

TAKING ON A TEXAS-SIZED PROJECT

Robert Drolet has examined more than 50 sites during his long-term investigation of the lower Nueces River Valley in Texas. He's made some important and surprising discoveries along the way.

By Richard A. Marini

FOR THE PAST 11 SUMMERS, Robert Drolet, an archaeologist at Texas A&M University–Corpus Christi, has been excavating sites in the lower Nueces River Valley in South Texas, collecting and identifying artifacts left behind by the peoples who made this area their home for almost three millennia. Dozens of sites and thousands of artifacts—projectile points, scrapers, and the tools used to make them—have, like individual pieces of a mosaic, created a surprising, even controversial picture of what life was once like in this river valley.

Every summer since 2000, Drolet has run an archaeology field school, co-sponsored by the University and the Corpus Christi Museum of Science and History, during which an ever-changing roster of students and volunteers learn basic archaeological techniques. Early on, they completed a systematic site survey of a 37-square-mile portion of the valley and, later, explored more than 50 habitation and quarry sites along a nearly nine-mile stretch of the Nueces, which empties into the Gulf of Mexico. They've found evidence that the area has been continuously populated from about 3,000 years ago through contact between the Native Americans and Europeans in 1536, when the Spanish explorer Cabeza de Vaca arrived in the valley.

On a hot and humid July morning, approximately a dozen students worked at two excavation areas about 75

yards apart on a rise above the nearby Nueces River. Recent rains triggered a mosquito population boom and the muggy air is thick with the tangy smell of citronella candles. The students were in the final week of the eight-week program and, having lived and worked together for most of the summer, they developed an easy camaraderie, even going so far as to tease Drolet (they call him Doctor Bob) about his taciturn manner.

They worked at one of the three Late Prehistoric base camps, known as NU-54, that have been uncovered in the valley. Each camp had easy access to river quarries, where the natives gathered the raw materials they used to make tools. Surrounding the camps were several smaller hunting camps spread over the valley bottoms or along feeder streams.

Having accumulated large amounts of data, Drolet is able to hypothesize about what life was like for the inhabitants of the area over the millennia. He believes members of several extended families lived in the base camps, the largest of which covered 10 acres. "We've found evidence that these multiple households were occupied over several hundred years, but we don't know how big the individual households were," he said. "These households may not have even been contemporaneous. The settlement probably grew over time."

The camps were organized to support the natives' hunter/gather economy. Here, everyone shared responsibility



JOHN HAHN

Bob Drolet (middle) leads a survey crew looking for evidence of sites. Red flagging is used to mark sites and surface artifacts. The student on the left is carrying a machete that's used to cut through heavy brush.



Students excavate and record stratigraphic profiles of a large trench at the Late Prehistoric base camp called NU-54.

for obtaining and preparing food, manufacturing tools, making pottery—the essential activities of daily survival. “I wouldn’t call it a ‘hard life,’ at least not as measured by the times,” said Drolet, his grey hair sticking out from beneath a worn baseball cap, his weathered face a testament to his years as a field archaeologist. “When you live this way beginning as a young child, it becomes a lifestyle. It’s how you survived.”

Compared to deposits found in the base camps, those excavated at the hunting camps were shallower and yielded fewer items, which consisted primarily of basic tools such as knives and scrapers, and weapons, such as bi-faces and projectile points. “This is where the hunters stayed when they were out searching for food,” he said. “They weren’t here often and they probably didn’t stay long, at least compared to the base camps, which were inhabited full time.”

The researchers have also found the raw material used to make arrow points at these temporary camps, suggesting the hunting parties were capable of making replacements if the points they brought from the base camp were lost or broken. Drolet believes the natives butchered their kills either at the hunting camps or in the field because only post-cranial bones (i.e. everything but the skull) have been found at the base camps.

The tools the natives used for hunting and food preparation came from the gravel deposits found along large bends of the Nueces. The cobbles obtained from these lithic quarries are mostly chert, and they range in size from pebbles

to softballs. Drolet’s teams found manufacturing debris that indicated the natives would carefully inspect these cobbles, flaking off a piece or two, and take the most promising back to the camps to be worked while discarding the others.

THE NUECES VALLEY is not much more than a shallow depression in the surrounding countryside. Until Drolet arrived in the late 1990s, most of the archaeological work previously done in South Texas focused on the coastal habitations. The valley, Drolet said, was “ripe for study.”

He has long been interested in studying settlement patterns to understand why people chose to live where they did. “If you study any kind of settlement pattern, even today, it’s based on the needs of people and their everyday life,” he said. “Where are the natural resources, where do the homes go, where is food prepared? It wasn’t any different in prehistoric times.”

Drolet previously worked in South America where, he noted, population growth resulted in more complex, hierarchical settlements. There, as well as in other places in the New World, those with the greatest status lived in the largest homes. Things were different in the South Nueces River Valley. The living areas he’s found suggest an egalitarian society, one without chiefs or social rank; where living quarters were shared and everyone did everything, from making tools to preparing food. “In each base camp we find similar assemblages,” he said. “This leads us to believe that everybody was making the same tools, the same pottery. They hadn’t reached a level of specialization we’ve seen elsewhere.”

Unlike other hunter-gatherer societies, however, the people of the Nueces River Valley were not nomads. Instead they were stationary, indicating a more complex level of organization than that of typical hunter-gatherer societies. “Between the Late Archaic and Late Prehistoric periods, the only real difference in settlement patterns is that the base camps got bigger,” Drolet said. “But all the other river valleys in the region were already occupied, so there was no place else for them to go. So they were essentially forced to become sedentary.”



These sherds of Mexican galera ware were recovered from NU-54.



Students standing waist-deep in the Nueces River gently submerge fine mesh screens filled with excavated dirt. The water separates tiny items such as seed and charcoal remains, which float, from the heavier dirt, which sinks.

To survive, they would have needed year-round resources, and analysis of several soil samples taken from the NU-54 site suggests its inhabitants could have been growing corn. “There were a half dozen or so carbonized corn kernels in the samples,” Drolet said. In recent history, corn has not been cultivated in the area where the kernels were found, and they could have come from elsewhere via trade. But Drolet believes corn could have been cultivated there centuries ago, perhaps down near the river. “Even though hunter-gatherers weren’t supposed to have grown corn, why couldn’t they have?” he said. “Corn isn’t difficult to grow, it takes only three months to harvest and, if the crop fails, they’re not out anything.”

Because of disease and other factors, the Late Prehistoric peoples disappeared by the 1820s, so there’s no ethnographic record to support Drolet’s contention. But other evidence suggests the natives knew enough to modify their environment and increase their chances of survival. For example, French and Spanish records tell of the natives using fire to clear the valley of scrub and expand the grasslands, which attracted deer, bison, and other large game. Yet they conserved the forests that hug the meandering Nueces because these were rich sources of food, such as grapes and berries. “Is that agriculture? Is it animal husbandry?” asked Drolet. “I don’t know, but we have to accept some level of environmental intelligence among these people.”

american archaeology

PERHAPS THE PROJECT’S biggest mystery is the complete absence of human remains at any of the excavated sites. According to local lore, later historic groups practiced cannibalism, but Drolet believes that if that were true, it’s likely human remains would have been found at the camps. He doesn’t think the human bones decomposed because animal bones from the same time periods have been found. At NU-54, for example, his team uncovered long mammal bones that were burned and crushed, and Drolet theorizes the natives were processing grease from the bones and using it for cooking and preparing hides. He once thought they might have added bone temper—a graham cracker crumb-like substance made from the pulverized bone shafts—to their pottery to make it stronger. But recent examinations of more than 400 shards collected over three years found they used river gravel instead.

Drolet’s most surprising discovery took place at NU-54, which is believed to be the site of Fort Lipantitlán, a Mexican fort built sometime during the 1830s. No remains of the fort have been found. Drolet has uncovered mostly pre-fort material, indicating, as might be expected, that the area was inhabited long before the Spanish arrived.

What’s surprising, however, is that Drolet’s teams found Spanish, Mexican, and native artifacts in the same stratigraphic level, suggesting that these groups co-existed for at least several decades. (Texas was then part of Mexico, which



GUY MORO

This painting, which is based on data uncovered from a Late Prehistoric site known as SP-220, shows village residents performing various chores.

gained its independence from Spain in 1821.) “Some say flooding caused this mixing, but this site is on a ridge and there’s no evidence—no flood lenses of sand and silt—to support that claim,” he said. “And people who’ve lived here for decades said they’ve never seen this area flooded.”

If Drolet is right, this would make the area the first recorded instance of Europeans and Late Prehistoric people living together peacefully, other than in the Spanish missions located throughout the area. “But the Native Americans were forced into the missions,” he said. “They were being acculturated and made into Christians. Here, the Indians came first and the Spanish arrived later to trade. That’s an exciting

situation to contemplate.”

Drolet, who has yet to publish these findings, thinks some historians, as well as locals who prefer the historical emphasis be on the fort itself, will dispute them. “It’s like the Native Americans are not part of the cultural history,” said Drolet. “That’s a common attitude in the U.S. But the fort is the end of the story, not the beginning.”

ONE EVENING, SHORTLY AFTER the fieldwork ended, the students gathered in the local community center to present their findings. In order to “graduate” from the field school, they had to present a

scientific paper exploring a topic (these ranged from faunal analysis to lithic manufacturing to pottery remains) related to the project. The large room there served as the group's after-hours gathering center, where they ate dinners provided by the ladies of the nearby Catholic church and discussed the day's findings.

Most of the attendees were friends and family, but several area residents were also there. This community has embraced Drolet's work: Landowners allowed his crew onto their properties to survey and excavate. A rancher let them use a restored field house as their own base camp. Another loaned Drolet a pickup to shuttle students around the valley.

Several years ago, when Texas Governor Rick Perry proposed building a 4,000-mile network of highways, rail lines and utility right-of-ways he called the Trans-Texas Corridor, residents opposed to the plan asked Drolet to testify about how one portion of the network would destroy many of the archaeological sites in the area. The project has since been scaled down due to such vociferous public criticism.

The student presentations were put together in little more than a week—the final touches of several, in fact, were hurriedly made between dinner and



The crew had to bail out a flooded excavation unit at SP-220 during a heavy rain in 2008.



A group of students sort, clean, and catalogue faunal remains and lithic debitage from NU-54.

Drolet's introduction. But the students acquitted themselves well, demonstrating a thorough knowledge of their findings and impressing with their poise.

As for Drolet, he's decided this past field school will be the last of the project. He's thankful for having had the freedom to do the kind of long-term, wide-ranging research that is becoming increasingly rare in archaeology because of its expense, and the institutional and public support it requires.

Though the fieldwork is done, analysis of this summer's data remains to be completed, and Drolet thinks it's time to publish his findings and see how they hold up to professional scrutiny. He hopes to write a book about his research, using the various papers he's presented at professional conferences over the years. Drolet suspects his publications will generate more questions that will in turn spur further research in the region. He may have stopped digging, but Drolet acknowledged that the investigation of the valley will "never be over."

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