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## Recent Investigations at the Gerstle River Site, a Multicomponent Site in Central Alaska

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The Gerstle River Site (49XMH-246) is located 1 mile from a braided river on a south-facing bench on a loess-mantled bedrock outcrop in the Tanana Basin, central Alaska. The site consists of two areas 30 m apart, the Upper Locus and Lower Locus. Previous researchers tested and excavated the Upper Locus in 1976, 1977, 1983, 1985, and 1996 (Holmes 1998; Holmes and Dilliplane 1976; Kimura et al. 1989; Rabich and Reger 1978), and briefly tested the Lower Locus (Holmes 1998). The author excavated 48 m<sup>2</sup> at the Lower Locus in 1999 and 2000 (Potter 1999, 2000; Potter and Holmes 2000). To date, we have excavated 133 m<sup>2</sup>, obtained 21 <sup>14</sup>C dates, and recovered over 6,000 artifacts in 6 components spanning the entire Holocene at both loci. The 2000 excavation was designed to connect various activity areas relating to hearths and articulated and unarticulated faunal remains uncovered in 1999, excavate the southern edge of the bluff prior to collapse, determine the extent of artifact presence, and retrieve <sup>14</sup>C-datable material. The stratigraphy at the site consists of a series of eolian sediments up to 4 m thick, with five buried Bw horizons and two paleosol complexes.

Component I, associated with a paleosol dated to 9740 ± 50 RCYBP (B-133751), consists of flaking debris, a few scattered unidentifiable bone fragments, and 72 cobbles/boulders that may represent a feature. Since no diagnostic artifacts were recovered, its cultural historical placement is unknown. Component II consists of 2 modified flakes, 102 microblades, 1 microblade core tablet, and 2 facet rejuvenation flakes from wedge-shaped cores, together with flaking debris, all associated with a hearth dated to 9510 ± 50 RCYBP (B-134098). Component III, the largest component at the site, consists of over 4,000 artifacts, including 434 microblades, 2 wedge-shaped microblade cores, 2 burins, 10 burin spalls, 1 endscraper, 1 sidescraper, 4 boulder spall scrapers, and flaking debris, associated with 3 hearths, one dating to 8860 ± 70 RCYBP (B-133750). Numerous faunal elements were associated with the hearths and lithics, including multiple individuals of elk and bison, and a single worked mammoth ivory tusk. Gastroliths have been found in the 1996 and 2000 excavations for this component. The assemblages from Components II and III are most similar to clusters A-

C, G, and N at Dry Creek site CII (Powers et al. 1983), and fall within Denali Complex parameters (West 1967). Component IV consists of eight microblades, a side scraper, an endscraper, and flaking debris. Component V consists of a single notched pebble, and Component VI contains two endscrapers, a projectile point, and flaking debris, with a stratigraphic date of  $3800 \pm 65$  RCYBP (N-4959).

The worked mammoth ivory rod or point (Figure 1) was found 50 cm south of a hearth dated to  $8860 \pm 70$  RCYBP (B-133750). This point, approximately 25 cm long and less than 1 cm diameter, has a near-circular cross section near

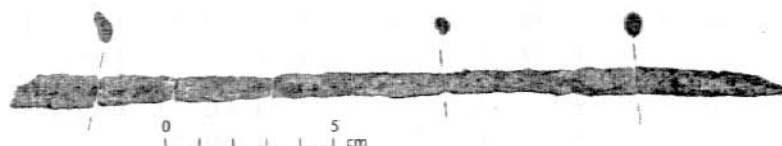


Figure 1. Mammoth ivory point (UA99-062-284).

the tip and becomes flattened near the base. Similar points, made of bone and found in the muck deposits near Fairbanks, were recently dated by Jim Dixon to about 8500 RCYBP (Dixon 1999:53). The presence of this non-slotted point in association with microblades is intriguing.

The 1999 faunal assemblage of Component III is composed primarily of low-yield axial and lower limb elements. Such an assemblage is highly suggestive of a field-butcherer site, where recently killed animals were processed and low-value meat units extracted from the carcasses. The fragmented nature of the bones tends to support this interpretation, suggesting use of marginal-value bones for marrow extraction. The 2000 faunal assemblage of Component III and fauna from previous excavations are currently being analyzed.

There is potential for earlier occupations at the site. Several horse bones were recovered in 1996, including a radius dating to  $15,090 \pm 70$  RCYBP (B-109267) (Holmes 1998) and a molar found in 2000. A saiga antelope humerus was also recovered. These remains were recovered in the eroding slope debris; no artifacts were found in association. Due to safety and time constraints, only one test (a pit 1 m square) has been conducted in the lower sediments. Further excavations are scheduled for the summer of 2001. It is hoped that small, discrete components such as those found at the Gerstle River site can begin to address early-Holocene site structural questions and help elucidate Denali Complex subsistence and settlement patterns.

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