



The missing city on the plains

Following in the footsteps of an ill-fated conquistador, archaeologists may have unearthed one of America's biggest pre-Columbian settlements. Daniel Cossins reports

IN JUNE 1601, Juan de Oñate, conquistador and governor of the fledgling colony of New Mexico, marched eastwards in search of Quivira, a fabled land of gold thought to lie near an undiscovered coast. He found no treasure and no ocean. But according to Spanish records, Oñate's expedition did turn up an intriguing discovery – one whose true significance is only just coming to light.

In testimonies given on their return, Oñate's soldiers described their journey across what are now the US states of Texas, Oklahoma and Kansas. They spoke of "grasses so high that in many places they hid a horse", Apache horse riders hunting vast herds of "monstrous" bison, and friendly encounters with a tribe they called the Escanxaques. Then the Spanish recounted how they were led to a settlement

of people they called the Rayados so large that it would have taken two days to walk across it. They called it Etzanoa and reckoned it was home to some 20,000 people.

Scholars have long been sceptical about Etzanoa. Conquistadors were notorious for embroidering their tales to impress the Spanish authorities, and many believe that the people of the Great Plains lived in small, scattered settlements – not sprawling proto-cities.

Now, fresh translations of the soldiers' testimonies have led one archaeologist to claim he has found Etzanoa. If true, and if it really was as extensive as Oñate reported, it wouldn't only shake up our picture of how the people of the Great Plains lived before Europeans arrived. It would also remind us

that the remains of large and socially complex settlements can hide in plain sight.

Modern attempts to find Etzanoa have relied on an enigmatic map drawn by a man called Miguel. He is thought to have been from Quivira, but captured by the Escanxaques as a boy. He was taken prisoner by Oñate's men as they returned from Etzanoa in 1601, during a day-long skirmish with the Escanxaques, who had turned on them. He was later taken to Mexico City, where he gave testimony and sketched the landscape.

The first attempt to find the place depicted in the "Miguel map" came in 1982, but it led nowhere. Four years later, Susan Vehik, an anthropologist at the University of Oklahoma, published a breakthrough. She realised that the portion of the map that dealt with the



JIM RICHARDSON/GETTY

Great Plains depicts north to the left, rather than the top, and from that figured out that the settlement that Oñate's expedition reached was either along the Walnut river in southern Kansas or possibly at Beaver creek near the border between Oklahoma and Kansas. "With the information available to this point, it is not really possible to separate [them] as possible points of destination," Vehik wrote.

Since then, fresh leads have come to light. In 2013, a group of historians and linguists led by Jerry Craddock at the University of California, Berkeley, published new translations of documents associated with Oñate's expedition: the official account, written by one of the friars who travelled, and testimonies from five soldiers questioned

in Mexico City in 1602. They also posted a full-colour scan of the original Miguel map, including corrections to the names of some of the settlements.

That was enough to pique the interest of Donald Blakeslee, an archaeologist at Wichita State University in Kansas. Blakeslee had previously been involved with an attempt to retrace the route of Francisco Vázquez de Coronado, who led the first Spanish expedition to the Great Plains in the 1540s. As such, he has a keen appreciation for the

"Modern attempts to find Etzanoa have relied on an enigmatic map"

pitfalls of using historical accounts to find archaeological sites. "You have to tread carefully," he says. But the new translations convinced him to follow in the footsteps of Oñate. "I was so impressed," says Blakeslee. "Earlier versions were a bit murky, but this was all so vivid. I thought, 'wow, I can almost picture these places'"

Before long, Blakeslee was out in the fields and woods around the confluence of the Arkansas and Walnut rivers, not far from Arkansas City in southern Kansas, comparing the map and landmarks described in the documents with the lie of the land as it is today.

His explorations brought him to one of the two swathes of land that Vehik had identified 20 years earlier. Scattered archaeological

A Wichita group
building a lodge in 1904

The Mississippian metropolis

In southern Illinois, just beyond the urban sprawl of East St Louis, the flat plains give rise to a big grassy knoll that marks the centre of North America's first city.

Cahokia, as it is known, began in the 9th century as a small collection of villages inhabited by the Mississippian people. At its peak, 200 years later, it was home to as many as 20,000 people - and it was quite a sight. A 30-metre-high terraced structure hewn from the clay-heavy soil overlooked a grand plaza, outside which people lived in thatched huts scattered across the landscape.

Analysis of bones and teeth from the site suggest that people came to Cahokia from far afield. What brought them there? Some archaeologists think it was down to politics and economics: a powerful leader created a new form of governance and people flocked in to take advantage of the urban life it made possible. Others argue that the city's emergence was the result of a religious revival, perhaps inspired by a star that went supernova in 1054 and lit up the night sky for almost a month. Either way, it didn't last long. Cahokia seems to have been abandoned by the middle of the 14th century.

The fact that it existed at all shows that Native Americans didn't always live nomadic lives, scattered across the plains in small groups. But it was an outlier - the only known example of urban living in North America before the Europeans arrived. Hence why people are excited by the recent discovery of what seems to be a similarly sized settlement in southern Kansas (see main story).



HISTORIC COLLECTION / ALAMY/STOCK PHOTO

evidence of habitation, such as pottery and arrowheads, had been found here as early as the 1950s - only now he was walking in the footsteps of Oñate, matching descriptions of his journey with landmarks on the ground.

"If you go out there and spend time in the landscape, things fall into place," says Blakeslee. Sure enough, he found the spot where he thinks the Spanish had to swing away to the east so that their ox carts wouldn't get stuck on rough ground, and the hill from which they first saw the Rayados across the river. He even located what he suspects is the rocky ravine from which the Escanxaques attacked Oñate's party as they sought to begin their journey home. "Nobody had even looked for it before," says Blakeslee. "But the accounts are very specific, and once you scour the landscape you see that there is only one ravine that could have hidden thousands of people."

In spring 2015, having secured permission from the landowner, Blakeslee drafted in archaeologists from the National Park Service and the Kansas Historical Society. They used remote sensing to search below ground for evidence of habitation, and they struck gold. Well, not quite. What they found was evidence of clusters of houses surrounded by gardens, which fits nicely with the eyewitness testimonies described by Oñate and his men. As Diego de Ayardía, a soldier on the expedition, reported, the houses "were all

made of poles stuck into the ground, covered with straw, and closed on top like tents" separated by a series of small "fields of corn, beans, and squash".

The archaeologists could also see the large storage pits described by Oñate and his men, not to mention pottery and stone shards thought to be debris from the manufacturing of tools to butcher game and scrape hides.

"It was clearly a well-populated area," says Vehik. "There is no doubt about that." What isn't clear, she says, is whether the artefacts that archaeologists and amateurs have uncovered in the area over the decades are from people who were living there all at the same time, or a result of small groups moving around over time.

For Blakeslee, the clincher came in the shape of an iron shot. He had taken a group of volunteers armed with metal detectors down to the rock-lined ravine he had identified as the spot where the battle took place. Just as everyone was thinking about packing up, the landowner's son dug up an iron ball roughly the size of a marble. It was pockmarked in a way that has convinced Blakeslee it had been fired from a Spanish gun. He has also found a Spanish horseshoe nail. "We have definitively found the site of the battle," he says.

Blakeslee is similarly bullish about having found Etzanoa. "I think it's obvious at this point," he says - and he isn't alone. Scott

Ortman, an anthropologist at the University of Colorado, Boulder, who spent a couple of weeks at the sites around Arkansas City, is satisfied that the details in the accounts of Oñate's expedition checks out with what they are finding on the ground. "Everything I've seen of the landscape and archaeology is consistent with Oñate's descriptions," he says. "I'm convinced."

Robert Hoard, an archaeologist at the Kansas Historical Society, is more cautious. "I think it is plausible that the Walnut river valley sites are Etzanoa. It also is plausible that they are not, that they are the result of long occupation by smaller groups of people," he says. "I would need firm evidence of Spanish contact with the indigenous people." Ideally, that would be some sort of quantitative metallurgical evaluation to unambiguously determine that the iron shot and the horseshoe nail really are Spanish.

If Blakeslee is right, though, the implications are profound. It would make Etzanoa the second-largest prehistoric settlement ever found in North America after Cahokia, a city of at least 20,000 people in modern-day Illinois (see "The Mississippian metropolis", left), further reshaping our understanding of how the people of the Great Plains lived in the period before the Spanish arrived.

The conventional picture is that of a vast, empty space populated by nomadic people following bison herds. Etzanoa tells a different story – that at least some tribes settled in large

"They used remote sensing to search below ground, and they struck gold"

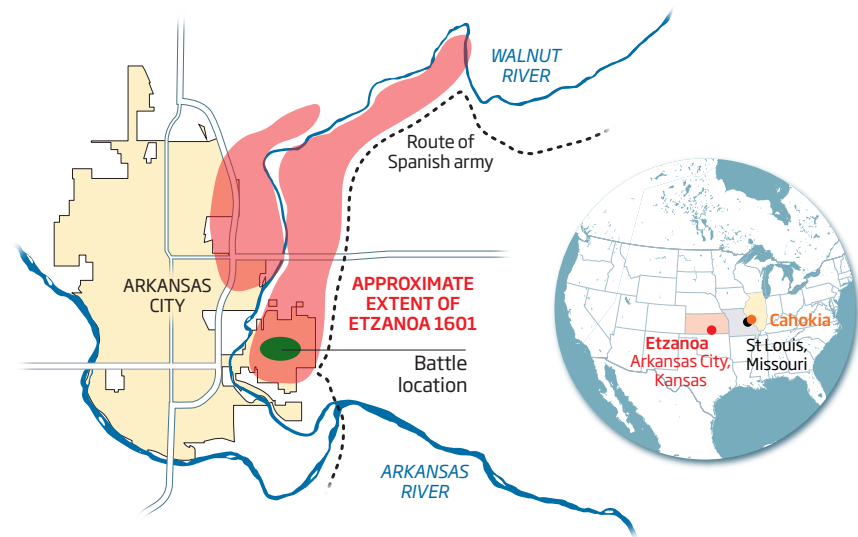
towns, raised crops, made pottery and processed bison on a huge scale. "I'm not sure if I'd call it an urban lifestyle," says Ortman. "But I do think the scale of the place and the extent to which that requires political organisation is greater than we might have imagined."

Hoard agrees. If we can show that there were "thousands of people living and working together, growing huge amounts of food for which they carefully planned planting, harvest, storage and redistribution", he says, then we have to consider that the people of the Great Plains created "a more complex social organisation" than anyone knew.

He also points out that they did so in a region that was nowhere near as promising

North America's lost cities

The Great Plains were home to the large Native American settlement of Cahokia in modern-day Illinois. Now archaeologists think they have found a second, Etzanoa in modern-day Kansas, based on records from a Spanish expedition in 1601.



SOURCE: WICHITA STATE UNIVERSITY ALUMI MAGAZINE

as the floodplains on which Cahokia rose and fell. "It was famously referred to as the 'great American desert' by Europeans," says Hoard. "That was overstatement, but to find a large indigenous community in this difficult environment is testimony to the people living there."

Just as intriguing is that, as far as we know, the Etzanos built their society without any monumental architecture. Cahokia had a collection of giant mounds at its centre, sculpted from earth and used for ceremonies cementing the hierarchy through which society was governed. But Etzanoa doesn't appear to have had anything of the sort. "How did these people accomplish this level of social organisation without monuments and the inequality they typically indicate?" says Ortman.

Blakeslee and his colleagues will seek answers to such questions next year, when they plan to carry out more extensive excavations. The dream scenario, he says, is to find some sort of communal structure. "If the community was as large as Oñate described, it is going to have some sort of public architecture," says Blakeslee.

In the meantime, the Wichita people, many of whom live nearby in Oklahoma, are watching with interest. Thought to be the descendants of the Etzanos, they have been involved from the beginning of the

excavations. Current residents of Arkansas City have also embraced the discovery by setting up the Etzanoa Conservancy, a non-profit organisation that aims to preserve and study the sites, many of which lie in their own backyards. It is early days, but plans are afoot to create a visitor's centre and, ultimately, to apply for UNESCO world heritage status.

That would put Etzanoa on a par with some of the world's most spectacular archaeological sites, from the Roman city of Leptis Magna in Libya to the ancient temples of Angkor Wat in Cambodia. This might seem like a stretch to some, given how few traces the thatched, bee-hive-shaped houses of the Etzanos left behind. But for Ortman, therein lies an important lesson. "Etzanoa is not visually compelling in the same way as some of the world's most famous archaeological sites, but the human story it conveys is just as interesting," he says.

There is a tendency to equate the degree to which sites are preserved with the social development of the people who lived there, he says, but "big and well-organised communities don't always leave behind an obvious archaeological record. To me, that raises the question of how many other cases like this are out there." ■

Daniel Cossins is a staff features writer at *New Scientist*