

MAMMOTH HUNTING IN WYOMING

Spencer R. Pelton, Ph.D.

Office of the Wyoming State Archaeologist, Laramie, WY

Madeline E. Mackie, Ph.D.

University of Wyoming, Laramie, WY

Todd Surovell, Ph.D., University of Wyoming, Laramie, WY

Mammoths are part of the Order Proboscidea, or elephant-like animals that include mammoths, mastodons, two genera of modern elephants, and many extinct genera spanning the last 58 million years. The earliest known members of Order Proboscidea are known as Eritherium, which are found in fossil deposits in Morocco. After early evolution in Africa, proboscideans emerge in the fossil record of the western hemisphere during the Miocene epoch around 12 million years ago and persist until the late Pleistocene, around 12,000 years ago.

Wyoming was home to a proboscidean species called the Columbian mammoth (*Mammuthus columbi*), the most massive terrestrial species living in the Americas during the last Ice Age. The Tate Museum in Casper, Wyoming is home to the largest Columbian mammoth ever discovered (Figure 1). The Museum named its mammoth 'Dee' after its discoverer, a heavy machine operator grading an oil pad who noticed big bones and had the foresight to alert paleontologists. Through careful excavation of the bones, paleontologists discovered that Dee was a 65 to 70-year-old male mammoth estimated to have weighed 22,000 pounds and to have stood almost 14 feet tall at its shoulder. Dee perished of natural causes around 13,500 years ago in Converse County, leaving behind one of the most complete mammoth skeletons ever discovered.

Proboscideans survived for nearly 12 million years in the Americas and then vanished from the fossil record around



Figure 1: 'Dee' the largest Columbian mammoth ever discovered, now displayed at the Tate Museum in Casper, WY. Photo courtesy of Casper College.

12,800 years ago, a rapid extinction event that occurred across the entirety of the Americas and that coincided closely in time with human arrival to the New World.

Humans arrived in the western hemisphere at least 14,500 years ago by traversing a now-submerged sub-continent called Beringia that connected Asia and North America during glacial stages. They arrived south of the North American continental ice sheets sometime before 13,500 years ago. Shortly thereafter, the western hemisphere's three families of proboscideans went extinct, including the mammoth, mastodon, and gomphothere. The timing of human entry to the New World and their impacts on extinct proboscidean species are among the most hotly contested topics in American archaeology. It was long-held that the first North Americans were associated with the Clovis culture, best known for its distinctive 'fluted' points (Figure 3), but

a handful of archaeological sites dispersed throughout the Americas hold tantalizing hints at occupations preceding Clovis. Likewise, many long believed that hunting by humans played a primary role in proboscidean extinction, but some regions, especially the American southwest, have evidence for extensive and severe drought coincident with proboscidean extinction, suggesting that climate played a role in their demise. Despite legitimate debate surrounding these issues elsewhere, the current evidence from Wyoming seems clear. Hunter-gatherers associated with the Clovis culture appear to be the state's first residents, and their arrival coincides closely in time with the disappearance of mammoths from the Wyoming fossil record. Two Wyoming archaeological sites with clear evidence of mammoth hunting by Clovis groups are the Colby Mammoth site and the La Prele Mammoth site.

The Colby site, located near Worland, contains two piles of mammoth bones interpreted by archaeologists to represent the remains of mammoth meat caches stored by members of the Clovis culture (Figure 2). Excavated by George Frison, Colby contained evidence for seven Columbian mammoths, the bones from which had been distributed between two large, stacked piles. Climate conditions during the earliest occupation of the Americas would have allowed hunters to store meat in snow drifts for long periods of time without



spoilage. At Colby, only one of the meat caches appears to have been opened and used. The Colby site contained very few artifacts, but they included four Clovis points, which were presumably used to hunt the mammoths and then left in the mammoth meat upon caching (Figure 3).

The La Prele site, located near Douglas, contains the bones of a single juvenile Columbian mammoth (Figure 4) and several

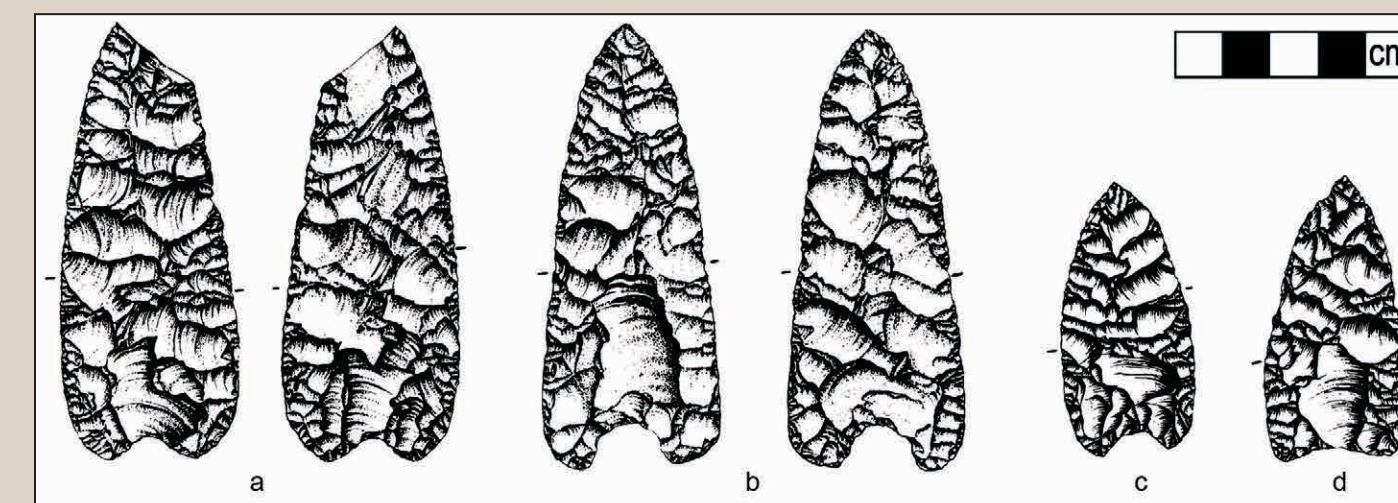


Figure 2 (above): A bone pile from the Colby Mammoth site during excavation, interpreted by archaeologists to represent a meat cache. Image courtesy of Charles Reher.

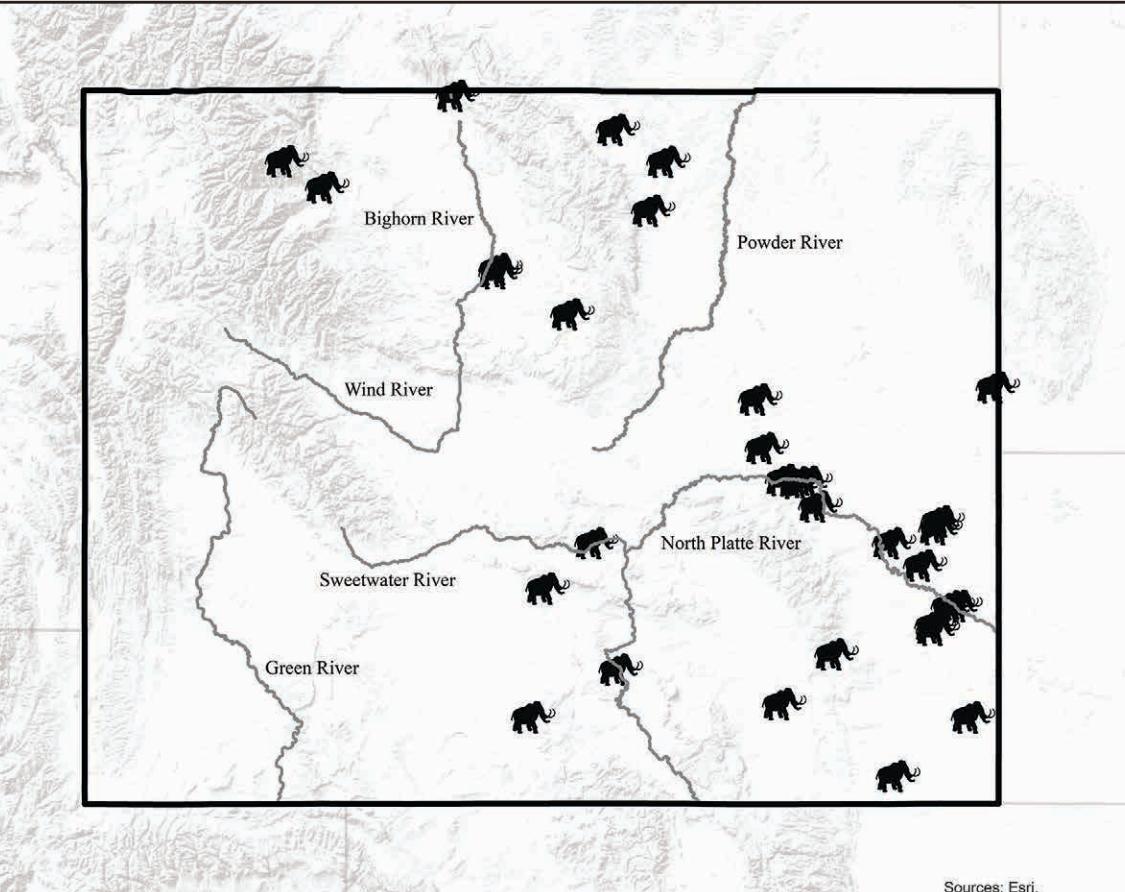
Figure 3 (left): Clovis points recovered from the Colby Mammoth site. Image courtesy of Brigid Grund.



Figure 4 (top): 1987 excavations at the La Prele Mammoth site. Image courtesy of Danny Walker.

Figure 5 (middle): Artifacts recovered from the La Prele Mammoth site.

Figure 6(bottom): A large red ochre stain associated with the floor of a house at the La Prele Mammoth site.



associated artifact scatters interpreted by archaeologists to represent the footprints of ancient houses occupied while Clovis foragers processed meat and other animal products from the mammoth. First excavated by George Frison and then later returned to by Todd Surovell and a team of archaeologists from the University of Wyoming, La Prele offers a rare glimpse into the domestic life

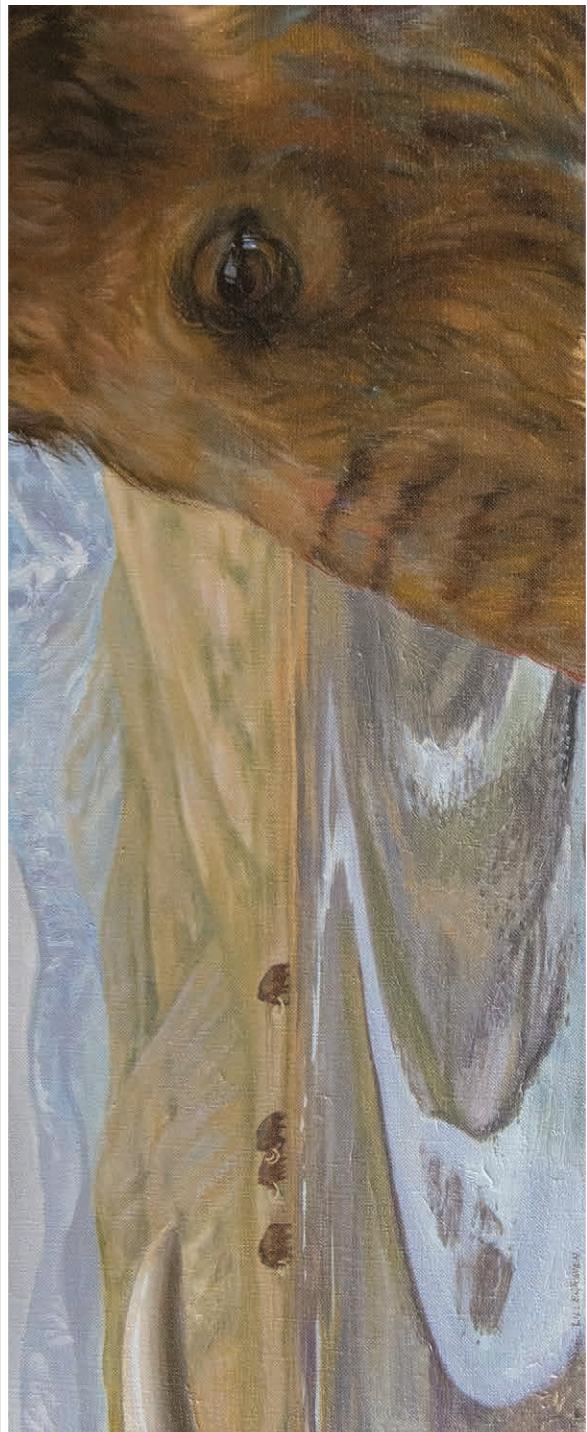
the Jewett mammoth site near Guernsey. There have been at least 50 mammoths thus far discovered in Wyoming, and others may yield further evidence for human interaction under more careful archaeological scrutiny. Given widespread predation of mammoths by Clovis hunters, there likely exists many more mammoth kill sites in Wyoming yet to be discovered.

Figure 7: Known mammoth sites in Wyoming, including archaeological and paleontological sites. The remains of another 20 or so mammoths are known to researchers, but their locations are not.

associated with killing and butchering a mammoth. In addition to the artifacts one might expect to find in an animal kill site, such as a Clovis projectile point, stone knives, and meat choppers, the La Prele site contains a diversity of domestic artifacts, including a bone bead and several bone needles (Figure 5). Recent excavations also uncovered a large red ochre stain associated with the floor of a house, a phenomenon never before documented at a mammoth hunting site in the Americas (Figure 6). Ongoing investigations at La Prele are certain to yield a variety of surprising insights into the practice of mammoth hunting by the Clovis culture.

While Colby and La Prele are the two most widely accepted mammoth kill sites in Wyoming, other Wyoming mammoths hold hints of human interaction, such as the UP mammoth site near Rawlins and

MAMMOTH HUNTING IN WYOMING



For information about Wyoming Archaeology Awareness Month activities, visit our Web page:
<http://wyoshpo.state.wy.us/index.php/events-training/archaeology-awareness-month>

Wyoming State Historic Preservation Office; Office of the Wyoming State Archaeologist; University of Wyoming Department of Anthropology; George C. Frison Institute of Archaeology & Anthropology; U.S. Bureau of Land Management; U.S. Forest Service; National Park Service; Wyoming Army National Guard; Wyoming Department of Transportation; TRC; Cultural Resource Analysts, Inc.; Western Archaeological Services; SWCA Environmental Consultants; Cannon Heritage Consultants, Inc.; Bonneville Archaeology; Edward and Susan Baily; Wyoming Association of Professional Archaeologists; Wyoming Archaeological Society.

Mammoth painting by Linda Lillegraven, courtesy of the artist. Photograph of painting by Richard Collier. Graphic design of poster by Mariko Design LLC/Elizabeth Ono Rahel.