Introduction

For the third consecutive year, the 2010 Archaeology Field School, South Texas (AFSST) season centered on one site, Fort Lipantitlán (41-NU-54, hereafter designated NU-54). This important site contains stratified components dating from Archaic, Late Prehistoric, and Spanish/Mexican contact periods (Drolet 2008a, 2009a). The site is located along the Lower Nueces River near San Patricio, Texas (Fig. 1). Previous survey and testing operations by the AFSST has confirmed this site extends approximately 20 hectares in size and is associated with dispersed habitation localities (Drolet 2008a, 2009a).

Work this summer continued excavations in the northwest site portion (River Area). Two block excavations exposed habitation localities associated with prehistoric occupations and an historic component dating to the late 1700s and early 1800s. Site NU-54 is the only known site in the Lower Nueces River Valley where these distinct cultural occupations have been clearly isolated together, offering an opportunity to trace changes from prehistoric to historic periods in a single river valley and a single site in South Texas.

As described in earlier reports, Site NU-54, known locally as Fort Lipantitlán, served as both a Spanish/Mexican civil settlement and military station during the late 1700s and early 1800s (Drolet 2009a; Jackson et al. 2006). Our previous archaeological work over the past three years has demonstrated that prior to the establishment of the Fort in the 1830s, the settlement was a Late Prehistoric base camp associated with historic contact and cohabitation (Drolet 2008b, 2008c, 2009b, Drolet and Wright 2010). One of the two habitation features investigated this year offers additional evidence relating to this contact situation.

This report describes student training and field research during the 2010 Field School program. Institutional and public support make this annual program
possible. Field operations and research results are described below.

Participants and Support
The 8-week archaeology field program is co-sponsored by Texas A&M University-Corpus Christi (TAMU-CC), and the Corpus Christi Museum of Science and History (CCMSH). The goals of this program, now in its eleventh year, are to offer students and the public training in archaeology field methods and document the history of human settlement in the Lower Nueces River Valley. There are two groups of participants: University students enroll in the AFSST course (Anthropology 3390) at TAMU-CC, and interested youth groups and public sign up through the CCMSH. All participants work in teams under the Director and field supervisors. Everyone is housed at a local ranch that serves as the field headquarters.

The University students were from Texas A&M University-Corpus Christi and Texas A&M University-College Station. John Hahn and Rebecca Izen, previous Field School students, served as Field Supervisors. Sixty new and returning volunteers joined the Field School team. These included middle school and high school students and adult volunteers. Among these were forty-four 7th graders from the Alice ISD Science Camp who assisted in field and lab operations over a two day period. They were accompanied by high school mentors and teachers.

Project Assistance
The Archaeology Field School received continued support and assistance from institutions, community organizations, and individuals. The sponsoring institutions, including Texas A&M Corpus Christi and the Corpus Christi Museum of Science and History offered logistical and administrative support. The Friends of the Corpus Christi Museum provided equipment, supplies, and consultant fees for field supervisors. The Corpus Christi Museum Director, Rick Stryker, always provided his support. The Texas Archeological Society graciously contributed financial support for the program.

Support also came from individuals and organizations. St. Patrick’s Catholic Church in San Patricio once again provided the Community Center for dinner and evening discussions. The field research team had exclusive use of Dr. Robert Bluntzer’s ranch in San Patricio, where the field headquarters, camp, and laboratory were located. Rick Kocurek and Peter Tischler offered access to their ranches for archaeological research at and around Site NU-54. Charles Bluntzer, Joan Bluntzer, Cindy McCown, Della Yunis, Bill Havelka, and Reverend George Thomas were helpful in providing logistical and field support, as well as information about local history. Finally, Mr. Sanford Amey of Corpus Christi, kindly donated the use of a 4wd pick-up truck for the 2010 program.

The community of San Patricio hosted a public meeting at St. Patrick’s Church Community Center where Field School students and staff presented their final research results (Blue 2010; Cowen 2010; Riewe 2010). The presentation was attended by approximately 35 people from the surrounding area.
Field Research and Results
The 2010 field season focused on Fort Lipantitlán, Site NU-54, a habitation site with both prehistoric and historic components (Chapman 2008, 2009, 2010; Drolet 2009b). It represented one of eleven small hunting camps located in the northern Nueces Valley during Late Archaic times. In the latter part of the Late Prehistoric, after AD 1400, the site became one of three principal base camps located along a 14km stretch of the Nueces River (Fig. 2).

NU-54 is associated with a diversity of small satellite hunting camps, procurement stations, and quarries located 1-3km around the habitation complex. This pattern is similar to the other two principal base camp sites, SP-220 and NU-301. These three base camps continued to be principal habitation areas until the 1700s. They functioned as settlements for multiple domestic groups, locations of pottery and stone tool making, and permanent camps used for staging logistical hunting/foraging procurement in the surrounding Valley areas (Drolet 2008c). While two of the Late Prehistoric base camps, SP-220 and NU-301 appear to have been abandoned in the 1700s, Site NU-54 shows evidence of continued occupation and contact in the late 1700s and early 1800s. NU-54 is the only site in the Valley with this long, continuous sequence and the only one identified thus far that contains information relating to Late Prehistoric Spanish/Mexican contact at a Native site in the region (Drolet 2008b, 2009b).

In 2010, work at NU-54 focused on two previously identified habitation localities, Areas 1 and 2 in the River Area (Fig. 3). The objectives of intensive excavation at each locality were to isolate the prehistoric components, recover artifact assemblages for laboratory study, and locate specific habitation features. Block excavations were designed to provide both stratigraphic and spatial information about the Archaic, Late Prehistoric, and historic site occupations.
To further investigate the clustered relationship within the multiple site group surrounding NU-54, subsurface testing was continued at one out-lying site, NU-333 (Hahn 2010; Figs. 2 and 3). Previous work in 2009 indicated the site served as a temporary lithic reduction station. It measured approximately 1 ha in size and was located a few hundred meters north of NU-54, adjacent to a principal quarry, Site NU-258, located along the banks of the Nueces River (Hahn 2008, 2009). A Late Prehistoric lithic assemblage was recovered in 2009, primarily containing reduced cores and prepared bifaces. Toyah phase sherds and early historic pottery fragments were associated with the assemblage, clearly linking the use of this site with the Late Prehistoric/Historic habitation at NU-54. Continued testing at this site in 2010 was designed to obtain more information about its overall size and to recover a larger sample of lithic materials relating to tool manufacturing at NU-54 and chert cobble procurement at quarry site NU-258.

One of the more intriguing issues to develop in our recent research at NU-54 has been the “historic cohabitation” argument expressed in recent professional conference papers (Drolet 2008b, 2009b; Chapman 2010). This argument is based on archaeological remains recovered in the upper cultural component at the site. The component contains Late Prehistoric Toyah phase artifacts mixed with Spanish/Mexican/English artifacts dating from the late 1700s and early 1800s. We interpreted this component as evidence for historic contact prior to the establishment of Fort Lipantitlán in the 1830s. Other archaeologists have suggested the cultural materials may represent temporally distinct and disturbed occupation components, where mixing of artifacts in these upper levels is perhaps the result of periodic flooding and recent land-use disturbance. This alternative hypothesis challenged us in the 2010 work to generate more information that might support or reject the cohabitation argument. During this season, the field team continued to carefully record stratigraphy, plot all cultural materials, and record minute soil changes. In addition, floatation and column samples were collected from the block excavations for analysis and test units were excavated outside the habitation areas to record evidence of natural soil horizons, flood lenses and evidence of recent tillage disturbance. This additional information along with careful evaluation of excavated cultural materials has strengthened the Late Prehistoric cohabitation argument (Chapman 2010, Drolet and Wright 2010, Inez 2010).

**Habitation Area 1 (A1), River Area, NU-54**

This habitation area was identified during the 2008 surface survey of the site (Fig. 3). It contained Late Prehistoric and historic artifacts dispersed over an area approximately 10m by 10m. Testing in 2008-2009 revealed a 20-30cm deep habitation deposit containing fragmented faunal bone, pottery, and lithic artifacts (Drolet 2009a). In 2010, excavations were extended from the original 2008-2009 test units to include a 7m long x 3m wide x 40cm deep block to further expose the cultural deposit and record special features within the cultural component.
The excavation yielded a rich collection of cultural material, a hearth, and a bone bed (Blue 2010; Riewe 2010). The cultural material consists of mixed Late Prehistoric and historic artifacts distributed homogeneously throughout the 30cm deep deposit. These include over 350 Native ceramic fragments, consisting mostly of Leon Plain ware (Fig. 5). Spanish, Mexican, and English ceramics were equally numerous, consisting of over 300 sherds containing colorfully decorated and glazed earthenwares. Glass and metal fragments, including one glass bead were also scattered throughout the excavation area (Drolet and Wright 2010). Toyah phase lithic artifacts dominated the deposit, including chert bifaces, cores, modified flakes, prismatic blades, and thousands of debitage flake remains (Izaguirre 2010). Approximately 3000 g of crush, fragmented, and burnt faunal bone, mostly large mammal (bison and deer) was recovered in a section of the habitation area, possibly used as a grease production station (Blue 2010). Adjacent to the concentrated bone, a hearth was identified with heavy amounts of charcoal and ash, suggesting the locality where the faunal bone was burned (Riewe 2010). Other cultural material included shell beads, modified shell remains, fired clay nodules, fish otoliths and sandstone nodules (Chapman 2010; Cowen 2010). Although no house features, such as a floor, pole impressions, or stone alignments were identified, the exposed area was clearly used for domestic activities by one or more surrounding households. The undisturbed deposit clearly indicates a contact period habitation.

Habitation Area 2 (A2), River Area, NU-54
This habitation area, identified in 2008 by concentrated Late Prehistoric and historic surface artifacts, revealed more
temporal evidence about site habitation in the River Area. Limited excavations begun in 2009 (Drolet 2009a) were expanded in 2010 exposing a 3m long x 4m wide x 1m deep block. Within the top 20-30cm Late Prehistoric and historic materials were recovered in sparse amounts compared to Area 1, located 40m to the west (Fig. 3). However, beneath this upper cultural layer, an earlier Archaic habitation component was identified that measured 40-50cm in depth (Maeda 2010).

The lower-level Archaic component contained diagnostic lithic artifacts and an abundance of flake debitage. The projectile points recovered include Tortugas, Darl-like, an unknown stemmed, Matamoros-like, and Catan dart point (Fig. 6 a, b, c, e, j). These, the Matamoros point recovered during the 2010 testing at Area 1 (Fig. 6f), and the dart points recovered from surface survey (Fig. 6 g, h, i, k) are diagnostic artifacts commonly found in Middle to Late Archaic sites in the Valley and the region (Drolet and Gilmore 2002). In addition to the projectile points found at Area 2, cores, bifaces, modified flakes, prismatic blades, a bifacial gouge, an abrader, an anvil, and a hammer stone were recovered in the same 20-60cmbs Archaic component (Maeda 2010).

Testing conducted in other areas of the River Area (Drolet 2009) indicate the Archaic occupation deposit extends from Area 2 approximately 40m further north and west across the terrace to Area 6 (A6) (Fig. 3). The component confirms the earliest NU-54 site habitation, dating somewhere between 2700 and 1000 years ago, based on regional dating of the period and the associated diagnostic artifacts (Perttula 2004:9).

**Testing at Site NU-333**

In addition to the initial post hole test units excavated at this site in 2009, twenty-four more units were completed in 2010 (Hahn 2009, 2010). The most recent work recovered Late Prehistoric lithic and ceramic material similar to the 2009 assemblage (Drolet 2009:6). The bulk of the recovered material comes from a buried cultural deposit located 10-40cmbs and spread over an area measuring approximately 100m long by 30m wide. The 2010 lithic artifacts included 1 Perdiz point, 1 knife, and 1 biface along with several plain Toyah pottery sherds and moderate densities of chert flakes, faunal bone fragments, fire-cracked rock and clay nodules. The small size of the site along with the
abundance of lithic material indicate that the locality fronting the Nueces River was a procurement/reduction station used by groups from NU-54 in Late Prehistoric times. During this period, base camp settlements like NU-54, typically contained multiple small hunting camps, lithic reduction stations, and quarry sites where resources were procured, modified, and carried back to the base camp for use or consumption.

**Discussion**

Site NU-54 is providing new information about the prehistory of the Lower Nueces River Valley and the broader South Texas region. The settlement is associated with a long hunter/gatherer tradition that developed over several millennia. It is the only habitation site in the Lower Nueces Valley where an approximate 2700-year continuous occupation has been documented. The archaeological sequence at the site extends over two prehistoric periods and continues until early 19th century historic times.

The earliest inhabitants at the site were Archaic groups that probably seasonally lived here. Habitation Areas 2 and 6 contain remains of this earliest occupation, associated with Tortugas, Catan, and Matamoros projectile points, diagnostic of Middle and Late Archaic periods. During Late Prehistoric times the settlement grew in size and was associated with multiple habitation areas containing pottery and lithic tool assemblages. Common artifacts during this period included Toyah pottery fragments, Perdiz arrow points, and diverse unifacial tools, including modified flakes and prismatic blades. Site NU-54 represented one of three major Late Prehistoric base camps in the Lower Nueces Valley at this time. Like the others, the settlement became permanent and utilized the surrounding prairie lands and flood plains as a territorial location for hunting, gathering, and procuring raw materials.

At the terminal portion of the Late Prehistoric, rapid changes began to affect NU-54 and other nearby base camps. Habitation Area 1 at NU-54 contains clear evidence of culture contact with Spanish/Mexican groups. Diverse glazed pottery types, including Mayolicas, Galera Ware, crockery, and even fancy English whitewares suddenly appear and are mixed with native Toyah pottery. The glazed ceramics can be dated to this period and are identical to historic wares imported into the nearby Spanish Missions at Goliad at this time (Fox and Ulrich 2008).

![Fig. 7. Mexican Galera Ware recovered from Habitation Area 1, NU-54.](image)

Formal analysis of the Toyah ceramic remains from Area 1 indicate this contact situation may have endured for several decades and influenced change in native pottery manufacture at the site. The native ceramics from Area 2 correspond to Toyah ware, typically consisting of plain, undecorated, bone-tempered bowls and jars commonly associated with Late Prehistoric sites in South Texas (Johnson 1994; Fig. 5). However, the fragmentary
but sizable collection from Area 1 shows new features (Drolet and Wright 2010). The sherds contain gravel temper instead of the traditional bone temper, indicating a major manufacturing change. Several sherds have bright red slips and two even have clear glazes representing new decorative elements on the native wares. These innovations may have been attempts by local Toyah potters at copying the colorful and better made Spanish/Mexican/English ceramic style vessels circulating in habitation areas of NU-54. In addition, black designs were being applied on some Toyah pots using asphaltum, a decorative technique more commonly associated with Rockport phase pottery from the neighboring central Texas coast.

Were the historic changes at NU-54 during the end of the Late Prehistoric due to the movement of artifacts or people or both? From the late 1700s to the early 1800s, was the Late Prehistoric base camp at NU-54 being transformed into a Spanish/Mexican hamlet through contact, trade, and cohabitation? Does the borrowing of asphaltum painting techniques by local, Late Prehistoric Toyah potters at NU-54 indicate that trade and technology transfer operated between Native groups of the coast and inland areas during the same Spanish contact period? These are intriguing questions that could help direct future research about historic contact at Native settlements in South Texas and help explain how this contact influenced cultural change, alliances, and trade. Given the information being generated at NU-54, this is one of the only known sites in South Texas where answers to these questions can be answered.

**Final Comments**

Archaeology field schools are designed to train students in methods and techniques of data recovery, laboratory analysis, and artifact conservation. The Archaeological Field School, South Texas has successfully done this for the past eleven years. It has also provided an opportunity for public volunteers to learn about how archaeological research is conducted. In the San Patricio county area, local support of this program has resulted in land owners and community people protecting archaeological and historical sites on their property.

Another important component in field school training has been teaching students how to prepare field reports and present professional conference papers. The final Field School papers and oral presentations benefit the students academically. This year, as in previous ones, the Field School students modified their field reports into conference papers and presented these at a special Symposium of the Texas Archeological Society (TAS) Meetings held at Corpus Christi in October 2010. The papers focused on data recovered from NU-54 and NU-333. Topics ranged from habitation feature identification (Riewe 2010), faunal analysis (Blue 2010), stratigraphy (Izen 2010), lithic tool
assemblages (Chapman 2010; Hahn 2010, Yzaguirre 2010), and pottery types (Drolet and Wright 2010). The papers included interpretive sections about how these topics relate to Archaic, Late Prehistoric, and historic occupations at NU-54. Several of the students received scholarship awards from TAS for attending and presenting at the conference.

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