

PADRE ISLAND NATIONAL SEASHORE

NOVILLO LINE CAMP HISTORIC STRUCTURES REPORT

ON MICROFILM



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Southwest Cultural Resources Center
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Table of Contents

ACKNOWLEDGEMENTS	iii
PREFACE	iv
I. ADMINISTRATIVE DATA	1
II. HISTORICAL DATA	3
III. ARCHITECTURAL DATA	7
IV. PRESERVATION DATA	19
V. ANALYSIS	25
VI. RECOMMENDATIONS	36
VII. APPENDICES	39
Aerial Photo Site Plan	40
Photographs (historic and recent)	41
Bunkhouse Drawings	43
Weather Data	66
National Register Forms	68
FOOTNOTES	76
BIBLIOGRAPHY	77

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PREFACE

This Historic Structures Report was prepared in conformance with National Park Service Guidelines for such documents. However, it is in no way to be considered as an action plan. Rather it constitutes the professional recommendation of Cultural Resource Preservationists to Management. Acceptance of this report does not constitute acceptance of its recommendations. Any decision to implement the recommendations of this report, or other alternatives, will at that time become an action plan and must receive prior Advisory Council Clearance prior to implementation.

I. ADMINISTRATIVE DATA

Name and Location

Dunn Ranch, Novillo Line Camp, Padre Island National Seashore

List of Classified Structures numbers and Order of Significance

The Novillo Line Camp is considered to be of local (the Third Order) of Historical Significance.

Number	Name
PAIS-HS-1	Fences (all, including gates)
PAIS-HS-2	Bunkhouse-A
PAIS-HS-3	Bunkhouse-B
PAIS-HS-4	Kitchen
PAIS-HS-5	Corrals
PAIS-HS-6	Windmill and Tank
PAIS-HS-7	Historic grounds

Proposed Level of Treatment

It is proposed that no major preservation effort be made at Novillo, and that the structures be placed under Category D of the List of Classified Structures (LCS), the category designation for structures that Management has decided may be disposed of, demolished, benignly neglected, or altered. The Advisory

Council on Historic Preservation and the Texas State Historic Preservation Officer must be afforded the opportunity to comment before this proposal is implemented as policy. (36 C.F.R. Part 800).

Proposed Use

It is proposed that the Novillo Line Camp be interpreted to the Public in its ruinous condition until no longer feasible, due to eventual collapse of the structures or sudden destruction from a hurricane, desire for interpreting the history of cattle raising at a future visitor center, or whatever other circumstances might develop.

Cooperative Agreements, Leases, Etc.

The Chevron Cracking Plant, located immediately to the southeast of the Novillo Line Camp, was built in 1955. It operates under the auspices of a lease to mineral rights granted by the National Park Service. It is likely that lease will be periodically renewed when necessary so long as the plant can continue to perform its function.

II. HISTORICAL DATA

Statement of Historical Significance

From 1805 until 1971 Padre Island was used primarily for raising cattle, and the Novillo Line Camp is the best remaining artifact of that activity. Novillo is significant because it represents an aspect of open-range cattle ranching that continued until 1971. By 1900 open-ranching had become a thing of the past on the Texas mainland due to land parceling and fencing, so the fact that it continued for so long on Padre Island is notable.

The Novillo Line Camp is also a physical expression of one man's ingenuity and perseverance in adapting a cattle ranching operation to a hostile environment. That man was Patrick Dunn, and by the time he died in 1937 he was known as the Duke of Padre Island.¹

Ownership

The history of land ownership on Padre Island is long and complex, beginning with Spanish exploration and continuing through Mexican ownership and Anglo-American settlement in South Texas. By the time Patrick Dunn as a young man looked to Padre Island in 1879 as a possible location to raise cattle, the island was owned by a variety of personal and business interests, though little human settlement had actually occurred. Dunn

obtained a lease from two Corpus Christi landowners (whose names were John McCampbell and Stanley Welch) to raise cattle on their land, and as his ranching operation prospered he purchased more and more land until by 1926 he owned almost all of the entire island.²

Padre Island is approximately 115 miles long and from 500 yards to three and one-half miles wide. With natural water barriers on all sides (the Gulf of Mexico on the east, the Laguna Madre on the west, Corpus Christi Pass on the north, and Brazos Santiago Pass on the south), no fences were necessary to keep Dunn's cattle from wandering off his range. Fresh water was available by digging shallow wells in the sand, and grass was generally plentiful, more so towards the northern end of the island.

By 1926 Patrick Dunn had acquired legal ownership of almost all of Padre Island's 130,000 acres. There were small portions of land on the island which Dunn did not own, though by having grazing rights he in fact controlled the entire island. Interestingly, the Novillo Line Camp straddles the boundary line between Land Tracts 7 and 8 on Padre. Dunn owned Tract 8, but Tract 7 was owned by a Mr. Lovenskiold, who had purchased it in 1876. However, Dunn obtained grazing rights to Lovenskiold's tract and thus the Novillo site was managed entirely by the Dunn Family.³

On February 1, 1926 Patrick Dunn sold to Sam A. Robertson his entire land holdings on Padre Island for the sum of \$125,000.⁴ This action had little effect on the cattle ranching operations as Dunn retained grazing rights which were held by the Dunn family until 1971, when the last cattle were removed from the island. Patrick Dunn died in 1937, but the ranching operations continued under the supervision of his son, Burton Dunn, until 1971.

Land Tract 7, owned by Mr. Lovenskiold, passed to his heirs upon his death, who in turn sold this land to the National Park Service in 1964. Land Tract 8, which passed from Dunn to Robertson, later was sold to Albert Jones. Upon his death, Jones' heirs acquired legal ownership and sold it to the Park Service in 1965.⁵

Structural Documentation

Documentation of the structural history of the Novillo Line Camp is at best sketchy and there are several reasons for this. First, Patrick Dunn relied upon the island itself for the various materials used to build his line camps. With lumber being expensive and transportation to the island difficult, the alternative was to gather the odd and generally plentiful assortment of wood pieces that washed up along the beach. Currents and prevailing winds continually deposited cargoes washed overboard from ships as well as anything washed into the sea from as far away as southern Mexico.

The second reason for incomplete structural documentation at Novillo is the general nature of Padre's environment, in the form of shifting sands, salty moist air, and periodically severe hurricanes. These factors made maintenance and replacement a continual necessity to keep the line camps functional. Hurricanes are not uncommon along Padre Island; however, those occurring in the years 1916, 1919, and 1933 were so severe that it is highly likely that most of the structural make-up of Novillo today dates to subsequent times.

While some structural alterations are known to have occurred at a particular time, the scarcity of photographs and lack of records make structural documentation conjectural. What is known about the Novillo Line Camp is that the general configuration and its structural components follow very closely the initial line camp building scheme devised by Patrick Dunn himself in the 1880's. With the exception of structural features added in recent times, such as a windmill and loading ramps for cattle trucks, Novillo has evolved very little in either form or function since its conception.

For these reasons, the existing structural appearance and conditions of the Novillo Line Camp will be herein described, with all known structural or functional alterations, additions, and deletions noted. Supporting photographs and drawings may be found in the appendices.

III. ARCHITECTURAL DATA

Statement of Architectural Significance

The architectural significance of the Novillo Line Camp is perhaps a form derived entirely from the materials at hand and the function to be performed. Novillo is neither well-crafted in design nor construction; its fabrication is simple at best, and more often primitive in execution. However, this line camp is a clear expression of the limited materials available and the harsh climate to which it is adapted.

Existing Appearance and Conditions

The Novillo Line Camp is the northernmost of four line camps Pat Dunn built on the island in order to effectively work his cattle strung out over such a distance. It consists of a large fenced-in area, called a trap, which encloses the entire camp area. Within this compound are two small bunkhouses (completely enclosed), an outdoor kitchen, smaller traps, and corrals (working pens).

The other line camps, called Black Hill and Green Hill, are located at approximately fifteen-mile intervals down the island, but are now badly deteriorated and fallen down. These two camps were very similar to Novillo in layout and structural

features, but Novillo is the only one which remains generally intact.

Pat Dunn and his "vaqueros" (cowboys) traveled up and down the island between the line camps on horseback, pulling along a small freight wagon on which was carried food and provisions. This wagon still exists and today is owned by Padre Island National Seashore. It is presently stored at park headquarters, and is in fair condition.

For the purposes of describing the existing appearance and condition of the Novillo site, the line camp will be broken down into its seven major components: the post-and-wire fences, the two bunkhouses (designated A and B), the kitchen, the corrals, the windmill and stock tank east of the corrals, and the historic grounds. Refer to the site plan for orientation and the relationship of structural components.

Fences

The term "fences" is used to designate the post-and-wire construction which delineates the trap areas, as opposed to the term "corrals", which are the all-wood constructed working pens. The fences at Novillo today were installed in September of 1976 to replace what was there before. They are composed of unpeeled cedar posts approximately 5 feet above grade, with five strands of barbed wire stretched between them.

It should be noted that when this work was done, the wire was stapled to the outside of the posts. This is

historically and functionally incorrect, as cattle in the trap areas would have a tendency to push the wire away from the posts instead of against them, and the staples most likely would pull out of the posts and the wire would collapse.

Documentation as to whether the present fence lines exists in their original location at the time of the camp's initial construction is non-existent, though they do follow the plan that existed prior to replacement. There is some older, woven wire fencing on the north side of the corrals which raises the question as to whether the earliest fences incorporated that type of wire. The present post-and-wire fences are basically in sound condition, though the barbed wire is already starting to corrode.

Bunkhouse A

Bunkhouse A refers to the southernmost and slightly larger of the two bunkhouses. They are the only two completely enclosed structures on the Novillo site. Bunkhouse A is a rectangular wood structure, measuring in plan 14'6" wide by 15'6" long. It is of board and batten construction, with a pitched split cedar shingle roof. The boards are 9½" wide and 2½" thick; batts are 3½" wide and ¾" thick. The three doors of this cabin, located on the east, south, and west walls, are constructed in the same manner as the walls, and attached to the building with metal strap hinges.

Bunkhouse A is constructed on 12-14 inch log piers, which elevate the cabin approximately two feet above grade.

Presumably, this was done to keep the floor dry and sound due to the extremely high water table, and to provide some protection against snakes. The flooring is constructed of boards of the same dimensions as the siding.

The roof has 24 courses of split cedar shingles to each slope, with a shingle exposure of 5". The corrugated tin was placed over the shingles in 1970 for the last cattle round-up.⁶ Apparently the shingle roof had leakage problems and the tin was an expedient remedy.

It has been corroborated that Patrick Dunn built the two existing bunkhouses, though the date is uncertain. It is possible they may have been constructed to replace two earlier bunkhouses which had been destroyed in the very bad 1919 hurricane, but this is strictly conjectural. (Practically all of the Green Hill Line Camp had to be rebuilt after that storm, so it is likely that Novillo suffered similar damage.) Dunn stayed in this cabin on cattle round-ups, while the "vaqueros" (cowboys) stayed in the other. He is supposed to have slept on a wooden platform approximately 6" off the floor, but this no longer exists.

On the west facade of Bunkhouse A can be seen the ghost-line of an attached outhouse, now gone. James Lynch, the last cattle foreman at Novillo, remembers this as having been built approximately 1920, which would have made it an integral feature of the bunkhouse if it was constructed after the 1919 storm.

The bunkhouse west door opened onto a platform which allowed one to enter the privy itself.

Bunkhouse A is basically sound structurally, though wood rot heavily infests some of the wood members. The split cedar shingles are badly deteriorated, but the tin roof is providing some protection.

Bunkhouse B

This bunkhouse, located north of Bunkhouse A, is of very similar construction, with a few notable differences. It measures 12'0" wide by 14'6" long, having a door on the south elevation, and window openings on the east and west facades. Each of the two window openings has no glass, but rather a hinged door of the same board and batt construction as the walls. Metal strap hinges secure these window doors and the regular door to the structure. Those securing the east window door and the south door were installed in 1976 to replace older ones of the same type. The strap hinges on the west window door are broken and badly corroded.

Bunkhouse B was first utilized by the vaqueros in Patrick Dunn's era, but in later years the cattle foreman and the cook stayed here while the vaqueros slept in Bunkhouse A. The icebox found in Bunkhouse B was placed there for the last round-up (1970-71) to make things more amenable.⁷

The roof is composed of split cedar shingles, 20 courses to each slope. The coorugated tin placed over it was done at the same time and for the same purpose as that on Bunkhouse A.

Bunkhouse B has the same preservation problems as Bunkhouse A, with some rotted pilings, boards and batts, and shingles. The wood rot situation is much more severe with this bunkhouse, however, due to a buildup of sand around the cabin which has caused a standing water situation directly below the structure. Indeed, during heavy rains and wet winters the entire lower cabin is immersed in water, which has caused greatly accelerated wood rot of pilings and siding. Bunkhouse B is not as high above grade as Bunkhouse A, and either sand has gradually built up underneath or the bunkhouse has settled. Whichever the case, the water problem here is severe.

Kitchen

The kitchen is an open structure, consisting of a pitched roof of tongue-in-groove wood planking supported by round posts. The roofed area measures 10'6" by 15'6"; the planking is 5" wide and varies in length of 6' to 8', and the round posts supporting the roof are approximately 9" in diameter. Underneath the roof is a long table (11'2") which is 34" wide and has built-in benches on either side running the length of the table.

An L-shaped windbreak, measuring approximately 17' by 12' extends north and then west of the covered table area. It is composed of vertical boards, anywhere from 9" to 18" wide. This structure was added in later years (date unknown) as a windbreak to keep sand from blowing into the food while

it was being prepared in this area. The corrugated tin, which forms more windbreak walls, was added in 1970 in preparation for the last cattle round-up (the same material used to roof the bunkhouses). At one time there were suppose to be vertical boards providing this same function, but there is no evidence of this.

The kitchen is in an advanced state of deterioration, and was on the verge of total collapse when it was pushed back up in April of 1976. Wood rot is extensive throughout the structure, and the table has sunk or the area beneath it has filled with sand, as the table is now too low. At one time there was a wire line strung between the kitchen and Bunkhouse A on which strips of beef were hung and dried to make jerky.⁸ The rolled up and twisted wire seen attached to the L-shaped windbreak is probably what is left of that line.

Corrals

The corrals represent the most diverse use of materials at Novillo. The boards are of all types and sizes, nailed to upright timbers that also vary considerably. There is a hierarchy of pen sizes, as cattle were forced into progressively smaller pens for working (branding, castrating, vaccinating, etc.). A long narrow working chute running down the length and middle of the corral complex forced cattle to move single-file into the desired pen area. There is a unique triangular stop-gate located in this working chute which allowed a steer

to be diverted into a pen without letting the animal behind follow or walk ahead.

In the earliest days of Novillo no metal hinges were used for gates. Instead, a mortise and tenon technique, fashioned out of wood, was employed to hinge gates. While some of the corral gates have since been remodeled with metal strap hinges, there are still a few examples of the earlier fastening technique, which dates to the earlier years of the line camp.

There are two cattle loading chutes as part of the corral complex, located on the east side and southeast corner of the corral area. These are features added after 1948 with the advent of the first cattle truck useage on the island. Burton Dunn, son of Patrick Dunn, purchased an army surplus truck in 1948 which he used to transport cattle from as far away as Green Hill to the Dunn Ranch headquarters located at the northern end of the island along Packery Channel.⁹

When the Padre Island Causeway opened in 1951, for the first time commercial cattle trucks could come to the island and could drive down the hard-packed beach to as far south as the Novillo site. From that time onwards the Novillo Line Camp took on added importance as the principal gathering place for all cattle from Novillo southward, relegating the importance of the other two line camps to a subordinating position.¹⁰

The two cattle loading chutes at the corrals are the only real structural concession to cattle marketing modernization

at Novillo. The first built was the ramp located at the eastern edge of the corral complex. Later, due to grading and water problems that caused difficulty for the cattle trucks, a second ramp was built at the southeast corner of the corrals, along with a shell-based road running from it to the beach area.

The corrals are in a very serious state of deterioration, which includes extensive wood rot, collapsed gates, and badly corroded nails and hinges. They represent perhaps the single-most preservation problem at the Novillo Line Camp. In addition, the grasses which have grown up in the pen areas are worsening a moisture problem caused by standing water in low-lying areas.

Windmill and Tanks

A windmill was erected in 1949 at the Novillo Line Camp to pump water into two reinforced concrete stock tanks approximately twenty feet away.¹¹ Each of these two round tanks has an inside diameter of 5' with a depth of 22". Water filled the tanks via a pipe running from the windmill to the tanks, which were allowed to overflow. This was one of nine windmill systems Burton Dunn build on the island.¹²

Until this time water was gathered in a ground-level stock tank located east of the corrals, approximately 35 feet away. At one time there were about 75 such tanks located on the island.¹³

The ground-level stock tank is a good example of how Pat Dunn improvised and worked with the natural environment at Padre Island. It was made by building a wood frame 6' wide,

8' long, and 2' deep out of 2x12 lumber. A hole was dug approximately 3' deep and the bottomless frame was placed in it. Fresh water seeped through the cracks and from below and kept the tank filled with fresh water. These tanks were placed near the sand dunes on the Gulf side. On Padre Island, sand catches rainwater and with salt water being more dense, this fresh water floats on top. This phenomenon has historically made cattle ranching on Padre a possibility.

The ground tanks gradually filled with blowing sand and had to be cleaned out periodically. At the insistence of Burton Dunn, the windmill system was devised in 1949 to make this less of a chore at the Novillo site, and to eliminate having to carry water on the campsite in buckets. Pat Dunn had resisted Burton's idea years earlier. In retrospect, windmills for collecting water on Padre Island proved to be more convenient but no more efficient for collecting water than the earlier ground-level stock tanks.

Today the windmill stand is lying near the kitchen, away from its original standing position near the northwest corner of the corrals. That area has now filled with standing water, no doubt a more recent development. The frame, which suffers from deterioration, is 10' tall, 40" square at the base, and 7" square at the top. (A reconstruction was built in November 1976, but was not faithful to the original design and had to be discarded as unacceptable; it, too, lies within the trap area.) The two reinforced concrete tanks are in an advanced state of

deterioration, with concrete spalling off due to corrosion of the reinforcement bars.

Historic Grounds

This heading refers to all ground areas within the main trap perimeter, which is delineated by the post and wire fencing. It also includes secondary structural features on the site, such as the hand pump located in front of Bunkhouse B, the hitching post located immediately south of the kitchen, and the water barrel stand presently located between the kitchen and Bunkhouse A.

The grounds consist of grass-covered flatlands and dunes, with areas that periodically experience standing water. With the water table being so high on the island, any water surplus from heavy rains or washed over the island from ocean storms has a tendency to collect in lower areas and may stand for months before completely evaporating or being absorbed into the ground. This is a recurring problem and is often severe, depending upon its location. It not only accelerates rot when in contact with any wood structure, but also makes walking access throughout the site difficult.

The various grasses and other vegetation found on the site, when unchecked, grow to a height of three feet or more. This accentuates the moisture problem around the bases of all structures and fencing, as well as promoting snake habitation and a fire hazard during dry periods. These grasses are periodically mowed by the Park Staff, but standing water and weather

conditions doesn't always permit this when necessary. Despite the vegetation covering, the underlying sands gradually shift with the winds and build up around the base of structures and contribute to standing water problems.

The hand water pump, added in 1969, was one of the last features to be built at Novillo in anticipation of the last cattle round-ups.¹⁴ A well of approximately 10 feet was dug adjacent to the kitchen and Bunkhouse B (where the cook stayed) to facilitate gathering fresh water for cooking, drinking, washing, etc. Before this time, water was carried over via bucket from the windmill tanks located at the northwest corner of the corrals.

The hand pump still functions, though some of its metal parts are badly corroded and near failure. A wooden bench located next to the pump suggests by its crafted appearance that it was brought from elsewhere rather than constructed on site from gathered beach materials. It was most likely used for setting utensils on while operating the pump.

The hitching post consists of a horizontal iron pipe resting upon three wood posts. James Lynch, last cattle foreman, remembers this as being a more recent feature of the line camp. The posts are now badly rotted and the pipe suffers from extensive metal corrosion.

The water barrel stand was designed to support a single barrel, presumably as a convenient water storage source. It is in good structural condition.

IV. PRESERVATION DATA

Until 1971 the Novillo Line Camp was used on a semiannual basis (usually in May and October or November) for separating out and preparing cattle for market. The site is now in a state of non-use and, despite some preservation maintenance and repair, pathological deterioration of the resource continues to take its course. This section will describe the passive and active forces which are physically affecting the condition of the line camp.

Environmental Conditions

Climatically speaking, Padre Island at its northern end (where the Novillo Line Camp is located) is intermediate between the humid subtropical region to the northeast and the semiarid region to the west and southwest. In summer the site area is hot and humid, and the steady moderating onshore breeze which begins about midday is noticeably diminished by the dune belt area to the east of the site. Winter weather is brought in by "northers," which though moderated by the warmer Gulf waters nevertheless cause generally cold, windy, and uncomfortable weather. However, Padre Island is cooler than most of the Southwest in the summer and warmer than most of the United States in the winter.¹⁵

Monthly precipitation varies between $1\frac{1}{2}$ to 3 inches or more during the year, producing an annual rate of approximately 28 inches. The relative humidity is high the year around and, combined with salt spray, produces a climate that is always highly corrosive to metals and painted surfaces.

Generally speaking, temperatures range from the high 80°'s in the summer to the low 50°'s in winter, though temperature extremes can range from the 20°'s to the high 90°'s. Average wind velocities vary between 8-12 mph, but peak periods can reach as high as 60 mph. Velocities can reach much higher during a severe hurricane.

Padre Island is periodically buffeted by hurricanes and tropical storms. While severe storms average only about one every ten years, lesser strength storms average about one in five years. The chief hurricane months are August and September, but tropical storms can occur as early as June and as late as October. Tornadoes are of infrequent occurrence and hail occurs about once a year. Freezing weather is infrequent, averaging about four times per year.

Padre Island is an exceptionally long arc-shaped barrier island. It forms a continuous stretch of land 115 miles long and from 500 yards to three and one half miles wide. A windrow of barrier dunes parallels the beach the entire length, approximately 150 to 250 feet from the water's edge. These dunes range in elevation from a few feet up to 40 or more and are generally 200

to 300 feet in width. They are covered with vegetation on the northern end of the island.

Another expanse of bare sand dunes runs south from the north end of the island along the shore of the Laguna Madre. Between these bare dunes on the Laguna side and the more vegetated dunes on the Gulf side lies a wide, one-to-two mile, low grassy plain, often covered in the lowest areas by shallow rain water ponds. These ponds increase considerably in size and number after a hurricane or heavy rain, and then slowly diminish again.

Novillo Line Camp is situated on this grassy plain, closer to the Gulf dune belt, with both low dune and shallow water features within the trap area. Particularly evident are the shallow water areas, which encroach upon the structures during the wet winters and often heavy rains. Poor drainage and a high fresh-water table have greatly accelerated fungal rot and general moisture deterioration.

A superficial examination of surface soils reveals an almost total composition of sand and shell. Clays are present underlying the sand of the island and vary considerably in distance and depth below surface. Any bedrock underlying the island is too far down to be of any consequence. The sandy surface is in constant change and subject to forces exerted by the sea, wind, and storms.

There is a continual movement of loose sand across the island in an east-to-west direction caused by the prevailing

east-southeast winds together with occasional tropical storm action. This has resulted in sand accretion to the Laguna Madre side of the island and, geologically speaking, Padre Island will eventually become attached to the Texas mainland.

Blowing and shifting sands have had considerable impact upon the Novillo Line Camp. Sand and wind erosion to wood surfaces is visible on virtually all structural components, causing surface deterioration and eventual structural failure. The build-up of sand around the structures is a continual problem, and can produce undesirable standing water situations. The drainage situation under Bunkhouse B is an excellent example of this problem, which has occurred in the corral and kitchen areas as well.

Vegetation in the grassland area in which the Novillo site is located includes species of Andropogon, camphorplant (Heterotheca), gaillardia (Gaillardia), phlox (Phlox), and Machaeranthera. In the low-lying marshy areas can be found saltwort (Batis maritima), glasswort (Salicornia perennis), and salt or marsh grass (Spartina and Leptochloa).¹⁶

From a preservation standpoint these grasses can be a problem when allowed to grow to full height immediately around the structures, particularly the corrals. Historically (during the line camp's operations), the cattle would have kept this vegetation eaten or trampled down, but left unchecked it is accelerating an already serious moisture problem around posts and board fences and walls.

The most serious biological threat to the Novillo Line Camp is wood fungi, whose necessary moisture and temperature conditions are ideally met by Padre's climate. Wood rot of various types is evident everywhere, and no doubt this has always been a problem with the line camp since its conception.

The environmental conditions that confront simple wood structures such as those at Novillo Line Camp can only be considered severe. Wood rot, wind erosion, metal corrosion, and storm damage are destructive forces that have always had a major impact on the structural history of Novillo, and there is no reason to believe the future will be any different.

Structural Condition

As stated earlier, Patrick Dunn relied upon the island itself for the various materials used to build his line camps. The southeast prevailing winds and the Gulf Stream continually deposited an odd assortment of materials, mostly wood, on the shore and it was merely a matter of gathering them up, letting them dry, and then incorporating them into the structural components that either needed to be built or required repair.

The Novillo Line Camp is built entirely of wood, with supplementary materials such as metal nails and hinges, ropes, and fencing wire used where needed or expedient. The result is a structural complex that is simply designed and executed, the emphasis being upon function rather than aesthetics.

A close examination of Novillo reveals a wide assortment of wood types, including cypress, cottonwood, walnut, teak,

mahogany, pine, and oak, among others. All types of wood washed up on the shores and hence all types were used. From a preservation standpoint this is important to note, because some woods weather much better and have a greater lifespan exposed to the elements than others. The corrals offer a good location to see one wood member rotting away while a member adjacent to it, exposed to the same conditions, remains structurally sound. Of course, this disparity in deterioration is further reinforced by newer wood members introduced wherever necessary to replace rotted ones. Thus, one sees at Novillo a structural complex reflecting a wide degree of wood types, dimensions, applications, and conditions.

The salty, highly humid air is very corrosive to metals, and for the most part the non-galvanized nails and iron hinges seen throughout the line camp are in a state of deterioration. Non-galvanized metal wire used in the corral area is rapidly disappearing due to corrosive action.

The design and workmanship at Novillo cannot be greatly criticized when it is realized the camp was built in a relatively severe climate by men who had limited materials available and who realized continual maintenance and replacement would always be necessary. After all, the Novillo Line Camp was just that, a camp, used for a limited period of time out of the year to perform a particular task, and aesthetics, comfort, or permanence was never a real consideration.

V. ANALYSIS

The Novillo Line Camp is a physical expression of the predominant activity on Padre Island between 1805 and 1971 namely, cattle ranching. That activity has now ceased; the last cattle were removed from Padre Island in 1971. What remains at Novillo is essentially a 'skeleton', devoid of all of the activity that was once associated with it. It is listed on the National Register of Historic places and is not now, but needs to be, interpreted for the visitor to Padre Island National Seashore. There are a number of factors that need to be considered in determining the form and scope and direction of future interpretation of the site.

First, all of the structural components at Novillo have serious deterioration problems, which have been previously described. Wood rot, improper site drainage, disrepair and deterioration due to the severity of the environment, etc., have taken their toll on all of the structures.

Second, no component of the Novillo Line Camp is really expendable; all of the structures are necessary for true interpretation of the site. For example, the corrals and fences are no less important than the bunkhouses and kitchen. Specifically, this means that any preservation effort must be

comprehensive in the sense of not letting one component fall into irretrievable ruin at the expense of another.

Third, Novillo was always "temporary" in the sense of being used only two months out of the year, sitting dormant for the remaining time. Each time the line camp's activity was renewed any necessary repairs would be made to keep the camp functional. This meant annual cyclical maintenance in the form of replacing boards and shingles, mending fence lines, repairing or replacing hinges, etc. The entire structural history of Novillo has been constant repair and replacement due to a harsh and sometimes exceedingly destructive environment. Now the cattle operations associated with Novillo have ceased, and the problem is to maintain the existing historic fabric under the same environmental conditions.

Replacement of rotted wood members with like-kind materials and dimensions can insure a correct historic configuration, but it will not maintain historic integrity. Continual replacement of historic fabric will eventually lead to a replica of the original line camp, and historic integrity is irretrievably lost in the process.

One might argue that this is the dilemma facing all historic wood structures. It is true that a wood structure, properly built and maintained and located in a favorable climate, will last for centuries. Unfortunately, this is not true of the Novillo Line Camp. The very simple wood construction exposed to the harsh coastal climate has a very limited lifespan. That is why

Pat Dunn and (in later years) Burton Dunn and their workers continually replaced deteriorated wood members, as well as metal components, with newer replacement pieces gathered from the beach or acquired elsewhere. The National Park Service can continue this replacement pattern and maintain historic accuracy, but it cannot maintain historic integrity.

Fourth, any future interpretation of the Novillo site must take into account the annual visitation patterns at Padre Island National Seashore, which are heaviest in the summer when the microclimate at the site is perhaps most severe. Temperatures during the mid-day are hot and humid and this factor, combined with mosquitos and general lack of prevailing sea breezes at the site, limit the time the casual summer visitor might want to spend investigating Novillo Line Camp. The most comfortable periods for visitation during the summer are the cooler morning and evening hours. Visitation at the Novillo site would be more inviting during late fall, late winter, and spring, when there is more inclination for taking walks and using trails. Fortunately, visitor access to the Novillo site is not a problem, and adequate parking could easily be made available.

Keeping the above-mentioned factors in mind, some possible interpretive alternatives will now be considered, with advantages and disadvantages noted. These alternatives are directed at the long range future of Novillo as it exists within the National Seashore boundaries. Any interpretive scheme should be evaluated in terms of the educational value for the visitor, maintaining

the historical integrity of the resource, and the amount of effort and cost necessary to achieve those goals for future generations.

The primary objectives of this report are to document the structural history of the Novillo Line Camp and to make a realistic determination as to the level of stabilization recommended for the site. The emphasis here upon the interpretive aspects for Novillo is not an attempt to usurp the Interpretation Division of the National Park Service of its expertise; the author makes no claims to be a qualified expert in that field. However, in the case of the Novillo Line Camp, any stabilization proposal must also address the issue of interpretation of the site. The island environment is simply too severe from a preservation standpoint to put the site on "hold"; the degree of stabilization for Novillo and how the line camp is to be interpreted is a two-fold question that should be answered before any work commences at the site.

The four interpretive alternatives which follow are not the only possibilities, but they do represent four selected levels of stabilization for the site which range from perhaps the most to least extensive efforts in terms of time, maintenance, and cost. Cost estimates for each alternative are provided as a means of comparison, and are fairly conservative in scope.

Interpretive Alternatives

The most extensive interpretive alternative in terms of planning effort and cost might be a living history program incorporated into the Novillo site, which would have to be

stabilized at the functional level (as opposed to existing conditions). This option would require a fairly extensive stabilization effort in terms of replacement and repair to the existing historic fabric, regrading, and ongoing grounds maintenance. A furnishing study and its implementation would also be necessary.

The disadvantages of this interpretive scheme outweigh any advantages derived. Making the traditional line camp operations realistic poses major problems of logistics in terms of livestock management, provisions and storage, personnel staffing and training, and adequate historical research. The cost of implementing and maintaining such a program would be considerable and totally out of proportion to the historical and educational value derived from such an effort. The point should be made here that the line camp's operations in themselves are not unique. Vaccinating, castrating, and singling out particular cattle for market is normal for any contemporary cattle ranching operation, such as the King Ranch.

A less extensive but nevertheless questionable interpretive option for the Novillo Line Camp is the researching and implementation of a historic furnishings study for the site. The major problem associated with this proposal is that of security. Not only is there the very real threat of vandalism, but also the danger to artifacts posed by possible extreme environmental conditions. While any historic furnishings could probably be safely removed should the site be threatened by a hurricane,

they might be of questionable value afterwards should the site itself suffer extensive and perhaps even irreparable damage.

A third interpretive alternative more realistic than the two previously mentioned alternatives might be a self-guided tour through the site, supplemented by an explanatory leaflet provided at the site. The time spent at the camp is now a determination more easily made by the visitor himself, an important factor when considering the sometimes intense summer weather conditions. Novillo would only have to be stabilized at the existing level (as opposed to some reconstruction efforts necessary for the first two schemes).

Stabilization at the existing level would mean initially extensive and repeated wood preservation treatment, replacement of rotted wood members, repair and rehangng of gates, regrading, and continuous grounds maintenance. Despite these efforts, the destructive environment will force eventual replacement and, hence, loss of much of the existing historic fabric. This continual maintenance is in keeping with the historical nature of Novillo, which has always been annual repair. However, it is now being done for an entirely different reason: namely, to keep the line camp historically intact, as opposed to the original notion of keeping the camp functional for its intended operations.

This is a significant point, because annual repair at Novillo Line Camp really means eventual replacement for most, if not all, of the components at the site, and loss of historic integrity.

There is no way to reverse the process of wood decay, it can only be arrested at whatever stage treatment occurs, and even then decay will eventually continue. This is due to the harsh climate already described, and the limited protection wood preservative treatment provides.

A fourth interpretive alternative for the Novillo Line Camp is essentially a "no-save" solution; i.e., to make no further efforts at stabilization and to interpret the site in its ruinous condition. This would most likely be done at one point where the visitor could view from a safe distance the major remaining components of the site, aided perhaps by an explanatory panel showing what the line camp once look like and explaining the camp's significance in the history of cattle ranching on Padre Island. The Southwest Regional Safety Officer feels that to direct visitors through the line camp as it now exists would be inviting injury and tort claims, and that care must be exercised to see that visitors are kept away from deteriorated structures.

As a related option, some minimal preservation action might be considered, such as extensive wood preservative treatment and regrading around some of the structures to alleviate the standing-water situation, which is accelerating the deterioration process. These efforts must be viewed as merely slowing down the inevitable disintegration of the site. Once that has occurred it might be desirable to have the site marked to indicate what was once there.

Cost Analysis

A cost estimate for each of the four stated alternatives will now be presented. Each estimate takes into consideration four economic factors:

1. Vehicle and equipment charges
2. Travel and per diem
3. Construction labor
4. Materials

Vehicle charges are based on a rate of two vehicles costing \$100.00 per month (base charge), plus mileage. Travel and per diem for the Division of Conservation preservation crew is figured at the rate of \$35.00 per day of travel and \$15.00 per day of field per diem for each man involved with site stabilization. Construction labor is based on an average of \$75.00 per day per man, and the materials charge is based on replacement cost for like-kind material, be it lumber, hardware, etc.

The philosophy of site stabilization or restoration is to replace rotted or corroded material with similar, but not necessarily exact, replacement. This preservation philosophy for Novillo would save money and would also be in keeping with the replacement philosophy that has traditionally been associated with the line camp. The cost estimates presented below are admittedly approximate, but can be used for comparative purposes.

Alternative I: Site Stabilization/Restoration for a Living History Program

6 weeks duration

Vehicle and equipment charges (includes regrading equipment, rental charges, etc.)	3,000
Travel and per diem (four men at \$60.00/day for six weeks, plus travel)	3,700
Construction labor	11,000
Materials	<u>14,000</u>
Subtotal	31,700
Historic Furnishings study	5,000
Historic Furnishings implementation	<u>5,000</u>
TOTAL	41,700

(Total does not include interpretive costs, such as trails,
parking, signs, etc.)

Annual Maintenance

Equipment charges, tools, vehicles	1,000
Construction labor	2,000
Materials	<u>1,000</u>
TOTAL	4,000

(Total is based on annual maintenance under ideal conditions;
does not take into account storm damage.)

Alternative II: Site Stabilization for a Furnishings Study

Vehicle and equipment charges	2,000
Travel and per diem	2,000
Construction labor	8,000
Materials	<u>7,000</u>
Subtotal	19,000
Historic furnishings study and implementation (includes researching and writing report, acquiring artifacts, repairing wagon, providing security)	<u>10,000</u>
TOTAL	29,000

(Total does not include interpretive costs,
such as trails, parking, signs, etc.)

Alternative III: Site Stabilization for a Self-Guided Trail

Vehicle and equipment charges	2,000
Travel and per diem	2,000
Construction labor	8,000
Materials	<u>7,000</u>
TOTAL	19,000

Annual Maintenance	
Equipment charges, tools, vehicles	1,000
Construction labor	2,000
Materials	<u>1,000</u>
TOTAL	4,000

While stabilization here is not as extensive as Alternative I (and hence less expensive), it should be noted that less materials are being replaced. This means there will be more existing deterioration at the outset, and presumably more material replacement on an annual basis.

Alternative IV: Minimal Site Preservation for Interpretive Purposes

Labor	1,000
Materials (wood preservatives, some initial minimal repair, etc.)	<u>1,000</u>
TOTAL	2,000

(Total does not include costs of providing parking or signage).

Analytical Summation

Any interpretive alternative must contend with the Chevron Cracking Plant located immediately to the east of the site. It is a major visual intrusion upon the Novillo Line Camp not only because of its size and proximity, but also because of its operations, particularly the plant helicopter which regularly flies in and out of the plant complex several times a day. While the

cracking plant does coincide with the last years of the line camp's operations, it is nonetheless in conflict with the historic cattle ranching theme.

In the final analysis, there are two factors which distinguish the Dunn cattle operations on Padre Island from cattle ranching on the Texas mainland, particularly in the later years of operation (1920 to 1971). Any interpretive proposal should address these two essential elements.

First, Patrick Dunn's ranching efforts and practices were based on an open-range concept which had become obsolete on the Texas mainland with the advent of land parceling and fencing. The natural water barriers and the island's long and narrow configuration made this practice both possible and practical, and the line camp became a logical feature of this ranching technique.

Second, the open-range concept and the ruggedness of Padre's topography caused the old-style type of cattle round-up, with vaqueros on horseback spending weeks on the open range, to endure long after more modern practices became practical elsewhere.

Both of these concepts are central to the story of the Novillo cattle ranching operations. However, both are relatively intangible in terms of site stabilization. The ranching activities at Novillo were but one step in Patrick Dunn's ranching system. Be it in excellent or poor structural condition, the Novillo Line Camp does not by its physical presence convey these two basic

principles which made cattle ranching on Padre Island significant. Therefore, interpretation of the cattle ranching theme, of which Novillo Line Camp is a part, takes precedence in determining what future preservation efforts at Novillo should be.

VI. RECOMMENDATIONS

Due to the severity of the environment, the present physical condition of the structures, and the local historical significance of the site, it is recommended that the Novillo Line Camp undergo no major preservation program and instead be interpreted for the public in its ruinous condition. This could be accomplished by providing an explanatory panel at one location from which can be viewed all of the major structural components of the site. The panel could describe the importance of the line camp to the history of cattle ranching on Padre Island, as well as identify the various structural elements at Novillo. Parking for a half dozen cars could be easily accommodated off of the shell-based access road to the Chevron Cracking Plant.

It is further recommended that some minimal preservation efforts be initiated at the site. However, the actions recommended should be viewed as only slowing down the inevitable process of deterioration and collapse of the structural fabric.

These preservation measures include:

- wood preservative treatments, perhaps on an annual basis, which would inhibit rapid wood decay.
- renailing or resecuring wherever necessary to keep the structural components standing for as long as site interpretation is desired.
- regular grounds maintenance, which includes:

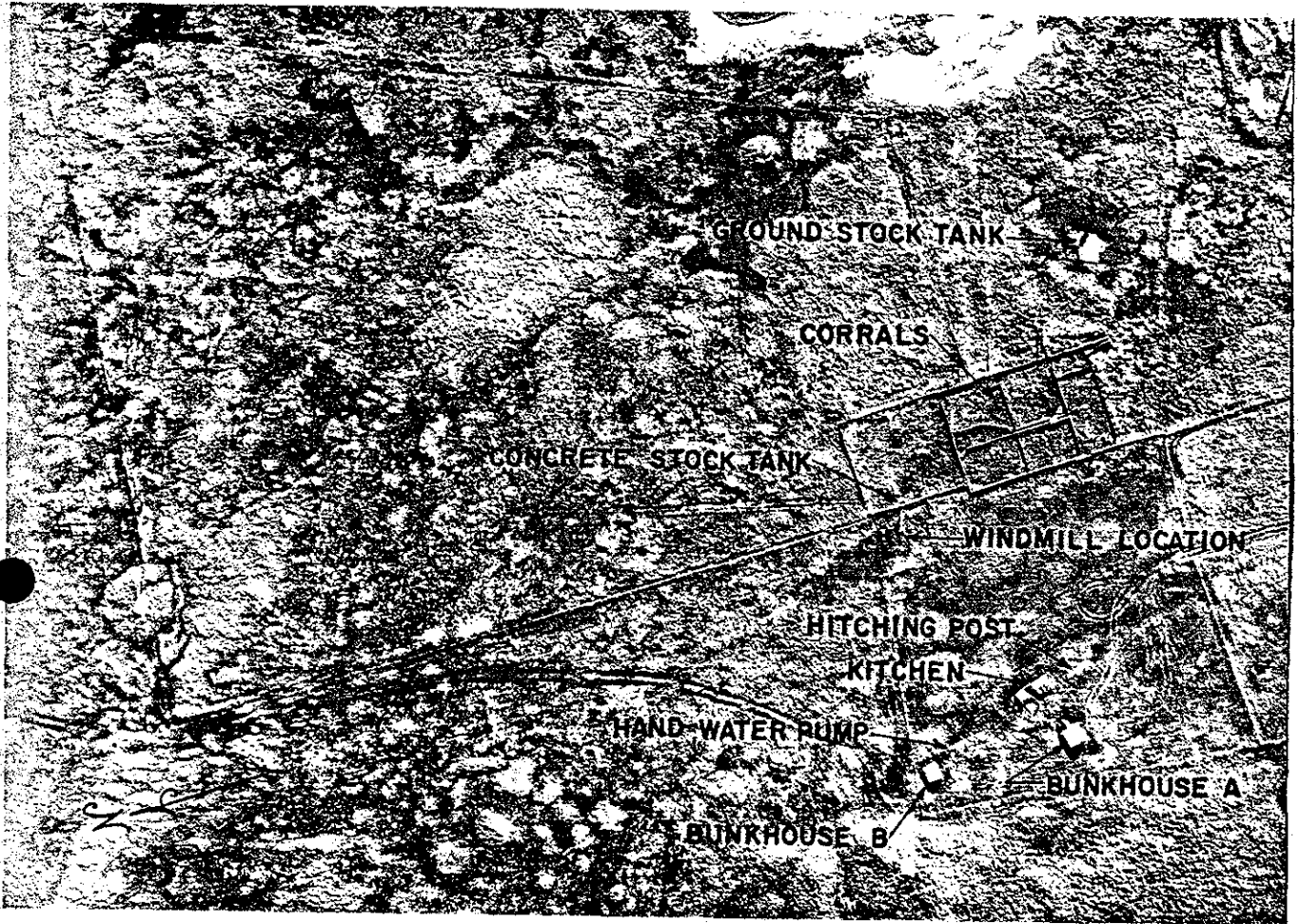
- (a) cutting grasses around structures to minimize moisture deterioration and threat from fire.
- (b) regrading or infill of sand in those areas where standing water poses an immediate threat to standing structures.

--removing the lumber, ice box, and any other items stored in the bunkhouses which are placing unnecessary strain on these structures.

--standing up the windmill stand (preferably at its original location if regrading permits) to minimize contact with ground moisture.

Finally, it is recommended that the Novillo Line Camp be placed under Category D of the List of Classified Structures (LCS), which is the category designation for structures that Management has determined may be disposed of, demolished, or altered for some other management purpose. Since the Novillo Line Camp is listed on the National Register of Historic places, the Advisory Council on Historic Preservation, and the Texas State Historic Preservation Office must be afforded the opportunity to comment upon this proposed adverse effect alternative regarding these structures (36 C.F.R. Part 800), which is essentially benign neglect.

VII. APPENDICES



Aerial photograph of the Novillo Line Camp, taken
October, 1979.



PLATE 1

BUNKHOUSE A

1979

South elevation.

Photo, J. Keith Everett

PLATE 2

BUNKHOUSE A

1979

West elevation.

Photo, J. Keith Everett

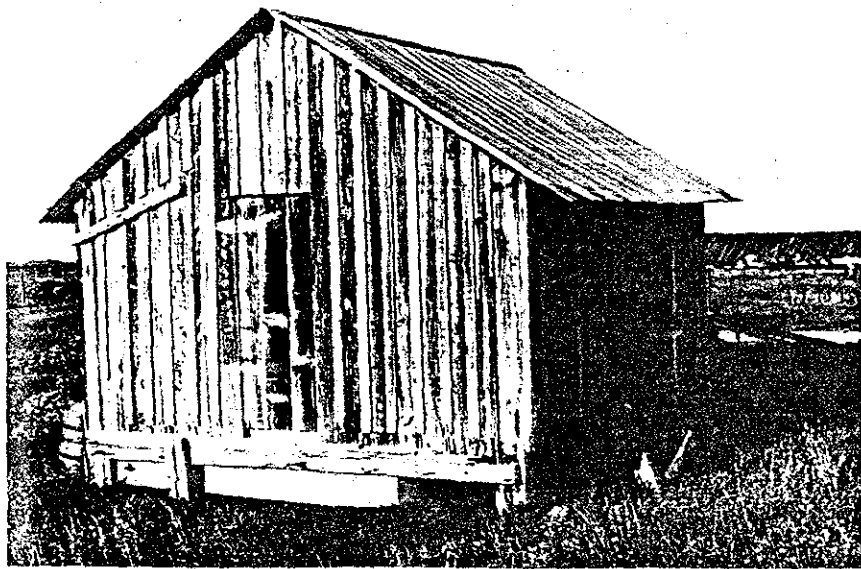
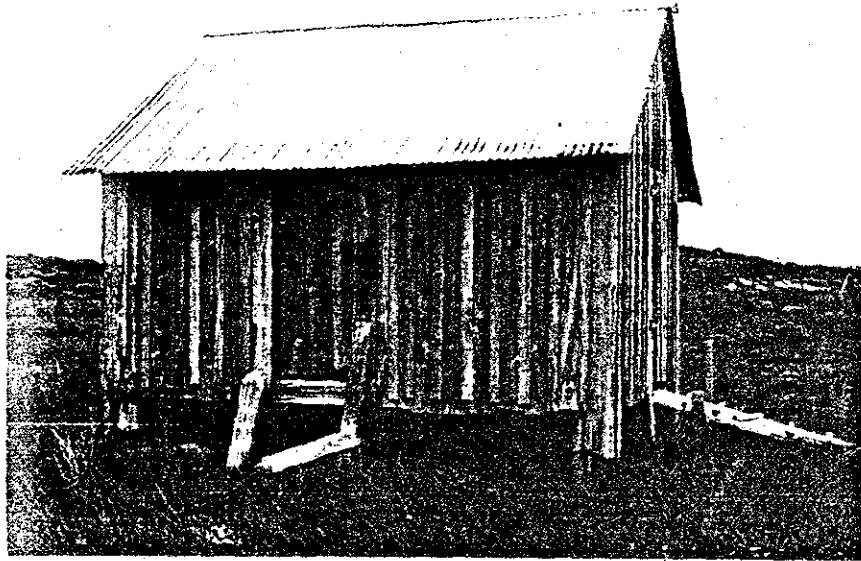


PLATE 3

BUNKHOUSE A

1979

North elevation.

Photo, J. Keith Everett

PLATE 4

BUNKHOUSE A

1979

East elevation.

Photo, J. Keith Everett

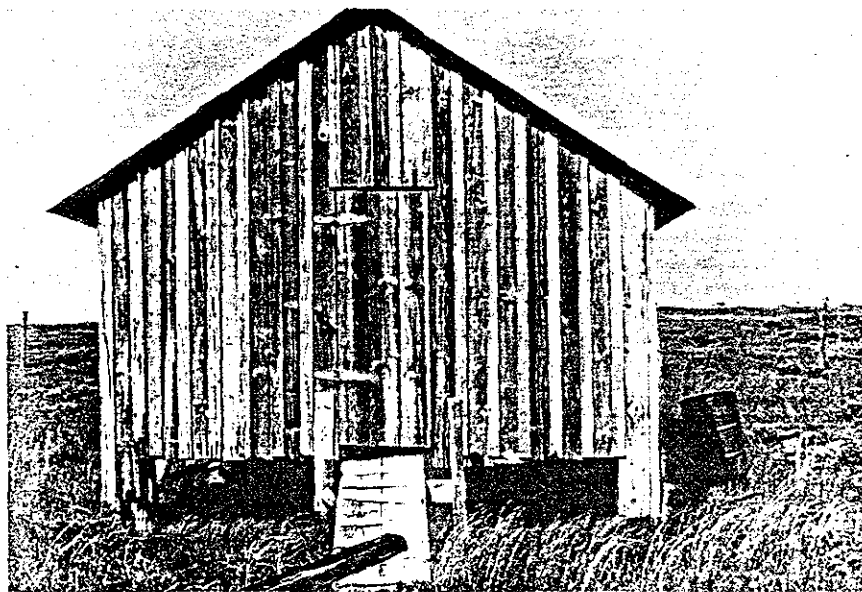
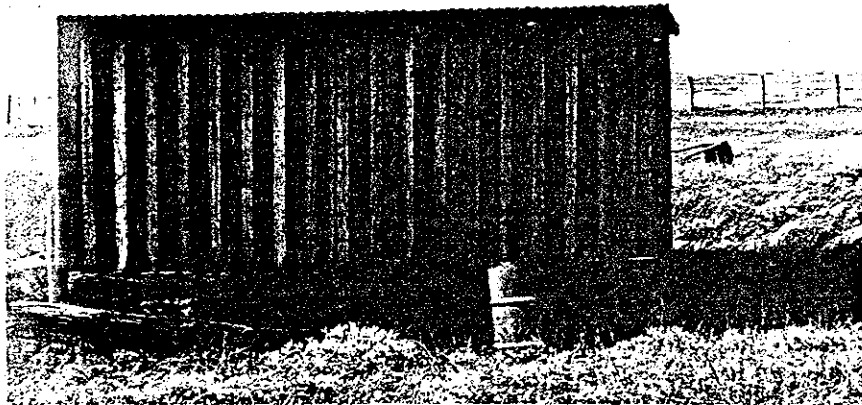


PLATE 5

BUNKHOUSE B

1979

South elevation.

Photo, J. Keith Everett

PLATE 6

BUNKHOUSE B

1979

West elevation.

Photo, J. Keith Everett

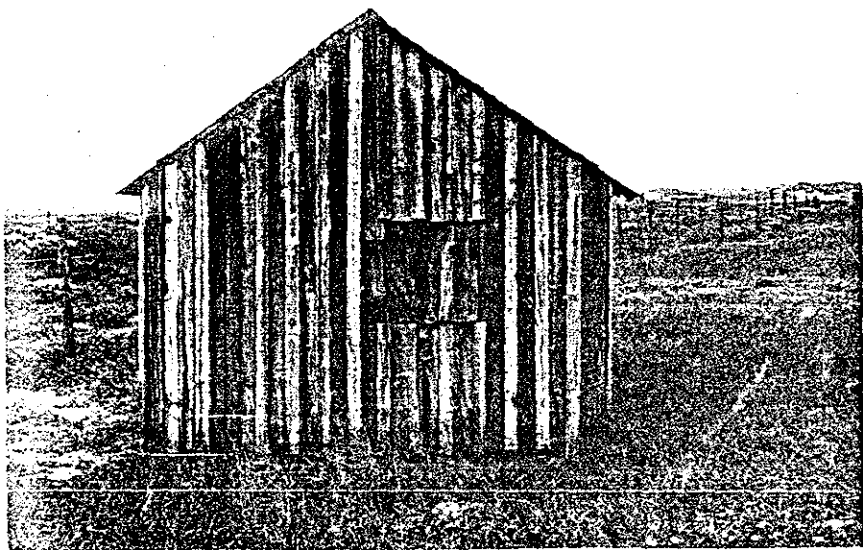
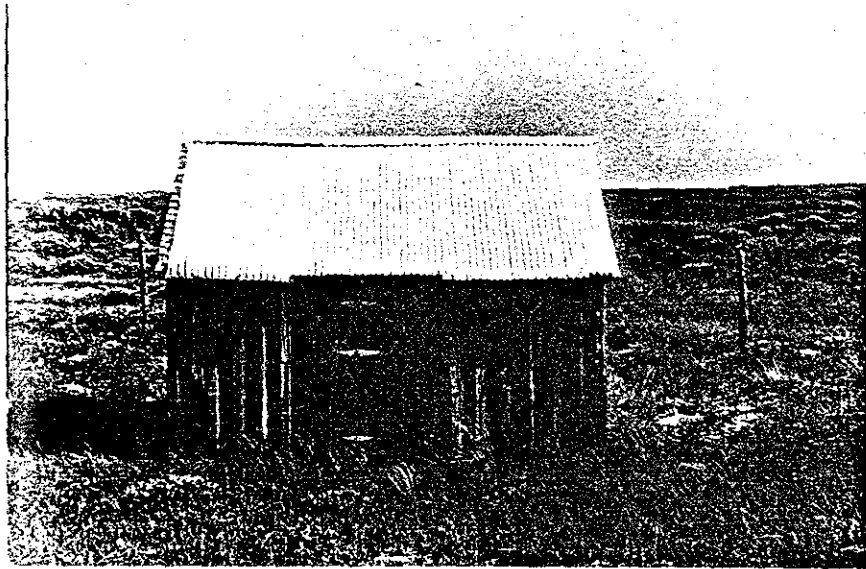


PLATE 7

BUNKHOUSE B

1979

North elevation.

Photo, J. Keith Everett

PLATE 8

BUNKHOUSE B

1979

East elevation.

Photo, J. Keith Everett

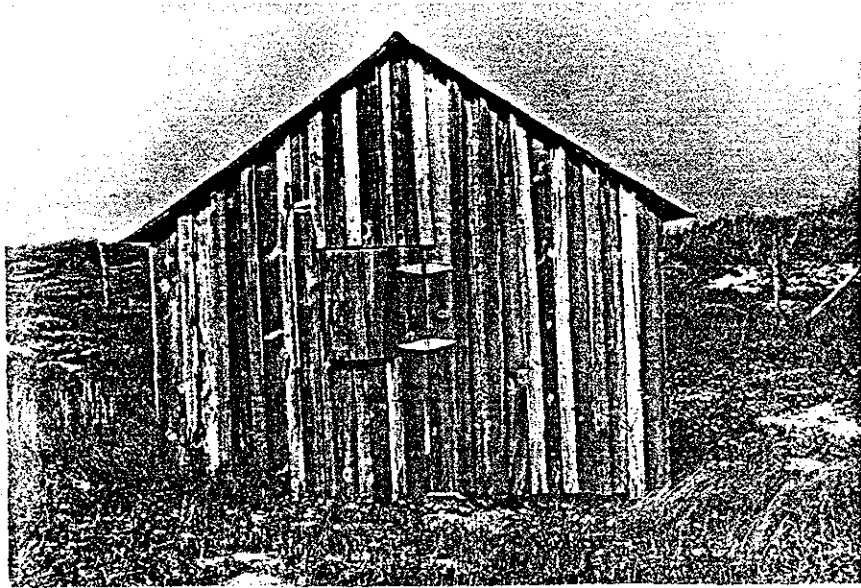
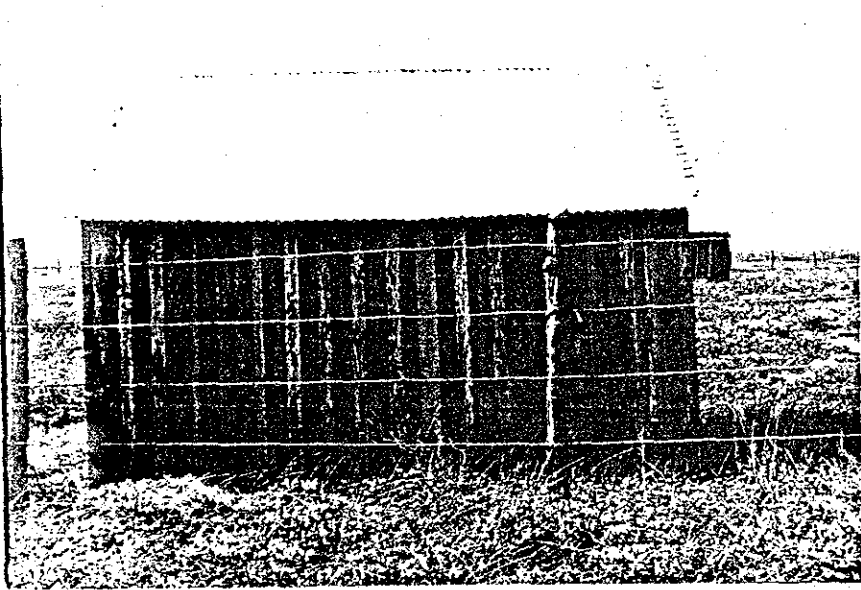


PLATE 9

BUNKHOUSE A

1973

Standing water underneath the structure is evident in this photograph. Also note the windmill standing at its correct location.

Photo, Robert Whistler

PLATE 10

BUNKHOUSE B

1979

The dark horizontal stain at the base of wall is evidence of a periodically severe standing water situation which greatly accelerates wood rot.

Photo, J. Keith Everett



PLATE 11

BUNKHOUSE A

1979

Wood rotted pilings, boards, and batts is a problem with both bunkhouses.

Photo, J. Keith Everett

PLATE 12

BUNKHOUSE B

1979

Corrosion to metal hinges causes deterioration to adjacent wood.

Photo, J. Keith Everett

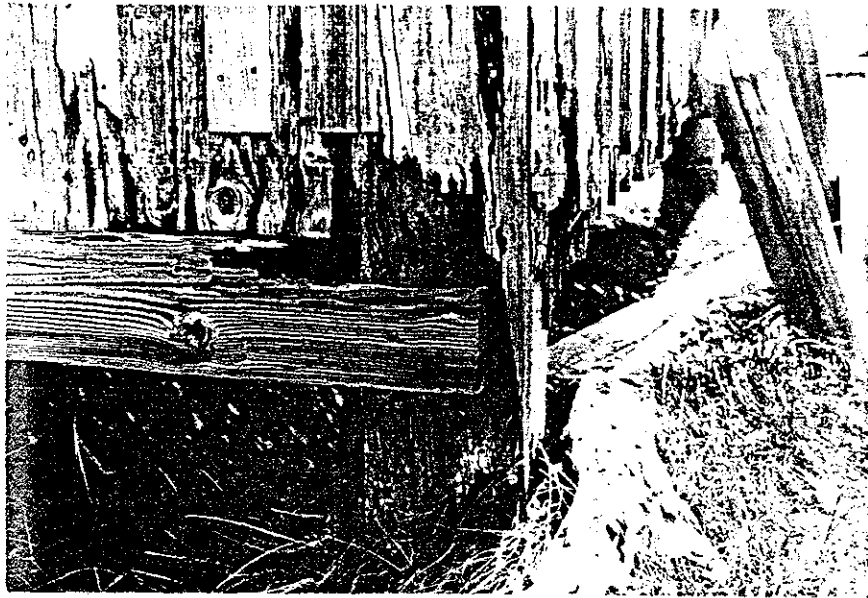


PLATE 13

BUNKHOUSE B

1979

Corrugated metal roofing (c.1970) is providing limited protection to the original split cedar shingle roofing.

Photo, J. Keith Everett

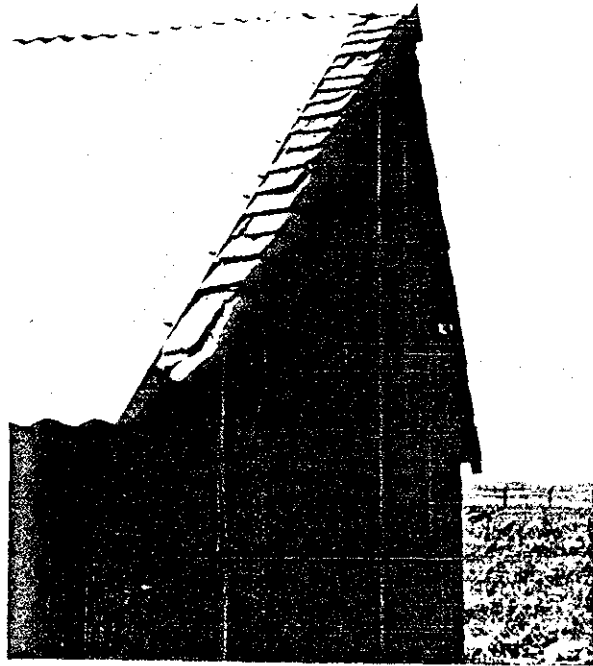


PLATE 14

KITCHEN

1979

South elevation.

Photo, J. Keith Everett

PLATE 15

KITCHEN

1979

North elevation.

Photo, J. Keith Everett

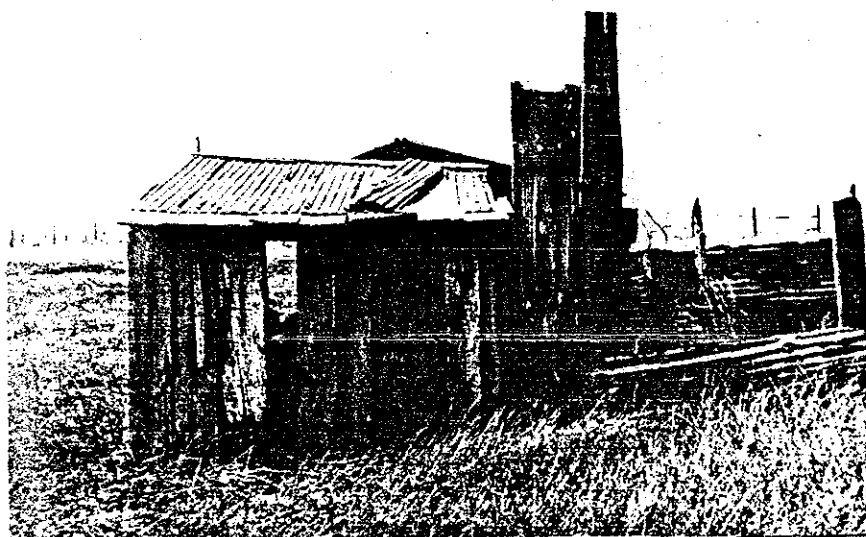
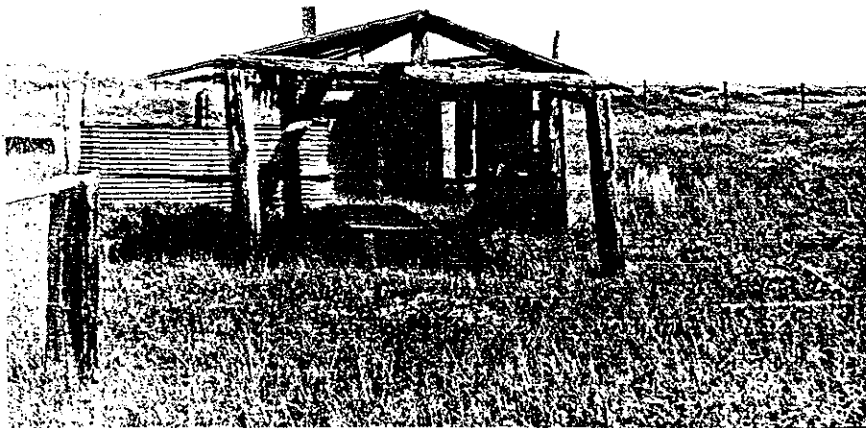


PLATE 16

KITCHEN

1979

West elevation, north end. The rolled up wire at left once stretched between kitchen and bunkhouse A; strips of beef were hung on it to dry to make jerky.

Photo, J. Keith Everett

PLATE 17

Kitchen

1979

West elevation, south end. Note the windmill stand lying on the ground, away from its original location.

Photo, J. Keith Everett

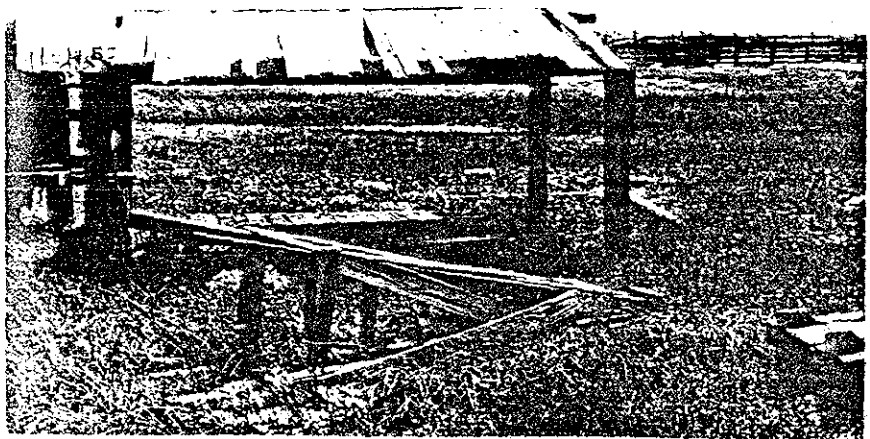
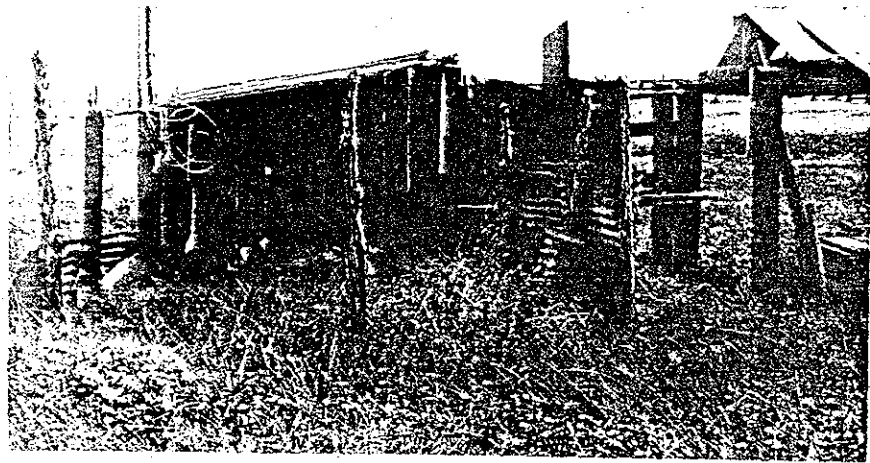


PLATE 18

KITCHEN

1979

East elevation, south end.

Photo, J. Keith Everett

PLATE 19

KITCHEN

1979

East elevation, north end.

Photo, J. Keith Everett

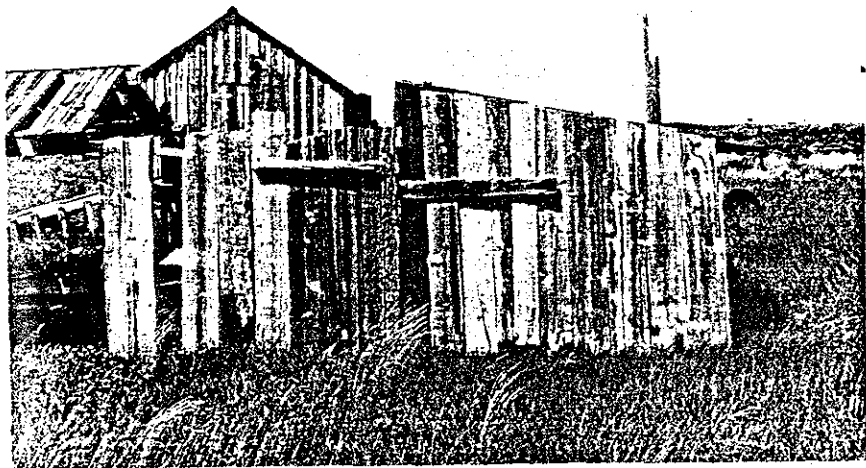
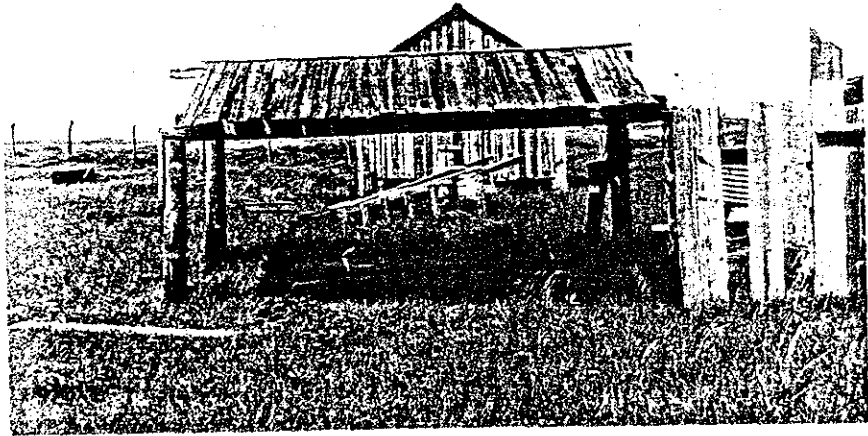


PLATE 20

KITCHEN

1976

The cooking area in use during a 1976 living history demonstration. The corrugated metal was added in 1970.

Photo, Robert Whistler

PLATE 21

KITCHEN

1979

Gradual infill of sand around the table has made it too low; high vegetation around the wood is accelerating a moisture problem.

Photo, J. Keith Everett

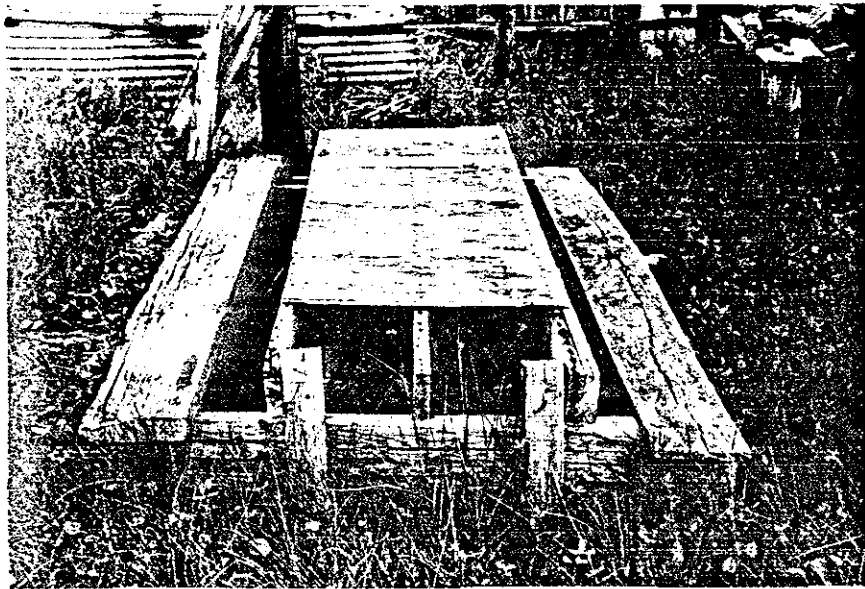


PLATE 22

KITCHEN

1979

Severe wood deterioration of windbreak portion of
kitchen structure.

Photo, J. Keith Everett



PLATE 23

CORRALS

Aerial view looking southwest.

Photo, unknown

PLATE 24

CORRALS

1971

Note the shell road, leading from loading chute to beach area, laid down for cattle trucks. The vehicle in foreground was that purchased by Burton Dunn in 1948.

Photo, Hambly

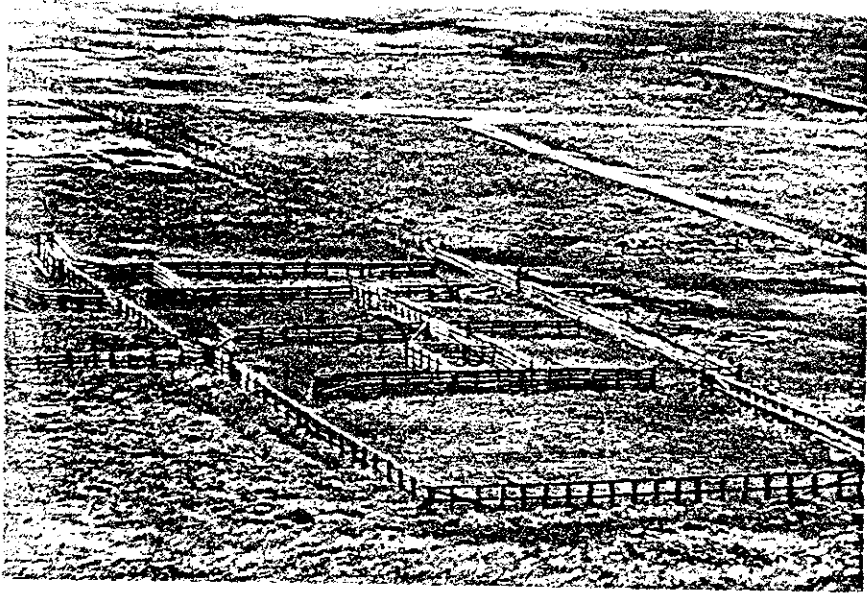


PLATE 25

CATTLE TRUCK

c.1972

The vehicle purchased by Burton Dunn which changed cattle ranching operations on Padre Island.

Photo, Robert Whistler

PLATE 26

LOADING CHUTE

1979

This is the first of two similar chutes built with the advent of cattle trucking on Padre Island.

Photo, J. Keith Everett

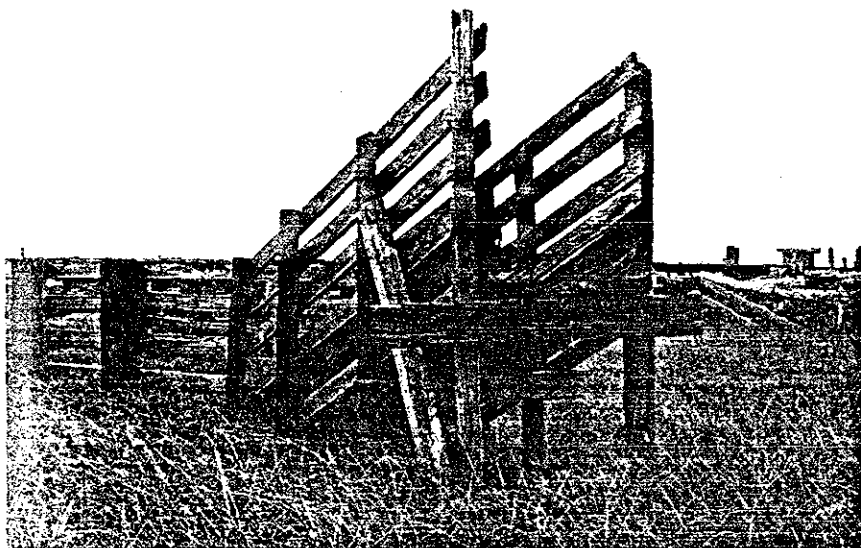


PLATE 27

CORRAL

1979

Note the random construction (varied board widths and lengths) and high level of deterioration due to fungal attack and corrosion of nails.

Photo, J. Keith Everett

PLATE 28

WOOD ROT

1979

This degree of deterioration is not unusual in the corral area. Note the algal growth at the upper left, due to the proximity of a marine environment.

Photo, Richard J. Knox

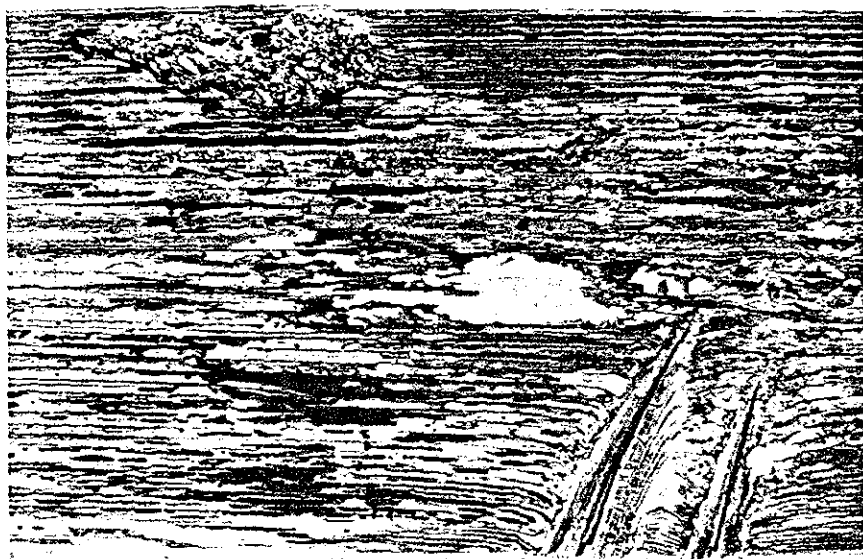
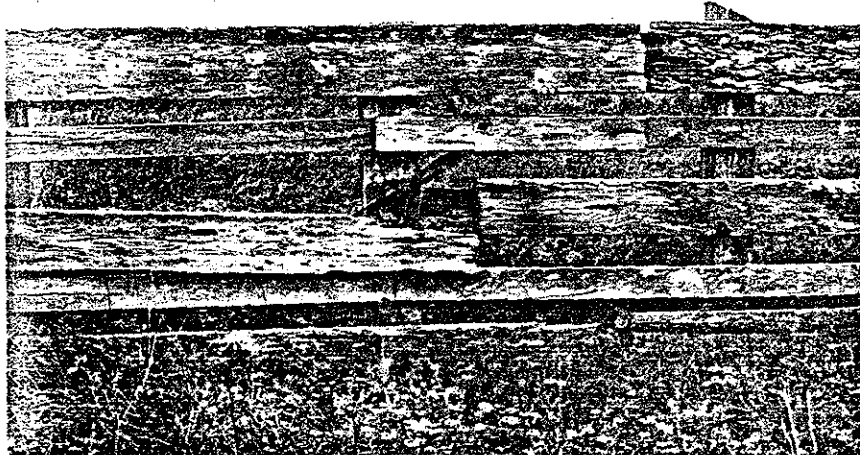


PLATE 29

CORRAL GATE

1979

Wood rot and corrosion of metal strap hinges and nails has resulted in this condition.

Photo, J. Keith Everett

PLATE 30

CORRODED METAL STRAP HINGE

1979

Photo, J. Keith Everett

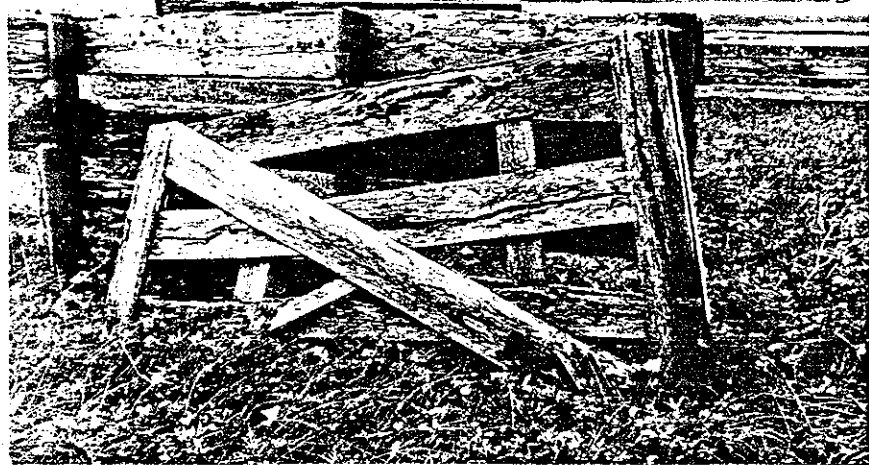


PLATE 31

WOVEN-WIRE FENCE

1979

The wire is literally disappearing due to corrosion.

Photo, J. Keith Everett

PLATE 32

STOP GATE

1979

Photo, J. Keith Everett

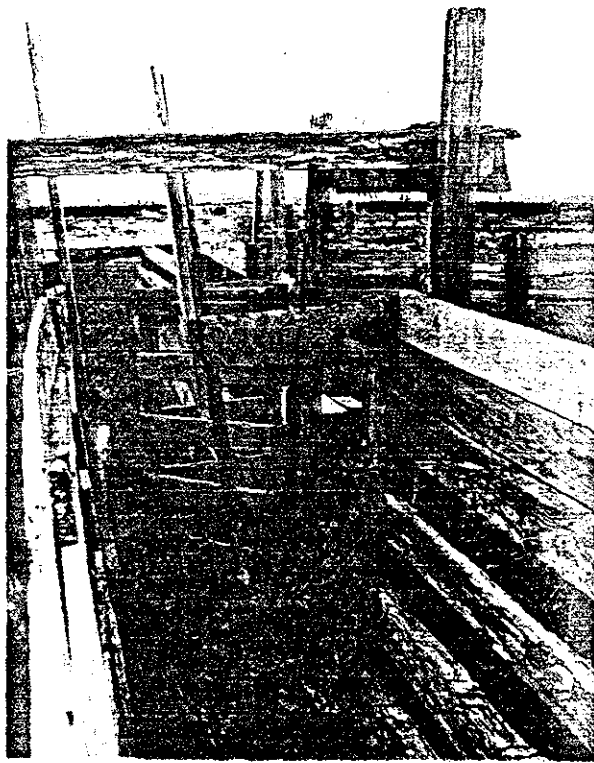


PLATE 33 CORRAL GATE 1979

This particular gate is hinged in the manner first used on Padre as a simplistic solution to hanging a gate -- namely, the use of a pentil.

Photo, J. Keith Everett

PLATE 34 CORRAL GATE 1979

This strap-hinged gate was modified at an unknown date from the previous use of a pentil.

Photo, J. Keith Everett

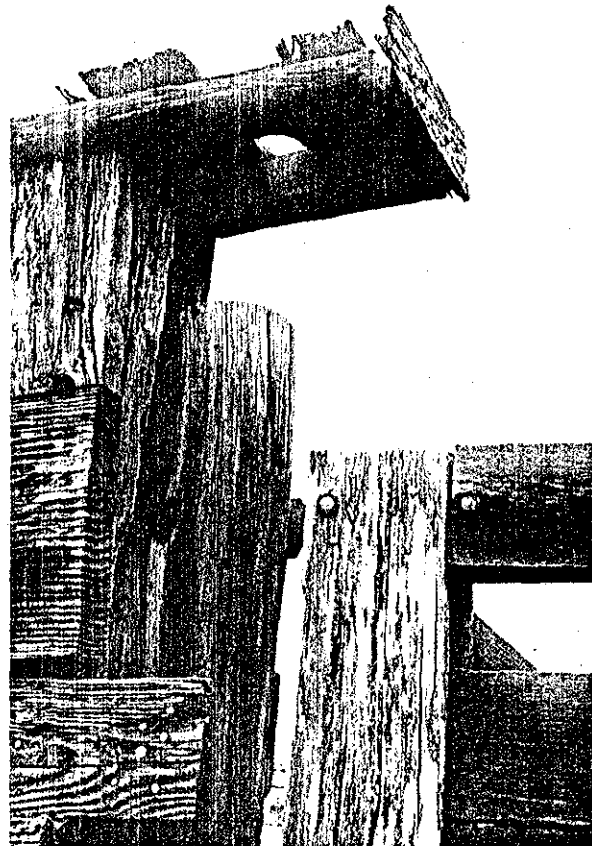


PLATE 35

WINDMILL

(c.1973)

This view shows its location in relation to the two bunkhouses and kitchen. One of two round concrete stock tanks is in foreground.

Photo, Robert Whistler

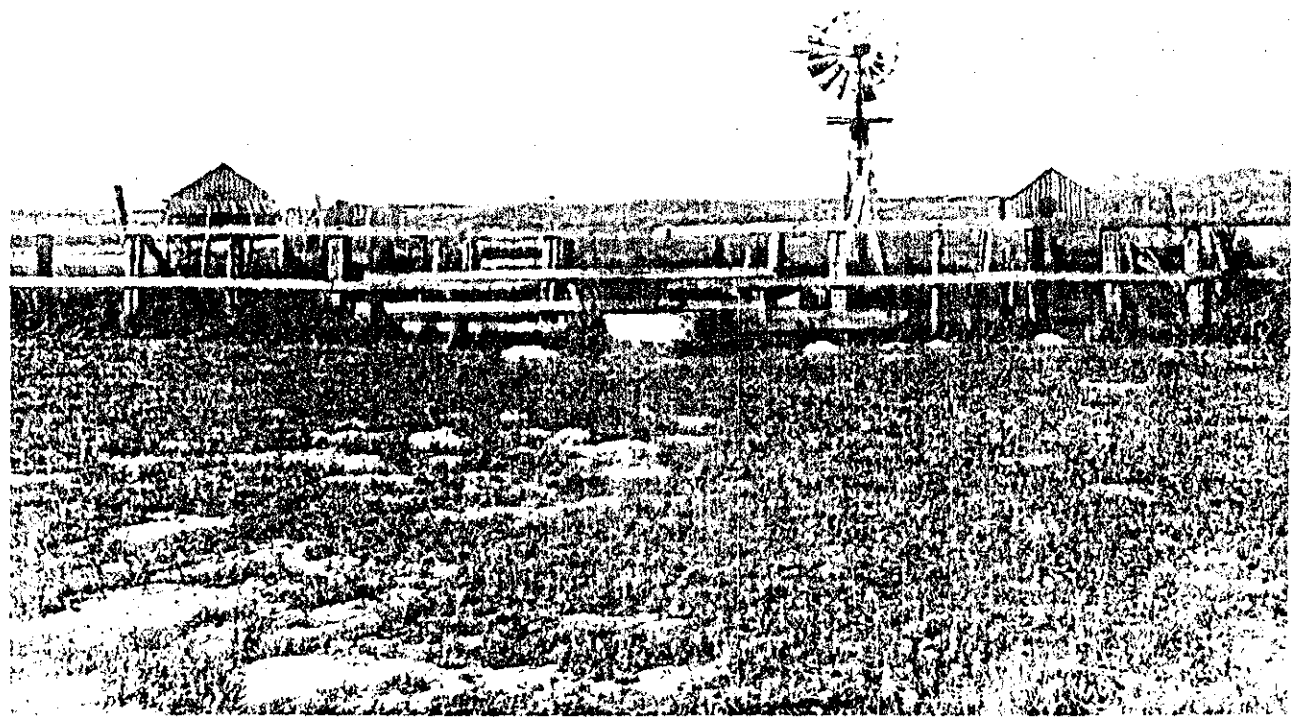


PLATE 36

WINDMILL

c.1973

Photo, Robert Whistler

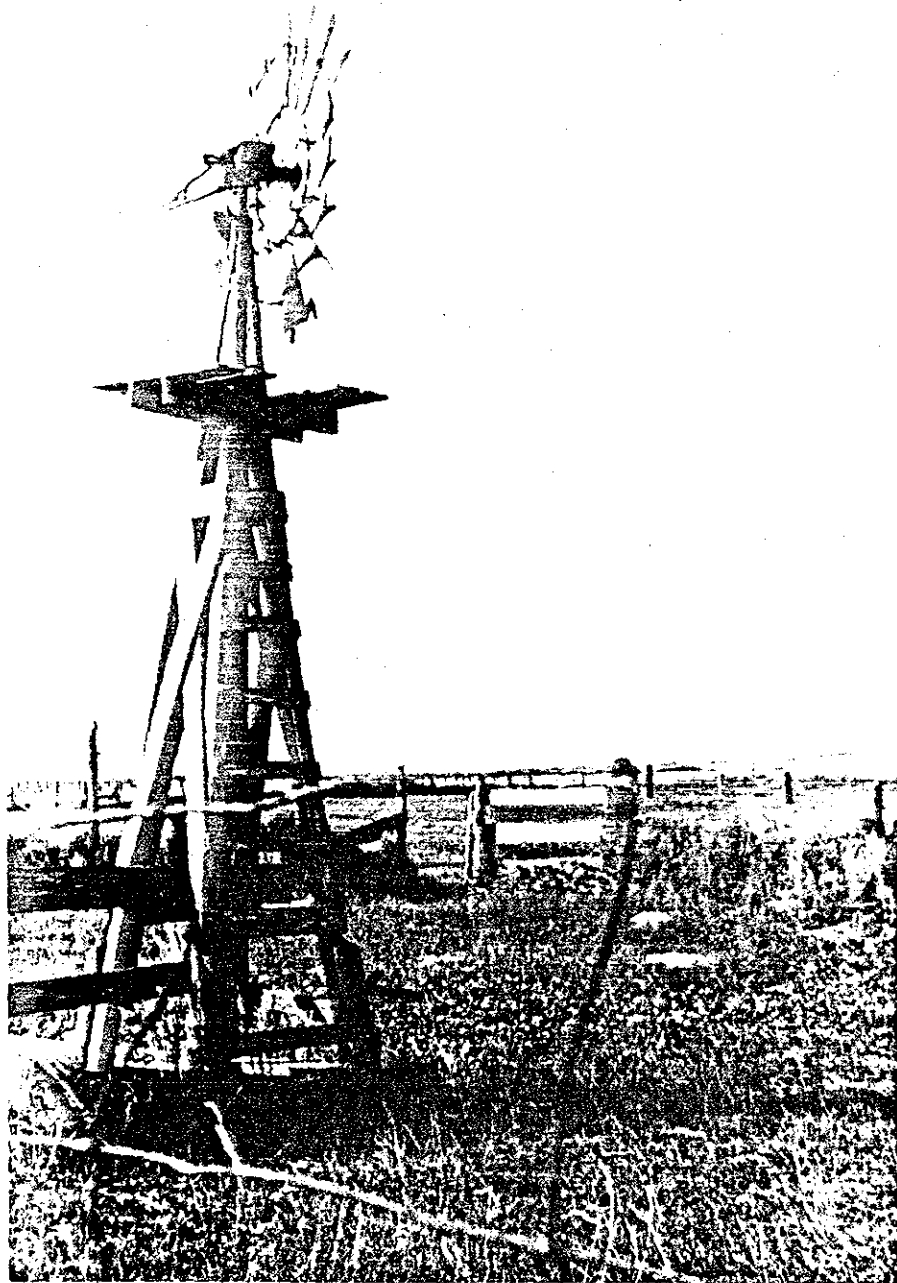


PLATE 37

WINDMILL LOCATION

1979

The three posts in foreground indicate where the windmill once stood; the pipe leads to two concrete stock tanks approximately 20 feet away. Compare this photo to Plate 35 to see how a standing water problem has developed at this location.

Photo, J. Keith Everett

PLATE 38

CONCRETE STOCK TANKS

1979

Photo, J. Keith Everett

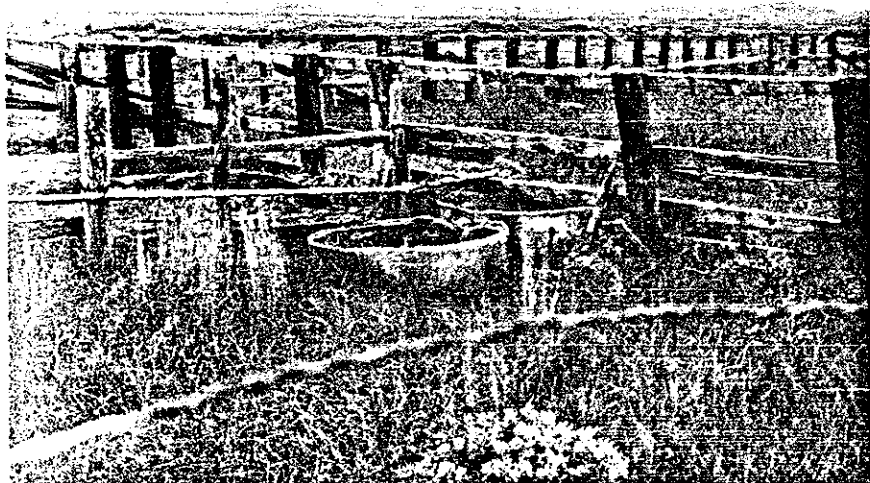
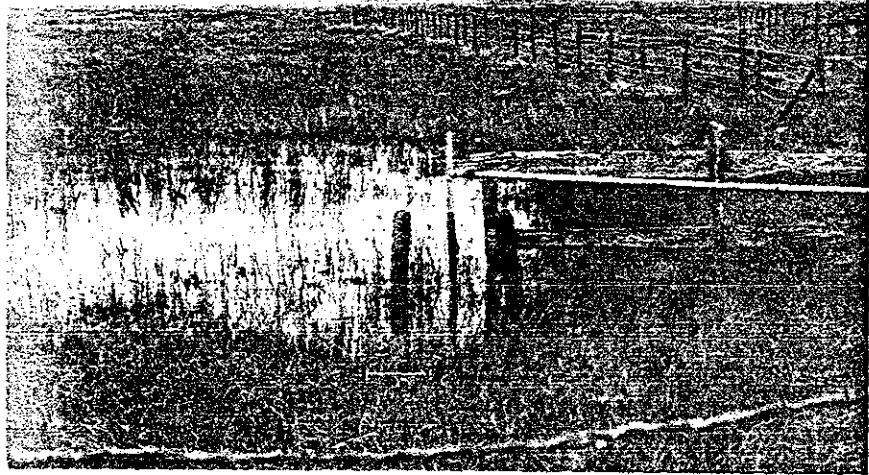


PLATE 39

HAND PUMP

1979

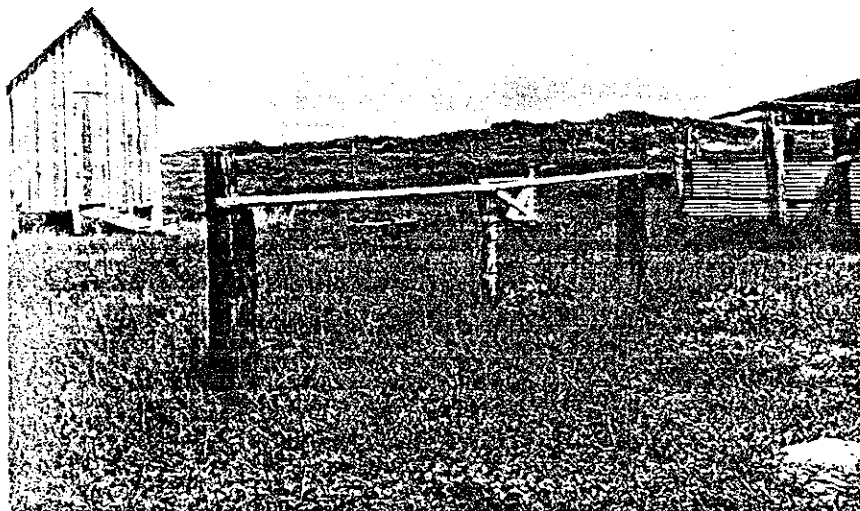
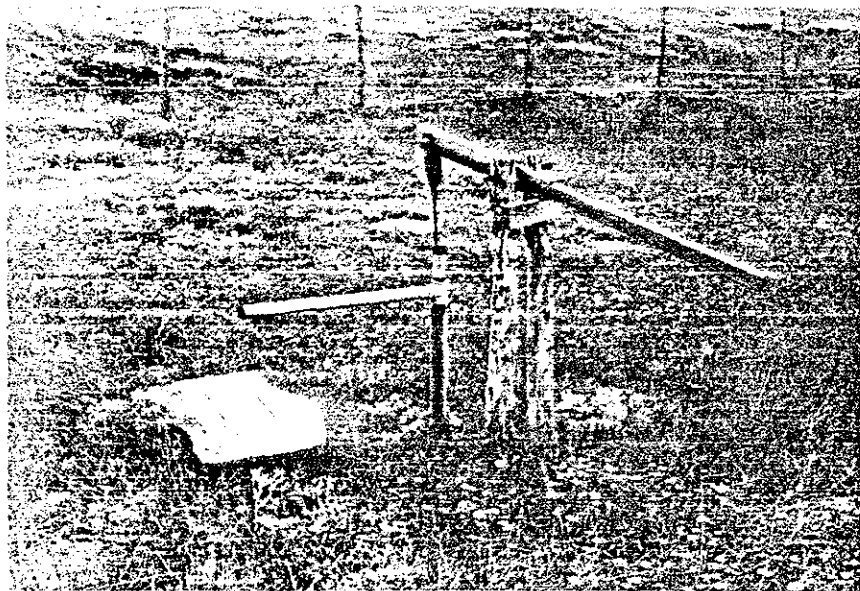
Photo, J. Keith Everett

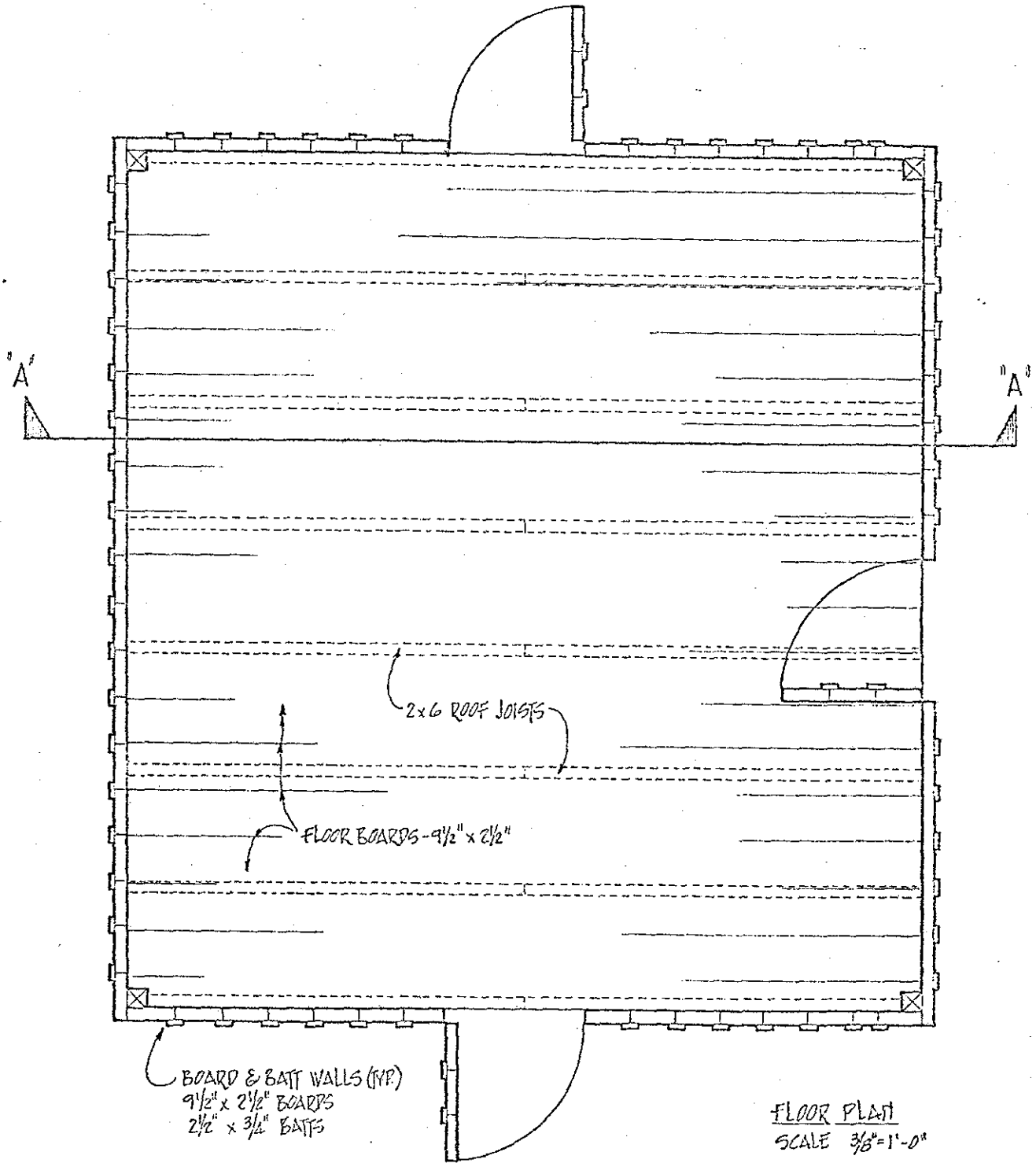
PLATE 40

HITCHING POST

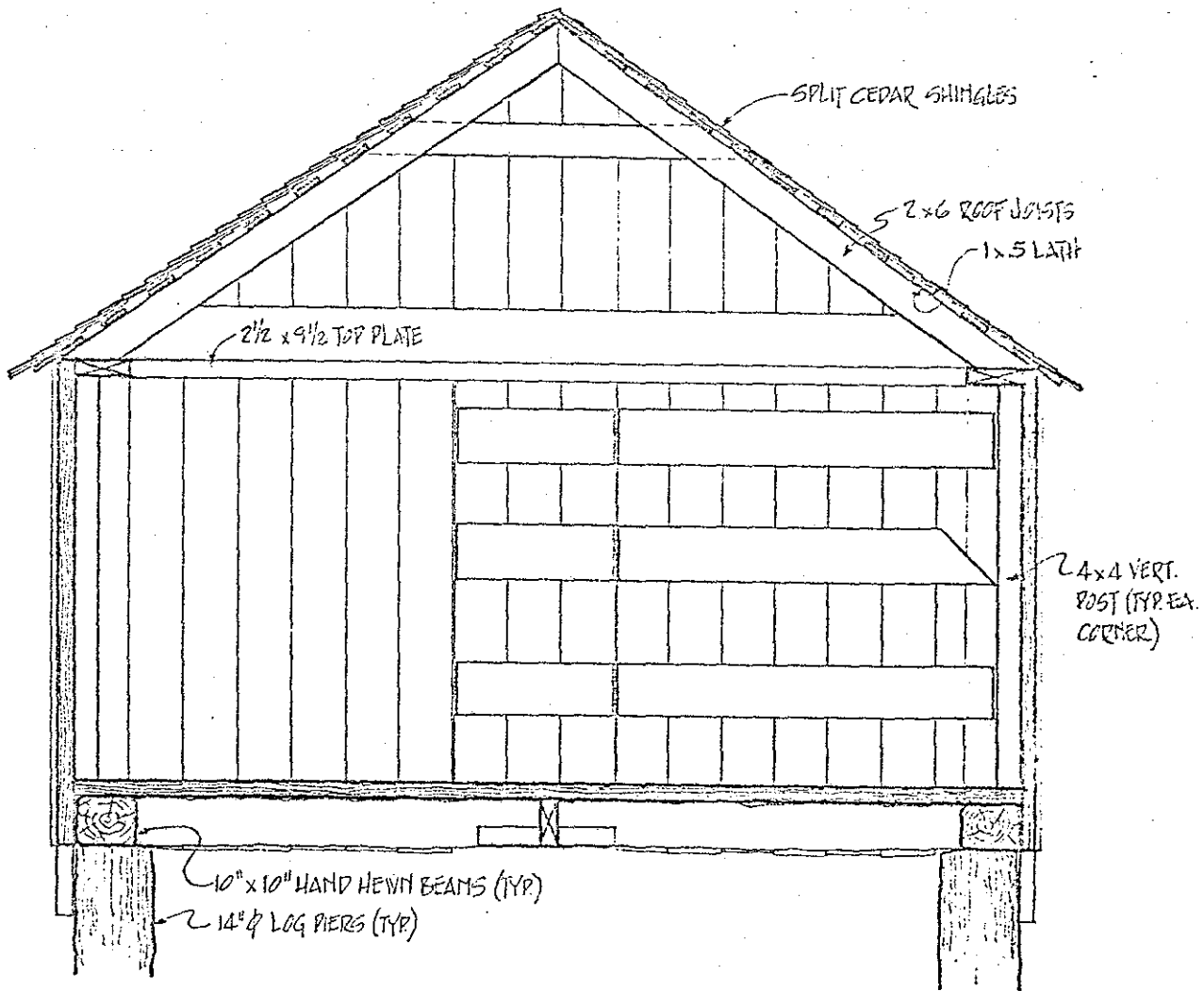
1979

Photo, J. Keith Everett





BUNKHOUSE "A"



SECTION "A-A"

SCALE 3/8" = 1'-0"

BURKHOUSE "A"

CLIMATOLOGICAL STANDARD NORMALS (CORPUS CHRISTI)*

Element	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
Average Maximum Temp.	67.4	69.8	74.4	80.4	85.9	90.5	93.5	93.8	90.1	84.5	73.8	68.8	81.1
Average Minimum Temp.	47.4	50.9	55.9	63.0	69.1	74.0	74.6	74.5	71.4	64.5	54.3	49.5	62.4
Extreme High Temp.	86	98	94	102	98	100	104	102	102	98	95	88	
Extreme Low Temp.	18	18	28	39	50	61	68	65	50	40	29	24	
Precipitation	1.63	1.70	1.44	2.14	2.99	2.39	2.32	2.77	4.40	2.76	1.72	2.08	28.34
Maximum 24 Hr. Period	6.38	2.99	2.67	7.19	2.83	3.89	3.73	5.52	7.68	7.25	3.44	3.86	
Average Wind Velocity	11.9	12.7	13.7	13.9	12.9	12.2	11.6	10.9	9.9	9.7	11.1	10.9	11.8
Fastest Mile (Wind)	59	48	56	49	65	43	40	70	63	46	46	47	
Rel. Humidity 6:00 a.m.	88	89	86	90	92	92	93	93	91	89	85	87	90
Avg. Water Temp. (1963)													
6:00 a.m. Port Aransas	53.5	54.0	63.5	72.7	77.7	82.7	81.5	80.9	80.0	76.8	70.5	55.7	

*High temperatures estimated 4° lower on island
 Low temperatures estimated 4° higher on island
 Wind velocities generally greater on island
 Prevailing wind SE except NNE in November, December and January

CLIMATOLOGICAL STANDARD NORMALS (BROWNSVILLE)*

Element	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
Average Maximum Temp.	69.6	73.4	77.1	82.1	87.3	90.9	92.5	93.4	90.2	85.6	77.3	71.7	82.6
Average Minimum Temp.	51.4	54.4	58.9	65.3	70.5	74.2	75.1	74.8	72.5	66.4	58.2	53.0	64.6
Extreme High Temp.	87	94	99	100	100	101	103	100	104	95	94	88	
Extreme Low Temp.	23	22	32	45	53	49	68	66	55	43	34	29	
Precipitation	1.43	1.18	1.11	1.59	3.09	3.05	1.97	2.45	5.13	2.91	1.55	2.16	27.62
Maximum 24 HR. Period	2.95	4.98	1.85	3.69	4.00	8.18	3.62	4.39	5.76	6.67	3.64	5.69	
Average Wind Velocity	12.0	12.5	13.6	14.2	13.8	12.8	11.7	10.7	9.7	9.8	11.0	11.0	11.9
Fastest Mile (Wind)	46	45	47	52	57	52	37	57	40	47	42	45	
Avg. Water Temp. (1963)													
6:00 a.m. Port Isabel													

*High temperatures estimated 4° lower on island
 Low temperatures estimated 4° higher on island
 Wind velocities generally greater on island
 Prevailing wind SE except NMW in December

ENTRIES IN THE NATIONAL REGISTER

STATE TEXAS

Date Entered OCT 1 1976

Name

Location

Dunn Ranch, Novillo Line Camp

Padre Island National Seashore
Kleberg County

Also Notified

Hon. John G. Tower

State Historic Preservation Officer

Hon. Lloyd M. Bentsen

Mr. Truett Latimer

Hon. E. (Kika) De La Garza

Executive Director

Mr. Douglas Wheeler (FWP), Deputy

Texas State Historical Survey Committee

Asst. Secretary for Fish and

Post Office Box 12276

Wildlife and Parks

Capitol Station

Austin, Texas 78711

NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM
FOR FEDERAL PROPERTIES
(Type all entries - complete applicable sections)

TEXAS

COUNTY:

Kleberg

FOR NPS USE ONLY

ENTRY DATE

NOV 1 1974

1. NAME

COMMON:

AND/OR HISTORIC:

Dunn Ranch, Novillo Line Camp

2. LOCATION

STREET AND NUMBER:

(See continuation sheet)

CITY OR TOWN:

Padre Island National Seashore

CONGRESSIONAL DISTRICT:

15th District - Texas

STATE:

Texas

CODE

48

COUNTY:

Kleberg

CODE

273

3. CLASSIFICATION

CATEGORY
(Check One)

OWNERSHIP

STATUS

ACCESSIBLE
TO THE PUBLIC

- District Building
 Site Structure
 Object

- Public
 Private
 Both

- Public Acquisition:
 In Process
 Being Considered

- Occupied
 Unoccupied
 Preservation work
in progress

- Yes:
 Restricted
 Unrestricted
 No

PRESENT USE (Check One or More as Appropriate)

- Agricultural Government Park Transportation Comments
 Commercial Industrial Private Residence Other (Specify) _____
 Educational Military Religious _____
 Entertainment Museum Scientific _____

4. AGENCY

U. S. Government, National Park Service, Department of Interior

REGIONAL HEADQUARTERS: (If applicable)

Southwest Regional Office

STREET AND NUMBER:

P. O. Box 728

CITY OR TOWN:

Santa Fe,

STATE:

NM, 87501

CODE

35

STATE:
Texas

5. LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC:

Kleberg County Courthouse

STREET AND NUMBER:

Kingsville

CITY OR TOWN:

Kingsville

STATE:

Texas

CODE

48

COUNTY:
Kleberg

6. REPRESENTATION IN EXISTING SURVEYS

TITLE OF SURVEY:

None

DATE OF SURVEY:

Federal

State

County

Local

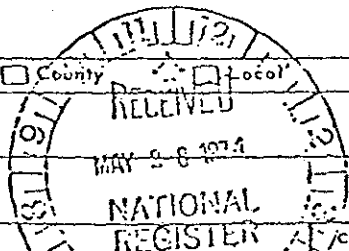
DEPOSITORY FOR SURVEY RECORDS:

STREET AND NUMBER:

CITY OR TOWN:

STATE:

CODE



ENTRY NUMBER

NOV 1 1974

FOR NPS USE ONLY

NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM

(Continuation Sheet)

COUNTY

KLEBERG

FOR NPS USE ONLY

ENTRY NUMBER

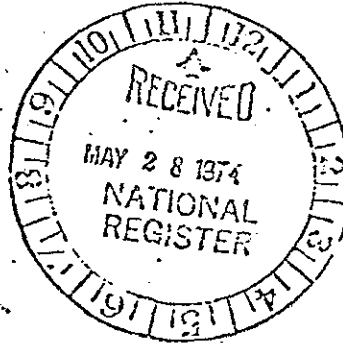
DATE

001 1 1974

(Number all entries)

2. LOCATION

The Novillo Line Camp is located near the east shore of Padre Island N. S. approximately 2.2 miles south of the north boundary along the access road and approximately 0.2 mile east along a Shell Oil Co. service road.



(Check One)

CONDITION

Excellent Good Fair Deteriorated Ruins Unexposed

(Check One)

Altered Unaltered

(Check One)

Moved Original Site

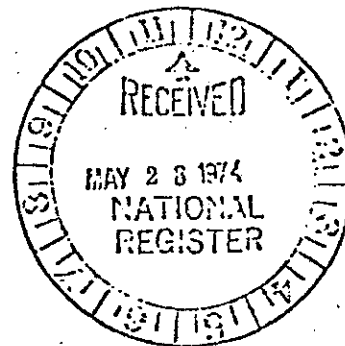
DESCRIBE THE PRESENT AND ORIGINAL (if known) PHYSICAL APPEARANCE

The Novillo Line Camp underwent some changes during the long period of its use. These changes were occasioned mostly by changing techniques, such as the introduction of trucks for the transporting of cattle. Thus, one may see truck loading chutes, a windmill, etc., which were not part of the line camp at its beginning, but which were added through the years as techniques changed. Novillo remained a viable part of the Padre Island cattle industry from the time Pat Dunn first established his ranch in 1879 until the cattle raising industry was phased out in 1971, and remains in appearance just as it was left at that time.

With the exception of the windmill, which Pat Dunn did not use, but which was introduced by his son Burton Dunn after his father's death, and the loading chutes, which were introduced along with trucks after WW II, the basic elements of the line camp have remained the same. They consist of the traps, holding pens, corrals, two bunkhouses, a kitchen, and a windmill and tank.

The two bunkhouses are the only completely enclosed structures. These are of board and batten construction, with pitched roofs covered with corrugated metal roofing. They are constructed on piers, with the floors being about two feet above grade, presumably to keep the floors dry and sound due to the extremely high water table, and also to provide some protection against snakes. The kitchen is an open structure, consisting of a pitched roof of wood planks supported by posts. It served primarily as shelter from sun and rain. The pens were generally fenced wood plank rails on posts, while the traps were fenced with barbed or woven wire. The conditions of these structures vary from good to deteriorating.

SEE INSTRUCTIONS



SIGNIFICANCE

PERIOD (Check One or More as Appropriate)

- Pre-Columbian 16th Century 18th Century 20th Century
 15th Century 17th Century 19th Century

SPECIFIC DATE(S) (If Applicable and Known)

AREAS OF SIGNIFICANCE (Check One or More as Appropriate)

- | | | | |
|--|---|--|--|
| <input type="checkbox"/> Aboriginal | <input type="checkbox"/> Education | <input type="checkbox"/> Political | <input type="checkbox"/> Urban Planning |
| <input type="checkbox"/> Prehistoric | <input type="checkbox"/> Engineering | <input type="checkbox"/> Religion/Philosophy | <input type="checkbox"/> Other (Specify) |
| <input type="checkbox"/> Historic | <input type="checkbox"/> Industry | <input type="checkbox"/> Science | _____ |
| <input checked="" type="checkbox"/> Agriculture | <input type="checkbox"/> Invention | <input type="checkbox"/> Sculpture | _____ |
| <input type="checkbox"/> Architecture | <input type="checkbox"/> Landscape Architecture | <input type="checkbox"/> Social/Humanitarian | _____ |
| <input type="checkbox"/> Art | <input type="checkbox"/> Literature | <input type="checkbox"/> Theater | _____ |
| <input type="checkbox"/> Commerce | <input type="checkbox"/> Military | <input type="checkbox"/> Transportation | _____ |
| <input type="checkbox"/> Communications | <input type="checkbox"/> Music | | _____ |
| <input checked="" type="checkbox"/> Conservation | | | _____ |

STATEMENT OF SIGNIFICANCE

"Novillo is the best single remaining artifact of the primary historical land utilization activity on Padre [Island], namely, cattle raising, from 1805 to 1971. ... Novillo documents and graphically illustrates a level of man's historical interaction with the island's environment. Novillo is a symbol of man's adaption of an agricultural economic form to Padre Island."

Ranching on Padre Island began with the Spanish, was continued during the period of Mexican ownership, and came into the hands of Anglo-Americans after the establishment of the Republic of Texas. In 1879, Patrick Dunn moved from the Texas mainland and began his ranching operations. He eventually acquired almost all of Padre Island.

Ranching on the island had features unusual to the Texas cattle-raising industry. Because of the environment no heavy brush grew on the island; thus this major obstacle and hazard did not have to be contended with by the cowboys. Perhaps more significant, no fencing was required as the entire range was surrounded by water which provided a natural barrier for the cattle. This removed considerable expense which almost all cattlemen faced with the end of the open range system in the late nineteenth century.

The unusual length of the island meant that cattle could wander south more than a hundred miles from the ranch headquarters near the island's north end. To operate in these particular circumstances Dunn built his line camps at fifteen-mile intervals along the upper (north) portions of the island. Novillo was his northernmost line camp and it is the only one which remains generally intact.

As a part of the plains cattle industry, the ranching activities on Padre Island and other nearby islands involved environmental features unique to the industry. The Novillo line camp, as the chief remnant of this activity within the park area, has considerable interpretive potential and represents a ranching effort which because of its uniqueness, has local and regional significance.

1 James W. Shiere, "Padre Island National Seashore, Historic Resource Study," p.73.

SEE INSTRUCTIONS

MAJOR BIBLIOGRAPHICAL REFERENCES

Shiere, James W., Padre Island National Seashore, Historic Resource Study, National Park Service, U.S. Department of the Interior, 1971

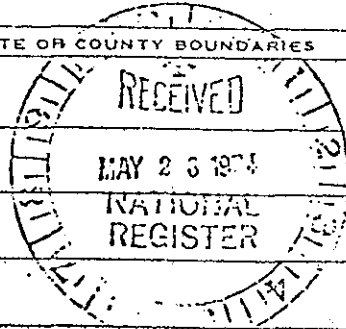
GEOGRAPHICAL DATA

LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY			OR	LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES		
CORNER	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE	
	Degrees Minutes Seconds	Degrees Minutes Seconds		Degrees Minutes Seconds	Degrees Minutes Seconds	
NW	27° 27' 51"	97° 17' 09"				
NE	27° 27' 46"	97° 16' 58"				
SE	27° 27' 33"	97° 17' 05"				
SW	27° 27' 38"	97° 17' 16"				

APPROXIMATE ACREAGE OF NOMINATED PROPERTY: 22

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE:	CODE	COUNTY:	CODE



SEE INSTRUCTIONS

FORM PREPARED BY

NAME AND TITLE: David G. Battle, Historic Architect; Richard W. Sellars, Historian DATE: Feb. 1974

BUSINESS ADDRESS: National Park Service, Southwest Region

STREET AND NUMBER: P. O. Box 728 PHONE: (505) 988-6501

CITY OR TOWN: Santa Fe, STATE: New Mexico CODE: 35

CERTIFICATION OF NOMINATION

State Liaison Officer recommendation:
 Yes
 No
 None
[Signature]
 State Liaison Officer Signature

NATIONAL REGISTER VERIFICATION

I hereby certify that this property is included in the National Register.
[Signature]
 Director, Office of Archeology and Historic Preservation

In compliance with Executive Order 11593, I hereby nominate this property to the National Register, certify that the State Liaison Officer has been allowed 90 days in which to present the nomination to the State Review Board and to evaluate its significance. The recommended level of significance is National State Local

Date: 10/1/74

ATTEST: *[Signature]*

Federal Representative Signature: *[Signature]* Date: 7/8/74

MAJOR BIBLIOGRAPHICAL REFERENCES

Shiere, James W., Padre Island National Seashore, Historic Resource Study, National Park Service, U.S. Department of the Interior, 1971

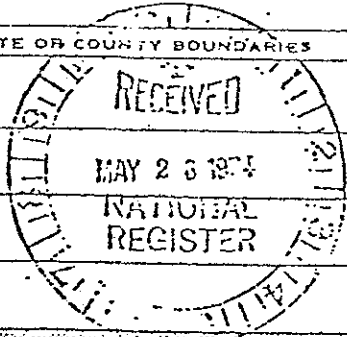
GEOGRAPHICAL DATA

LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY			O R	LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES		
CORNER	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE	
	Degrees Minutes Seconds	Degrees Minutes Seconds		Degrees Minutes Seconds	Degrees Minutes Seconds	
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APPROXIMATE ACREAGE OF NOMINATED PROPERTY: 22

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE



SEE INSTRUCTIONS

FORM PREPARED BY

NAME AND TITLE: David G. Battle, Hist. Architect; Richard W. Sellars, Historian DATE: Feb. 1974

BUSINESS ADDRESS: National Park Service, Southwest Region

STREET AND NUMBER: P. O. Box 728 PHONE: (505) 988-6501

CITY OR TOWN: Santa Fe, STATE: New Mexico CODE: 35

CERTIFICATION OF NOMINATION NATIONAL REGISTER VERIFICATION

State Liaison Officer recommendation:
 Yes
 No
 None
[Signature]
 State Liaison Officer Signature

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[Signature]
 Director, Office of Archeology and Historic Preservation

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 Federal Representative Signature: *[Signature]* 7/8/74

Date: 10/1/74
 ATTEST: *[Signature]*

July 1969

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

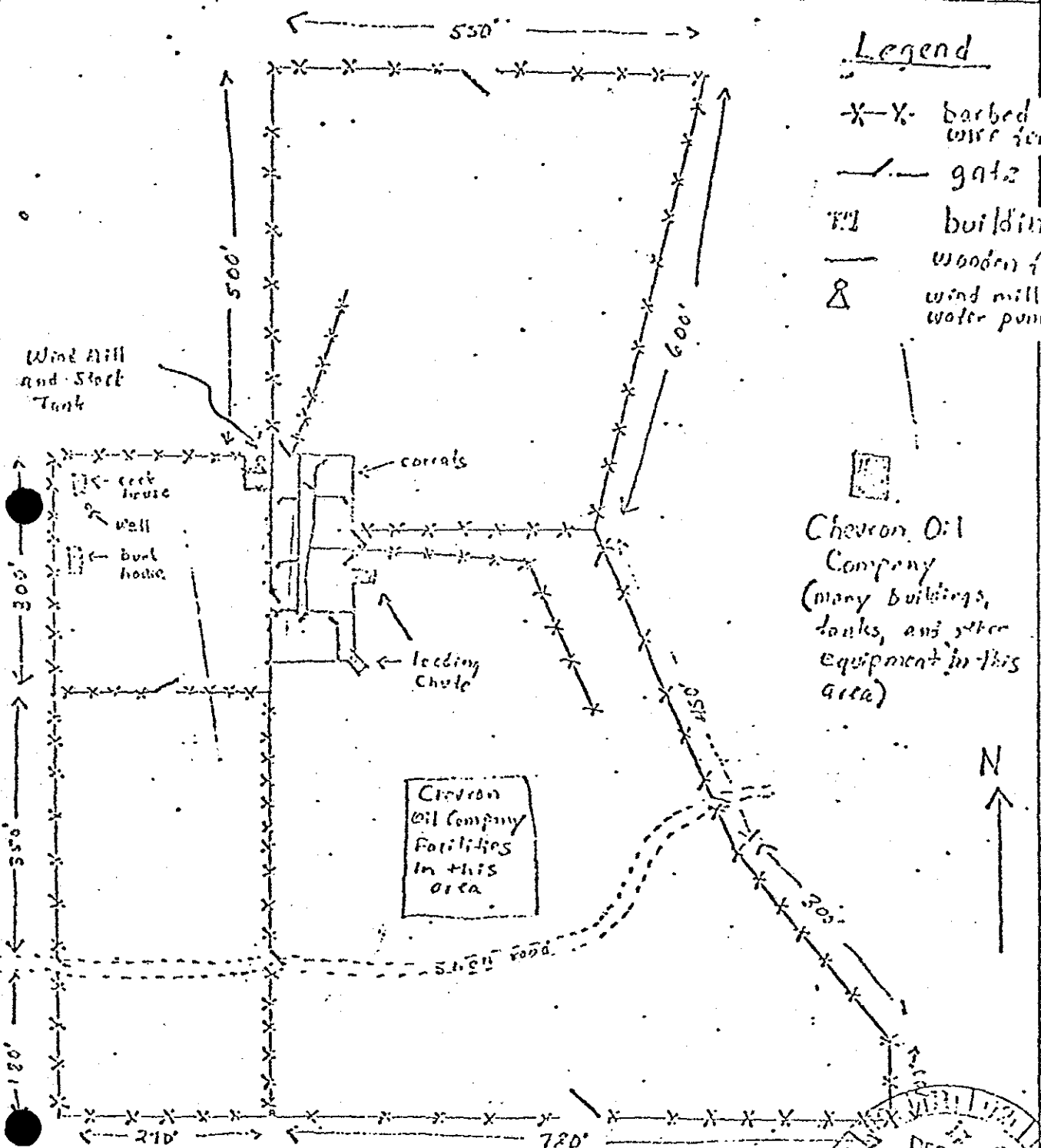
NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM

(Continuation Sheet)

STATE	
TEXAS	
COUNTY	
KLEBERG	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE
	OCT 1 1974

Legend

- x-x- barbed wire fence
- / - gate
- ▭ building
- wooden fence
- ⊗ wind mill water pump

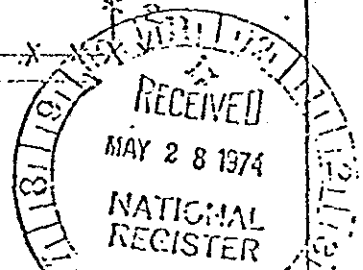


Chevron Oil Company
(many buildings, tanks, and other equipment in this area)

Chevron Oil Company
Facilities
in this
area.

NOVILLO LINE CAMP
Padre Island National Seashore
1" = 200 ft.

(distances are approximate)



FOOTNOTES

¹ V. M. Harris, "History of Cattle Raising on Padre Island," in South Texas Agriculture (Vol. 1, No. 2, 1965), p. 5.

² James Sheire, Historic Resource Study: Padre Island National Seashore, (Washington D.C.: U.S. National Park Service, Eastern Service Center, August, 1971), p. 44.

³ Land Acquisition Records, Land Tract 7, Padre Island National Seashore.

⁴ Sheire, op. cit., p. 54.

⁵ Land Acquisition Records, Land Tract 8, Padre Island National Seashore.

⁶ Taped interview between Mr. James Lynch and Mr. Robert Whistler, March 1, 1977. (Courtesy of Padre Island National Seashore.)

⁷ Ibid.

⁸ Ibid.

⁹ Harris, op. cit., p. 10.

¹⁰ Ibid., p. 11.

¹¹ Ibid., p. 10.

¹² Ibid., p. 10.

¹³ Sheire, op. cit., p. 47.

¹⁴ Lynch interview, op. cit.

¹⁵ Master Plan Brief for Padre Island National Seashore, (U.S. National Park Service, August, 1964), p. 10.

¹⁶ Ibid., p. 17.

BIBLIOGRAPHY

Harris, V. M. "History of Cattle Raising on Padre Island." South Texas Agriculture, Vol. 1, No. 2, 1965.

Jones, Fred B. Flora of the Texas Coastal Bend.
Corpus Christi, Texas: Mission Press, 1975.

Master Plan Brief for Padre Island National Seashore. U.S.
National Park Service, August, 1964.

McFarland, Weldon H. "Soil Properties of Four Range Sites
on Padre Island National Seashore." Kingsville, Texas:
M.S. Thesis, Texas A&I University, May 1973.

Reese, Pauline. "The History of Padre Island."
Georgetown, Texas: M.A. Thesis, Southwestern
University, 1938.

Sheire, James W. Historic Resource Study: Padre Island
National Seashore. Washington D.C.: U.S. National
Park Service, Eastern Service Center, August, 1971.

Taped Interview between Mr. James Lynch and
Mr. Robert Whistler. March 1, 1977. (Courtesy of
Padre Island National Seashore).

Land Acquisition Records, Land Tracts 7 and 8, Padre Island
National Seashore.