

## Clovis and Beyond: A Report on the Santa Fe Conference

by **Ann Humphrey**

The Peopling of the Americas! Now there is a topic guaranteed to generate vigorous arguments among archaeologists, each of whom is convinced that he or she has a piece of the truth. The odd thing is that perhaps each one does, and the place to discover this was in Santa Fe, New Mexico, over the Halloween weekend, 1999, at the Clovis and Beyond conference.

Co-sponsored by the Center for the Study of the First Americans, Clovis and Beyond attracted more than 1400 archaeologists and interested lay people.

Reviewing the history of the search for the first Americans, archaeologist Alan Bryan said that 19th century people felt that the New World should have remains comparable to those in Upper Paleolithic France, but in 40 years, no associations with extinct Pleistocene mammals were found. This solidly entrenched the idea that the New World was empty of people until quite recently. Then in 1927, a Folsom point was found in association with extinct bison, and slightly older points, called Clovis, were associated with other extinct mammals. Everyone then began searching for fluted points, with Clovis as the starting point - the "Clovis First" model. An advanced paleolithic culture was deemed necessary to survive in the subarctic Pleistocene, as the method of entry was assumed to have been across Beringia and down an "ice-free corridor" into an empty landscape. The corridor was closed during the height of the last glaciation, so people had to use it either after 11,000 BP or before about 30,000 BP.

Postulating Clovis people of 11,500 BP as first in an empty landscape leads to some ludicrous scenarios. Bryan, a specialist in South American sites, asked how people could enter Alaska and make it to southern South America in 200 years. Answering his own question, with tongue firmly in cheek, Bryan said it would have required an enormous population explosion, with many women pregnant and leading several small children as they scurried toward Tierra del Fuego. (This idea is so blatantly ridiculous that no archaeologist would dare to espouse it, so how should a dedicated Clovis-Firster deal with the proliferation of ancient South American sites? Deny their antiquity, of course.)

As most Clovis points are found in the southeastern United States, Alan Bryan believes that Clovis developed in the southeast after people had entered, and that the backwash went west. He warned that as some ancient dates for pre-Clovis sites have been disproved, that does not mean that all pre-Clovis dates are spurious.

CSFA Director Robson Bonnichsen presented several competing hypotheses for Clovis origins:

- 1. In situ development by people who were already here
- 2. North Atlantic hypothesis - tradition (Solutrean?) came from Europe to eastern North America
- 3. Goshen/Plainview culture - overlaps (pre-dates?) Clovis

- 4. Intermountain lanceolate - out of Asia?
- 5. Northern paleoamerican hypothesis - Asian from across Beringia
- 6. Did someone move u. the corridor after it opened?

Kenneth Tankersley reminded the audience that while the 1941 peopling of the Americas conference assumed a single line of change, it is much more complicated than that. The Meadowcroft rock shelter produced human bones dated to 14,500 BP, which need to be re-analyzed, because that is even older than Monte Verde, Chile (12,500 BP), a thousand years before Clovis.

George Frison, who was given the "Paleoarchaeologist of the Century" award by Vance Haynes, spoke of the Goshen cultural complex. He said that Goshen underlies Folsom at several sites, and quite probably overlaps Clovis. He also pointed out that cultural remains do not have to be Clovis just because they are beneath Folsom (10,900-10,200 BP).

Albert Goodyear gave evidence of pre-Clovis sites in eastern North America. These are Saltville and Cactus Hill in Virginia, and the Topper site in South Carolina. Whether or not Meadowcroft in Pennsylvania is accepted, he said the other three are pre-12,000 BP. He cautioned that because they are so early, they need to be studied very carefully, so that a good picture of the geological context and paleoecology can be constructed.

Dan Fisher spoke of the effects of environmental conditions on tusk growth in the Columbian mammoths. Tusks show slower growth in winter, and, from modern elephants, very slow growth in the early period after young males have been driven from the herd. It takes several years for normal tusk growth to resume. In the mammoths, data from different kinds of sites show that there was much greater tusk growth near the extinction, which is consistent with the over-hunting hypothesis, not stress-inducing climate change. Fisher tested the technique of storing large amounts of meat under water in winter by experimenting with the 1400-lb carcass of a friend's dead draft horse. The meat came out fine for a lot of reasons, including the growth of *Lactobacillus*, which produced acid and CO<sub>2</sub>, preventing growth of harmful bacteria.

Another use for mammoths was presented by Steve Holen, who said that a lot of shattered mammoth bones were knocked apart by people looking for the best pieces for flake and core tools. Holen believes that steppe-adapted people came across Beringia before 30,000 years ago and that some mammoth sites on the Great Plains, dating between 19,000 and 14,000 BP, show signs of bone quarrying.

Ruth Gruhn, a longtime supporter of ancient South American sites, dismissed what she called the "Clovis first-Clovis everywhere model", stating that South American sites bear no resemblance to Clovis. She said that by the time Clovis appeared in North America, (around 11,500 BP), all of the major environmental zones in South America had already been settled by people whose technologies differed from each other as well as being different from those in North America. She believes people colonized South America well before 20,000 BP.

David Madsen spoke of microblade technology, which is quite efficient in that it gives lots of edges from one small core. As there is no microblade technology in the Clovis tool kit, nor those of Meadowcroft or Cactus Hill, he suggested that if these cultures had progenitors in North Asia, they would have had to arrive before the microblade developments which, in North Asia, were well in place

by 17,000 BP. Solutrean technology was very similar to Clovis, and thus the best candidates for precursors are the 20,000 to 30,000 BP technologies of Europe and North Asia.

And so it went, with speaker after speaker saying that he or she accepted that there were already people here when Clovis first appeared, and that these others arrived "before 12,000", "before 20,000" or "before 30,000 BP". Dealing with skeletal morphometrics, Douglas Owsley and R.L. Jantz said that the very early bones and crania differ widely from North American populations, and if there is any affinity at all with modern populations, it is with Polynesians. Unfortunately for further investigations, both the Buhl skeleton and Minnesota Woman were recently reburied. Geneticists added their voices to the pre-Clovis chorus, with Theodore Schurr presenting masses of data on mitochondrial DNA and Y-chromosome lineages, both of which indicate numbers of migrations by different populations, extending back well before 20,000 BP.

Over the two days of the conference, the focus was on the who and the when, but almost nothing about the how of the entries into the New World. Close to the end, the Smithsonian's Pegi Jodry spoke of watercraft. She said that close to 20,000 years before Clovis, people had watercraft to colonize Australia and other Pacific islands. As for North America, she asked, "No one was on boats on those rivers?", and noted that paleo sites are on both sides of the same river. "Did they swim that well?" She urged archaeologists to at least consider some woodworking tools as useful in boat construction - even expedient boats. To those of us who find sea-going and coastal-entry hypotheses easy to accept, those were encouraging words.

Indeed, the whole Clovis and Beyond conference was encouraging, moving past Clovis as the cornerstone to Clovis as one among many ancient groups, and not at all the first one.

I came out of the conference convinced, more than ever, that there were several different ways people reached the Americas. Although no one spoke of it, it surely seemed to me as if South America could have been populated from the east and from the west, without using North America at all. As for the antiquity of New World sites, I go with the old high school cheer: "Push'em back, Push'em back, Wa-a-a-ay back".