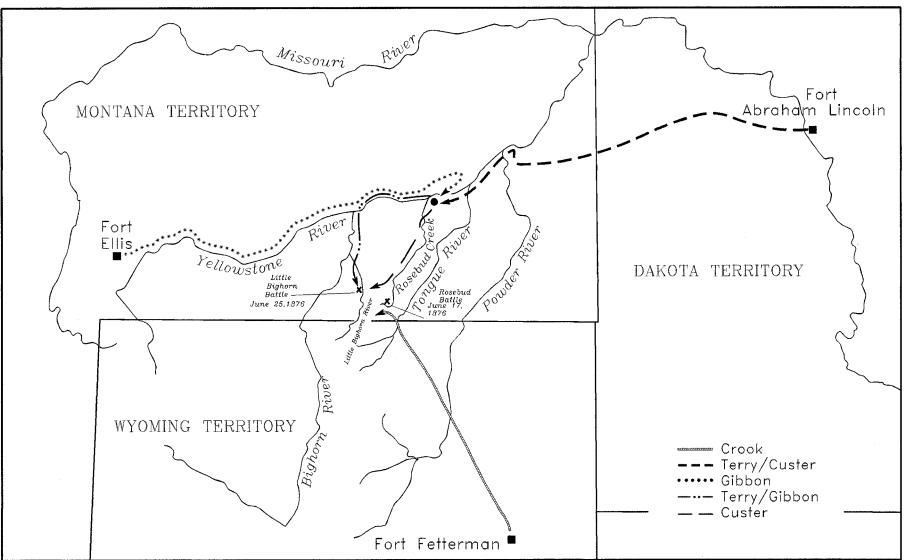


FIG. 2—Map of the Northwest Plains showing the approach of the three columns involved in the Campaign of 1876.

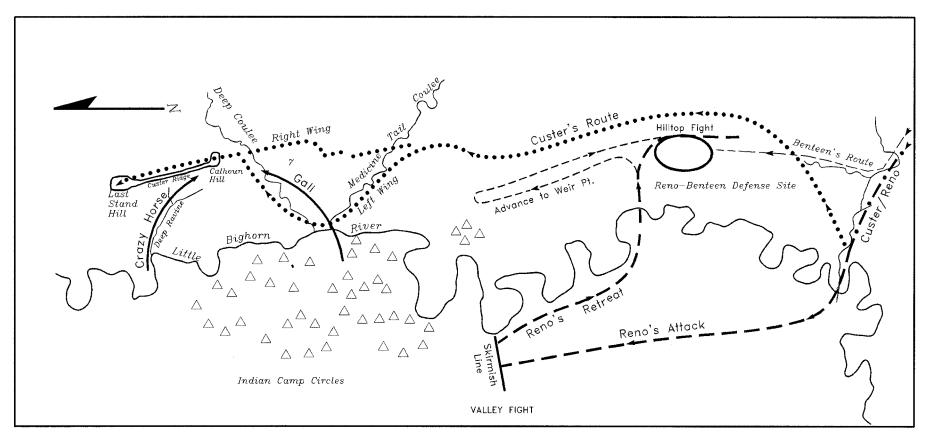


FIG. 3—Map of the Little Bighorn Battlefield showing location of the Native American village and movements of the Seventh Cavalry battalions.

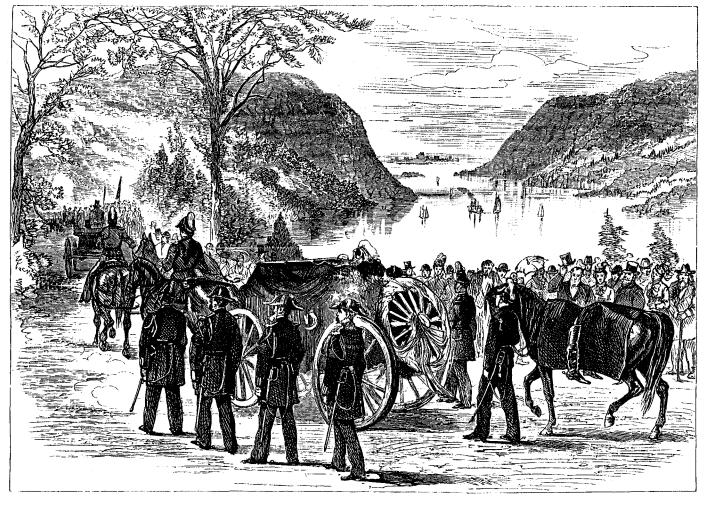


FIG. 4—Custer's funeral march at the U.S. Military Academy, West Point. (From Harper's Magazine, 27 Oct. 1877.)

stone one (13). There is no other mention of the grave, or when or where the bones were found. As a consequence of this lack of information, it is unclear if the bones were found on Last Stand (Custer) Hill, where Custer's body was found and buried following the battle, or some other location. So the only certain conclusions concerning the grave are that the remains were gathered by 1940, most likely from the battlefield.

As a part of a larger research project to analyze all of the skeletal remains from the Battle of the Little Bighorn, the National Cemetery grave was archaeologically excavated in 1992 (14–16). The remains were found in a wood box with numerous wire nails and at least two individuals were present—a younger and an older male. The older male, dubbed Burial 8B, is the one of interest here. Burial 8B's bones were distinguished from the younger male's by the older male's degenerative joint disease and other age-related alterations, while the younger male's bones were identified by recent epiphyseal unions and other youthful osteological characteristics.

Burial 8B Osteology

This individual was represented by a mandible with some teeth, both clavicles, some ribs and vertebrae, right radius, left innominate, sacrum, coccyx, and a few bones of the wrists and hands (Fig. 6). Most major elements were missing, including the cranium and the lower limbs. There were possible cuts and other modifications on the remains. A left rib neck and the right radius interosseous crest had what appeared to be old cuts and may have indicated mutilations around the time of death, although they may have happened during their exhumation. The right clavicle had two cuts or hacks which may have occurred during the old exhumation, the one before 1940. In addition to the old modifications, there were many fresh breaks and cuts from the recent archaeological excavation.

Radiopaque fragments were in the left ischio-pubic ramus, possibly one on the lateral body of a thoracic vertebra, and some on a rib fragment. This rib fragment may have belonged to this individual (Burial 8B) or perhaps the other skeleton (Burial 8A) found in the same grave. These fragments suggested that there was a gunshot wound or possibly wounds in the abdomen, thorax or adjacent areas.

The age at death of Burial 8B was middle age. This estimation was based on osteophytosis development, pubic symphysis and auricular surface morphologies, dental root development and epiphyseal union. The person was 30 to 45 years old with a most likely age in the 35 to 40-year range. This age was relatively old for the Seventh Cavalry casualties (17).

The sex was male. Sex determination was based on chin shape, subpubic angle, ischio-pubic ramus, sacrum size and shape, overall size and robusticity, and absence of parturition scars. The only contraindications to it being male were the obtuse gonial angle and dis-

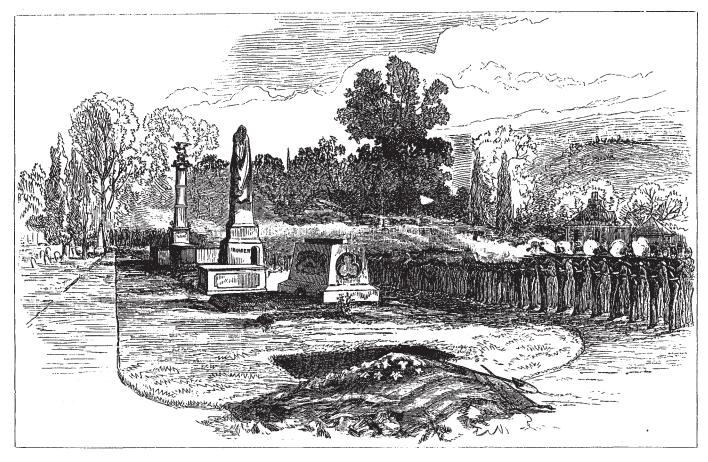


FIG. 5—Final salute over Custer's grave in the U.S. Military Academy's Post Cemetery, West Point. (From Harper's Magazine, 27 Oct. 1877.)

criminant function score from mandibular measurements; both results indicated a female. Both of these two contraindications involved the mandibular ascending ramus, which, as discussed later, was pathologically reduced in size and altered in shape. There was little doubt, then, that the individual was male. Race, because of the incomplete and fragmentary nature of the bones, was undetermined.

The stature was tall. Stature was estimated as 181.07 cm (71.28 in.) using the radius length and a standard regression formula for white males (18). However caution is in order for this estimation. Estimations based on an upper limb bone, as this one, are subject to greater error than those based on lower limb bones. The interval around this best estimation using the 80% confidence interval was ± 5.548 cm (2.18 in.) (19). This interval stretched the height estimation from 175.522 to 186.618 cm (69.1 to 73.5 in.). When this height was compared with those of the Seventh Cavalry casualties, it was apparent that the person was tall by their standards (17).

There were numerous indications of degenerative joint disease and trauma. There were two healed rib fractures. One of the fractures was on the neck of a left rib (number 3-10) and the other fracture was near the costal end of a right rib (number 3-10). The coccyx was fused to the sacrum, possibly from a traumatic episode or it could have been a congenital development.

Degenerative joint disease was present in the thorax and radius. The distal right radius had slight osteoarthritis. The mid-thoracic vertebral bodies had moderate osteophytosis, and the rib heads had osteoarthritis. Schmorl nodes were frequent on the vertebrae, and the most severe ones were in the lower thoracic and upper lumbar vertebrae (Fig. 7). The severity of this person's back problems were extensive and distributed through much of the spine, and they were among the most severe of the Custer National Cemetery skeletal series (16).

Of all the degenerative changes, the most marked were to the mandibular condyles and the mandibular ascending ramus—at least the right ascending ramus. Both condyles displayed deterioration that was severe enough to have reduced the height of the mandible's right ascending ramus. The left ascending ramus, except the condyle, was absent postmortem, but that condyle showed degenerative changes similar to those on the right side. While this condition may have been hemifacial microsomia, another possibility was severe degenerative change of the temporomandibular joint.

There were no Harris lines, at least not in the radius, although many enamel hypoplasias were present on the teeth.

Nine teeth were present. There were indications of tobacco use; the left premolars had a "pipe-stem" abrasion groove (Fig. 8), suggesting habitual pipe smoking. Adjacent to the groove on the second premolar as well as the left first molar, heavy calculus deposition was present (Fig. 8). The groove lacked calculus. All of the other teeth had calculus buildup, although to a lesser extent than those mentioned previously. Three of the right mandibular teeth displayed dark staining suggesting tobacco use.

The right mandibular first molar was lost before death. The ad-

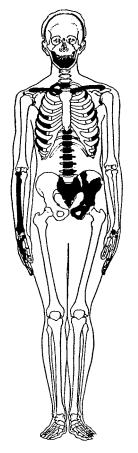


FIG. 6—Schematic illustration of bones and bone fragments recovered from Custer National Cemetery Grave 517A, Burial 8B.

jacent second molar drifted mesially and tilted into the space left by the missing first molar. The drifting and tilting suggested that the molar was lost long before death.

There were numerous carious lesions. Most of the lesions were located in the interproximal and cemento-enamel juncture areas. One of the carious lesions was so extensive that the crown of the tooth (the left mandibular third molar) was missing and only the roots remained (Fig. 8).

Comparison of Burial 8B with the Seventh Cavalry Casualties

Based on the osteological conclusions presented above, there are four most likely Seventh Cavalry identities for the remains (Table 1). Considering the hundreds of casualties in the battle, it is fortunate for the purposes of identification that Burial 8B is so comparatively old and tall. Had the skeleton been from a shorter, younger male, then many more possible identities would have been possible (17).

The first possible identity is Sergeant Robert H. Hughes (Fig. 9). He was born in Ireland, first enlisted in 1868 and was in his second enlistment at the time of the battle (20). On the day of the battle he was reassigned from his usual company and given the unenviable duty of carrying Custer's personal flag (21). His body was reported as being in Deep Ravine, although Hughes's company commander recalled seeing his body on Last Stand (Custer) Hill (22). He was 36 years old and 5-ft 9-in. tall, and he left a widow with three children (20).



FIG. 7—Schmorl nodes on the inferior body of thoracic 11 from Custer National Cemetery Grave 517A, Burial 8B.



FIG. 8—Lingual view of left dentition and mandible from Custer National Cemetery Grave 517A, Burial 8B. Note pipestem abrasion in occlusal surfaces of the premolars, calculus development, and loss of third molar crown.

Another possible identity of the skeleton is Private George A. Warren (23). He was born in Indiana and enlisted just in the fall before the battle, having been a carpenter in civilian life. He was 5-ft 9.5-in. tall and 36 years old. Although he did die with Custer's battalion and most of his company died on Last Stand (Custer) Hill, the location of his body was not specifically noted in the historic accounts.

The third possible identity is Captain Miles W. Keogh (Fig. 10) (24). Captain Keogh was born in Ireland, served in the Vatican's military, later in the Union Army, and last with the post-Civil War Seventh Cavalry. He was 36 years old and 6-ft 0.5-in. (184.15 cm) (25,26). He died near Custer Ridge, was buried there, then exhumed in 1877 and reburied in Auburn, NY.

The fourth and most intriguing identity is, of course, none other than George Armstrong Custer himself. The skeletal age and stature and the gunshot wound to the chest fit him as well or better than the other possibilities. Custer's age at the time of the battle was 36 years, comparing favorably with CNC Burial 8B's 35 to 40 age range. It should be noted, however, that a more extensive

	Age in Years	Stature in inches	Comments
Grave 517A Burial 8B	35–40	71	Gunshot wound(s), poor oral health, pipe smoker, degenerative joint disease, battlefield location uncertain
Sergeant Robert H. Hughes	36	69	Custer's personal flag bearer, body location variously given as Deep Ravine and Last Stand (Custer) Hill
Private George A. Warren	36	69.5	Previous occupation carpenter, killed with Custer's battalion
Captain Miles W. Keogh	36	72.5	Body found near Battle Ridge, remains presumably exhumed in 1877
General George A. Custer	36	71	Gunshot wound(s), abstained from tobacco, remains presumably exhumed in 1877

 TABLE 1—Comparison of Custer National Cemetery Grave 517A, Burial 8B with Seventh Cavalry casualties's records. Information on casualties abstracted from other sources (20–45).



FIG. 9—Sgt. Robert H. Hughes, Company K, Seventh Cavalry. The day of the Battle of the Little Bighorn, Hughes was assigned the unenviable duty of carrying Custer's personal flag. He died with Custer's command.

age interval (30 to 45 years) cannot be excluded for the skeletal remains.

Custer's stature is estimated as 5-ft 11-in. (180.3 cm). Some explanation is needed concerning his stature before comparing it with the skeletal stature estimation. Although stature was measured during the enlisted men's recruitment processing, officers received no such close examination and Custer was typical of his rank. So the estimation of his stature presented here comes from various other historical documents.



FIG. 10—Capt. Myles W. Keogh, Company I, Seventh Cavalry. Keogh died during the Battle of the Little Bighorn, falling on Custer Ridge.

Custer's appointment papers to West Point, written when he less than a month shy of his 17th birthday, list him as 5-ft $9^{3}/_{4}$ -in. (177.165 cm) (27). If he grew the average amount for antebellum West Point cadets (28) and Custer's appointment stature was accurate, then he would have grown another 2.0 cm by the time he was 21 years. Adding that average growth figure to the appointment stature, Custer should have been 179.165 cm (70.54 in.) as a young adult.

In historic recollections, his wife (29) said he "was nearly six feet in height" and another source (30) said he was "just under six feet in height." These statements are surprisingly precise, because most contemporary men whose stature approach six feet tend to round their stature to the even foot (31). The precision of these ac-

counts makes them seem more probable than had Custer's stature been reported as an even six feet.

So, as a best estimation, Custer's stature was probably 5-ft 10-in. or 5-ft 11-in. His stature and that of Burial 8B are very similar and both are near the upper extreme of the Seventh Cavalry casualties' statures (32, 33).

On the other hand, the skeletal indications of tobacco use on the skeleton's teeth are inconsistent with Custer, although there are some possible explanations. According to most sources, Custer abstained from tobacco. While at West Point, he described the use of tobacco as "a filthy, if not unhealthy, practice" (34), a position echoed by many of today's anti-smoking militants. And later, a trooper, who served with Custer during the Civil War and for ten years on the Plains, noted that Custer "neither drank, smoked nor chewed tobacco (35)."

Parenthetically, it should be noted that Custer was not without vice. His worst addiction, according to an officer who had been with the Seventh Cavalry four years at the time of the Battle of the Little Bighorn, "was the gambling habit to which he was passion-ately attached" (36)—passionately attached, that is, until his last great gamble when he wagered the lives of the Seventh Cavalry in battle and lost.

Back to the question of Custer's smoking, besides the accounts of his tobacco abstinence, there are other intriguing indications that perhaps as a youth he used tobacco. While a cadet at West Point, Custer wrote his father requesting signed permission to purchase tobacco (37). When his father refused to give his permission, let alone blessing, George replied that he himself neither smoked nor chewed; he wanted the tobacco to give as presents to his nicotineloving friends (37). Today similar such excuses are often heard by parents while confronting their adolescent offspring caught redhanded with cigarettes. Custer's denial of tobacco consumption smacks of this same knee-jerk excuse.

There is another possible indication of Custer smoking tobacco while attending the U.S. Military Academy. Among Custer's cadet career total of 726 demerits—a near record—some were for "tobacco smoke in quarters (38)." It is unclear if Custer was the smoker or if it was one of his fellow cadets, but in either case the violation brought him four demerits.

A final note on tobacco use is in order. Although all sources indicated he shunned tobacco at least as an adult, there were occasions when he was required to smoke. As a commanding officer stationed on the Plains, he was sometimes obliged to smoke "peace" pipes during councils with Native Americans. His wife, writing about one such council in Dakota Territory, said, the "pipe was then smoked, and the general had to take a whiff when it came his turn (39)." This perfunctory partaking is hardly the sort of consumption that would lead to the stains and grooves observed on the teeth of Burial 8B, but it perhaps was enough to perpetuate stains which may have been already present. In conclusion, the stains and pipe stem groove on the teeth may be from Custer's smoking as a youth and perhaps sustained by the ceremonial smoking obligations required of a commander.

Besides indications of smoking, there are other apparent inconsistencies between the skeleton and Custer. The poor oral health of the mandible is inconsistent with someone of Custer's military and social standing. There is anecdotal evidence that his oral health was a concern and dental care extended back well into his childhood. A family story tells of George, aged 4 years, being taken by his father (a blacksmith who normally would have extracted teeth himself!) to a doctor or dentist in nearby Scio, OH, where a tooth was extracted (40, 41). Such early care is inconsistent with the oral ill health displayed by the mandible. There is one mention of Custer having a toothache during his second year as a cadet at West Point (42). Further, Custer's oral concern apparently extended into adulthood, when he owned and presumably used toothbrushes (43).

There are no indications that he suffered from degenerative joint disease. No temporomandibular joint problems are mentioned in the literature concerning Custer. Apparently there are no accounts of back problems, although a career cavalryman might well expect to have had such problems. So the skeletal indications of degenerative joint disease are not collaborated by the historic accounts of Custer.

The healed rib fractures observed in the skeleton are not mentioned in accounts of Custer, either. Nevertheless it is possible that he suffered rib fractures in any of a number of accidents, such as being tossed from a carriage in 1864 or being pinned under a horse in 1865 (44, 45). Consequently, it is possible that Custer's active life led to fractures, although apparently none were recorded.

In summary, the partial skeleton has both consistencies and inconsistencies with Custer. The skeletal age, stature, and gunshot wound or wounds fit Custer as well or better than any of the other casualties. On the other hand, the indications of tobacco use, poor oral health, temporomandibular deterioration, back problems and rib fractures are unexpected of Custer.

Who's Buried In Custer's Grave?

The question implied by the title of this article is: where is Custer buried? Is he under the massive marble obelisk at West Point or is he in a grave for unknowns out on the Montana prairies? The historic accounts of his 1877 exhumation lend suspicion that he was not recovered and was not subsequently buried—or at least not all of his body was buried—at West Point, where tradition would have him interred.

Certainly some historic accounts lend credence to the possibility that at least part of Custer remained on the Little Bighorn Battlefield following his supposed exhumation in 1877. And, as we have proposed here, there is skeletal evidence that remains recovered from the battlefield about 1940 may be part of him. If this evidence is correct, then his West Point grave could contain Custer, part of Custer, or someone else altogether.

Previous researchers have succinctly summarized the question concerning Custer's interment. Concerning the occupant of Custer's West Point grave, Snow and Fitzpatrick write "there exists the possibility, at least, that one or more unknown troopers may be perpetually doomed to the commission of that most cardinal of military sins: impersonating an office (46)."

Acknowledgments

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WILLEY AND SCOTT • WHO'S BURIED IN CUSTER'S GRAVE? 665

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Additional information and reprint requests: P. Willey, Ph.D. Anthropology Department Chico State University Chico, CA 95929-0400