

We acknowledge and thank Joe Span for sharing this find with us and for allowing us to photograph and record it.

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SOME SURPRISING DUNE DATES ON THE WASHITA

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and
Don Wyckoff

If you receive the Newsletter of the Oklahoma Anthropological Survey, you may recall a brief report in 1990 on the radiocarbon dating of a sand dune on the divide between the North and South Canadian Rivers in Dewey County (Wyckoff 1990). The date was assayed on the organic carbon in a buried soil horizon at the base of a low dune along US 270, two miles northwest of Oakwood. The soil dated 6960 ± 150 BP (Beta- 33701). Accumulation of the overlying dune presumably occurred soon thereafter, during the long-term drought dubbed the "Altithermal" by Antevs (1955) which afflicted much of the United States and the Southern Plains in particular, from about 6000 to 4500 BP.

At about the same time, Brady (1989) dated sub-dune soils from four localities along the Cimarron in Alfalfa and Major counties. The soils dated as follows:

Mt. Zion Locality	GX-14708	1200 + 70 BP
Ames Locality	GX-14709	6385 + 285 BP
Brinson Locality	GX-14708	7645 + 280 BP
Campbell Locality	GX-14707	11345 + 425 BP

The soil beneath the Mt. Zion dune appears to be contemporaneous with the Woodland (first millennium AD) Caddo County (a.k/a Copan) Paleosol (Ferring 1982, Lintz & Hall 1983, Hall & Lintz 1984, Hall 1988). The Ames and Brinson localities appear roughly contemporaneous with the Oakwood dune. Dune formation at all three sites presumably occurred during the Altithermal. The Campbell locality date indicates soil formation during the very end of the Pleistocene, with dune formation occurring immediately thereafter in early Paleoindian (Clovis/Folsom) times. Researchers have made many assumptions about the timing of dune formation in western Oklahoma, but these have been the only radiometric dates of the phenomenon obtained up to now.

There is a large (ca. 10 acre) dune several hundred yards northeast of the US 283 crossing over the Washita River at Cheyenne, on property owned by Bill Trammell. The Roger Mills County road crew has been removing sand from this

dune for over ten years, resulting in the exposure of a 19 foot high vertical profile from dune crest to base on its northern end. In the summer of 1993, the authors recorded a measured profile of this exposure, and collected samples for radiocarbon dating from a buried soil (VA1b) immediately below the dune base, from three additional buried soils at heights of 5 feet (IVA1b), 6.5 feet (IIIA1b) and 8 feet (IIA1b) above the dune base. Finally, a heavily carbon-stained layer (IAA1b) 13 feet above the dune base was dated. On the basis of prior studies, we assumed that the sub-dune soil would be roughly contemporaneous with those at the Oakwood, Ames, and Brinson localities; that the three soils in between would be Woodland and Late Prehistoric age; and that the upper soil would date to the Historic era.

As you can see in the following results, we only guessed one right (dates listed for Trammell Dune in stratigraphic order, from top down):

IA1b - 13 ft above base	Beta-70143	102.8 ± .9 (modern)
IIA1b - 8 ft a.b.	NZA-4083	4,670 ± 150
IIIA1b - 6.5 ft a.b.	NZA-4082	14,120 ± 190
IVA1b - 5 ft a.b.	NZA-4081	18,870 ± 230
VA1b - dune base	NZA-4069	22,850 ± 290

Imagine our surprise. The lower third of the dune is clearly of Late Pleistocene Age. The center accumulated during the middle Holocene Altithermal, and the upper part is modern. The indications of alternating mesic/xeric (wet/dry) periods towards the end of the Pleistocene are certainly intriguing. We are frankly stunned to see dune building over such a long interval on a river that is not exactly known for its dune fields (there aren't any). Dune formation is an excellent indicator of xeric conditions, and we plan to seek out additional dune localities along the Washita and adjacent drainages for dating. It has been assumed in the past that most of the dune formation activity in western Oklahoma dates to the Altithermal. Apparently, the truth is considerably more complex.

Acknowledgements

We would like to thank the landowner, Mr. Bill Trammell, for so hospitably granting us access to the dune at Cheyenne. We are also very much indebted to Dr. Joseph W.A. McKee and the staff of the Institute of Geological and Nuclear Sciences, Ltd., Lower Hutt, New Zealand, for their exemplary assistance in assessing, pretreating, and AMS dating the four lower samples from the Trammell dune.

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Here is a small article I thought might be of interest. about real old antiques that surfaced in a Montreal antique shop recently. Who knows how many more of these types of artifacts are floating around the art and artifact trade. This piece was submitted by Ken Bloom.

REAL ANTIQUES

Last October, a sculptor who had bought five female statuettes in a Montreal antique shop four years earlier decided to have the pieces evaluated by experts at McGill University's Redpath Museum in Montreal. "I nearly fainted" Dr. Michael Bisson, the McGill anthropologist who examined them, told the *New York Times*. "It was obvious that these were Upper Paleolithic female figurines."

Dr. Randall White, a specialist in Ice Age art at New York University, confirmed that the figurines were carved 18,000 to 25,000 years ago. With further research, he concluded that they were five of the seven missing so-called Venus figurines excavated in the 1880s from the Grimaldi site across the Italian border from Monaco. Through the antique dealer, the other two figurines were located.

Three of the figures were carved in soapstone, two in serpentine, and two in ivory from the tusks of woolly mammoths. The ivory along with the themes represented, White explains, indicate that these Cro-Magnons living near the Mediterranean during the maximum glaciation in the last Ice Age, had physical contact and a flow of ideas with people farther north as far as Central Europe.

All seven figurines recently found have been reunited with seven other Grimaldi figurines at the Musée des Antiquités Nationales outside Paris, France. The only other known specimen from that site is at the Peabody Museum at Harvard University.

Five of the recovered figurines..... are pregnant women. Dr. Patricia Rice, an anthropologist at West Virginia University, surmises that since many of the figurines have

holes, the men may have worn them as pendants to remind them of hearth and home while they hunted. Until the 1980s, she points out, the favored interpretation related the figurines to fertility, but most fertility rites are associated with agricultural societies, which came thousands of years later.

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ANNOUNCEMENTS

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are hosted by the Museum of Texas Tech University, and co-sponsored by the Council of Texas Archaeologists, The South Plains Archeological Society, and the Lubbock Lakesite Foundation.

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