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NEWSLETTER

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THE CERTAIN SITE PART 2: OU FIELD SCHOOL 1993

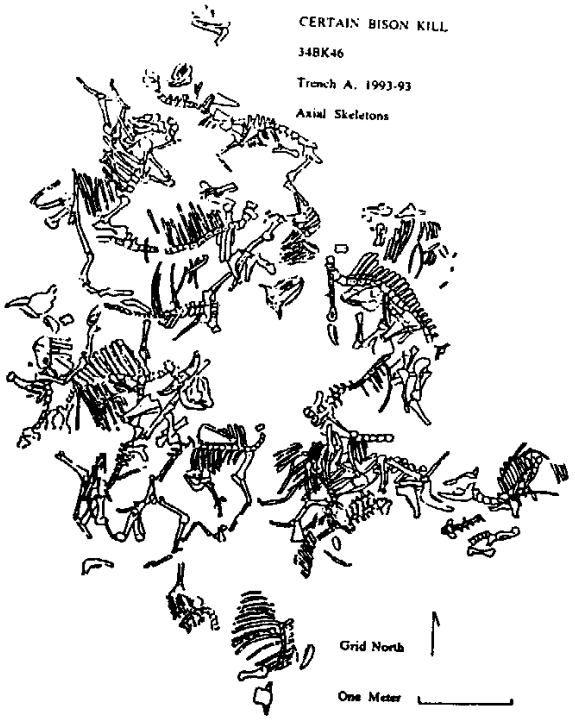

Figure 1. Bone bed in Trench A, Certain site.

The Certain site, 34BK46, is a Late Archaic bison kill site in northern Beckham County. Recorded in 1970 and tested in 1992, this important site was the focus of the 1993 OU Archeology Field School directed by Dr. Lee Bement and Kent Buehler. Ten undergraduate students and one graduate student conducted excavations at the site for a six week period between June 14 and July 24, 1993. The excavation centered on Trench A which was begun the previous year.

Limited testing in July, 1992, revealed the presence of a dense bone bed representing a kill and primary butchering area containing at least 12 bison. This year's excavations widened the trench and uncovered the semi-articulated remains of at least 20 animals ranging in age from four months to more than ten years (Figure 1). The animals seem to represent a single kill event which took place in late summer/early fall.

Repetitive butchering practices were evident. Many of the animals were laid on their sides and the limbs and ribs were removed from the upper side but not from the side lying on the ground. Meat was apparently stripped from the legs and most of the bones, often still articulated, discarded on the spot. Skulls were commonly smashed, presumably to allow removal of the brains. Most of the skulls lacked hyoid bones, suggesting the hunters removed and carried away the animals' tongues. Caudal (tail) vertebrae were also rare. Since the tail is usually removed with the hide, this suggests the skins were being taken.

The presence of so many large skeletal articulations seems to indicate the hunters were not making maximum use of the available meat. Perhaps not all of it was needed, or there was more than could be processed and transported.

In addition to expanding the excavation area at Trench A, the field school also exposed a new bone bed in the bottom of another buried gully 100 meters downstream from the first. This area, known as Trench C, was placed in one of four buried gullies identified by soil probing during the summer of 1992. This trench exposed two small fire pits above a bone bed with twice the bone density of Trench A (Figure 2). Beneath this bone bed was a second dense bone deposit. Less than 25 percent of Trench C was excavated to the uppermost bone bed. The area sampled contained at least 13 animals, including one deer. At this point we can only speculate how the deer became mixed up in the bison kill. Perhaps the animal was in the canyon bottom, spooked when the bison were herded into the gully, and killed by the hunters as part of the trap. Another possibility is that the hunters procured the deer prior to the bison kill and tossed its bones onto the bone pile after the bison hunt.

Projectile points of the same general type were recovered from both trenches A and C. These dart or spear points are all skillfully crafted from Ogallala quartzite (Figure 3). Although resharpening flakes were also found in the upper bone bed, no formal butchering tools were recovered. The hunters appeared to have scavenged as many points as possible and did not discard any butchering tools.

The two small hearths above the upper bone bed in Trench C provide the opportunity to establish a capping date for the use of this gully. Since the bone beds are below the hearths, they must be older than the hearths. At this point, we speculate the hearths identify a short term camping area probably used when kills had occurred in one of the other gullies along the canyon.

Figure 2. Bone bed in Trench C of the Certain site.

Figure 3. Spearpoints/knives from the Certain site.

The stacked bone beds in Trench C, coupled with the use of other gullies along the canyon such as Trench A, indicate the site was the scene of multiple kills that can be segregated horizontally as well as vertically. Work will continue at this important site.

PLEISTOCENE STUDIES CONTINUE IN DEWEY COUNTY

Thanks to Mother Nature and cooperative landowners and lessees, some notable work on Oklahoma's Pleistocene character was continued in early September. Our office was called by Soil Conservation Service agent Scotty Vanderwork (Taloga) who, while inspecting a washed-out dam in eastern Dewey County, observed that the 100 feet long gully exposed black and gray snail-rich deposits some six feet below the surface. The site was visited in August and this inspection revealed the site was on the Canadian River's first terrace about three miles south of the Hajny mammoth site. Moreover, the deposits in the exposure appeared to be those of an aggraded pond or ox-bow channel. The deposits were silty to clayey in texture and contained abundant snails and occasional bone fragments, including mammoth teeth fragments. Because the deposit seemed conducive to radiocarbon dating as well as recovery of invertebrate and vertebrate animal remains of the ice age, permission was sought from the land owner and lessee. Graciously, Mr. Harry Percy and Mr. Don Kincaid consented, provided the work was done soon so that the pond dam could be rebuilt before fall rains began.

Consequently on September 2nd and 3rd, volunteer Dave Morgan, Dr. Nick Czaplewski (paleontologist with the Oklahoma Museum of Natural History) and Survey Director Don Wyckoff made a contour map of the location, cleaned a 15 feet profile at one part of the exposure, and collected bulk matrix samples of the different horizons for dating and analyses of snails, vertebrates, and hopefully, pollen. On September 3, Dr. Brian Carter (O.S.U. soils scientist) brought his advanced soils class out and they worked up a detailed description of the profile.

Thanks to the O.U. Research Council and O.U. Acting Vice-President for Organized Research, Eddie Smith, funds were made available to help with these studies. Dr. Jim Theler (University of Wisconsin - LaCrosse) is currently recovering gastropods, and an organic-rich sample of the pond sediment is being radiocarbon dated. In addition, Dr. Peter Wigand (Desert Research Institute, Reno, Nevada) kindly agreed to recover pollen and, if suitable, have sediment samples studied for ostracods, their isotope variations, and their dating by accelerator technique.

All in all, the brief work at the Percy exposure should help augment the meager knowledge about late glacial environments in west-central Oklahoma. Also, dating the site should help clarify the chronology of terraces along the Canadian River, an issue raised by findings at the nearby Hajny site. As this goes to press, a radiocarbon date on organics in the uppermost horizon of the pond deposit is reported to be 35,600 B.P. $\pm$1120 (BETA - 66020).

TUSK EXHIBIT PREPARED

In the April, 1993, issue of this newsletter, the emergency recovery of a proboscidian tusk in Dewey County was reported. Through the summer, volunteer