Meat on a Massive Scale

Through the research done on the Jones-Miller Site by the late Dr. Dennis Stanford of the Smithsonian Institution, we know that more than 300 bison were slaughtered in the “surround” on the Arikaree on at least two separate occasions. And based on radiocarbon dating of the bones, teeth and other organic material found in the bone bed, we also know the first hunt happened in late autumn. The second and perhaps larger kill took place in late winter. Three years of excavation work yielded over 41,000 bones, all exhibiting “evidence of heavy butchering.”

Trying to envision what took place there allows the mind to run wild. Based on bone and teeth analysis, Stanford’s team concluded that only “nursery herds” were targeted, essentially adult females and juveniles. While the killing of that many large herbivores sounds impressive, the sheer weight of the harvest itself borders on the incredible.

“I have not come across anyone who’s done tonnage estimates, but I know that Chrissina Burke (currently with Northern Arizona University) published the most recent MNI at 315 bison,” noted Amy Gillaspie with the Denver Museum of Nature and Science where the Jones-Miller artifacts are now housed.

It is important to understand that the bison killed and butchered at Jones-Miller were not the modern American bison that most of us are familiar with. Rather, they were *Bison antiquus*, an extinct species that belonged to the megafauna world of the late Pleistocene Epoch, a world that included mammoth and mastodon. While the weight of a mature American bison bull might approach 2,000 pounds and modern cows might weigh 1,000 pounds, *Bison antiquus* were completely different animals.

*Bison antiquus* were substantially larger, some standing more than 7 feet at the hump. Additionally, the ancient bulls would often weight more than 3,500 pounds, and the antiquus cows 2,000 pounds, twice the size of a modern “buffalo.”

Using the numbers of Stanford, Burke and the analysis of Paleo-Indian expert George Carr Frison of the University of Wyoming, one can safely conclude that the kill in Yuma County was massive by even modern standards. “After processing, and considering juvenile skeletons were recovered, as well as adults, a conservative guess might be as much as 600,000 pounds,” noted Gillaspie. Or perhaps a little closer to 400,000 pounds.

Interestingly, Gillaspie and her colleague, Natalie Patton, who’s also involved in the Jones-Miller collection in Denver, generally agree that not all the bison killed at the Jones-Miller Site were utilized by the hunters who slaughtered them. Some of the meat and carcasses were probably sacrificed and shared with other hunters on the plains.

“This goes back to what I was saying earlier regarding collaborating with modern indigenous people. Chrissina, Natalie and I have all discussed ethnographic records with other experts that indicate Lakota didn’t necessarily utilize every ounce of bison once it was being processed, and instead left some meat for carnivores to come scavenge,” Gillaspie noted.
“There is quite a bit of carnivore gnawing and marking on the Jones-Miller bones, so I think that is of interest.”

And that evidence adds yet another fascinating component to the visual image associated with Jones-Miller.

Around the glowing fires of the kill site enclosure more than 10,000 years ago, while these nomadic hunters were processing meat and keeping the meat racks stocked, wolf packs would have been part of the scene. If more recent accounts of western history tell us anything, we can safely assume hundreds of wolves would have been lurking in the surrounding darkness just beyond the firelight, and the eerie chorus of howling would have echoed up and down the little valley of the Arikaree in the weeks and months that followed this ancient bison kill.

The wolves present during the Jones-Miller kill were likely ancestors of the grey wolf that trailed American bison herds for millennia until they were exterminated by settlers and cattlemen in the late 1800s. Or they may have been larger wolves, an ancient species from the late Pleistocene. Whatever scavengers or predators gathered around the kill site on the Arikaree Fork there were, one can rest assured that it was feast for the ages.

– MATT VINCENT