

SUPPRESSED EVIDENCE FOR ANCIENT MAN IN MEXICO

*The discovery of
tools among
fossilised mammoth
bones, dated at
least 250,000 years
old, extends the
history of humans
in the Americas
well beyond the
dates accepted by
establishment
science.*

by Virginia Steen-McIntyre,
PhD © 1998

PO Box 1167
Idaho Springs, CO 80452, USA
E-mail: dub.ent@ix.netcom.com

Was someone actively hunting mammoth in Mexico a quarter-million years ago? In this article I give the geologic evidence for such a presence and relate the 25-year ongoing battle I've had with the establishment to get the information out to the public.

So, 250,000 years ago—not 25,000, but 250,000. Closer to 275,000, actually—at least that's where the radiometric dates seem to cluster: zircon fission-track dates from two of the overlying volcanic units, and two uranium-series dates from a butchered camel skeleton that was found lying next to some well-made stone tools. No ¹⁴C [carbon-14] dates, of course—the site is much too old for that dating method. And that's just for Hueyatlacono (way-at-LA-co), the youngest of the four sites.

Fifteen metres lower in the sedimentary section, exposed only when the water of the reservoir is abnormally low, lies the oldest site, El Horno (el OR-no)—a mastodon kill site, that one, found with a slim stone flake still wedged between two of the teeth. Someone had tried to remove one of the molars. When? According to two uranium-series dates on the tooth, some time more than 280,000 years ago!

"How exciting! A new discovery?" you ask.

No. The uranium-series [U-series] dates were published almost 30 years ago,¹ and the zircon fission-track dates over 17 years ago.² But the scientific evidence and radiometric dating methods we geologists used to date the archaeological sites fly in the face of an entrenched theory that has only lately been seriously questioned—a theory that declares that humans have been in the New World (the Americas) only since the end of the last ice age some 10,000 to 12,000 years ago. According to this prevailing view, both our data and our dates are "impossible". Both are ignored by establishment science, and my career as a research geologist is ruined as a consequence.

But for me, some good has come out of this after all. With no career to worry about, no job to protect, no boss looking over my shoulder, I'm free at last to speak my mind. I want to give you the true story about these ancient archaeological sites. Who knows, it may be the only time you'll ever hear it!

ANCIENT HUNTERS AT VALSEQUILLO

One hundred kilometres east of Mexico City and few kilometres south of the city of Puebla lies the Valsequillo (bal-say-KEY-yo) Reservoir. It nestles in a high mountain valley guarded by some of Mexico's most famous volcanoes: La Malinche, Tlaloc, Iztaccíhuatl and steaming Popocatepetl.

Surrounding the reservoir are low, buffy-tan badlands: thick, eroded deposits of ancient mudflows, lake beds, stream and overbank sediments, and volcanic ash and pumice layers. Grass-covered now, in the 1960s and 1970s when the climate was drier they were sparsely dotted with cactus and other spiny plants of the Mexican high desert.

For over a century the area has been famous with palaeontologists and museums as a collecting locality. Weathering out of these badlands beds are well-preserved remains of an incredibly rich assortment of ice age (Pleistocene) animals: mammoth, mastodon, glyptodont, horse, camel, dire wolf and sabre-toothed cat, to name a few.

Also weathering from these beds, as first noted over 60 years ago by the Mexican pre-historian Juan Armenta Camacho, are man-made artifacts of flaked flint, quartz and bone.

Juan is the original hero of this story. Born and raised in the city of Puebla and of an inquiring mind, as a lad he would often go exploring along the shores of the reservoir and up the arroyos that fed into it. There, in 1935, he found eroding out of a sediment bank in

the Alseseca Arroyo the fossilised leg bone of an elephant-like creature. Firmly embedded in the bone was a flint spearhead.³ Obviously, someone at some time had actively hunted that animal. But who? And when?

The questions intrigued Juan, and he was hooked. For the next 30 years he spent much of his spare time searching for more evidence of these early hunters. His search was well rewarded. During that time he located well over 100 partial skeletons of butchered mastodon and mammoth as well as many others of the smaller game animals. Missing were the parts rich in meat. Often the bones he found showed signs of human activity. There were intentional cut marks on some of the bones, made during butchering operations. He found splinters of bone, sharpened, smoothed and made into tools; bones cracked to remove the marrow (a food delicacy for primitive hunters even today); a fragment of engraved mastodon pelvis, worked when the bone was fresh; and even a mammoth jaw with an embedded spearpoint.

And what of the archaeological establishment in Mexico City during this time? They ignored Juan and his evidence, declaring that all of it—including the engraving and the spearpoint in the mammoth jaw—was the result of Nature, not Man.

THE VALSEQUILLO PROJECT

Fortunately the research didn't end there. Other scientists besides the archaeological elite in Mexico City learned of Juan's work. They realised its importance and that an in-depth study of the area was imperative—a study that would include input from archaeology, geology, palaeontology and other more esoteric fields. Wheels were put in motion both in Mexico and in the United States; funds were found; and in 1962 the Valsequillo Project was born.

Cynthia Irwin-Williams, a young anthropologist from Harvard, was tapped to work with Juan. That first summer exploring together, they located four sites on the north shore of the Valsequillo Reservoir where fossilised bones and stone tools occurred together *in situ*—that is, *within* the sediment layers and not just lying loose on the surface. From oldest to youngest, these

sites were El Horno, El Mirador, Tecacoxco and Hueyatlatco.

Hueyatlatco was the one they concentrated on during the ensuing field seasons. It had lots of fossil bones and two distinct artifact types: rather simple-looking tools (unifacial tools), made by chipping the edges of natural stone flakes, found in a lower, older sedimentary layer; and more complexly worked pieces (bifacial tools), found in several upper, younger layers. Capping the artifact-bearing beds was a thick cover of younger sediment that contained several volcanic ash and pumice layers.

Both tool types included projectile points (spearheads) and both were associated with butchered bones from very large mammals such as the mastodon and mammoth. This was exciting news! It meant that the tool-makers, whoever they were, were actively hunting and killing these large prey, not simply cutting up a dead carcass they happened upon.

Next step was to date the Hueyatlatco site, but a problem quickly arose. No carbon (charcoal, wood, shell) had been preserved at any of the four sites including Hueyatlatco. Without carbon there can be no ¹⁴C dates, and ¹⁴C is the common radiometric method used to date archaeological remains in the New World. There was fossil bone in plenty, and bone usually contains carbon, but the bones from these sites had all been permineralised, fossilised, turned to stone. Whatever carbon had been there was now gone.

And the sites just *had* to be dated! Evidence from two other areas in Mexico where ancient stone tools had been found—Caulapan, about five kilometres northeast of Hueyatlatco, and Tlapacoya, south of Mexico City—suggested that Hueyatlatco, the *youngest* of the four sites found by Armenta and Irwin-Williams, could be as old as 22,000 years. This would make it more than twice as old as any date accepted in the 1960s as evidence of humans in the New World. Textbooks would have to be rewritten. It would make our careers!

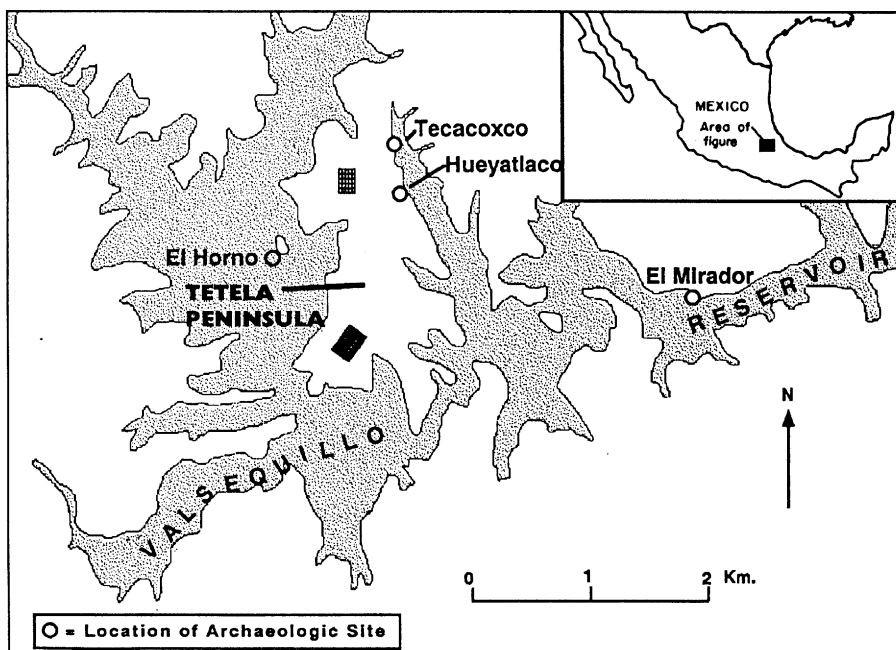
TESTS ON THE TEPHRA LAYERS

It was the lack of carbon and the need to date Hueyatlatco that brought me to the project in 1966. I was a young, enthusiastic graduate student at the time—a volcanic ash specialist (tephrochronologist) looking for an interesting research project for my doctoral dissertation.

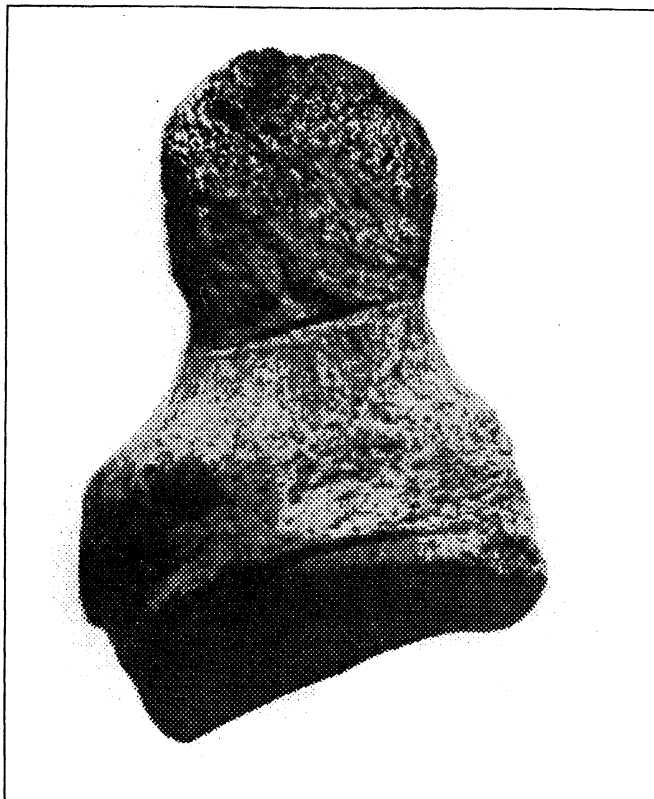
At the site itself were several overlying younger ash and pumice layers (tephra layers). The surrounding badlands contained hundreds of other volcanic deposits. On nearby La Malinche volcano, the project geologist Hal Malde had already dated a series of tephra layers by the ¹⁴C method, using charcoal from the carbonised logs they contained.

Employing the microscope techniques I had learned at the university, I was certain I could help the other project scientists date their butchered bones and stone tools. I would match up the undated volcanic layers at the site with the dated layers on the volcano. Find even one match, and I had a pair of samples that came from the same eruption. Same eruption, same date. The site would then be dated indirectly. Simple—or so I thought!

So my work began. Years went by. I examined tens of samples, hundreds of samples! No luck. No correlation.



Map of the area. The sites discussed lie along the north shore of the Valsequillo Reservoir, south of the City of Puebla.



Mastodon phalange (toe bone) with deep cut encircling the base, found in the El Horno excavation. (Armenta, 1978, fig. 61-1)

JEALOUSY AND ACCUSATION

Dating her sites was only one of Irwin-Williams' concerns during those years. She also had to contend with the insane jealousy of a highly placed archaeologist in Mexico City—a man who did all he could to discredit her, Armenta and their work.

In a series of moves that sound like a plot for a TV soap opera, they were accused in print of incompetence, with dark suggestions of worse things.⁴ Massive excavations were made by a rival team of archaeologists only metres from her trenches.⁵ Armenta's life-work was confiscated and moved up to Mexico City,⁶ and he was forbidden by law to do any more fieldwork of any kind, ever.

Cynthia easily refuted the charges against them,⁷ but it obviously was a difficult time for her, for Juan, for us all.

"IMPOSSIBLE" URANIUM-SERIES DATES

Meanwhile, other scientists were also trying to date the site. In 1968 Barney Szabo, a geochemist with the United States Geological Survey (USGS), wanted to try the then-new radiometric method on the fossilised bones—the uranium-series method.

Cynthia sent Barney a molar from the butchered mastodon at El Horno, a pelvic bone from the butchered camel skeleton associated with bifacial tools at Hueyatlaco, and a bone associated with the one stone-flake scraper that made up her "site" at Caulapan. (Caulapan had already been dated at approx. 22,000 years by the ¹⁴C method, using fossilised snail shells found next to the scraper.)

The dates came back.⁸ Irwin-Williams was delighted with the ones for Caulapan: 22,000 ± 2,000 years by one U-series ratio; 20,000 ± 1,500 years by the other. They agreed closely with the ¹⁴C date on the fossilised snail shells: 21,850 ± 850 years.

But oh, the other dates!

The butchered camel pelvis from Hueyatlaco dated 10 times older than the oldest date we had ever considered: greater than

180,000 years by the first ratio; 245,000 ± 40,000 years by the second. And the El Horno dates were even "worse": greater than 165,000 years by one ratio; *greater than 280,000 years* by the second!

Cynthia ignored these new dates, calling them "impossible".⁹ She considered the 22,000-year ¹⁴C date for Caulapan valid for her other Valsequillo sites as well—the *only* valid date.¹⁰

"Poor Barney!" the rest of us thought. "His methods only work on young material."

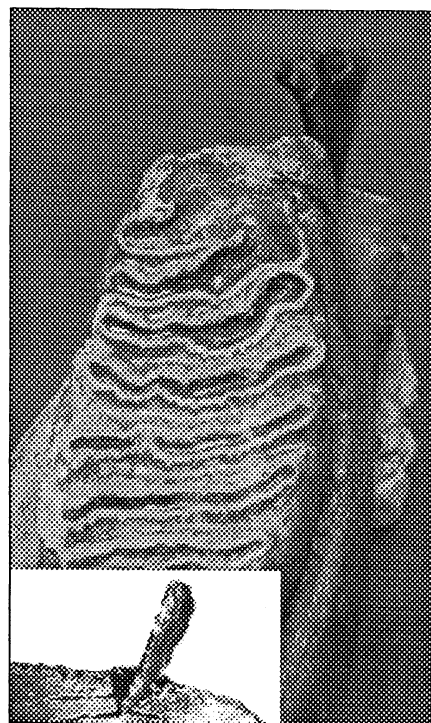
PARADIGM SHIFT

Although the evidence for very ancient hunters was clear, we other scientists on the project had our politically correct blinders on. Since the sites "couldn't be that old", we assumed out of hand that something was wrong with Barney's methods—until we began to look more closely at the sites, especially the Hueyatlaco site, and at our own lack of results.

Hard to believe, but it took *seven years* of negative results at the microscope before my thinking began to change. What if Barney's dates were correct? If so, I would never find that elusive correlation I was looking for between a dated volcanic ash layer on La Malinche volcano and one of the undated ashes at the Hueyatlaco site. The matching layer I was seeking would, in reality, lie deeply buried in the flanks of the volcano, covered over with a quarter-million years' worth of younger deposits!

As I began to look at the problem with new eyes, it was obvious that, geologically speaking, the Hueyatlaco site was *old*. The sediments were all highly weathered. The volcanic glass was turning to clay. There were many buried soils in the overlying sediment pile, each one representing hundreds if not thousands of years when the landscape just sat there with little deposition or erosion. The sediment cap over the artifact-bearing layers was at least 10 metres thick and probably had been much thicker at one time. Erosion by the nearby river had cut down through that cap at least 50 metres.¹¹

A *quarter-million* years? That meant that if we were ever going to date the site using other than the controversial uranium-series method, we would have to stop thinking "New World" with its comfortable ¹⁴C dates and start thinking "Africa". Only in Africa, with the early hominid research going on there, would we find the means to date such old archaeological material.



Mandible (jawbone) from a mammoth skeleton discovered by Armenta near the small hamlet of Arenillas, north shore, Valsequillo Reservoir. Protruding from the bone is a flint spearpoint. Inset: Another view of the spearpoint in place, showing the damage it caused to the bone. (Photos from Armenta estate collection)

ELATION OVER ZIRCON FISSION-TRACK DATES

Fortunately, the scientists working in Africa had faced a similar problem to ours and had come up with several radiometric dating methods besides the unsuitable ^{14}C method. And most of those methods required volcanic ash!

In 1973, early sites in Africa were commonly dated radiometrically using materials from overlying volcanic layers. The potassium-argon method was popular, but it required lava flows and/or potassium-rich mineral crystals. We had neither at Hueyatlaco.

But we did have tiny zircon crystals (very tiny, about the size of a grain of sugar) in the tephra samples. This meant we could use the zircon fission-track dating method on the younger volcanic ash and pumice layers exposed in the archaeological trenches. Dates for these tephra units would give a minimum age for the underlying, older artifact beds.

In 1973 Chuck Naeser, another geochemist with the USGS, offered to run the zircons for us. We didn't ask him for precise data at the time, as that would have required weeks of hard labour. We only wanted "the big picture": to know if his zircon dates would fall closer to Barney's "impossible" 250,000-year uranium-series dates or to Cynthia's "politically correct" 22,000-year date.

The dates came back with two sigma numbers—meaning that statistically there is a 95 per cent possibility that the actual measured date falls within the stated range. Even with a large plus or minus value, Chuck's dates agreed with Barney's: $600,000 \pm 340,000$ years for zircons from an overlying pumice-rich mudflow layer; $370,000 \pm 200,000$ years from an overlying air-fall ash layer.¹² Cynthia's wishful-thinking date of 22,000 years was out of the running.

I was elated! Several lines of geologic evidence, including six radiometric dates, placed big-game hunters in Mexico a quarter-million years ago. As far as I was concerned, it was an open-and-shut case.

How naïve I was!

ESTABLISHMENT DENIAL

It was the geologists versus the anthropologists; fact versus theory. Geologic evidence said the Valsequillo sites were *old*. Entrenched theory said the sites were *young*.

In a classic case of argu-

ing from theory to fact, then throwing out the facts that don't fit, Cynthia Irwin-Williams wrote:

"These [bifacial] tools surely were not in use at Valsequillo more than 200,000 years before the date generally accepted for development of analogous tools in the Old World, nor indeed more than 150,000 years before the appearance of *Homo sapiens*."¹³

Privately, she referred to those of us involved with dating the site as "the lunatic fringe".¹⁴ She ceased all communication with us from that time forward.

PUBLICATION WOES

If this were a perfect world, the Valsequillo players would have

sat down at the same table and debated the issues publicly until the truth came out. But it isn't. And we didn't.

Cynthia Irwin-Williams was an establishment anthropologist with degrees from prestigious schools and influential friends in the east. I was a geologist with a PhD from a small western university and my dad was a meat cutter. Her friends, especially her men-

tor H. Marie Wormington, advised her to ignore me and the whole geological thing and preach the 22,000-year date for *all* her sites. And she did.¹⁵

Meanwhile, we geologists were having a hard time getting our old dates for the sites into print. We started out well with an exciting news release in the fall of 1973. The story was picked up by the wire services and quickly circled the globe. But then, when it came to the critical research paper, it was one delay after another.

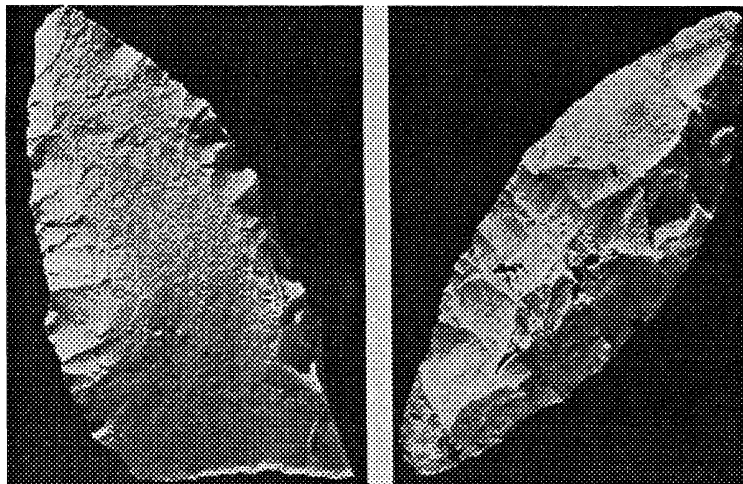
From 1975 to 1979 we waited for the paper to be printed in a scientific book. After four years, the third editor decided not to publish the book at all. The manuscript was returned.

In 1980 I submitted the paper to the editor of a popular science magazine who had requested it. After several months' delay, he regretted that "the manuscript had fallen down behind the file cabinet and had been lost". It was returned.

By 1980 my career as a research geologist was suffering. My professional correspondence, both



Overview of the Hueyatlaco site in 1973 during excavation to expose the sedimentary layers and to collect samples for zircon fission-track dating. The artifact-bearing beds appear at lower left; the volcanic ash and pumice layers occur in the overlying (younger) sediment cap, visible at middle and upper right. (Photo by Hal Malde)



Representative artifacts from Hueyatlaco. Left: edge-retouched tool. Right: bifacial tool. The edge-retouched tool is older. (Photos by H. S. Rice: Irwin-Williams estate)

domestic and foreign, fell to near zero. My government job disappeared. My contract as an adjunct professor at one of the state universities was subsequently dropped. And were my geological colleagues avoiding me?

You couldn't blame them, really. In 1973 we geologists made a startling announcement: we had found evidence for mammoth hunters in Mexico 250,000 years ago. Seven years later, no supporting data were forthcoming. Where were the facts? Were the dates wrong? Were we wrong? Why no information? My future as a professional scientist looked grim.

I then submitted the manuscript to an acquaintance of mine: geologist Steve Porter, editor of the high-powered scientific journal *Quaternary Research*. Steve was a gem. He wrote that he did not care how controversial our findings were as long as we had the scientific data to back them up. He sent the article out to other scientists for review. It was approved, accepted for publication and finally saw print in 1981.¹⁶

But it was too late. That 22,000-year date for *all* the Valsequillo sites, including Hueyatlatco, had flooded the literature and was now set in concrete.¹⁷

So there I was in 1981: stonewalled, jobless, no career, damaged reputation, mightily depressed. For 13 years I dropped out of science completely. During that time, Armenta, Irwin-Williams, Wormington and the jealous archaeologist died; Malde and Szabo retired; and I cared for elderly relatives and became a professional flower gardener.

A NEW START, BUT THE SAGA CONTINUES

Then things began to turn around.

In 1993, Cremo and Thompson's book, *Forbidden Archeology*, was published. Eight years in the writing, it has a nice section on Hueyatlatco and my problems with it.

In 1994 I did a short segment for the *Sightings* TV program, and in 1996 did a larger segment for the network special, *The Mysterious Origins of Man*.

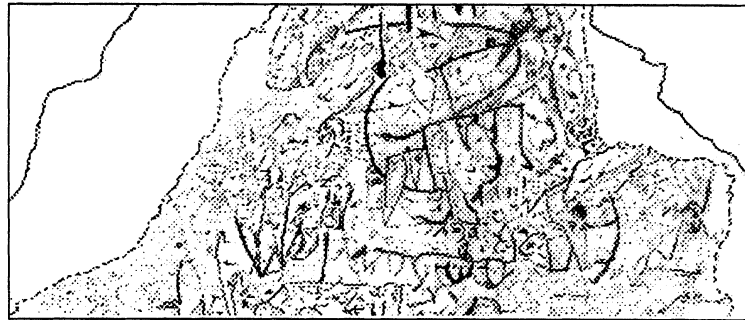
In 1997 I gave my first lecture on Hueyatlatco in over 20 years, did a bit of fieldwork in Mexico and examined the late Irwin-Williams' files. (Her critical Valsequillo materials have disappeared, as has most of my correspondence with her.) A wealthy philanthropist became interested in the project and we sent away material for more radiometric dates.

In July 1997, I "just happened" to learn that primitive human skull fragments are coming to light in Valsequillo-like sediments west of Mexico City. According to entrenched theory, those fragments can't be there. Establishment scientists are involved. They are trying to date the fragments using the ¹⁴C method. I told them to try the uranium-series method instead, and not to forget all the work we've already done at Hueyatlatco.

In March 1998, in response to news about the well-documented Monte Verde site in Chile,¹⁸ establishment archaeologists at the 63rd Annual Meeting of the Society for American Archeology admitted that humans just may have entered the New World earlier than they thought—perhaps as long ago as...15,000 years!

Things are getting interesting. Stay tuned in!

∞



Scribed fragment of mastodon pelvis, showing a four-tusked mastodon and other animals. The bone was worked while it was still fresh. It was found in the 1950s, weathering from Valsequillo sediments 50 metres north of what later would be the main excavation trenches at Hueyatlatco.

(Photo by D. Hiser; sketch by Armenta: Armenta estate collection)

Endnotes

1. Szabo, B. J., H. E. Malde and C. Irwin-Williams (1969), "Dilemma posed by uranium-series dates on archaeologically significant bones from Valsequillo, Puebla, Mexico", *Earth and Planetary Science Letters* 6(4):237-244.
2. Steen-McIntyre, V., R. Fryxell and H. E. Malde (1981), "Geologic evidence for age of deposits at Hueyatlatco archeological site, Valsequillo, Mexico", *Quaternary Research* 16:1-17.
3. Armenta Camacho, J. (1978), "Vestigios de labor humana en huesos de animales extintos de Valsequillo, Puebla, Mexico", *Consejo Editorial del Gobierno del Estado de Puebla*, Puebla, Mexico, p. 11 (128 pp; published privately).
4. Lorenzo, J. L. (1967), "Sobre Métodos Arqueológicos", *Boletín del Instituto Nacional de Antropología e Historia*, Mexico City, Junio 1967, pp. 48-51.
5. Irwin-Williams, C. (1967), "Comments on Allegations by J. L. Lorenzo Concerning Archaeological Research at Valsequillo, Puebla", *Miscellaneous Publications*, Paleoindian Institute, Eastern New Mexico University, Portales, NM, USA, p. 2 (7 pp.).
6. Armenta Camacho (1978), op. cit., p. 120.
- 7a. Irwin-Williams, C. (1967), op. cit.

- 7b. Irwin-Williams, C. (1969), "Comments on the associations of archaeological materials and extinct fauna in the Valsequillo region, Puebla, Mexico", *American Antiquity* 34(1):82-83.
8. Szabo, B. J. et al. (1969), op. cit., p. 241.
9. Ibid.
10. Irwin-Williams, C. (1978), "Summary of archaeological evidence from the Valsequillo region, Puebla, Mexico", in Browman, D. L. (ed.), *Cultural Continuity in Mesoamerica*, Mouton, The Hague, Paris, pp. 7-22.
- 11a. Steen-McIntyre, V., R. Fryxell and H. E. Malde (1981), op. cit.
- 11b. Cornwall, I. W. (1971), "Geology and Early Man in Central Mexico", *Proc. Geologists Assoc.*, vol. 82, part 3, pp. 379-392 (p. 388 and fig. 3), and cited references.
12. Steen-McIntyre et al. (1981), op. cit., table 2.
13. Szabo, B. J. et al. (1969), op. cit., p. 241.
14. Cremo, M. A. and R. L. Thompson, *Forbidden Archeology*, Bhaktivedanta Institute, Govardhan Hill Publishing (PO Box 52-211, Badger, CA 93603 USA), 1993, p. 366 (914 pp); condensed edition: *The Hidden History of the Human Race*, 1994 (322 pp.).
15. Irwin-Williams, C. (1978), *ibid.*, pp. 18-20.

16. Steen-McIntyre, V. et al. (1981), op. cit.
- 17a. Lorenzo, J. L. (1978), "Early Man Research in the American Hemisphere: appraisal and perspectives", in Bryan, A. L. (ed.), *Early Man in America from a Circum-Pacific Perspective*, Occasional Papers No. 1, Department of Anthropology, University of Alberta, Arch. Res. Inst., Edmonton, Alberta, Canada, pp. 1-9 (fig. 1, p. 4).
- 17b. Canby, T. Y. (1979), "The Search for the First Americans", *National Geographic* 156(3):330-363, September 1979 (pp. 350, 352, 354).
- 17c. Bryant Jr, V. M. (1992), "In Search of the First Americans", *1993 Yearbook of Science and the Future*, Encyclopaedia Britannica, Inc., Chicago, pp. 8-27 (pp. 19, 24).
18. Meltzer, D. J. (1997), "Monte Verde and the Pleistocene Peopling of the Americas", *Science* 276:754-755, and references.

About the Author

Dr Virginia Steen-McIntyre is a geologist who specialises in the study of volcanic ash layers, especially those used to date ancient archaeological sites. At present she is not gainfully employed. She and her husband live in a small mountain community west of Denver, Colorado.