## In Brewster County, Buried Hearths Tell an Ancient Story of Plants and People

Interview: Andy Cloud, KRTS Nature Notes

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## **Transcript by Andrew Stuart**

Cacti and succulents, grasses, shrubs and trees – arid as it is, the Trans-Pecos is filled with plant life. In fact, the plant diversity of the Chihuahuan Desert far exceeds that of lusher parts of Texas.

But for a hungry desert dweller, there's one pressing question about that thorny abundance – how to turn it into food.

As early as 11,000 years ago, Native peoples had cracked the code. In an arroyo in Brewster County, archeologists recently excavated the continent's oldest known earth oven. Earth ovens would become a cornerstone of indigenous life in the Southwest.

From Midland to Lubbock, West Texas sites have shed light on the first North Americans. Archaeologists call these people Paleoindians. As early as 13,000 years ago, they hunted mammoths and giant bison on the plains.

But evidence of Paleoindian life in the Trans-Pecos has been scarce. The Center for Big Bend Studies, at Sul Ross State University in Alpine, pursues archeology in the Big Bend. Finding Paleoindian material has been a priority.

In 2010, the Center caught a break. Homer Mills, manager at Brewster County's O2 Ranch, was hunting a lost cow when he noticed blackened earth in an arroyo bank. The Lykes Foundation owns the O2, and collaborates with the Center. Mills thought he'd found something important.

He was right. The arroyo had exposed a dozen buried hearths – the oldest dating back 11,000 years.

Andy Cloud is the Center's director. He's excavating the Paleoindian find – called the Genevieve Lykes Duncan Site.

"You're walking on the surface of the site – without that arroyo, you'd have no clue there was anything buried down below," Cloud said. "We've been looking for this kind of a site for years and years out here, and this is one of the first that we actually found that's buried and intact."

Agave, sotol, lechuguilla – they're signature plants of the Big Bend. In pits with heated rocks, the Paleoindians buried the hearts of these plants, and let them cook for days.

"What it provides you is like a simmer-switch on your stove," Cloud said. "You can cook at lower heat and longer duration. The Natives found that there were plants out here – there was a lot of sustenance locked up in complex sugars, and normal cooking wouldn't break those down where you'd get the sustenance. Opening up that food source allowed the desert to have a much greater carrying capacity for human populations."

Specialists have analyzed charcoal and plant particles from the ancient hearths. The Paleoindians cooked agaves. They used other familiar plants to heat the rocks.

"I like to cook wood fire in the backyard with mesquite – the prehistoric inhabitants had a similar preference," Cloud said. "Mesquite shows up left and right. We had cane cholla show up. We had creosote bush show up. Now, you think – do you want to cook with creosote bush? Maybe not. We're not finding a whole bunch of it. Maybe you throw a sprig or a few springs in to keep the bugs down."

Archaeologists have found more recent earth ovens outside the Southwest. They were used to cook wild onions in present-day Central Texas, palm-tree hearts in the Mississippi Delta.

But earth ovens were central to the "desert lifeway" – they were a fixture of Native life here into the 19th century. The Spanish called Apaches of the Trans-Pecos the "Mescalero" – for their practice of roasting mescal, or agave, in earth ovens.

The ovens may have been invented here.

Cloud brought Steve Black, a Texas State University anthropologist, to the O2 site. Black is regarded as the "guru" of earth ovens, Cloud said.

"He basically gave me his blessing on everything I've been saying about this being the earliest intact example," Cloud said. "And he actually did say that he had long suspected that maybe the desert was where this technology first took hold. We can't yet prove that, but there is a suggestion that that could be the case. Here you had a huge storehouse of food that was untapped. Human ingenuity, their needs – it could well have happened here."

The Genevieve Lykes Duncan site is a major archeological find. And it tells an ancient story of humans and the natural world in West Texas.