Historic Resources Assessment Rancho La Union, Zapata County, Texas

for the Guadalupe and Lila Martinez Foundation



FRANK BRISCOE / Architectural Conservation

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Rancho La Union, ca 1985 provided by the Guadalupe and Lila Martinez Foundation



Summary

The purpose of this report is to assess the historic resources at La Union and suggest ways in which they might be incorporated into a program of educational and cultural uses at the ranch. The report addresses the central planning issue of identifying a period of interpretation and rehabilitation strategy for the early resources consistent with the existing built environment. The report forms the core of a Historic Structure Report and collects information for the preliminary requirements of a nomination to the National Register of Historic Places.

Two things immediately stand out about Rancho La Union: a strong sense of south Texas ranching history, authentically reflected, and the related issue of how much of the early site is hand-crafted. The ranch complex seems to have evolved organically, growing outward from the earliest buildings, on an as-needed basis. There are few straight lines and fewer right angles. Overall site planning has little regularity as demonstrated in building setbacks and orientation.

Historic resources at the La Union include the Old Bunkhouse *jacal*, Kitchen *jacal*, an enormous masonry dam, 1,250 linear feet of *corrales de leña* (mesquite fencing), a mid-Nineteenth Century inscribed stone, and the site itself. The complex seems to have evolved from an outpost of another ranching center late in the Nineteenth Century, and includes structures from the 1890s to the 1980s. The recommendation will be made to rehabilitate the early structures in accordance with the "Secretary of the Interior's Standards for Rehabilitation". Much of the work could be carried out in concert with planned educational and academic activities. Other structures and areas of the site could be used to support those and related educational and cultural goals.

Several potential uses have been identified that would be sympathetic to the historic ranch environment and take advantage of its authenticity without detracting from it. These include educational and cultural uses such as a field school, academic residencies, ecotourism, and film production. Development of a web site for Foundation activities is recommended, as is eventual high speed connection to the internet from the ranch. Recommendations are also made for further studies that would greatly expand knowledge of this important site, including nomination to the National Register of Historic Places, an archaeological survey, a wildlife survey, and an oral history program, among others.

Site Description

Rancho La Union is approximately 9.3 miles east of San Ygnacio, Texas, reached by RR 3169 (fig.1). It is .35 miles from the highway to the entrance to the complex of buildings described in this study, which is centered approximately at coordinates N 27.12518 degrees W 99.3094 degrees.



figure 1. entrance to Rancho La Union

The complex at the center of the ranch includes about twelve structures from the late Nineteenth to the late Twentieth Centuries, from hand-crafted buildings made almost entirely of materials immediately at hand to modern concrete block structures. With only one or two exceptions, what they all have in common is a direct connection to a century of ranching operations at Rancho La Union.

Much of the ranch's development seems to closely parallel the development of water resources there. An early stone dam, described in more detail below, still impounds water just east of the complex. Another, later, tank is west of the complex. Presently water is hauled by truck from San Ygnacio and stored in above-ground tanks.

The buildings of the complex are fairly evenly distributed between residential, storage, and utility buildings. The earliest – the Old Bunkhouse and Kitchen, were multi-use structures and provided for the simple spatial requirements of an early Twentieth Century ranching center. The complex grew outward from these two buildings to provide spaces for more mechanized operations and more modern accommodations (drwg.A).

Building Chronology

South Texas ranches like La Union are tied directly to the Spanish settlement of the area in the mid-Eighteenth Century. Nuevo Santander, as the region was named, stretched along the Rio Grande from Laredo to Reynosa. Settlement of the area was encouraged through the distribution of *porciones*

¹ Sánchez, Mario L. A Shared Experience: The History, Architecture and Historic Designations of the Lower Rio Grande Heritage Corridor. Second Edition. Los Caminos del Rio Heritage Project and the Texas Historical Commission, Austin. 1994 p.18

along the Rio Grande and larger parcels farther from the river (fig.2).

Ranching was key to the northward extension of the frontier. Without ranching, it may not have been possible to settle and occupy the rugged scrub plains at all. In her thesis on south Texas ranching heritage, Sharon

Fleming writes that livestock were a critical factor in each successful colonization effort in Nuevo Santander.²

The two buildings at the heart of the ranch, the Old Bunkhouse and Kitchen, are based on an indigenous building type from northern and central Mexico. The *jacal*, as this construction is known, generally consists of pairs of posts with an infill of split wood members and a thatched roof (fig.3). From archival sources we know that the jacal was the most common structure on early south Texas ranches and had a variety of functions. An inspection of the area was made in 1757 by Jose Tienda de Cuervo. His report describes developments in the new settlements, including the presence of numerous jacales.3

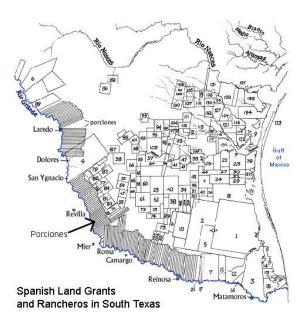


figure 2. drawing by Jack Jackson

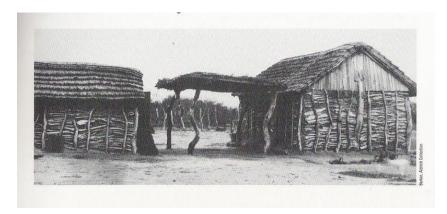


figure 3. Typical jacales, ca. 1915. fr/ A Shared Experience

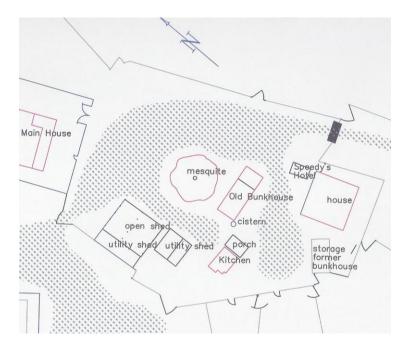
² Fleming, Sharon Elizabeth. <u>Building La Frontera: The Form and Technology of Historic Ranch Architecture in Zapata County, Texas</u>. Master of Architecture thesis, Texas Tech University. 1998. p.83.

³ report of Jose Tienda de Cuervo, Expedientes relativos a Inspección y estadistica de la Colonia de Santander,1757.

The absence of a fortified structure at La Union indicates that ranching operations headquartered there probably did not begin until hostilities with Comanche and Apache tribes had ended in the 1860s. Typically the fortified structures were masonry buildings, and several surviving examples from the Eighteenth and early Nineteenth Centuries are found in Zapata County.

The Old Bunkhouse is the oldest extant building on the site, and dates from the 1890s. The remarkable stone dam seems to be from the late Nineteenth or early Twentieth Century, and for many years these may have been the only permanent structures at La Union. The Kitchen *jacal* seems to be significantly later, unless large areas of earlier construction there have been lost. Its walls, built primarily of cedar posts, are distinct from the earlier mesquite wall construction across the way at the Old Bunkhouse.

The primary use of cedar posts and mesquite splits in the Kitchen jacal suggests a chronological connection with an extensive fence building campaign at the south and west areas of the complex. Although difficult to date solely from the physical evidence, that campaign, which resulted in almost a quarter mile of cedar and mesquite fence construction, seems to have taken place in the past 50 or 60 years. This was about the time the frame addition was built onto the east end of the Old Bunkhouse, and shortly before another building campaign was initiated which eventually included the construction of three 1,000sf-plus cinderblock buildings, several wood frame buildings, and a few welded pipe structures.



Drwg A detail -- site plan of central area of the complex

Description of Historic Resources

As mentioned above, the historic resources at La Union consist primarily of two *jacales* – the Old Bunkhouse and Kitchen (fig.4); a stone dam structure about 360 feet in length (fig.5); approximately 1,250 linear feet of *corrales de leña* (split mesquite fences) (fig.6); an inscribed stone; and the site itself. To understand these resources and place them in their cultural context, historians and architectural conservators use a variety of tools. In addition to archival sources, conservators in particular gather information about structures based on the physical evidence.



figure 4. the Kitchen (left) and Old Bunkhouse



figure 5. a tall section of the stone dam

Interpretation of the physical evidence, therefore, is chiefly a matter of working forward and backward through a chronology of known layers. Hardware can be one of these "timestamps," except that in utilitarian structures it is often reused from earlier buildings. The same is true for wood elements in

The challenge posed by La Union in this regard is that so many of its historic resources are hand-crafted, using methods that have been employed for centuries. From the dam to the fences to the walls and slabs of the *jacales*, everywhere one looks one sees the result of thousands upon thousands of hours of labor largely unassisted by machines. With the exception of the dam, most of this work was done by ranch hands with a few simple tools. The specialization shown in later structures, such as the cinderblock buildings, cattle guard, and highway entrance, serve to highlight the simplicity of the earlier work.



figure 6. corrales de leña - mesquite fences

historical settings where local wood supplies were scarce. For structures

from the later Nineteenth and early Twentieth Centuries, conservators look particularly closely at fasteners such as nails. At La Union these have provided the clearest evidence of the evolution of its historic resources.

Old Bunkhouse

The Old Bunkhouse is the oldest of the buildings surveyed at La Union, and is a rare surviving example of early regional ranching structures. The great majority of the building is original. It is typical of late *jacal* construction, with a combination of hand wrought and machine-shaped features (fig.7).



figure 7. Old Bunkhouse jacal, south facade

Walls are traditional *jacal* construction, with pairs of rough posts lashed together to support an infill of split mesquite material covered with earth plaster (fig.8). Roof framing includes dimensional material as well as hand hewn elements. The original thatched roof is visible below the later corrugated iron roof. Fasteners used in the building range from hand-made pegs to cut nails and extruded nails. Cut nails, which were clipped from an iron bar, were widely replaced by the modern extruded nail by

1893. The presence of the two nail types together in original features of the bunkhouse suggests a construction date

between 1890 and 1895.

Character-defining features include the mesquite post with mud plaster wall construction, exterior doors, roof framing of dimensional lumber, and corrugated roofing over the original thatch roof material. A sensitive rehabilitation or restoration of the structure would include careful treatment of these features. Even later features such as the corrugated roofing should stay in place unless a specific period of interpretation is established that predates the corrugated



figure 8. typical Bunkhouse exterior wall construction

roof, for example. Any period of interpretation that would involve altering character-defining features should be supported by physical evidence; conjectural reconstructions are to be avoided.

Exterior

The exterior building dimensions are approximately 17′ 7″ N-S and 44′ 10″ E-W, including a later wood frame addition at the east end (drwg.B). There are two exterior doors of the *jacal* portion, one each at the north and south facades and one door at the east façade of the addition. There are no windows on the *jacal* section, but two of three crates placed in the south wall – apparently at the time of construction for use as interior shelves – are now open to the exterior (fig.9). The east façade of the later addition includes one door and one window (fig.10).



figure 9. crate used as interior shelving (not window)



figure 10. east façade Bunkhouse addition

Walls of the Old Bunkhouse are composed of pairs of posts set into a roughly finished slab. The pairs are spaced irregularly along the walls two to four feet apart. Individual members of the pairs are set a few inches apart perpendicular to the wall plane, with the space between roughly filled with stacked split mesquite pieces and sections of branches. The post pairs are lashed together in one or two places with heavy gauge galvanized "slick" wire. Overall wall thickness varies from 10 - 14" (drwg.C).



figure 11, west facade of Bunkhouse

All posts visible at the exterior are mesquite with the exception of those along the west wall (fig.11) and one post where the *jacal* portion intersects the later addition on the north side (fig.12). The mesquite members are either un-worked or show a minimum of shaping, and some were installed with bark attached. The west wall has been largely – or completely – reconstructed. Original northwest and southwest corners have been

replaced with heavy dimensional members similar to railroad ties, and a like member has been added at the center of that wall. Other west wall posts are cedar. The west gable, unlike the east gable of the *jacal* portion, has been rebuilt with vertical plank siding.

The slab is either original or early, judging from the proximity to it of the earliest level of mud fill in the walls. It is about 8" thick in some places, appears to be unreinforced, and was



figure 12. north façade of Bunkhouse, repair at left post

formed up a few inches outside the exterior face of the walls. Like several other features at La Union, it represents a considerable investment of labor. The slab material was not analyzed, but is either *chipichil* or lightly cemented concrete. *Chipichil* is a traditional local material made of lime, sand, and aggregate frequently used in regional buildings for floors and flat roofs until the late 1800s.



figure 13. pegged connection of plate to posts at doorways

At the north and south walls the posts support a 3x5 pine or cypress plate/beam generally 73 to 74" above the slab. At the west wall, which has been largely rebuilt, the beam is a pair of 2x6s. At the north and south doors the openings are framed with rough mesquite members finished with an adze and notched to receive the plate in a kind of saddle joint. At doorways the plates are fastened into place with hand-carved round wood pegs about 34" in diameter (fig.13).

Both interior and exterior wall surfaces have been plastered with mud plaster. There have been at least three applications of plasters, but the original, innermost mud material is distinct for its deep reddish color (fig.14). The outermost layer, added as a repair in several portions of the interior and exterior, is a strong cement plaster. Exterior plaster shows



figure 14. early reddish and tan plasters below cement

extensive erosion and a majority of the wood structure and wall infill is exposed.

North and south door leafs are similar in construction and appear to be original. They are about 35" wide and 71" high, made from three vertical 1x12s (11-1/4") secured to three horizontal 1x3s on the interior with cut nails. They are hung on strap hinges, but there is evidence of earlier hardware.

Both the *jacal* and later portion of the building have a corrugated steel roof. The roofs seem to be similar in age and construction, so the wood frame addition may date from the time that the original thatched roof was replaced. The addition is also clad with corrugated material, although this appears to be slightly later.

A half-round galvanized gutter is hung from the south eaves of the *jacal* portion with wire. It slopes toward the SW corner where it empties into a raised cistern, which appears to have replaced an earlier water collection feature. There may have been a similar gutter on the north side of the building, and its removal may be related to the replacement of the west wall. A large stone (similar to the dam material) provides a landing at the south door.

Interior

The interior of the *jacal* section of the bunkhouse is an undivided open space (figs.15,16). There is one interior door on the east wall leading to the addition (fig.). It is similar to the doors on the north and south walls, including the manner of framing the opening.



figure 15. Bunkhouse interior looking southwest



figure 16. Bunkhouse interior looking east

Interior dimensions are 15' 4" N-S and 30' E-W, excluding the east addition. The peak is approximately 11' 5" above the floor. Interior wall posts match

their exterior paired members. All are mesquite except those along the west interior wall. More of the interior wall plaster is intact, although more of it has been plastered with cement. There appear to be two campaigns of interior cement plaster – one fairly early, and the other within the past 30 years or so.

The east gable of the *jacal* portion, now an interior wall, retains the original construction of hybrid dimensional and mesquite framing members, and split mesquite infill with earth plaster. Traditionally the center of each gabled wall would have a large forked member that would support a ridge beam, but the framing method used here did not require one.

Rafters are pine and fairly uniform, ranging in size from 2.5/8" - 2.3/4" wide x.3.1/2" - 3.7/8" deep. They were sawn on a mill and have smooth sawn sides, but less smooth lower edges. They are spaced approximately on 36" centers, and rest on the wall plates with birds' mouths. There is no ridge beam, but rather the rafters meet at the peak in a lap joint secured to each other with cut nails. Some rafters show round holes at or near the peak,



figure 17. Bunkhouse interior looking northwest

suggesting they may have been reused from another installation. Collar ties stiffen the rafters. These are 1" by 3", and are located 103 1/2" above the floor (fig.17).

A beam approximately 4" wide by 8" deep rests on the wall plates about 10' from the west wall, tying the north and south walls together. The beam is probably not in its original location, as it shows at least five round mortises

from an installation unrelated to its present position. It is possibly the replaced wall plate from the west wall, and although the mortises appear larger than those at the north and south doors, are approximately spaced to frame one or more door doors as found at other openings.

Milled pine *latias* (or "purlins") are alternately 1" and 1 1/2" wide, and spaced approximately 4 1/2" on center over the rafters. Evidence of the original thatch roof is widely present above them, pinned below the underside of the existing corrugated steel roofing. The thatch appears to be a species of the Rush plant, of the family *Juncaceae*. Rushes generally grow in wet or damp soils of low fertility. Tule was also often used in regional thatch roofing, and is distinguished from rushes by its triangular stems.

The building has electrical service from the power pole located a few feet to the west. A single cable passes into the gable on that side. The cable appears to be 4-conductor stranded wire (similar to that used for water wells) and is run exposed (i.e., without conduit). It provides interior lighting and power to a few receptacles near the wall plate. The building does not have water service to the interior.

Kitchen Jacal

The Kitchen *jacal* (figs.18-20) shares several basic construction features with the Old Bunkhouse but the building appears to be significantly later. A vertical plank addition was added to the west end, alongside the large cooking fireplace (drwg.D). Overall it gives the impression of a rustic camp kitchen, with calendars, ranch paraphernalia, and cooking utensils attached to most interior surfaces (fig.21).



figure 18. Kitchen jacal, south facade



figure 19. Kitchen jacal, north facade



figure 20. Kitchen jacal, west façade with chimney

The Kitchen is approximately 22' E-W and 15' 7" N-S, with a height of about 10' 5" from the concrete floor to the peak of the rafters. Character-defining features include the paired post and split mesquite infill construction, the vertical plank door and wood latch, forked mesquite members supporting the roof ridge, brick chimney and fireplace, and dimensional roof framing and its corrugated covering. Mesquite posts are found at corners, but other interior and exterior pairs of posts are

cedar. Post pairs are spaced approximately 24 - 30" on center, more regular and more closely spaced than at the Bunkhouse. Walls are plastered on the exterior with at least one application of earth plaster, which is covered in

many places with a later, strong cement plaster. Interior walls show no history of plaster application.



figure 21. Kitchen interior looking southwest

Forked mesquite members typical of traditional *jacales* support the roof peak and the relatively modern roof framing. Rafters are 2x4s and are set approximately on 42" centers. The corrugated roof is fairly recent, and is secured to 1x4 strapping with extruded nails.

The kitchen has one door, on the east wall near the southeast corner (fig.22). Construction is vertical plank (1x6s) nailed

to horizontal members at the top and bottom with extruded nails. It has a sliding wood latch and is hung with slender strap hinges. Door framing is dimensional material. The building has two aluminum windows – one at the east wall and one at the west.

The large brick fireplace appears to be from the 1940s or later, and is said to predate the vertical plank west addition. It is used for cooking as well as for heating. It has a thick, raised concrete hearth about 20" above the finish floor and a shelf above about 60" above the floor, although the hearth may have been added later. In the northwest corner of the addition is an old commercial gas range.

Electrical service is similar to that of the Bunkhouse. It is exposed cable, and provides power to an overhead florescent fixture and receptacles nailed to the central forked mesquite posts. The building does not have running water.



figure 22. plank door with wood latch



Adjacent to the east wall, the kitchen has a shed roofed porch with a corrugated covering (fig.23). Mesquite posts support an armature of welded pipe, over which cane was laid for shade. The corrugated roofing was added later, secured to 2x4 framing that rests on the pipe.

figure 23. Kitchen, east façade, with porch

Stone Dam

The stone dam is an impressive structure just east of the center of the site (figs.24,25). It is about 360' long and runs in a straight line generally eastwest. The masonry face of the dam is approximately 30" thick, finished on the outside only, and is built into a berm or earth levee behind it. In sections near the west end of the dam, the masonry wall is more than 7'6" high.

The stone is not the locally common *piedra de arena*, a type of sandstone found in abundance near the banks of the Rio Grande. It appears to be a durable sandstone found in the region known as *almendria*, but could also be limestone. (The stone was not analyzed, but a diagnostic test for limestone



would be to treat it with a few drops of muriatic acid. Limestone will react strongly, while sandstones will have little or no reaction). Shirley Gonzales related an account of the stone being brought by wagon from an area northeast of La Union.

A map of area geology produced by the Texas Water Development Board (www.twdb.state.tx.us/GwRD/GTA/GAT/laredo.htm) shows the ranch is located near a conjunction of the Yegua Formation and the Jackson Group, both of which are dominated by clays and

figure 24. section of the stone dam near the west end $% \left(1\right) =\left(1\right) \left(1\right)$

sandstone. However, the map shows an area of the Goliad Formation several miles northeast of the Webb County line. In addition to clays, sandstones and sands, the Goliad Formation includes caliche and limestone.

The dam construction is similar to traditional regional masonry buildings, linked to a style of masonry work from central Mexico known as *rejoneado*. In this method of building, large stones are laid in generally regular courses and vertical joints (and sometimes horizontal joints) are filled with smaller stones. The dam wall contains some very large stone units. Many are more than 4' long and 16" high and weigh more than 1,500 lbs.



figure 25. tallest section of the dam, about 7'6"

Mesquite Fences

Rancho La Union has approximately 1,250 linear feet of mesquite / cedar post fencing (figs.26, 27). Fences are about 5' high, built of pairs of 3-1/2" to 4" diameter cedar posts with a stacked infill of split mesquite branches. Pairs of posts are set on +/- 32" centers with the individual members of the pair spaced about 12" apart on center (drwg.E).





figure 26. mesquite corrals west of complex, typical

figure 27. cedar posts with mesquite infill, typical

Mesquite infill varies in diameter, with some members up to 4" (fig.). Lengths typically extend a few inches on either side of the pairs of posts. Gates at openings between the fence sections are hung on posts detached from the fence. Most are creosoted 6" round posts or railroad ties. Gates vary widely in size and construction, and are generally later features.

The largest sections of mesquite fence are to the left and right of the gate at the entrance to the complex. The remainder of mesquite fencing is found in the pens west of the Kitchen. With few exceptions, the construction method and general condition suggest that it was all built within one or two campaigns, probably within the last 50 or 60 years. Some sections of the corrals do have mesquite posts, and could be significantly older.

Stone Marker



stone marker (fig.28). The stone is approximately 32" high, 36" wide, and about 10" deep. In a script reminiscent of the mid-Nineteenth Century are raised letters "__SE D. URIBE Y HERMANO J^E" arranged along the inside of the upper half of a horizontal medallion shape. Other letters or words on the bottom half of the medallion are illegible.

Near the center of the complex is an inscribed

figure 28. Stone marker

Conditions Assessment and Priorities for Action

No emergency conditions were observed at La Union. In general, and with the following exceptions, most conditions regarding the historic resources are either stable, or the rate and state of deterioration of features will not be radically changed by immediate actions. There are, however, several actions recommended for conservation of the resources. These could be addressed in any of a variety of ways, depending on whether the rehabilitation itself is to be part of an educational exercise.

Conservation recommendations include discontinuing use of strong Portland cement for plaster repairs at the *jacales*; limited removal of cement plaster and replacement with a more porous earth plaster; localized amendment/consolidation of early earth plasters at the Old Bunkhouse; treatment of exposed wood features – including lower areas of fences – with a wood preservative; installation of termite baits at the perimeters of the Old Bunkhouse and Kitchen; stabilization and preservation of a section of the stone dam; and raising and consolidating the inscribed stone.

The described work is in keeping with the Secretary of the Interior's Standards for Rehabilitation, which is the best overall guide for historic preservation as it is practiced in the United States. All interventions should be documented with before and after photographs. A budget estimate for the stabilization actions described is included at the end of this section.

Old Bunkhouse

The Old Bunkhouse is the most historic and authentic of La Union's resources. Because of its rarity and the percentage of original late-Nineteenth Century material it retains, conservation measures there will be slightly different from those required at other structures. Still, part of the authenticity of the building has to do with how it has evolved along with the rest of the ranch, and conservation treatments here should be limited as elsewhere.

The building appears to be in stable condition overall, although the west end is leaning slightly toward the south. The roof structure and perimeter drainage – two of the most important considerations in the long term preservation of the building – seem to be shedding rain runoff away from the building. Beyond those issues, the next most important are potential structural conditions at the west end of the building and the electrical system.

A conservation program for the Old Bunkhouse will include removal of limited amounts of the modern cement-based plaster; ensuring that lower

areas of post bases are intact; application of a wood preservative on exposed wood materials at lower wall elevations; installation of termite baits; and limited consolidation of earth plasters. Removal of cement plaster and application of appropriate replacement plaster must be supervised by skilled craftspeople.

The wall and gable at the west end of the building were probably replaced due to structural failure along that façade (possibly related to prior elements of a water collection system). Adjacent posts near the northwest and southwest corners were left in place, although some of the problems that made the repairs necessary are likely here, too. Some wood posts at these locations show deterioration at their connections with the slab. Even in dry climates, slabs and other masonry materials retain moisture for long periods of time, and this creates an environment for decay fungi and termite attack on wood materials close by.



figure 29. cement plaster at wall base near northwest corner

At some point after replacing the west wall, repairs were made with a cement plaster that is trapping moisture against the earlier plaster and mesquite members. It is recommended that portions of this plaster be removed along the north and south sides near the west end, especially as necessary to make visual inspections and/or repairs of the post bases there (fig.29).

If decay at post bases is found to be minor, cement plaster removal can be minimized unless a restoration of the structure is pursued.

The cement will have to be removed very carefully to avoid unnecessarily detaching pieces of the early earth plaster materials. (Although in the scheme of priorities, actions at the Old Bunkhouse supersede actions at the Kitchen, it may be preferable to develop a methodology and skill level removing some of the Kitchen cement plaster before removing plaster from the Old Bunkhouse.)

Removal should begin with the cement plaster along the lower wall on the north side between the northwest corner and the door on that façade. At least 12" of the cement plaster should be removed so that an assessment can be made of post bases where they meet the slab. However, if the cement detaches fairly easily, the whole cement patch should be removed.

Post bases should be carefully probed with a sharp object to determine extent of decay. If mesquite post bases show deterioration through more than one half of the cross section of the member near the base, it will be

necessary to saw out the deteriorated lower area of the wood member and create a durable structural joint with similar replacement material. Alternatively, if a mesquite member matching the damaged one can be located or fabricated, it may be possible to sensitively replace the entire member.

Similar actions should be taken at the south façade near the southwest corner, although it will not be necessary to remove as much cement to assess condition of post bases. An outward-sloping cement wedge at the lower wall may be helping shed rain that might otherwise settle at the wall base, but it almost certainly is separated from the earlier slab below it by hairline fractures that can store quantities of water for extended periods. On the whole, it is not worth the loss of historic fabric that would be involved in removing this wedge until and unless a comprehensive rehabilitation of the structure is pursued. The cement-based wedge is almost certainly non-historic.

After cement plasters have been removed, exposed areas of wood features should be treated with Bora-Care by spraying with small hand-operated spray tanks. Treatment may be limited to lower wall elevations unless deterioration is apparent higher in the wall. Approximately one gallon of Bora-Care concentrate should be enough to treat the Old Bunkhouse.

Bora-Care is a borate-based wood preservative and contains the mineral boron. Boron was first developed as a fire retardant and a bleaching agent, but its qualities as a fungicide and termiticide soon became apparent. Its toxicity to mammals is considered very low, approximating that of table salt. It will, however, kill vegetation that it contacts. Bora-Care is sold as a liquid concentrate, mixed 1:1 with water, and must be mixed thoroughly. A gallon costs about \$95 and treats 800 board feet. One of many sources for Bora-Care is Preservation Resource Group, www.prginc.com/Borates/index-borates.html.

The northeast corner of the *jacal* portion where it intersects the corrugated-sided addition to the east has been replaced on the exterior surface (fig.30). Almost all early exterior plaster in this area is either lost or replaced with cement plaster. Lower infill on the exterior side of the wall appears to be a fairly recent replacement. The interior surface at this location appears to retain its early plasters, and therefore at least part of the original mesquite infill. Care should be taken to avoid disturbing inner wall material during repairs to the exterior.

The recent cement plaster should be removed from the lower wall base. Recently installed wall infill members could be replaced with more sympathetic materials. The cedar post at this location could likewise be replaced with a mesquite member during these repairs. Following the wood replacement the area should be treated with Bora-Care.

Consolidation of early and original earth plaster should be considered for lower areas near the slab. Ethyl silicates are typically used, but should only be applied by people trained with their application. Consolidation of earth plaster should be limited to areas showing excessive erosion or friability.

Limited earth plaster replacement is recommended for lower areas of Old Bunkhouse walls and where earth plaster comes off with cement plaster patches. Samples of the early plasters that have been studied are surprisingly sandy. Material from the edge of the reservoir would probably provide a good match, and could be amended with sand if the excavated material has excessively high clay content. Sample



figure 30. non-original section

batches should be made and allowed to dry thoroughly before deciding on replacement plaster. An appropriate mix would contain enough clay to be cohesive when wet, have good bonding properties, and not crack excessively when dry. It should fairly closely match the color of the material applied over the original reddish colored earth plaster, i.e., a rich tan color would be preferable.

The electrical system does not appear to be in a dangerous condition, but is substandard. Given the proximity to the wiring of thatch and wood features, an electrical short in any of several places could result in irreparable damage to the building. Replacement of the existing service from the adjacent power pole with armored cable or cable in conduit is recommended as soon as this is feasible.

In the interim, since the building is now used primarily for storage, power could be turned off at the breaker box. It may also be possible to replace the breaker serving the interior with a Ground Fault Circuit Interrupter (GFCI) breaker that would immediately interrupt power service if it detected a very small leak in current, such as an electrical short.

Additionally, a system of termite bait stations is recommended for installation at the perimeter of the Old Bunkhouse. Termite baits are much more effective and less toxic than so-called "barrier" treatments in buildings with slabs. Baits are typically installed on 8 – 10' centers.

The most effective bait systems are typically only available through certified pest control installers. The Sentricon system is one of the best known and is widely used, but is generally not available without a contract for monitoring. The Exterra system also seems to be effective, and usually can be installed without a pest control license. More information about these systems can be found at: www.ca.uky.edu/ENTOMOLOGY/entfacts/ef639.asp

Kitchen

As at the Old Bunkhouse, the Kitchen roof and site drainage seem to be in good order, but none of the site visits took place during a period of rain. After those considerations, condition of walls and the electrical system are the primary concerns. Walls seem to be structurally sound, but measures should be taken to reduce ongoing deterioration related to cement plasters and natural causes.

The Kitchen does not have the same level of historic significance as the Old Bunkhouse, so there is less reason to limit removal of harmful cement plasters where present. Particular attention should be paid to the cement at lower wall areas, where it seems to have been applied to cover or consolidate damaged features there.

The south façade has wide areas of cement plaster which should be removed as feasible. Split mesquite members similar in size to what was originally used in the walls should be used to replace damaged members. The cement-based wedge present in some areas of the perimeter can be left in place, but deteriorated wood members behind it should be replaced as possible.

Following the removal of cement plaster that can be easily detached, exposed wood features should be treated with Bora-Care as at the Old Bunkhouse. One gallon of Bora-Care should be sufficient for treating the exterior walls and lower interior wall elevations of the Kitchen. The same earth plaster material developed for the Old Bunkhouse could be used for plaster repairs at the Kitchen. A similar system of termite baits recommended for the Old Bunkhouse should be installed at the Kitchen perimeter.

Stone Dam

The most intact part of the stone work is a +/- 45' section about 40' east of west end. At 7' 6", this is also the tallest intact, visible, section of the masonry. Like most of the structure, it is being pried apart by tree roots, and possibly by hydrostatic pressure from the earth behind it. This section of wall is approximately 15" out of plumb, leaning outwards from the top.

Recommendations for preservation include stabilization of all or part of the section of the dam described above. The budget estimate below includes the entire 45' section. With some variations, the stabilization actions could be implemented as part of a masonry conservation program in an educational environment. If the stabilization actions are carried out over a period of years, or if no action will be taken in the near future, a simple buttress can be constructed to prevent the tall section from further dislocation.

The first step in stabilization of sections of the structure will involve removal of deep-rooted plants in the immediate area of the section of dam, making sure that stumps of plants cut down are treated with an herbicide that will prevent their return. Roundup $^{\text{TM}}$ or one of its derivatives work well but must be used promptly after cutting the plant. Typically a concentrated mix of the herbicide is brushed onto the stump. Care must be taken to prevent it from getting in the ponds because it is hazardous to amphibians.

A backhoe will be required to excavate along the backside of the masonry structure, and it must have the capacity to excavate 8' below the surface. The excavation between the masonry and the berm should be wide enough to accommodate masonry work at the backside of the dam – about 4 - 5', and must be properly braced.

At a project in Roma, Texas, our crew was able to jack a large section of brick wall back to a vertical position without disassembling it. It may be possible to re-erect the leaning stone structure in the same way, using several wall-anchored hydraulic jacks pushing against a structural lattice that distributes the pressure of the jacks across a section of the dam up to +/- 8 linear feet at a time.

If the masonry cannot be lifted to a vertical position in sections using a brace, it will be necessary to dismantle and reassemble the section of the dam to be conserved. If this is the case, the existing construction should be documented photographically (numbering each stone in the section to be reconstructed with index cards or other reversible marking system), disassembled, storing the stones adjacent to the dam, then reconstructed using the same stones and an appropriate lime-based mortar formula.

An appropriate mortar formula for this work would be 1 part white Portland cement: 3 parts hydraulic lime: 9-11 parts sand of a color and composition to provide a good visual match to the original mortar. Several test batches, thoroughly dried, will be necessary in order to get a good match.

Installation of a drainage barrier is recommended between the masonry wall of the dam and the earth berm behind it. There are several geotextile

drainage sheets that would work well in this application. These should be used in conjunction with a drainage channel at the base of the wall that will convey water through the wall to the north toward the tank.

Fences

Overall the cedar/mesquite fence sections are in generally good condition. Bora-Care will provide effective preservation of the fences from termites and decay fungi. Due to its exposed and ventilated construction, decay fungi are not a serious threat. Termites, however, will continue to cause damage to the structures over the long term. Bora-Care should be applied by spraying, with concentration on lower areas of the fences and especially the post bases. The treatment should be applied in a prioritized manner, with the more prominent fences nearer the center of the complex being treated first.

In case a section of the fence does fail, it should be replaced "in-kind". That is, deteriorated posts the same length as adjoining sections should be installed, and an infill of mesquite splits stacked between the paired posts to match the adjacent fence. Cedar posts should be used to replace cedar, and mesquite posts should be used to replace mesquite.

Stone Marker

The provenance of the inscribed stone tablet is unclear. It seems to be moved from its original location, but if it is some kind of location marker, it should of course remain where it is. The following actions would help to preserve it, wherever it is placed. As the lower portion of the tablet exhibits significantly more erosion than the upper part, a first step would be to raise the stone onto a plinth or platform a few inches high.

In this case, concrete would not be a bad choice of materials since its low permeability would reduce rising damp, which is causing most of the erosion now. The platform should be separate, and cured, before the stone is placed onto it. The dimensions of the plinth should be narrower than the lower surface of the stone so that water does not accumulate on top of it.

Other than lifting the stone from ground contact, the only other recommendation would be consolidation with ethyl silicates in a treatment similar to what is recommended for localized consolidation of early earth plasters.

Historic Resources Assessment									
Stabilization Budget Estimate									
	unit	quan	labor	labor tot	mats	mat/sc	total		
Old Bunkhouse remove exterior cement plaster wall base repairs at NW and SW contingency for replacement posts repair NE corner jacal portion additional mesquite infill repairs Bora-Care treatment earth plaster consolidation earth plaster development, tests limited earth plaster application removable screens at crate openings electrical upgrade check / resecure roofing (contingency) repair / resecure gutter termite treatment (Exterra or equal)	sf Is ea ea Is ea Is	300 1 7 12 150 1 200 2 1 1 1	2 750 200 55 10 250 2 300 3 125	600 750 1,400 660 1,500 250 350 300 500 250	0.25 25 50 5 2.5 100 0.5 50 1 25	75 25 350 60 375 100 100 50 200 50 450 50 100	10,345 675 775 1,750 720 1,875 350 450 350 700 300 450 400 300 1,250		
Kitchen remove exterior cement plaster mesquite infill repairs Bora-Care treatment earth plaster consolidation limited earth plaster application electrical upgrade termite treatment	sf sf ls sf sf ls	200 100 1 150 150	2 10 250 2 3	400 1,000 250 263 375	0.25 2.5 100 0.5 1	50 250 100 75 150 450	4,363 450 1,250 350 338 525 450 1,000		
Stone Dam (45' section) remove vegetation (backhoe + 1 man) temporary bracing excavation with backhoe reconstruct / re-erect section tie back wall into berm drainage sheet base drainage + gravel backfill with tractor, regrade re-seed with native grasses	Is Is Is Is Is Is Is Is Is If Is Is	1 1 360 1 360 60 1 500	400 550 800 25 700 1.5 10 400 0.5	400 550 800 9,000 700 540 600 400 250	550 350 1100 1.5 350 1.25 5 350 0.5	550 350 1100 540 350 450 300 350 250	950 900 1,900 9,540 1,050 990 900 750 500		
Mesquite Fences treat 300 If fence bases with Bora-Care	ls	1	350	350	100	100	450 450		
Stone Marker fabricate, raise onto rc plinth	ls	1	150	150	25	25	265 175		

Bora-Care treatment earth plaster consolidation	ls sf	1 200	250 2	250 350	100 0.5	100 100	350 450
earth plaster development, tests	ls	1	300	300	50	50	350
limited earth plaster application	sf	200	3	500	1	200	700
removable screens at crate openings	ea	2	125	250	25	50	300
electrical upgrade	ls					450	450
check / resecure roofing (contingency)	ls	1	350	350	50	50	400
repair / resecure gutter	ea	1	200	200	100	100	300
termite treatment (Exterra or equal)	ls	1					1,250
Kitchen							4,363
remove exterior cement plaster	sf	200	2	400	0.25	50	450
mesquite infill repairs	sf	100	10	1,000	2.5	250	1,250
Bora-Care treatment	ls	1	250	250	100	100	350
earth plaster consolidation	sf	150	2	263	0.5	75	338
limited earth plaster application	sf	150	3	375	1	150	525
electrical upgrade	ls					450	450
termite treatment	ls	1					1,000
Stone Dam (45' section)							17,480
remove vegetation (backhoe + 1 man)	ls	1	400	400	550	550	950
temporary bracing	ls	1	550	550	350	350	900
excavation with backhoe	ls	1	800	800	1100	1100	1,900
reconstruct / re-erect section	sf	360	25	9,000	1.5	540	9,540
tie back wall into berm	ls	1	700	700	350	350	1,050
drainage sheet	sf	360	1.5	540	1.25	450	990
base drainage + gravel	lf	60	10	600	5	300	900
backfill with tractor, regrade	ls 	1	400	400	350	350	750
re-seed with native grasses	sf	500	0.5	250	0.5	250	500
Mesquite Fences							450
treat 300 If fence bases with Bora-Care	ls	1	350	350	100	100	450
Stone Marker							265
fabricate, raise onto rc plinth	ls	1	150	150	25	25	175
consolidate with ethyl silanes	ls	1	75	75	15	15	90
General contractor fee (17%)							5,593
Total Budget Estimate for Stabilization as described in study							38,496

Site Planning / Period of Interpretation

One thing that emerges from this study is how strongly La Union evokes south Texas ranching history from the late Nineteenth Century to the third quarter of the Twentieth Century. Among the main planning issues will be to develop a rehabilitation strategy and period of interpretation that embrace that long span of ranching history while retaining a degree of chronological consistency.

The period of interpretation should reflect the span of time during which the site was at the peak of its ranching activity; the latest period of historic construction (generally any construction more than 50 years old); and proximity of the historic resources to later, "non-contributing" structures. The extent to which a proposed period of interpretation is supported by physical and/or archival evidence, rather than conjecture, is also an important issue.

Based on observations made during the course of this study, there seem to be three general options as logical periods of interpretation for the site: restoration of the Old Bunkhouse to its original appearance in the 1890s; restoration of the Old Bunkhouse to its appearance at the time the Kitchen and its west addition were in place (ca. 1945); conservation of the Old Bunkhouse, Kitchen and surrounding structures in their current configurations.

The first option – restoration of the Old Bunkhouse to its appearance at the time of construction – would be a more viable option if the building were not closely surrounded by almost a dozen modern structures. The Old Bunkhouse is the most significant of the ranch's historic resources, and could be restored with a minimum of hypothetical reconstruction. Yet, given the proximity of nearby modern buildings, a period of interpretation that includes at least the Kitchen makes more sense.

The second option – rehabilitation of the Old Bunkhouse and Kitchen to a point in time after the Kitchen addition was constructed – appears to include the years during which ranching activity at La Union was near its peak. Such a period of interpretation – ca. 1950 – would also include the cedar and mesquite fencing, and virtually all of the ranch's historic fabric. This would likely include the east addition to the bunkhouse as well. The setting could be made more sympathetic to the historic resources through the relocation of nearby features such as the campers, trailers, and perhaps the shed building southeast of the Old Bunkhouse.

Considerations of Uses

This report focuses on the historic resources, but Rancho La Union offers a great deal in addition to these. The ranch has very good potential for a range of educational, cultural, and ecological uses. All of the options, it seems, will depend on developing two basic kinds of relationships. One will be local contacts and support for the foundation, and the other will be long term relationships with the institutions and organizations that can make use of the ranch's resources.

Local relationships are essential to the everyday functioning of the facilities during and surrounding the time they are in use. Custodial and maintenance considerations aside, local ambassadors for the Foundation will be invaluable. Regional non-profit organizations whose goals overlap those of GLM should be identified in order to facilitate resource sharing, such as personnel, grant writing, and general development. One natural partner in this regard would be the River Pierce Foundation in San Ygnacio.

Potential institutional partners are more diverse, but it would be advantageous to focus on developing relationships with one or two that can include the ranch in their long-term planning. At least in the early stages of making broader use of the ranch, repeated visits will be much easier to accommodate than serial introductions. A few prospective institutions are mentioned below associated with particular activities.

Infrastructure

The location of the ranch, which informs so much of its development, informs the range of future uses too. While it is less than an hour from the Laredo airport, it seems disproportionately remote. Its relative isolation can help to focus collective and individual energies. However, a major component in advancing all of the contemplated activities at the ranch will be high speed internet access. This would probably take the form of a local network served by a satellite connection.

Likewise, a website will be essential to disseminate information about the Foundation and coordinate scheduled uses. Several Web hosting services cater specifically to non-profit organizations. One such service I can vouch for, and which is being used by an organization I am involved with, is Wild Apricot www.wildapricot.com/.

The existing infrastructure at La Union lends itself to hosting large numbers of people for events as well as extended periods. Aside from the historic resources, ranch buildings could accommodate 16 to 24 persons or more if ancillary structures are included. The main buildings include:

The Pavilion / "Party House" (1,500sf) is one large, open space and would make an exceptional place for gatherings, meals, classes and presentations. Restroom facilities are adjacent to the building.

The Main House (approximately 960sf), has an open plan with a small loft, kitchen, and bathroom, and could accommodate 8 – 10 visitors.

The cinderblock bunkhouse (1,600sf including screened porch), could accommodate 8 – 12 visitors.

Additionally, the Old Bunkhouse and Kitchen could facilitate the use of the ranch by groups of people. With a few sympathetic modifications, the Kitchen could include modern cooking facilities, and the Old Bunkhouse addition could be retrofitted with bath facilities.

The ranch complex also offers numerous support spaces, such as storage, equipment and shade structures. Some of them, such as the corrugated building south of the Kitchen, have been used as bunkhouses previously and could be again. A few of the many possible educational and cultural uses for the ranch are briefly described below.

Field Schools

One of the uses that would take good advantage of what La Union has to offer would be a field school in any of a variety of disciplines. The ranch would be an excellent location for intensive study sessions of a week or more, and as a base for academic charettes to nearby resources. Areas of study that first come to mind are: historic architectural resources of Nuevo Santander (most of which are within a two or three hour drive); archeological resources of Zapata County and Nuevo Santander; and wildlife and biological resources of south Texas.

Among the logical partner institutions for academic work of this kind would be Texas A&M (College Station, Laredo, and Kingsville campuses); the University of Texas (Austin and San Antonio campuses); National Ranching Heritage Center at Texas Tech University; and the Landscape Architecture Department at Louisiana State University. Links and contacts for these institutions may be found under Additional Resources below.

Academic Residencies

Rancho La Union would be an exceptional place for sustained academic work (such as a thesis), particularly if the subject is related to area cultural or ecological resources. There is a minimum of distraction, yet a selection of

restaurants, groceries, and other amenities is within an hour's drive. All that would be needed would be a high speed internet connection.

Artist Residencies

Perhaps the largest artist residency program in the country is in Johnson, Vermont. The Vermont Studio Center has accumulated 30 historic buildings where about 50 artists at a time spend 4 – 12 weeks developing their work. I don't know what the potential is for a scaled-down version of the Studio Center at La Union, but some aspects of what they have done could work well there. Their website is: www.vermontstudiocenter.org/.

Conservation Testing Ground / Experiment Field

As part of ongoing academic studies in cultural resource conservation, space at the site might be set aside for an experiment field where conservation treatments could be developed, tested and monitored. I don't know of a similar place devoted to testing techniques and methods for south Texas historic resource conservation, but it could be very useful. A model for such a testing ground would be the Fort Selden field in New Mexico, which is supported in part by the Getty Conservation Institute and the National Park Service. A description of the work there may be found at: www.getty.edu/conservation/publications/pdf publications/terraftselden.pdf.

Ecotourism / Birding

Spring and autumn bird migrations bring hundreds, if not thousands, of people to the area each year. Most of the species visitors are interested in are found along the Rio Grande. However, there don't seem to be facilities nearby that can support a substantial group of ecotourists, and certainly not one with surroundings, a sense of safety, and an ambience like La Union. Enhancing bird and other wildlife habitat, as discussed in the section Further Studies, would improve the offerings for ecotourists.

Film Location

Given the authenticity, character, and resources of Rancho La Union, it would make a very good location and/or base for film production. Typically this is coordinated through the Texas Film Commission, Office of the Governor.

Organizational / Corporate Retreats

Related to the potential uses above, La Union could lend itself well to corporate retreats and to seasonal use as a Bed and Breakfast.

Further Studies

National Register of Historic Places

Rancho La Union is a natural candidate for inclusion in the National Register of Historic Places (www.nps.gov/nr/). Aside from formal recognition of the ranch's historical significance, benefits of inclusion in the Register are mostly from eligibility for preservation-related funding. For non-profit organizations there are limited but increasing opportunities for tax credits for rehabilitation projects (although these credits might not be cost-effective at La Union).

Inclusion in the Register is through demonstration that a property meets one or more of four basic criteria. Most likely, the nomination of La Union would be as a historic district, under Criterion A.: *Property is associated with events that have made a significant contribution to the broad patterns of our history*, and Criterion C., that the ranch includes architecture that *embodies distinctive characteristics of a type of construction*. It may also be eligible under Criterion D., *Property has yielded, or is likely to yield information important in prehistory or history*.

The nomination process is involved, but not onerous. The nomination for La Union would be fairly expensive, although a significant part of the work is included in this report, and there is funding assistance available. Sample nominations may be found at: www.nps.gov/nr/sample nominations.htm.

Archaeological Survey

An archaeological survey for the site is highly recommended. The survey should include identification of historic as well as prehistoric resources and artifacts. Particular areas of interest for the historic period would include the area around the Old Bunkhouse, Kitchen, and other locations around the site.

Assistance with an archaeological survey can be found through Texas Historical Commission, Texas A&M University, and several other institutions. While such surveys can be expensive, there may be an opportunity to coordinate with planned investigations by River Pierce Foundation and/or proposed work at nearby Rancho Corralitos.

Oral History

An oral history program is highly recommended for La Union. Implementation of an oral history program would be timely. Speedy and others; identify a repository. When properly conducted, oral histories collect a wealth of information about everyday life at a site during the historical period. These surveys would identify such basic, but often overlooked, aspects of ranch life as who has worked on the ranch; what were their jobs;

where they stayed and ate; what were the seasonal activities, such as roundups; what was/were the source(s) of drinking water; how was trash disposed of; how and where were holidays celebrated; and much more.

Several organizations and institutions with a focus on south Texas could provide assistance with an oral history project for La Union. These include: The Texas Historical Commission, TAMU Kingsville, the Briscoe Center for American History, the Hidalgo County Historical Association, and the River Pierce Foundation. Links to websites for these organizations can be found under Additional Resources below.

The best south Texas oral history project I know of was conducted by archaeologist Jose Zapata while we were working together in Roma, Texas in the early 1990s. Zapata is director of the Casa Navarro State Historic Site in San Antonio.

Graduate Study

La Union provides a number of excellent research topics, any of which would make a very good thesis.

Wildlife Habitat

Rancho La Union is full of wildlife. I saw more species of snakes in one hour there than I have ever seen outside a reptile exhibit. (I believe one of these was either a Texas Indigo Snake – a protected species known to eat rattlesnakes – or a species of racer (fig.31).) There is an abundance of bird species, resident and migratory, as well as a diversity of insects.



figure 31. La Union has a diversity of wildlife

A wildlife survey would be a good start in identifying local species. Texas Parks

and Wildlife and/or the U.S. Fish and Wildlife Service would be helpful partners in the enhancement of La Union wildlife populations. A sustained program of improving wildlife habitat would benefit potential educational and ecology-related uses of the site.

Additional Documentation and Research

Given the hand-crafted nature of the Old Bunkhouse and its relative rarity, laser scanning of the interior and exterior would be desirable. Laser scanning provides an unparalled level of documentation, and would be valuable in

recording the building in its present condition as well as aiding a determination of rates of erosion at a later date.

Laser scanning is expensive, and would probably only be worthwhile if coordinated with other documentation of nearby resources, or in conjunction with future activities at La Union, such as at a testing field described below.

It would be of particular interest to me to include samples of mesquite members from the Old Bunkhouse, Kitchen, and fences in a dendrochronology study I intend to complete in 2010. Sampling would involve minor destructive investigation (boreholes approximately 5/8" in diameter) from four to eight members in unobtrusive locations, to be interpreted by the Tree Ring Laboratory in Tuscon, Arizona. If successful, the data would allow us to determine the year the wood members were cut, suggest a close date for the construction of the resources, and provide cross-references for other area buildings.

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Fleming, Sharon E., and Timothy Pertula. Report on the Architectural and Archaeological resources of Rancho Corralitos. Texas Historical Commission.

Lott, Virgil N. and Mercurio Martinez. <u>The Kingdom of Zapata</u>. San Antonio: The Naylor Company, 1953.

Rancho La Union Historic Resources Assessment Rancho La Union Historic Resources Assessment

Additional Resources

Dolph Briscoe Center for American History www.cah.utexas.edu/services/utopia.php

Louisiana State University, Department of Landscape Architecture www.design.lsu.edu/ (Contact: Bruce Sharkey bshark@lsu.edu/)

Museum of South Texas History (formerly the Hidalgo County Historical Museum) www.mosthistory.org/Archive-Artifact-Collections

National Park Service, Technical Preservation Services www.nps.gov/history/hps/tps/index.htm

National Ranching Heritage Center at Texas Tech www.depts.ttu.edu/ranchhc/body museum homeoverview.htm

River Pierce Foundation www.riverpierce.org (Contact: Christopher Rincon (956) 756-5784)

Texas A&M University

Architecture: Robert Warden RWarden@archmail.tamu.edu

Archaeology: Alston Thoms <u>a-thoms@tamu.edu</u>)

Texas Film Commission, Office of the Governor (Contact: Lindsey Ashley or Carol Pirie, 512 / 463-9200)

Texas Historical Commission www.thc.state.tx.us/ Contact: Sharon Fleming.

Zapata County Chamber of Commerce zapatachamber.com/cwt/external/wcpages/index.aspx