

Unearthing Texas' past

Source: <http://sci.tech-archive.net/Archive/sci.archaeology/2008-02/msg00446.html>

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 - *Date:* Sun, 17 Feb 2008 02:49:43 -0800 (PST)
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"Michael Collins, head of the Gault Project and a research associate of the Texas Archeological Research Laboratory at the University of Texas holds up photos of last year's promising test dig, pointing at layers of dirt that look like layers of a cake. The disturbed soil at the top coughed up the likes of cigarette filters, gloves and beer cans. The five feet of gray clay below that dates back 9,000 to 13,000 years. That's where archaeologists found broken bits of tools and projectile points. But it's what lies lower that's most intriguing -- it could hold artifacts deposited there up to 16,000 years ago, well before the time of the Clovis, who lived in most of the United States, as well as Mexico, Central America and even parts of South America.

If the archaeologists can find artifacts in that older layer of soil, it will help prove that another culture lived in this area before the Clovis. That would add ammunition to Collins' argument that humans spread out from Africa, Europe and Asia, making their way along the food-rich coastlines and into North America some 20,000 years ago."

Pictures at the cite.

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At dig, archaeologists, novices get the dirt on how long humans have lived here.

By Pamela LeBlanc

AMERICAN-STATESMAN STAFF

Sunday, February 17, 2008

I'm crouched in a hole, raking a trowel over a one-meter-square patch of clay, hoping the next clump of dirt will expose something incredible, like a prehistoric arrowhead. Instead, there's just more clay, which I scrape into shavings the color of dark chocolate. A few snail shells liven up the mix, but otherwise nothing but dirt and stone.

Still, it could happen. Just a week before my visit, Ashley Lemke, a University of Texas student who also is digging today, uncovered a

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perfect projectile point in this same pit. So I keep toiling, sifting through the earth in one of the oldest, most important continuing archaeology sites to reveal traces of North America's earliest humans.

Work like this goes on week after week at the Gault site near Florence, where nearly 1.5 million artifacts have been uncovered since 1998. Thoroughly 35-acre site in an area rich with springs was first excavated in 1929. Projectile points of all sizes, stone tools and bits of chert (flintlike stone chipped off in the point-making process) are the most common finds, but mammoth bones and other ancient fossils have also turned up.

It's slow, tedious labor, but for volunteers like me — and some 4,000 of us have channeled our inner archaeologists at Gault in the past decade — it's a chance to learn more about the people who lived here 130 centuries before European explorers encountered Native American tribes.

The thermometer reads 28 degrees when we pull into the pasture above the dig site last month. My dad and his wife are volunteering too, and we walk down a slope and past a spring-fed creek to a white Quonset hut surrounded by electric wire to keep out the resident cows that graze the property under a lease agreement.

"Archaeology sites are like snowflakes — each is unique," Michael Collins, head of the Gault Project and a research associate of the Texas Archeological Research Laboratory at the University of Texas, tells us. Collins recently purchased this land with his own money and donated it to the New Mexico-based, nonprofit Archaeological Conservancy, which will preserve the site and regulate future research here. Through his work at UT, Collins will continue to lead excavations at the site.

The pasture, named for the Gault family who once farmed the land, made its debut into professional archaeology in 1929 when J.E. Pearce, founder of the UT archaeology department, excavated here. Over the years, visitors could pay a fee to dig at the farm, hauling off what they found and leaving behind shallow craters.

Today, it's considered the most prolific site of its kind. Gault has generated more than half of the excavated artifacts from the Clovis people, long considered the first human culture in America. Until recently, most archaeologists believed the Clovis came from Asia across the Bering Strait land bridge at the end of the last ice age about 13,500 years ago, walked down the ice-free corridor of Western Canada and slowly spread across the Americas.

Collins and others believe people arrived in the Americas much earlier, probably by boat along the North Atlantic and North Pacific shores. And they believe this site will help prove it. "What we're trying to do here is expand on our knowledge of the peopling of the

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Americas," Collins says.

Even though the Gault site was dug and looted for years, archaeologists can still learn from it. Researchers come from around the world to dig, and the artifacts they've turned up are changing what experts believe about our pre-history.

Archaeologists once thought the Clovis were strictly mammoth hunters, following their prey across the prairies. Now they believe the Clovis were more a domestic and less nomadic people who also hunted turtles, alligators, fox, opossum and bison. They lived in small foraging groups that periodically gathered at this site, attractive for its springs, available food and supply of chert to make stone tools.

While the site is known for its artifacts from the Clovis period, an early Paleoindian culture generally believed to date between 13,000 and 13,500 years ago, it's what may be buried even deeper that excites Collins and the rest of the Gault Project staff.

UT leased the site from 1998 to 2002 to conduct excavations. The water table was high at the time, and didn't drop until near the end of the dig. When a small test plot was excavated down about nine feet during those final days, it produced a sample of chert flakes — a promising sign that pre-Clovis artifacts could be uncovered. Last spring, the Gault Project returned and dug in the same vicinity, until rains stopped work. Now that the dig is resuming, Collins and other scientists are eager to see if they will find more than flakes as they lower the level of their pit. This time they'll dig until they hit solid rock, or deposits far greater in age than the likely time of human presence. They're not sure how deep that will be.

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If the archaeologists can find artifacts in that older layer of soil, it will help prove that another culture lived in this area before the Clovis. That would add ammunition to Collins' argument that humans spread out from Africa, Europe and Asia, making their way along the food-rich coastlines and into North America some 20,000 years ago.

"We had hints and wisps of pre-Clovis in several areas, but this (area) was the best expression of it," Collins says.

Our task today is to lower the floor of our plot by 10 centimeters, or

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about 4 inches.

We sweep the dirt and rock we scrape from the bottom of the plot into buckets, which we'll spread on a screen and hose off later. We're working in a layer that holds cultural material dating back about 9,000 years. Here lies a layer of burned rock midden. Tribes that lived here cooked their food in rock-lined ovens dug into the ground. The remains of those old ovens long ago crumbled and mixed into the dirt, and we find lots of blackened rocks to prove it.

"It's always really exciting," says Lemke, the UT student. "You sit in a classroom and read about this for four years, but this is totally different."

Indeed. I've never looked at dirt this way before.

As we dig, someone on the other side of the hole plucks a broken projectile point out of the edge of his plot. My little crew digs more furiously, hoping to make a similar discovery. A few minutes later, someone who found the point pulls out an ancient rabbit bone.

The staff is encouraging. Sometimes you don't see the artifacts until they're spread on a screen and washed out, we're reminded.

"You never know what might turn up on the screen," Collins says. "That's where we get eureka moments."

After lunch, staff paleontologist and volunteer coordinator Cinda Timperley hands us a soil color chart. We flip through pages to match the color of the soil in our pit with the samples on the pages. She jots down the information in a record book. A soil's color, along with its texture, composition and structure, help archaeologists interpret its origins, age and condition.

Then the exciting part — we haul our buckets outside the tent to sift for any finds. We top off the dirt-filled pails with water pumped from a nearby pond, then dump the contents onto a waist-high screen. I aim the hose at the screen of debris and water belches slowly out, washing away the sticky mud. Within a few minutes, I look like someone's fired a cannon full of pond scum at me.

After 15 minutes of mud wrestling, we're left with a tray full of stones and snail shells — the payoff of a day's work. "Sometimes you look at what you find in the screen and think 'How could I have missed that?'" Timperley says.

We sort further, retrieving shapeless bits of chert and dropping them into resealable plastic bags to be sent to the lab for closer inspection. We toss most of the limestone — except the blackened bits that could be parts of rock ovens. On this day, no carefully carved projectile points or impressively ancient bones appear.

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But they are there, somewhere. Probably just a centimeter or two deeper in that hole we were digging.

Gault volunteers

To volunteer at the Gault site, contact Cinda Timperley at ctimperley@xxxxxxxxxxxxxx Membership in the Gault School of Archaeological Research is not required to volunteer, but members have priority. Membership is \$10 for students; \$45 for adults; and \$65 for families. The school also needs non-monetary donations of everything from equipment to electrical work. For more information, call (see cite)

<http://www.statesman.com/life/content/life/stories/other/02/17/0217dig.html>